

ANNUAL REPORT
2021-2022

POWER *to* PROTECT



ACKNOWLEDGEMENT OF COUNTRY

The Country on which we have the honour of standing was, and always will be, Aboriginal land. As a Taronga community, we acknowledge this and pay our deepest respect and gratitude to Cammeraigal and Wiradjuri Elders, past, present and emerging.

We acknowledge their Country, lore, spirit, tradition and ongoing Cultural connections to place as the Traditional Custodians of the land on which we stand. In a time of rapid environmental change, Taronga's commitment to education, wildlife, sustainability, conservation and science has never been more critical, and we acknowledge First Nations knowledge and approach can assist with this.

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 of First Nations Peoples as we urgently work to safeguard the future of our planet.



TARA DEVER CEO OF MINDARIBBA LOCAL ABORIGINAL LAND COUNCIL WELCOMING REGENT HONEYEATERS
AND THREATENED SPECIES EXPERTS ONTO MINDARIBBA LAND – PHOTO BY ALEX PIKE

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. We are a not-for-profit organisation and every dollar spent with us saves wildlife.

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, 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 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. The Koala was added as an 11th Legacy Species in 2019, to reflect increasing threats to its survival.

In the last 12 months alone, Taronga partnered with 39 organisations working on the front line of conservation across 18 countries.



KEEPER DEL LEONG RELEASING A NORTHERN CORROBORREE FROG — PHOTO BY HARRY VINCENT

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 and environmental education, 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 Heritage.

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. James Griffin MP

Minister for Environment and Heritage
Parliament House
6 Macquarie St
SYDNEY NSW 2000

Dear Minister,

It is with great pleasure that we present the 49th 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 2022 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



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Open 9.30am – 4.30pm (May – Aug)
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Open: 9.00am – 4.00pm
Open 8.30am – 5.00pm (during school holidays)
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CHAIR'S REPORT

As the incoming Chair of the Taronga Board, it is a real privilege to be shepherding Taronga through a challenging yet exciting period as we continue to grow, evolve and set ambitious targets that will create meaningful change for our environment and wildlife.

The past 12 months have been underpinned by a visionary mindset that has seen us embrace substantial projects, from announcing an upgrade to our famous Sky Safari and the establishment of a new Box-gum Woodland Rewilding Sanctuary, to construction of two, world-first specialist teaching hospitals and Platypus rescue and rehabilitation centres. These projects are bound together by a focus on connecting people with wildlife and improving outcomes for threatened species.

At a time of expansion, and in the wake of operational challenges due to the impacts of COVID-19, the Board continues to work to ensure Taronga's ongoing financial strength. In this light, we extend our thanks to our partners in government, universities and across the not-for-profit sector along with our generous donors for their support, both financially and as conservation collaborators.

The past year has been an important chapter for Taronga as we work to implement our new Strategic Plan with increasing focus on Commitment to Country and Environmental Leadership. We have developed our six strategic priorities to align both with our purpose and the UN's Sustainable Development Goals. These pillars guide us, and the expertise, energy and enthusiasm of our people to ensure we maximise our impact at a time of need.

We have set an ambitious agenda with the implementation of our new sustainability strategy that not only guides our operations and practices but sees Taronga take a leadership role in working collaboratively at all levels to enact change. In parallel, we have further prioritised our Commitment to Country by embedding a way of working that respects and includes Indigenous peoples, cultures, knowledge and place.

More than a century ago, Taronga began its life as a single zoo, and I am beyond proud to see the complex and impactful conservation organisation we have grown into today. Taronga brings together an exceptional guest experience with education, science, research and conservation, a unique equation that sees our impact and influence extend far beyond our physical footprint, and around the globe.

It's an honour to be stepping into the Chair role after eight years on the Board and I'd like to welcome new Board members who have joined us this year to guide us on our ambitious path. I would like to extend my heartfelt thanks to the Hon. James Griffin, Minister for the Environment and Heritage, the Hon. Matt Kean, Treasurer and former Minister for Energy and Environment, as well as the entire ecosystem of Taronga staff and volunteers who work tirelessly to ensure we deliver on our vision and connect people with our precious wildlife.



Penny Bingham-Hall
Chair



CHAIR PENNY BINGHAM-HALL WITH KOALA – PHOTO BY HARRY VINCENT

OUR BOARD

Appointed Board

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 meetings attended by each member is shown in brackets.



Ms Penny Bingham-Hall (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 Fortescue Metals Group, Dexus Property Group, Supply Nation and the Crescent Foundation. She also chairs Vocus Group and the Advisory Committee of the Climate Governance Initiative, Australia. Ms Bingham-Hall has broad industry experience in construction, property and infrastructure development and is an experienced company director in publicly listed, government and not-for-profit organisations. She has a particular interest in environmental sustainability, workplace safety and Indigenous employment. Ms Bingham-Hall is a Fellow of the Australian Institute of Company Directors, a Senior Fellow of the Financial Services Institute of Australasia and a member of Chief Executive Women and Corporate Women Directors. Term expires 31 December 2023.



The Hon. Robyn Parker (3)
GAICD

Ministerial Appointee. Outgoing Deputy Chair of the Taronga Conservation Society Australia Board. Chair of the Strategy and Engagement Committee (now known

as the Community Engagement and Sustainability Committee). Ms Parker has over 30 years of public sector experience, which began with roles in child and family services across a number of disadvantaged communities. She is a Non-Executive Director of several education and charitable organisations. She was a specialist TAFE teacher for over 14 years before moving into the political arena, spending 12 years as an MLC, MP and Cabinet Minister in the NSW Parliament. She was the CEO of Delphis Australia until March 2017. Term expired 31 December 2021.



Ms Kristin Stubbins (6)
BComm, BA, FCA

Ministerial Appointee. Incoming Deputy Chair of the Taronga Conservation Society Australia Board. Chair of the Performance, Audit, Risk and Safety Committee. Ms

Stubbins is PwC Australia's Assurance Leader and has been a member of the firm's Executive Board since 2020. A partner of 18 years, Ms Stubbins has extensive experience as both an auditor and adviser across a wide variety of industries. She has been the lead auditor on some of Australia's largest ASX entities and is currently a Board Member of the Group of 100, representing PwC Australia. She also developed and leads Innowell, a venture between Sydney University and PwC, designed to transform the way mental health services are delivered. Ms Stubbins is also a Board Member of the Mindgardens Neuroscience Network and was a founding participant of the Corporate Mental Health Alliance Australia. Ms Stubbins plays a leading role in many projects supporting women, including as the Chair of Women for Change. In 2019, Ms Stubbins was named in the Australia Financial Review's '100 Women of Influence', having been nominated in the innovation category. Term expires 30 June 2024.



Ms Gretel Packer AM (4)
MAICD

Ministerial Appointee. Member of the Community Engagement and Sustainability Committee (formerly known as the Strategy and Engagement Committee)

and Wildlife Conservation Committee. Ms Packer is Vice-President of the Board of Trustees of the Art Gallery of New South Wales, Chair of the Packer Family Foundation, Director of the Sydney Theatre Company and Chair of the Sydney Theatre Company Foundation. Her philanthropic interests include a broad range of community activities and charities aligned to the arts, education, and environmental science. Ms Packer received an AM in 2020 at the Queen's Birthday Honours, in recognition for her commitment to the visual and performing arts and to conservation. Among her many interests, Ms Packer has been a long-term supporter of Taronga as a Founding Patron of the Taronga Foundation, launched the Taronga Conservation Science initiatives and sits on the Taronga Science Advisory Council. Term ended on 10 May 2022.



Ms Laura Berry (2)
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. 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 and was the Australian Co-Chair of the Australian New Zealand Leadership Forum's Indigenous Business Sector Group from 2019–2022. Term expires 31 December 2025.



Dr Ian Roth PSM (6)
BVSc, MANZCVs, GAICD

Ministerial Appointee. Chair of the Wildlife Conservation Committee. 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, Executive committee 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 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". Term expires 30 June 2023.



Ms Catherine Harris AO PSM (1)
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 newly appointed to the Board of GreenCollar. Ms Harris has only recently stepped down as Consul General for Bhutan and 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. Term expires 31 December 2025.



Mr Graham Wackett (4)

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 the Strategy and Engagement Committee (now known as the Community Engagement and Sustainability Committee). Mr Wackett has been an active volunteer at Taronga Zoo in Sydney since 2006 and has a strong background in hotel, resort and attractions ownership and management. Previous executive roles include Managing Director and CEO of Southern Pacific Hotel Corporation and Managing Director Travelodge Australia and Travelodge Developments. He also has strong tourism industry experience, having previously served as a member of the Board of Tourism NSW, Tourism Training Australia and the Tourism Task Force. Term expired 31 December 2021.



Mr Joe David (1)
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 and 2022 editions of Best Lawyers in Australia in Real Estate. He has been an active volunteer at Taronga Zoo since 2017. Term expires 30 June 2025.



Mr Murray Wood (5)
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 7,500km², 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. Term expires 26 September 2023.



Ms Jennifer Cowley OAM (1)
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. Term expires 30 June 2025.



Mr John Walkom (1)

Nominated by an organisation involved in providing financial or other support to Taronga Western Plains Zoo and representing Taronga's volunteer community. Member of the Wildlife Conservation Committee and Strategy and Engagement Committee. Mr Walkom is Independent Chair of the Dubbo Regional Council Audit Risk Committee and Company Director of Walkom Bros Pty Ltd & Techni Clean Australia. He is an active and highly regarded member of the local community in Dubbo, having worked closely with a broad range of stakeholders including community, business, federal, state and local government representatives. Term expired 1 September 2021.



Clr Roy Bendall (4)
GAICD, LLB, BCom

Representing Mosman Council. Member of the Performance, Audit, Risk and Safety Committee. Clr Bendall has broad experience working in international financial and capital markets, and project management specialising in the trade and maritime infrastructure sector. He is also a legal practitioner with experience in regulatory reform and the provision of regulatory advice to corporations and the Government. Term expired 30 June 2022.

OUR COMMITTEES

Board Committees

Performance, Audit, Risk and Safety Committee (6)

Monitors performance and risk, work health and safety, financial management, internal and external audit, human resource management, information technology, capital works programs and asset management. Consists of selected Board members:

- Ms Kristin Stubbins – Chair
- Ms Penny Bingham-Hall
- Mr Graham Wackett (until 31 December 2021)
- Mr Roy Bendall (until 30 June 2022)
- Mr Joe David
- Mr Murray Wood

Community Engagement and Sustainability Committee

(formerly known as the Strategy and Engagement 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 Robyn Parker – Chair (until 31 December 2021)
- Ms Laura Berry – Chair
- Mr Graham Wackett (until 31 December 2021)
- Mr John Walkom (until 1 September 2021)
- Ms Gretel Packer (until 10 May 2022)
- Dr Ian Roth
- Ms Jennifer Cowley
- Ms Catherine Harris
- 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 – Chair
- Mr John Walkom (until 1 September 2021)
- Ms Gretel Packer (until 10 May 2022)
- Mr Murray Wood (until 28 June 2022)
- Ms Jennifer Cowley
- Mr Joe David
- Ms Catherine Harris
- 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 Michelle Campbell (Veterinarian)
- Dr Peter Johnson (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 21 ongoing projects and 8 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
- Paul Sinclair
- Roxanne Saunders

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

This year marks Taronga's 106th year of creating connections between people and wildlife. Across a century, we have grown into a multifaceted and impactful not-for-profit Zoo-based conservation organisation.

Taronga has focussed on conserving threatened species for decades but given the worsening state of our environment, we are accelerating and increasing our work to combat these wicked problems and mobilising the community to take action.

This year saw us make significant progress on the establishment of two new specialist Wildlife Hospitals and Platypus Rescue and Rehabilitation Centres. Built across both sites, these facilities will increase our capacity to care for animals affected by climate-related events and to educate veterinary professionals on how to treat native animals.

We also looked to future solutions for biodiversity loss and species decline with the announcement of a 5,000-hectare Box-gum Woodland Rewilding Sanctuary, which will be a haven for Koalas and other threatened species. This project is being supported by the NSW Government and marks an exciting new chapter for Taronga.

We've continued to push forward with our critical conservation science work, and this year released more than 300 endangered Corroboree Frogs, Regent Honeyeaters, Plains-wanderers, Bellinger River Snapping Turtles, Greater Bilbies and Christmas Island Blue-tailed Skinks into the wild. Thanks to the generosity of a valued Taronga donor, we also established a brand-new conservation breeding program for Chuditch in the Taronga Sanctuary, which in only a matter of months, has resulted in breeding success.

Our commitment to education has not wavered, and this year, digital engagement with school students played a pivotal role reaching 1.2 million students and achieving Taronga's educational outcomes in a year heavily impacted by COVID-19. We also saw the graduation of the first students to complete their degree as part of the University of Sydney-Taronga Alliance.

We also celebrated important milestones, with the fifth anniversary of Tiger Trek and our Legacy Species Commitments showing the progress that can be made when we combine our unique, multidisciplinary skillset

with powerful storytelling and community engagement. This inspires us to continue to work to ensure our community are aware of their Power to Protect wildlife, whether that be by visiting, staying, donating or engaging with us.

While 2021/22 was a great year for so many reasons, it was also a challenging one as we navigated the impacts of COVID-19, which unquestionably touched all areas of our operations. Due to the mandated period of zoo closures and minimal international visitation throughout the year, Taronga booked significantly less operating income in 2021/22 than in pre-COVID times. This challenge required careful internal management of the organisation's financial position and reduced revenue was also partially offset by insurance proceeds and additional grants. Pleasingly the Taronga Foundation had a solid year with continued support from generous donors and Taronga was also the beneficiary of NSW Government capital funding grants to progress on the Wild Futures project and Sky Safari Revitalisation. I am so grateful for the resilience of our dedicated and passionate teams, who were able to unite under a shared vision with the support of one another to protect our planet. I also extend my sincere gratitude to the Taronga Board, our valued partners and supporters and our staff, who have all worked tirelessly towards our vision.

Looking to the future, it's clear that changing the outcome for threatened species will take a collective response. Taronga is committed to working with individuals, business, governments, universities, conservation organisations, our First Nations Community and the global community to secure a future for wildlife and people. Together, I truly believe we can build a healthier environment and a stronger, more resilient natural world.



Cameron Kerr AO
Chief Executive Officer



CEO CAMERON KERR AO RELEASING A GREATER BILBY AT STURT NATIONAL PARK – PHOTO BY BRAD LEUE/AUSTRALIAN WILDLIFE CONSERVANCY

OUR ORGANISATION

Minister for Environment and Heritage
The Hon. James Griffin MP BA, MP

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
- Asset Management
- Guest Experience

Mr Steve Hinks
DipMgmt, DipBus,
MMgmt

**Divisional Director,
Taronga Western
Plains Zoo**

- Commercial
- Guest Experience
- TWPZ Accommodation
- Asset Management
- Wildlife and Horticulture
- Marketing and Communications

Ms Bettina Sammut
BA, Cert (PR), Grad
Cert (HRM), Grad. Cert
Change Mgt AGSM

**Divisional Director,
People, Culture
and Safety**

- Human Resources and Payroll
- 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
- Tourism and Contact Centre
- Fundraising and Memberships
- Corporate Partnerships

Ms Narelle Beattie
BCom, MA, CA

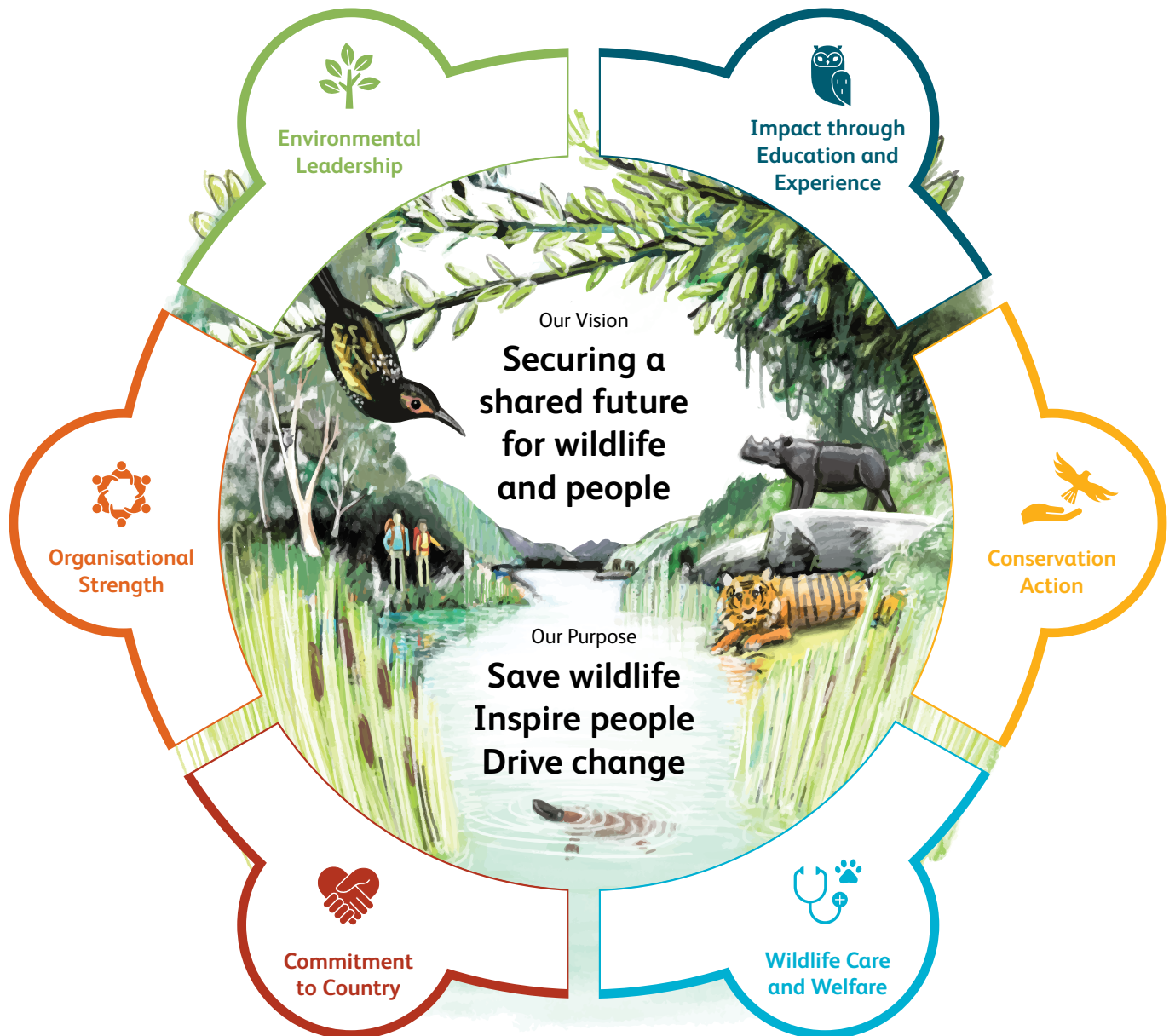
**Divisional Director,
Corporate Services
and Governance**

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

Mr Nick Boyle
BSc (Comms), LLB

**Divisional Director,
Welfare, Conservation
and Science**

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



OUR STRATEGIC PRIORITIES

At no time in history has Taronga's role been more critical. We believe that a future without wildlife is not an option, and our Strategic Plan 2021–2025 charts a bold and ambitious path towards a shared future for wildlife and people.

Our six strategic focus areas reflect the overarching priorities for our organisation.

We have developed ambitious goals that are aligned with our purpose and will help us achieve our vision to secure a shared future for wildlife and people. They focus the expertise, energy and enthusiasm of our people to maximise our impact.

Each focus area has specific goals with objectives and measures to monitor progress across the period of this Strategic Plan.

Securing a shared future for wildlife and people

Our Vision

Save wildlife. Inspire people. Drive change.

Our Purpose

Strategic Priorities



Impact through Education and Experience

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



Wildlife Care and Welfare

Global industry leader in wildlife care and continuous improvement in welfare



Conservation Action

Deliver world leading conservation action, recovery and science



Environmental Leadership

Lead environmental sustainability and climate change action



Commitment to Country

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



Organisational Strength

Enhance our reputation, financial position and organisational effectiveness

UNITED NATIONS SUSTAINABLE DEVELOPMENT GOALS

Taronga's Strategic Plan 2021–2025 identifies the relevant Sustainable Development Goals where it can play an important role.

The challenges facing the health of our planet are increasing. Climate change continues to exacerbate the frequency and severity of natural disasters. The rate of extinction is accelerating through habitat loss, wildlife trafficking, pollution and other human effects. Society continues to face considerable inequality in access to basic needs, resources and opportunities.

These threats and the need to address them are recognised by the United Nations through their 2030 Sustainable Development Goals. These goals provide a blueprint to enable the global community to support a better and more sustainable future and a framework for shared and urgent action. Taronga strongly believes it has an important role in contributing to this global mission.





REGENT HONEYEATERS – PHOTO BY RICK STEVENS

OUR FOOTPRINT

Taronga Zoo

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 the Corroboree Frog, 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. 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

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. 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 Sanctuary

Announced in April 2022, this project will see more than 5,000 hectares of Koala habitat and 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 integrated conservation breeding and release

NSW

Conservation breeding of the Plains-wanderer

Taronga Western Plains Zoo

Conservation breeding of the Chuditch

Taronga Western Plains Zoo

Conservation breeding of Greater Bilbies

Taronga Western Plains Zoo

Comparing habitat preferences of Greater Bilby founder groups

Taronga Western Plains Zoo

Building sustainable Rhino insurance populations

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

Monitoring post-fire wildlife use of tree hollows and nest-boxes

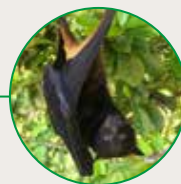
Nowra

Impact of changing prey availability on Little Penguins in NSW

Montague Island

Southern Corroboree Frog translocations and strategic biobanking

Kosciusko



Habitat Health: Flying Fox Ecology and Health; Threatened reptile translocation science

Christmas Island

Developing a mobile app for monitoring and researching the provision of food, water and shelter in-situ in bushfire affected areas

Australia (nationally)



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

Australia (nationally)



CONSERVATION SCIENCE IN 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 26 state and national recovery programs. Together with partners in university, government and conservation groups, Taronga has garnered scientific grants from donors, corporate partners and highly competitive funding bodies, including the Australian Research Council, to support these programs.

Australia (Nationally)

Regent Honeyeater integrated conservation breeding and release
NSW

Frog mass mortality investigation
Australia (nationally)

Combating illegal trade of Australian wildlife
Australia (nationally)

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)



Investigating bird adaptation to human land use change

Australia (nationally)

Conservation breeding of the Plains-wanderer

Taronga Western Plains Zoo

Conservation breeding of the Chuditch

Taronga Western Plains Zoo

Conservation breeding of Greater Bilbies

Taronga Western Plains Zoo

Comparing habitat preferences of Greater Bilby founder groups

Taronga Western Plains Zoo

Building sustainable

Rhino insurance populations

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

Monitoring post-fire wildlife use of tree hollows and nest-boxes

Nowra

Collaborative science for monitoring marine megafauna

Northern Territory

Uluru-Kata Tjuta NP Mala Census; Fire Management strategies in

Kakadu National Park
Northern Territory

Impact of changing prey availability on Little Penguins in NSW

Montague Island

Southern Corroboree Frog translocations and strategic biobanking

Kosciusko

Multimodal communication in marine mammals (Sea Lions on the Edge)

NSW and South Australia

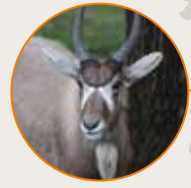
Field Grants

Restoring populations of endangered Great Desert Skinks at Newhaven Wildlife Sanctuary

Northern Territory

Funding GPS trackers to support the reintroduction of critically endangered Addax back into their former range in Morocco, through the Sahara Conservation Fund.

Morocco, Chad



Restoring forest habitat for the Cotton-top Tamarin.

Colombia



Field research and education programs to raise awareness about laws protecting wildlife.

Community-based bee-keeping mitigation of human-Elephant conflict.

Cameroon

OUR GLOBAL REACH

Taronga partners with 39 organisations working on the front line of conservation in more than 18 countries.

From Cambodia to Cameroon, and Zimbabwe 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.

Conservation Partnerships

Save the Bilby

Australia

Free The Bears

Cambodia

Save Vietnam's Wildlife

Vietnam

International Rhino Foundation

Zimbabwe, Sumatra, Indonesia

Sumatran Rhino Survival Alliance

Sumatra, Indonesia

Wildlife Asia

Sumatra, Indonesia

Elephant Conservation Centre

Way Kambas

Sumatra, Indonesia

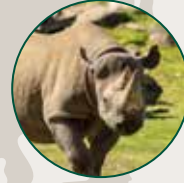
Breaking the Brand

Vietnam

Supporting the protection of Taronga's Sumatran Legacy Species in Way Kambas National Park.

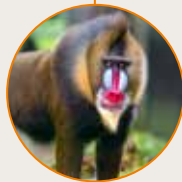
Rhino protection with the International Rhino Foundation. Funding camera traps to confirm potential newly identified Sumatran Tiger range.

Sumatra, Indonesia



Financial and expert support for the International Rhino Foundation to ensure the health of the Rhinos and the viability of the population overall.

Asia, Africa



Developing a release sanctuary and Mandrill release program at Tchimpounga, managed by Jane Goodall Institute.

Tchimpounga,
Democratic Republic
of Congo



Field monitoring of bilby populations in Western Queensland.

Australia

Field Grants

TRAFFIC

Asia

Flora and Fauna International

Vietnam

Cheetah Conservation Botswana

Botswana

Northern Rangelands Trust

Kenya

Jane Goodall Institute Australia (Tchimpounga)

Democratic Republic of Congo

Botswana Predator Conservation

Botswana

Sahara Conservation Fund

Morocco, Chad

Camera trapping for Sumatran Tiger

Sumatra, Indonesia

Adaptive Management of Ranger Patrols in the YUS Conservation Area

Papua New Guinea

Community empowerment to curb wildlife trade

West Kalimantan, Indonesia

ID-based monitoring of rhinos

Nepal

Black Mamba all-woman anti-poaching unit

South Africa

Conservation efforts for Slippery Frog

Ghana

Diani Forest Restoration and Conservation education

Kenya

Reducing Poverty to Protect Wildlife Habitat

Cameroon

Community-based mitigation of human-elephant conflict

Cameroon

Engagement officer

Botswana

Mitigation of human-wildlife conflict to protect Cheetah

South Africa

Community-based livestock guard dog breeding project

South Africa

Rehabilitation of the Park W Ecosystem

Niger

Wetland restoration

Madagascar

Mara Elephant Project

Kenya

Proyecto Titi: Restoring forests for Cotton-top Tamarin

Colombia



IMPACT THROUGH EDUCATION *and* EXPERIENCE

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



SUMATRAN TIGER IN TARONGA ZOO SYDNEY'S TIGER TREK – PHOTO BY HARRY VINCENT

Impact

Community Conservation Programs

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



Raise Your Palm

Driving the transition towards a responsible palm oil industry.

Taronga'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% Certified Sustainable Palm Oil in their supply chains. Through the Choice Mart supermarket experience at Tiger Trek, guests have sent 147,000 emails to 10 Australian retailers and manufacturers, raising their palm for critically endangered Sumatran Tigers.



They're Calling on You

Recycling mobile phones to reduce landfill and support primate conservation.

Taronga has partnered with Mobile Muster and PhoneCycle, to recycle and re-use mobile phones to divert them from landfill. More than 58,000 mobile phones have been reused and recycled through the campaign, which has now generated over \$94,000 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.



Beads for Wildlife

Supporting 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, in turn reducing human-induced pressures on wildlife such as poaching and habitat destruction. This year, Taronga sold 13,333 beaded products across both Zoos with all profits returned to the craftswomen and their communities.



Wildlife Witness

Combating illegal wildlife trade for greater protection of wildlife around the world, including Sun Bears, elephants and rhinoceros.

The Wildlife Witness smartphone app has had more than 22,000 downloads, resulting in the reporting and intervention of sales of illegal wildlife trade across Southeast Asia. Taronga's ongoing partnership with TRAFFIC Southeast Asia supports their enforcement program and Wildlife Crime Analyst.



Fish for Good

Promoting a healthy future for marine life by encouraging sustainable seafood choices.

Taronga's Seals for the Wild presentation continues to drive awareness for guests to choose MSC-certified seafood. To celebrate Sustainable Seafood Week in March, Taronga was featured in the MSC campaign to drive ocean awareness in schools through a partnership with the Saltwater Schools education program.



Litter Free Oceans and Rivers

Encouraging individuals to understand their environmental impact and empowering schools and businesses to reduce their plastic use for the benefit of marine and freshwater species.

The Litter Free community has now reached 3,000 individuals, schools and businesses working to eliminate single use plastics.



TARONGA ZOO FRIENDS WITH KING NYANI – PHOTO BY LAWRENCE FURZEY



Spotlight

King Nyani

Taronga Zoo welcomed King Nyani (meaning gorilla in Swahili), the largest gorilla sculpture in the world, with a monumental call to action for Taronga's mobile phone recycling campaign – They're Calling on You.

Guests can engage with King Nyani for an impressive, intimate and unforgettable experience, accompanied by equally bright and engaging signage. When a guest takes a photo of their loved one sitting in the giant hand of King Nyani with their mobile phone, it brings the They're Calling on You conservation message to life – their future is in our hands.

This unique artwork was kindly donated by internationally renowned artists Gillie and Marc as part of the Australian Cultural Gifts Program, and its installation was made possible through the generous support of the Denton Family.

“

Guests can engage with King Nyani for an impressive, intimate and unforgettable experience.

”



Five Years of Tiger Trek

This year, Taronga Zoo's Tiger Trek experience celebrated five years of impact. Since its opening in 2017, 4.3 million guests have visited Tiger Trek. More than 25% of those guests engaged with the Choice Mart supermarket, where they learnt about the benefits of sustainable palm oil for Sumatran Tiger conservation.

There have been more than 147,000 emails sent to Australian manufacturers and retailers encouraging them to use palm oil certified as sustainable by the Roundtable on Sustainable Palm Oil (RSPO).

As a result, guests who visited Tiger Trek have left with a much greater resolve to be part of the solution, with the intention of only purchasing products containing sustainable palm oil.

The advocacy efforts of Taronga Zoo guests have made a direct contribution towards improving sustainability within the global palm oil industry. Globally, there has been a steady increase in the uptake of sustainable palm oil. Several major Australian businesses involved with palm oil have made strong commitments or converted to sustainable palm oil.

This has contributed to the decrease of deforestation in Indonesia, which has fallen by 75% to its lowest level since monitoring began in 1990, an absolutely remarkable result.





HATCH: Taronga Accelerator Program

The second HATCH: Taronga Accelerator Program ran from July to October 2021 and supported eight passionate founders leading six innovative sustainability initiatives. The 2021 winner of the \$50,000 HATCH Grant was Carapac, a sustainable plastic alternative made from crustacean shell waste. The 2021 winner of the \$5,000 People's Choice Award was The Pedal Club, a sustainable children's bicycle subscription service.

The other four teams included Xylo Systems (collaborative tool for conservation management), Sine Surf (sustainable wooden surfboards), Spotttr (thermal-optic drone reconnaissance platform) and Visible (impact agency).

The program was supported by 24 mentors and subject matter experts including industry professionals and not-for-profit and social enterprise leaders, as well as HATCH judges Adam Ferrier, Natalie Kyriacou OAM, Andy Marks, Alex Holcomb and Cameron Kerr AO.

A six-week online Idea Generation Program also ran from May to June 2022. The program was designed to provide an opportunity for those interested in becoming eco-prenuers to further their ideation, with 35 participants taking part.

Taronga TV

Now in its second year, Taronga TV has remained a fixture of Taronga's digital ecosystem; it has also played a vital role in connecting Taronga with audiences around the globe. Throughout 2021/22, Taronga TV audiences watched more than 143,791 hours of engaging content. Crucially, this platform enabled Taronga to remain connected to its community through a second COVID-19 lockdown, during which Taronga TV Lion Cub Cam was launched. A first-of-its-kind live stream, Cub Cam allowed audiences to gain a keepers-eye-view of five growing lion cubs while also supporting Taronga's conservation work. Adopting a donate-to-view approach, Cub Cam raised more than \$40,000 in donations and on its own reached a global audience of more than 2.4 million people. Taronga TV continues to be an important brand, with awareness for the platform sitting at approximately 20% of the Australian population – with 35% of viewers noting that it increased their intention to visit Taronga's Zoos.

Reaching our Community

Throughout 2021/22, Taronga saw a significant media presence both nationally and internationally, representing an array of news and updates across Taronga's diverse operations. Over the year, Taronga was mentioned 41,000 times, and importantly, 15,000 or 36.5% of these mentions referenced Taronga as a not-for-profit organisation, a significantly higher proportion than Taronga's competitors and an indicator of the strength of Taronga as a conservation brand.

The COVID-19 lockdown provided an opportunity for Taronga to continue to engage with its audiences with the relaunch of Taronga TV, the launch of Taronga TV Lockdown Lessons and the launch of Lion Cub Cam. Each of these milestones attracted significant media attention resulting in a collective 1,100 media mentions, with highlights including a front-page cover of the Daily Telegraph, live breakfast crosses with then-NSW Environment Minister Matt Kean and in-depth radio interviews on ABC Sydney Breakfast.

Naturally, animal arrivals continued to attract significant media attention, with the debut of the Lion Pride at Taronga Zoo securing attendance from all TV broadcasters and metropolitan newspapers, while other key births such as three Red Panda cubs, a Pygmy Hippo calf and a Greater One-horned Rhino calf at Taronga Western Plains Zoo also attracted significant attention.

Underpinning this activity was a focus on Taronga's other strategic pillars. Of note, a year-long effort from across the organisation was realised with the airing of the ABC program *Surviving Extinction*. The 30-minute episode was proactively driven by Taronga and profiled the work of its experts across welfare, conservation and science in protecting critically endangered species. All five species represented in the documentary showcased Taronga as the lead agency working on their protection and recovery.

Taronga Documentary: Who's Who in the Zoo

For a second season, Taronga's inner workings and tireless conservation science efforts were broadcast to global audiences through the Taronga: Who's Who in the Zoo documentary, delivered in partnership with McAvoy Media. The 16-episode season focused on the return of African Lions to Taronga Zoo, the release of Greater Bilbies in Sturt National Park, countless wildlife rehabilitation stories from Taronga's Wildlife Hospitals and a unique look into what goes on in a zoo when it is closed to the public. Locally, the series aired to great reviews on the 9 Network, while in the US it aired on Nat Geo Wild. In addition, the series was also screened across 20 European countries.



Spotlight

Digital Education Engagement

Digital engagement with school students played a pivotal role in achieving Taronga's educational outcomes throughout a year heavily impacted by the COVID-19 pandemic. Despite closures and teaching restrictions, Taronga Education's agile shift to digital content creation empowered students, teachers and families to remain connected with quality zoo education experiences.

Taronga Education's Lockdown Lessons livestreamed in 2021 were enthusiastically received by more than 258,000 students, teachers and parents. The lessons attracted media attention and support from former

NSW Environment Minister Matt Kean, who celebrated this engaging learning opportunity created and delivered weekly. Taronga Education's digital engagement reach was further enhanced through the NSW Department of Education's Education Live weekly livestreams, which reached a viewership of more than 320,000 students, and in the Learning from Home lesson packages in 2022. Each package consisted of a full timetable of interactive virtual lessons created by curriculum experts and supported more than 1.2 million students during both COVID-19 isolations as well as communities impacted by bushfires and floods.



Education

Education is one of Taronga's highest priorities. 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 locations, and as outreach programs within the community and increasingly through digital means.

School Education Programs

All Taronga school education programs are developed and delivered by qualified teachers and curriculum experts, including Zoo Education Officers employed in positions funded by both the NSW Department of Education and Taronga. These passionate leaders in environmental education work collaboratively to deliver future-focused education programs across a wide range of curriculum areas. Through authentic engagement with conservation experts, fascinating wildlife, and education specialists, the team strives to inspire future generations of global citizens and champions for the wild.

Teacher Engagement

Delivery of face-to-face teaching was heavily impacted by COVID-19, school staffing shortages and changes to accreditation processes. As Taronga Education programs resumed, a face-to-face Teacher Preview and Zoo Education Update event was launched. The event reached capacity within two days, testament to a dedicated community of teachers eager to reconnect. Taronga Teachers Association (TTA) retains a strong base of over 700 teachers directly engaging with Taronga Education. Active participation in respected teacher networks has provided alternative professional development opportunities while traditional methods have not been viable. Each development opportunity increases the awareness of Taronga Education as a leader for high-impact teacher professional learning.

ZooSnooz

ZooSnooz continues to be considered by many as the 'wildest school sleepover' and despite COVID-19 challenges, consistently delivers strong results. After COVID-19 restrictions on school camps eased, schools eagerly returned to this immersive, overnight experience. This year more than 1,800 school students engaged in this educational experience, enhanced by evening discovery walks, early morning tours, behind-the-scenes encounters and educator-led workshops. At Taronga Zoo, students wake to spectacular views of Sydney Harbour, while students visiting Taronga Western Plains Zoo are immersed in Billabong Camp, a permanent Australian bush tent site surrounding the waterhole.

Zoomobile & Regional Outreach Education

The Taronga Zoomobile is a critical metropolitan and regional education outreach program. More than 5,500 students in the Greater Sydney region experienced a curriculum-based incursion at their school. Three, week-long regional Zoomobile trips delivered in partnership with the NSW Department of Education were delivered to 1,000 students in the local communities of the Bournda, Thalgarrah, and Cascade Environmental Education Centres. Taronga also partners with a number of organisations to deliver the Biological Diversity Study Day program to Year 11 students. Each regional trip is fundamental in connecting rural and remote students with quality environmental education.

Project In Situ

In its 15th year, Taronga's project-based conservation education program, Project in Situ, involved 1,130 students across 16 primary and high schools engaging their local community to help protect locally threatened species. This year, students targeted the Little Penguin and Corroboree Frog. Students were led through the Design Thinking process by Taronga Education's 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. Since its inception, Project in Situ has focused on 17 threatened species and engaged over 15,000 students and teachers.

Work Experience

School Work Experience at Taronga remains a competitive choice for senior students across NSW. Secondary students in years 10, 11 and 12 utilise the immersive, week-long placement as an opportunity to guide their critical pathways as they look beyond school to potential careers. This popular vocational program delivered strong learning outcomes for students as it returned to full capacity at both Zoos from the beginning of 2022. The School Work Experience Program empowered 144 students in making informed vocational choices and utilises every opportunity to encourage participants to consider a career in a conservation or STEM.

Depth Studies

Depth Studies are a compulsory part of the HSC Science Syllabus where students explore a topic of interest. This recent addition is the ideal platform to connect senior students with the work of Taronga's conservation experts, and a crucial opportunity for Zoo Education Officers to build capacity of teachers. Taronga provides an excellent stimulus for Biology students in the module – Ecosystem Dynamics. These full-day Depth Study programs inspire students through access to data, working scientists and staff involved in community engagement, conservation and wildlife recovery. The value of these programs is well known in the teaching community and the transition to offer Depth Studies virtually engaged regional, rural and remote school audiences that have not traditionally been able to participate in the face-to-face program.

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 460 active YATZ members and, despite not being able to visit the site between June and November 2021, this group contributed 8,721 hours to the zoo in volunteer time, which would equal 53 full time staff. In the past year, 50 members in the program applied to become leaders. YATZ leaders receive specialised leadership training and mentor newer members. These leaders are trained in Access and Inclusion, Respect and Resilience and Presentation and Mentoring skills.

Keeper for a Day

Taronga's Keeper for a Day program provided more than 800 children, young people and adults the chance to work with keepers to learn how to best care for Taronga's animals and their habitats. This program has also been adapted to offer unique opportunities for disadvantaged youth groups to connect and engage with Taronga's staff and wildlife. In the past 12 months, Taronga hosted two groups from the Youth Off the Streets program, to build capacity for engagement and career pathways development.

Zoo Adventures 'Wild Squad'

The Zoo Adventures holiday program continued to deliver a popular and exciting program for over 1,200 five to 12-year-olds at Taronga Zoo and Taronga Western Plains Zoo. The program was modified across both sites to support embedded COVID-19 plans as children participated in daily missions, craft activities and behind-the-scenes activities with keepers.

WINGS Program

Piloted in March 2022, WINGS is a supported work experience program for adults with intellectual disabilities. Currently a group of four participants and their support team take on regular and adjusted tasks in a real-life work setting in the zoo grounds. A trial group from the Windgap Foundation has made great progress with the nutrition team. Every Monday they prepare food deliveries and items for the animals and are enjoying learning about the Zoo. Taronga Nutrition staff support and train them in regular tasks such as making Red Panda bars and preparing food packs to send out to each animal division.

Taronga Training Institute

The Taronga Training Institute (TTI) is a Registered Training Organisation and delivers certificate qualifications 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 2021/22, TTI received over 936 applications from people applying to study full qualifications. From these applications, 589 students were enrolled.

In 2022, the certified animal courses changed nationally to ACM20121 Certificate II in Animal Care and ACM30321 Certificate III in Wildlife and Exhibited Animal Care. This resulted in significant changes to course content and delivery and assessment processes.

TTI continues to deliver high-quality training. In a survey of students who completed their training in 2021, 90% were satisfied with the training, 94% would recommend the training to others and 97% said the training prepared them well for work.



TARONGA — UNIVERSITY OF SYDNEY GRADUATES — PHOTO BY ELLIOTT KRAMER

Taronga – University of Sydney Education Alliance

The Bachelor of Science/Bachelor of Advanced Studies (Taronga Wildlife Conservation) is a collaboration between Taronga and the University of Sydney. This degree provides students with an opportunity to learn from academics and practitioners of wildlife conservation and take advantage of world-class facilities at both Institutions.

Taronga aims to create exceptional learning experiences to empower and inspire our university students in becoming the next ambassadors for wildlife conservation and there are currently 211 students enrolled in this Bachelor's degree.

2022 is the fourth year of this education alliance and it continues to go from strength-to-strength. The University Programs team teach 13 units of study across all four years of the degree in units focusing on topics from animal science, biology, ecology and conservation,

to statistics, wildlife management and wildlife health and welfare. The course is delivered across both Zoos and at the University.

In 2021/22 Taronga welcomed 1,800 University students to our Zoos for a range of classes, including lectures, practicals, tutorials, fieldwork and lab sessions. In addition, the team continued to teach the hybrid model of online classes to around 300 remote students. The fourth-year field trip to Taronga Western Plains Zoo immersed 30 students in wildlife conservation, where they learned from researchers and keepers and gained first-hand experience in the Taronga Sanctuary.

At the end of 2021, the first-ever graduates completed their degree. In March 2022, the graduates celebrated their achievements at Taronga Zoo Sydney prior to their official graduation at the University of Sydney.



Experience

Inspiring our Guests

Taronga Zoo

After a COVID-19 enforced closure from the end of June, Taronga Zoo reopened on 18 October 2021 providing a safe and enjoyable space for the community to reconnect with one another and wildlife. Taronga's Zoo Friends community returned early in strong numbers, a testament to their loyalty. Excitingly, in November 2021, a new membership model, the 'Family Flex', was launched to provide enhanced user experience and flexibility for families which has been exceptionally well received.

Taronga Zoo remained top of mind for guests, with admissions increasing towards the Christmas school holidays, driven in part by the debut of five African Lion cubs at the recently opened African Savannah. These playful new arrivals proved to be predictably popular, requiring their viewing to be carefully managed in a COVID-safe manner. An additional treat for returning guests was the addition of a new Capybara encounter, which was an instant hit, booking out daily. TripAdvisor Awards received during this period demonstrated guests' loyalty and advocacy for Taronga professionalism and delivery of unique experiences.

The Wildlife Retreat at Taronga reopened at the end of October, and despite the lack of international visitors, occupancy grew swiftly, driven by the local travel-restricted market. Christmas holidays delivered particularly high numbers of bookings and as the year progressed, weekend and holiday demand were well

supported by growth in corporate bookings through the Taronga Function Centre. Over 20,000 guests had been hosted at the Wildlife Retreat by year end, while Roar and Snore enjoyed immediate demand upon reopening and delivered unforgettable experiences to over 7,000 guests.

As the year drew to a close, a taste of normality returned in May and June with Wild Lights at Taronga, as part of Destination NSW's Vivid Sydney. A trail of bespoke, large-scale animal lanterns, animated projections and interactive light installations enthralled more than 80,000 visitors with this series of 18 after-hours ticketed events.

Taronga Western Plains Zoo

Taronga Western Plains Zoo began the 2021/22 financial year open for business, however, many key visitor markets such as Sydney and Newcastle were experiencing the beginning of the second COVID-19 lockdown. This resulted in a quieter than expected July school holiday period and ultimately led to the Zoo's closure in August due to a COVID-19 lockdown in Dubbo.

During the 10-week closure period, Taronga Western Plains Zoo made the Savannah Cabins available to NSW Health for use as a medi-hotel, enabling many local families to safely isolate and providing much-needed support to the Dubbo community.

Upon reopening, Taronga Western Plains Zoo was able to leverage recent major capital project openings, such as The Waterhole, as well as record levels of customer advocacy. As a result, visitation was high during the summer holidays and the second half of the financial year. The closure period also saw the team develop new experiences, such as Hippo Encounters and Elephant Barn Tours, which have been extremely popular with guests.



Overnight programs maintained the high levels of occupancy seen in the previous year, proving that the desire for a Regional NSW holiday remained very strong.

In November 2021, Taronga Western Plains Zoo was honoured to win the Gold Award for Major Tourist Attractions at the NSW Tourism Awards. Zoofari Lodge was awarded Silver in the category of Unique Accommodation. Taronga Western Plains Zoo also went on to win the Bronze Award for Major Tourist Attractions at the Australian Tourism Awards.

Improving Guest Experience

Zoo Friends Relaunch

Launched in November 2021, the new Zoo Friends 'Family Flex' Membership was the first upgrade to the membership program since 'two free kids' were added to membership types in 2017. The aim of the new membership was to allow families greater flexibility as they can now share their passes with other adult family members. This change has added value to the membership, which is extremely important in the current marketplace. An administrative membership portal was also created, allowing Zoo Friends to manage their membership renewals, register their visit and update details themselves.

Guest Learning and Engagement

Taronga Zoo

A range of updated and new signage, trails and collateral was developed throughout the year to maximise the guest learning opportunities of school holiday activities, major events, and corporate partnership activations, like the Red Energy Zoo Month Kids Trail – Creature Features that Flex.

School holidays featured the youth education platform Wild Squad to engage guests and support behaviour change activations. The African Lion cubs were the focus for summer, with interpretive signage developed and the kids map put an engaging lens on the animals of the African Savannah.

It was a special and vibrant return of Wild Lights at Taronga, with innovative, inclusive installations and breathtaking projections, weaved together with a story of possibility, wonder and hope for a healthy and shared planet for all.

Capital projects were a significant and continued focus with concept planning and detailed design work and development of the narrative, guest journey and a call-to-action for Nura Diya Australia, the Amphibian and Reptile Conservation Centre and Wildlife Hospital precincts.

Taronga Western Plains Zoo

New interpretive signage was installed at the Greater One-horned Rhino exhibit for the new calf and a suite of signage introduced at the Waterhole Café for the new Hot Rot Composter to showcase the Zoo's commitment to sustainability.

A new partnership with South African Tourism at the Black Rhino exhibit and Savannah Safari highlights sustainable, responsible, and ethical tourism. Existing partner Red Energy had signage introduced at the Hire Centre and a Zoo Month Kids Trail activated for the first time.

Capital projects were a significant and continued focus through concept planning, detailed design work and development of the guest journey narrative for the Wildlife Hospital and Platypus Conservation Centre.

Building a Zoo for the Future

Following successful delivery of the Centenary Capital Program, Taronga is continuing to plan and design the next round of capital projects that will not only transform the facilities for wildlife in our care, but also provide opportunities to expand Taronga's capacity for the treatment and rehabilitation of wildlife and to deliver our education and conservation programs.

Taronga Zoo

Nura Diya Australia

Nura Diya Australia will develop an environment that immerses guests amongst native Australian flora and fauna and will allow them to gain a deeper appreciation of Aboriginal cultural connection of caring for animals, trees and Country. Nura Diya Australia is a project at the front entry of Taronga Zoo, which will incorporate a specially designed Koala encounter area with canopy walk, provide significant areas to experience Kangaroos and Dingoes, and refurbish Taronga's much-loved nocturnal exhibit. It will be open to guests in Summer of 2023.

Amphibian and Reptile Conservation Centre

The Amphibian and Reptile Conservation Centre will be a world-class facility, connecting guests with crucial species and breeding programs while raising awareness of the impacts of climate change on wildlife. It will be an educational and multi-layered 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 is within the Wild Futures Initiative, with design and planning approvals now successfully achieved. Construction will commence in September 2022 and the centre is expected to open in late 2023.

Taronga Wildlife Hospital, Sydney

The construction of the Taronga Wildlife Hospital in Sydney is a key component of the \$80.7 million Wild Futures initiative, which is focused on veterinary practitioners and creating greater capacity for Taronga's conservation and education programs. Animal treatment spaces, including a prominent marine rescue centre, will be visible to guests from a public forecourt sheltered under a grand timber canopy. The design of the new Taronga Wildlife Hospital is almost complete, with the State Significant Development Application to be lodged in 2022, with construction complete by 2025.

Platypus Rescue and Rehabilitation Centre, Sydney

The Platypus Rescue and Rehabilitation Centre in Sydney will comprise two facilities to support Platypus rescue, rehabilitation and research, and an enclosed facility that can contain up to 10 tubs for rearing 150 juvenile Bellinger River Turtles. The facility will be able to hold up to 12 Platypus for rehabilitation prior to reintroduction to the wild and will facilitate understanding of Platypus reproduction and behaviour and support breeding. The conservation centre has commenced construction and is due for completion in early 2023.

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 will attract new visitors, boost the NSW economy and stimulate travel. The project team has now commenced design and planning, with the upgraded Sky Safari expected to open in 2025.

Taronga Western Plains Zoo

Taronga Wildlife Hospital, Dubbo

Construction for the \$14.6 million Wildlife Hospital continued in 2021/22. Despite unprecedented rain events during the construction period, it is on course to open in late 2022. The Hospital will provide increased capacity to care for sick and injured wildlife, assist conservation efforts and increase teaching capacity for veterinary staff. In addition to the hospital, an interactive guest experience has been developed utilising signage, play equipment and multimedia display to showcase the conservation, education, sustainability and animal welfare work undertaken at Taronga Western Plains Zoo.



Taronga Platypus Rescue and Rehabilitation Centre, Dubbo

The Platypus Rescue and Rehabilitation Centre in Dubbo has progressed through the planning, design and tender phases, culminating in the contract award in April 2022. The Centre will see the creation of a unique facility that will provide future refuge for drought threatened wild Platypus populations, an on-going research capability to study Platypus behaviour, a public Platypus habitat with an interpretative and educational overlay, as well as a pre-release area comprising a naturalistic creek line to prepare recovered Platypus for release back into the wild. It is expected that the \$12.1 million project will be completed in mid to late 2023.

Facilities and Infrastructure Asset Maintenance

Taronga Zoo

The Asset Management team continued to respond to reactive maintenance requests at Taronga and Taronga Western Plains Zoo through close monitoring of the Archibus work request backlog. Staff and contractor resources were allocated as required to maintain the reactive work request backlog at close to industrial standard level.

Scheduled maintenance and maintenance projects were risk assessed and prioritised for safety. Replacement of the Tree Kangaroo boardwalk and multi-story carpark draining improvement were notable safety related projects that were completed.

Asset Management implemented all policy and assessment development to ensure compliance with the NSW Government Asset Management Policy.

Heritage Asset Management

Preservation of Taronga's rich heritage continued throughout the year, particularly with a number of capital works projects underway or in planning.

Heritage assessments and archival records were made for the Taronga Wildlife Hospital project, while the Sky Safari Revitalisation team was briefed about heritage considerations when looking at options for new routes. The Hallstrom Memorial was dismantled and conserved.

Heritage advice was provided during construction of the Nura Diya Australia project, where excavation revealed the wall of the 1916 Baboon pit. It was recorded as an archaeological remain and the design adjusted to retain it. Conversion of the 1916 Spider Monkey pit to a Cultural Circle commenced, with the moat infilled. The upper house on Whiting Beach Road was assessed for adaptation to store archives.

Sydney Living Museum's exhibition, How to Move a Zoo, opened featuring items from Taronga's Archive and staff contributed to events. An episode of Tiny Oz, about the Zoo's 1916 move, was filmed and screened on ABC television. It included interviews with staff about Taronga's history.

Horticulture

The Taronga horticultural department has provided guidance and advice on the exhibit design for a number of upcoming capital projects. Taking a holistic approach to the design of exhibits, the horticulturalists have been involved in every stage of the design process. This included assistance with choosing plants species that are endemic to particular areas, the maintenance regime for plants and ongoing upkeep through to the conclusion of the project.

Education and Experience Snapshot

Wild Lights

81k 

visitors illuminated at Wild Lights at Taronga as part of Vivid Sydney

Tiger Trek

4.3 million 

guests have visited Tiger Trek since it opened in 2017

Taronga TV

Taronga TV audience spent

143,791 

hours watching and engaging with wildlife

Taronga's Digital Education

1.2 million+ 

students were supported through Taronga's digital education offerings in 2021/22

Taronga Training Institute

589 

students enrolled with the Taronga Training Institute from 936 applications



WILDLIFE CARE *and* WELFARE

Global industry leader in
wildlife care and continuous
improvement in welfare



PLAINS-WANDERER RELEASED TO THE WILD – PHOTO BY ALEX PIKE

Animals in our Care

Taronga Zoo

Animals are at the heart of the Taronga Zoo experience and over the past 12 months, the upmost care and diligence has been provided to more than 4,000 animals from 350 unique species to ensure best-practice animal welfare.

Following the opening of the African Savannah in 2020, Taronga Zoo is once again home to a pride of Lions, with lioness 'Maya' and adult male Lion 'Ato' welcoming five cubs in August 2021. The new arrivals delighted keepers and the community during a challenging period of lockdowns via Taronga TV Cub Cam. A first for Taronga, the live cam allowed people from around the world to get a keepers-eye-view of the cubs, while also supporting Taronga's important conservation work in Northern Kenya. Joining them throughout the year were other significant births including two Red Panda cubs, seven Squirrel Monkey babies and a Southern Hairy-nosed Wombat joey. These births reflect the multidisciplinary skills of the keeping, nutrition, veterinary and broader teams and play a crucial role in raising awareness of imperilled wildlife and the threats facing these species in the wild.

The wildlife operations team have also played a significant role in contributing to Taronga's conservation breeding and recovery programs. The amphibian and frog breeding program saw some great success, with 745 Northern and 932 Southern Corroboree Frog eggs produced, while continued success in the birth of 18 Plains-wanderer and 57 Regent Honeyeater chicks represents a significant contribution to these critically endangered species.

After a considered process and collaboration across the Zoo, Taronga's Chimpanzee community also moved back into their full outdoor habitat following significant upgrades to infrastructure. These included a new moat and exterior fencing, as well as a central tower to allow new observation points for the group.

Taronga Western Plains Zoo

The Wildlife team at Taronga Western Plains Zoo is responsible for caring for more than 58 species, and a number of these are listed as endangered or critically endangered. The past year saw a few new additions to key breeding conservation programs and a consolidation of programs.

This was a successful year for the conservation breeding programs operating at Taronga Western Plains Zoo. Following the first release of bilbies into Sturt National Park in 2020, more bilby joeys were born in the Taronga

Sanctuary in 2022 and 34 bilbies from the Sanctuary were released into the Australian Conservancy Newhaven Sanctuary. It is estimated that there are now up to 100 bilbies living in the Taronga Sanctuary. Regular trapping occurs to monitor animal health and record the population.

The Plains-wanderer program has had another successful year, with the first release of birds bred at Taronga Western Plains Zoo released in late 2021. The Regent Honeyeater conservation breeding program has also gone from strength to strength, with the establishment of a flocking aviary for the young birds to learn life skills with other species such as Mallee Fowl, Chough, Scalp-breasted Lorikeet and recently Budgerigar.

In October 2021, a male Greater One-horned Rhino calf was born to mother 'Amala' and sire 'Dora'. This is the second calf born in Australasia. The calf was named 'Hari', meaning 'Sun' in Nepalese and has passed several developmental milestones.

In April 2022, three lion cubs were born to 'Marion' and sire 'Lwazi'. While two of the cubs were delivered naturally, one of the cubs was delivered via caesarean section due to complications during labour. They have been introduced successfully to first time father 'Lwazi'. This is the first litter and pride in the Lion Pride habitat since its inception.

ZAA Accreditation

Taronga Zoo was proudly 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 champions welfare from the animal's perspective and examines the animal's experience. The framework considers not just the absence of negative welfare but the promotion of positive welfare. As part of its accreditation, Taronga was required to provide compelling evidence for set criteria on both its operations and the experiences of its animals.

A welfare assessment was also conducted based on the five animal welfare domains for key species from a broad cross-section of species nominated by ZAA – from invertebrates through to great apes. The program also considers Taronga's commitment to positive animal welfare, safety, biosecurity, conservation and sustainability. ZAA-accredited zoos and aquariums are assessed every three years to retain accreditation. Taronga Western Plains Zoo will undergo its reaccreditation process in 2022/23.



AFRICAN LION 'LWAZI' AND CUB — PHOTO BY RICK STEVENS

Asian Elephant Transfer

In March 2022, Taronga Western Plains Zoo welcomed a very important addition – female Asian Elephant ‘Anjalee’, who arrived from Auckland Zoo. Fifteen-year-old ‘Anjalee’ travelled well in her purpose-built crate alongside an Auckland Zookeeper before completing her mandatory quarantine period. This is the first elephant to have been transferred to Taronga Western Plains Zoo from international shores since the arrival of African elephants in 1977. Keepers have been able to achieve good results in managing ‘Anjalee’ in her new home. This includes a daily bath, foot care and blood draws for health and oestrus monitoring. All of this was largely achieved within the 30-day quarantine period. ‘Anjalee’ has since integrated into the existing herd of females. She is yet to meet the males physically but has sight, smell and audio contact. As soon as her oestrus cycle can be detected she will be introduced to the males.

Taronga is very proud to have worked collaboratively with Auckland Zoo to offer ‘Anjalee’ a new home and, in doing so, give her the opportunity to breed naturally, which is critical for her reproductive health and to support the regional breeding program for Asian Elephants.

White Rhino Transfer

Earlier in 2022, Taronga Western Plains exchanged male White Rhino ‘Umfana’, who was wild caught in South Africa, with ‘Satara’, also wild caught from South Africa and residing at Monarto Safari Park. The transfer required veterinary and keeping support and both animals travelled within 48 hours of each other. ‘Satara’ has yet to be introduced to the female herd as ‘Mopani’ is currently pregnant from ‘Umfana’. Satara has become a firm favourite with keepers due to his gentle nature and physical appearance.



BLACK RHINO 'BAKHITA' AND CALF 'SABI STAR' – PHOTO BY RICK STEVENS

Animal Welfare

Taronga promotes positive animal welfare for all animals, both in care and in the wild and takes its commitment to conservation and animal welfare seriously. Inherent within that, is caring for and portraying wildlife with the greatest dignity and respect, whilst delivering engaging and transformational guest experiences. Taronga is committed to providing excellent care, health management, housing and species appropriate behavioural opportunities that promotes good welfare to all animals in care.

Photography Guidelines

There is growing evidence that the way humans and animals are portrayed together in photos can affect public attitudes towards wildlife. As a conservation and welfare organisation, Taronga has a responsibility to consider the direct and indirect consequences of facilitating photos of people interacting with wildlife. While intimate wildlife encounters can facilitate learning and inspire pro-conservation behaviour, there is also evidence that some photos taken out of context can have unintended consequences, such as promoting illegal wildlife trade, encouraging exotic pet ownership, and underestimating the real threatened status of species in the wild. Taronga has developed Photography Guidelines to provide a framework to ensure that photos curated by Taronga staff support our goal to build a connection with wildlife, while being careful to avoid potential unintended consequences. This reflects another step in our journey of presenting wildlife with dignity and respect.

Ethical Animal Encounter Guidelines

Many zoos, wildlife parks and tourism destinations offer wildlife encounters or animal visitor interactions. It can be challenging for guests to critically discern what makes an ethical, meaningful and ‘higher’ welfare encounter. Along with Photography Guidelines, in 2021/22 Taronga developed some key factors that support respectful animal encounters, such as the animals having choice in participation, carrying out natural behaviours and benefiting the species in the wild through conservation, animal welfare or sustainability messaging. Taronga’s wildlife encounters have been assessed against criteria to ensure alignment with the Dignity and Respect for Wildlife framework and Animal Welfare Charter. These philosophies are being embraced more broadly and strong alignment can be found with the Zoo and Aquarium Animal (ZAA) Visitor Interaction Position Statement to which Taronga has contributed.

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Taronga strives to be at the forefront of industry standards for welfare and aims to drive improvement by conducting scientific research in animal welfare.

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Animal Welfare Committee

The Taronga Animal Welfare Committee is responsible for assisting Taronga to achieve its animal welfare commitments, maintain the highest possible care for its animal populations and to monitor the practices and procedures that ensure the health and welfare of the animals. This includes reviewing and advising on reported animal welfare related incidents, including both immediate resolution and long-term measures to prevent reoccurrence. The Taronga Animal Welfare Committee consists of core Taronga staff members with direct welfare related responsibilities, elected staff representatives from various divisions and external representatives. A key focus area for the committee this year was interactions with wild birds.

Welfare Science

Taronga strives to be at the forefront of industry standards for welfare and aims to drive improvement by conducting scientific research in animal welfare. The Conservation Behaviour Laboratory teamed up with researchers from Zoos Victoria and the University of Melbourne to develop a species-specific Behavioural Welfare Assessment Tool for giraffe in zoos. The purpose of the tool is to enable rapid and reliable tracking of an individual’s welfare throughout their life. The development of the tool involved expert elicitation of 36 participants from 10 countries followed by trialling and refinement of the tool at Taronga Zoo, Taronga Western Plains Zoo, Melbourne Zoo and Werribee Open Range Zoo.

In 2022, Taronga launched Welfare on Display. This project aims to utilise artificial intelligence and machine learning to gather data on animal behaviour, activity patterns and enclosure use. This data will allow automated quantitative measurement of behavioural patterns to both inform individual management and provide audio-visual displays for visitors explaining the behaviour they are seeing in real time.



Taronga Wildlife Health and Rehabilitation

Taronga Wildlife Hospitals

Taronga's veterinary teams are committed to providing the highest standard of healthcare for its animals and wildlife admitted to both Sydney and Dubbo, to responding to wildlife crisis events and to sharing expertise across the country to build knowledge and capacity to respond to wildlife crises.

Delivery of a veterinary health program is a key component of Taronga's commitment to best-practice animal welfare, biosecurity, conservation and science. The Wildlife Hospitals at both Sydney and Dubbo operate under a veterinary preventative medicine calendar, ensuring the health and wellbeing of animals is prioritised.

Oversight of animal nutrition and housing is combined with the development of quarantine, vaccination and disease surveillance programs. Health assessments are scheduled for animals throughout the various life stages, including at critical phases such as during growth and into old age. Additionally, Taronga provides consultancy services to other zoos and wildlife and welfare agencies.

Nutrition

Taronga's Nutrition department provides nutritionally balanced, sustainable diets that promote positive health and welfare. Weather conditions, supply chain disruptions and increased fuel and fertiliser costs continue to challenge a consistent, quality food supply. Efforts focus on initiatives that maintain the highest dietary standards and improve the sustainability of animal feed in increasingly challenging circumstances. One such initiative is research with the University of Western Sydney, funded by the Department of Climate Change, Energy, the Environment and Water, which is aiming to develop an artificial leaf to supplement and reduce reliance on fresh eucalyptus for Koalas in care.

Taronga leads in-situ and ex-situ nutrition research essential to conservation efforts. The One Welfare project, Wildlife Assist, investigates the provisioning of food, water and shelter in bushfire-affected areas with universities, wildlife rescue organisations, government agencies and funding partners RSPCA Australia and WIRES. Through consulting and education, Taronga also provides expert advice on nutrition for breeding and conservation programs throughout the region.

Wildlife Rehabilitation

The Taronga Wildlife Hospital rehabilitation program provides veterinary treatment and rehabilitation to injured, sick and orphaned native wildlife. Wildlife admitted for care receives treatment from veterinary experts before undergoing rehabilitation and being returned to the wild. In some instances, community members who were involved in the animal's rescue are invited to the release of that animal to help raise awareness of the pressures faced by urban wildlife.

Taronga collaborates with clinical veterinarians, wildlife rescue organisations, Government wildlife agencies, the RSPCA NSW and Federal and State Border Security to respond to wildlife emergencies, significant disease outbreaks and wildlife confiscations.

Taronga's two Wildlife Hospitals received 1,478 sick, injured or orphaned native animals for treatment and rehabilitation last year. The Taronga Wildlife Hospital in Sydney received 840 native animals – 480 birds, 253 mammals, 83 reptiles and 24 amphibians (including 20 endangered marine turtles). Fifty-seven birds from 17 species were leg banded and released at their encounter locations as part of the Taronga Rehabilitation Program in conjunction with the Australian Bird and Bat Banding Scheme. This program enables monitoring of survival and movement, and the project has provided significant data, with some birds reported decades after banding in the same release location and others moving considerable distances. Taronga staff work closely with NSW National Parks and Wildlife rangers and Sydney Harbour Water Police to enable release of marine birds 5kms offshore from Sydney Heads.

The Taronga Marine Turtle Satellite Tracking Program released four more Green Sea Turtles with satellite tags, bringing the total of tagged turtles released to 36. This research project monitors survival and movement of rehabilitated turtles and provides data on critical habitat use and movement of immature marine turtles in NSW.

The Taronga Wildlife Hospital in Dubbo received 638 sick, injured or orphaned animals for assessment and treatment this year – 371 birds, 181 mammals, 80 reptiles, five amphibians and one fish. The Wildlife Hospital also operates a wildlife service to both registered wildlife carers and members of the public.

Training in Wildlife Rehabilitation

The role of Taronga's Wildlife Hospital teams extends beyond the direct treatment of wildlife. Education and knowledge sharing is a crucial strategy to improve both Taronga and the nation's capacity to respond to wildlife crises in conservation medicine through wildlife first aid. Taronga is the leading provider of veterinary services in wildlife rescue and rehabilitation in NSW and during 2021/22 continued to expand its wildlife education offerings.

Emergency Online Bushfire Module

Following the Black Summer bushfires, Taronga was called upon by both state and federal Governments to provide training in wildlife care for the veterinary sector. The Taronga Wildlife Hospital team developed an online module 'Assessment, Triage & Treatment of Bushfire Affected Wildlife'. This free course is designed to upskill veterinary practitioners in treating bushfire injuries to wildlife. More than 4,800 veterinary staff from across the globe have accessed the course.

Wildlife First-Aid Course for Firefighters

In collaboration with the NSW National Parks and Wildlife Service, the Taronga Wildlife Hospital developed a wildlife first-aid training course consisting of four online modules and a handbook to equip more than 80,000 NSW firefighters with the skills to help wildlife impacted by bushfires.

This training ensures those on the frontline have the tools to assess and report injured wildlife, as well as apply basic first aid and transfer injured animals off the fireground to vets and volunteer wildlife rehabilitators when it is safe to do so. The course was made available from 1 December 2021.

Veterinary Professional Training in Wildlife

With a strategic priority to increase capacity to assist wildlife in need, Taronga has continued to deliver Veterinary Professional Training in Wildlife Treatment and Care. This hybrid online and face-to-face program is specifically designed for veterinarians and veterinary nurses and focuses on building the confidence, knowledge and skills required for the triage, first aid, treatment and care of wild Australian species.

This course was developed by Taronga in partnership with the NSW Department of Environment, NSW National Parks and Wildlife Service and the University of Sydney's Koala Health Hub, following consultation with veterinary and wildlife rehabilitation industry representatives. The course is endorsed and accredited by the Australian Veterinary Association and the Veterinary Nurses Council of Australia. Since the course commenced in 2020, 983 vet professionals have completed the online component of the Wildlife Treatment and Care, with 669 of those receiving either a full subsidy from the support of the Federal Government or a partial NSW Government Koala Strategy subsidy. In July 2021, Taronga partnered with Zoos Victoria and Currumbin Wildlife Sanctuary to offer face-to-face workshops interstate.



Taronga Wildlife Hospital Research

Koalas suffer painful conditions such as burns, as seen during the Black Summer bushfires, other injuries, and chlamydial cystitis. Koalas absorb and metabolise drugs differently to most other species and establishing the pharmacokinetics of pain medications in koalas is critically important to ensure safe and effective use of medications in this iconic species. In collaboration with the University of Sydney, Taronga investigated the pharmacokinetic profiles of paracetamol and tramadol in koalas. Taronga has previously investigated the pharmacokinetics of several antibiotics in koalas, a study that has now been published. A study investigating the pharmacokinetics of several non-steroidal anti-inflammatory drugs in Black Rhinos is also being undertaken in collaboration with the University of Sydney. These studies are critically important to ensure that medications administered to wildlife species are both safe and effective.

Flood Crisis Response

In early March, heavy rain and flooding impacted large areas of Eastern Australia, with people, wildlife and communities heavily affected. Enacting learnings from the Black Summer bushfires, Taronga acted swiftly to develop tips for the public on how to care for injured or impacted wildlife. This prompt action enabled Taronga to gain significant public exposure and share important information with the community in a time of need. During this period of crisis, Taronga's Wildlife Hospital team also treated a high-profile wildlife patient – Gerald the Echidna – who was found floating down a swollen river on a mattress. Gerald attracted significant media attention, following his rehabilitation and subsequent release.

Zoo Vet Residency Program

Taronga welcomed its first veterinary resident in over two decades. The Conservation, Wildlife and Zoo Medicine Residency Program is a partnership with Murdoch University and includes clinical training in all aspects of zoo and wildlife medicine, as well as related wildlife conservation and fieldwork opportunities. Despite their iconic status, Platypus remain relatively understudied, and there are gaps in our understanding of the impact of disease on the species. Without a thorough understanding of Platypus disease ecology, there is a risk of unintentional disease transmission through conservation actions such as translocations. The research component of the program is 'Investigating the health and disease of Platypuses in NSW'. A disease risk assessment has been completed and will be applied to an upcoming translocation of platypuses in the Royal National Park.

Wildlife Care and Welfare Snapshot

Regional Breeding Program

8



African Lion cubs

born as part of the regional breeding program across both zoos

Taronga Sanctuary

100



Greater Bilbies now living, thriving and breeding in the Taronga Sanctuary

Taronga's Wildlife Hospitals

1,478



sick, injured or orphaned native animals were **admitted for treatment and rehabilitation** at Taronga's Wildlife Hospitals over the last year

Wildlife First-Aid Training Course

A wildlife first-aid training course, developed with NSW National Parks and Wildlife Service, was shared with

80k+

NSW firefighters



Emergency Bushfire e-Module

4,800+

veterinary staff from across the globe have now accessed Taronga's Emergency bushfire e-module





CONSERVATION IN ACTION

Deliver world leading conservation
action, recovery and science



GREATER BILBY RELEASED AT NEWHAVEN WILDLIFE SANCTUARY – PHOTO BY BRAD LEUE/AUSTRALIAN WILDLIFE CONSERVANCY

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 scientists have uncovered important findings to understand the origins and habitat of Green Sea Turtles in New South Wales.

With support from BioPlatforms Australia, genetic analysis revealed the importance of NSW waters for multiple breeding stocks of Green Sea Turtles and found that turtles in NSW originated primarily from the southern Great Barrier Reef (~80%) and New Caledonia (~16%), with a small proportion originating from more distant locations. Understanding the connectivity of NSW foraging grounds to breeding stocks provides an opportunity to assess the impact of threats to marine turtles in the Indo-Pacific region and prioritise management actions.

Stable isotope analysis by collaborators at Griffith University revealed the overall diet composition of Green Sea Turtles in NSW consisted predominantly of macroalgae (74.8%), seagrass (19.2%), and trivial amounts of mangrove and other material (6%). Green Sea Turtles favouring macroalgae in NSW is in contrast with conspecifics in Queensland where sea grass is the predominant dietary source. The results also support the hypothesis that Green Sea Turtles are omnivorous and not strictly herbivorous as historically reported.

Crucially, these findings can direct local management and conservation of turtles in NSW waters, including releasing rehabilitated turtles to algae-dominated habitats to potentially increase survival. Combining genetic and stable isotope data with satellite tracking data collected from rehabilitated and wild turtles in the future will continue to identify sites of biological importance in NSW.

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Taronga scientists have been working with the Zoo and Aquarium Association to drive a national approach to conservation biobanking.

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CryoDiversity Bank

Taronga scientists have been working with the Zoo and Aquarium Association to drive a national approach to conservation biobanking. Our team is also investigating the cryobiology of reproductive cells across a range of species to develop methodologies for routine cryopreservation of gametes (biobanking) to support genetic management within breed-for-release and wider conservation programs.

During 2021/22, Taronga staff and collaborators from the Universities of Wollongong and Newcastle were able to cryopreserve sperm samples from 45 frogs across three conservation breeding programs at Taronga Zoo: Booroolong Frogs and Southern and Northern Corroboree Frogs. With the assistance of genetic management tools, these samples will be selectively used to produce young from certain genetic lines through assisted fertilisation.

Under the Australian Government's Reef Restoration and Adaptation Program (RRAP), Taronga and collaborators including First Nations Peoples continued their work to safeguard the health and resilience of the Great Barrier Reef during the annual coral mass-spawning event in November 2021.

Taronga conducted collaborative research with scientists from the Australian Institute of Marine Science (AIMS) on Bindal Nation to refine how cryopreserved sperm can be used to produce new corals en masse for reef restoration.

The team was able to produce large quantities (tens of millions) of coral larvae using cryopreserved sperm with fresh eggs and showed this can be achieved in relatively small volumes of sea water with 1 litre yielding almost 1 million larvae. This is an important step in upscaling ex situ coral breeding for restoration activities.

Taronga's conservation biologist also attended late summer spawning at AIMS for the first time in February 2022 to repeat fertilisation experiments and biobank sperm from new species. Taronga's Cryodiversity Bank now contains samples from 30 identified species of hard corals of the Great Barrier Reef.



NORTHERN CORROBOREE FROG DURING RELEASE
IN KOSCIUSZKO NATIONAL PARK – PHOTO BY HARRY VINCENT

Australian Shark Incident Database

This was a milestone year for the Australian Shark Attack File, which was renamed Taronga's Australian Shark Incident Database (ASID). This renaming is in-line with contemporary science-focussed language and an industry wide change to reduce negative connotations surrounding the word 'attack'.

The launch of the ASID was accompanied by a scientific manuscript (*The Australian Shark-Incident Database for quantifying temporal and spatial patterns of shark-human conflict*) in Nature's Scientific Data, co-authored with Flinders University. It has been accessed over 2,500 times since its release, mentioned in 18 news outlets and 130 times in social media.

In a bold move to increase the reach and impact of the dataset, a de-identified public facing version of the data has been made available through the open access platform GitHub, with a link to the repository imbedded in the Taronga website and through Scientific Data. Taronga remains the custodian and curator of this legacy dataset.

Making the Waves Safe

This Australian Research Council funded project with Macquarie University (MQ) 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, a virtual 3D shark model has been created by MQ to understand how different electric pulses propagate through the water and penetrate the body of a shark. High resolution MRI scans have been used to reconstruct a 3D model of a shark head and segment tissues.

Next steps include construction of a device capable of producing a wide variety of waveforms for comparison with current commercial devices. Examination of whether White Sharks are attracted to current commercial electronic devices is scheduled to occur in South Africa, and discussions are underway on the feasibility of conducting electro-sensory research with wild sharks (Dusty Whalers) temporarily held at Taronga Zoo.

Platypus Conservation

Taronga continues to spearhead Platypus conservation initiatives in NSW in collaboration with partners at the University of NSW. This year, ground was broken across both sites to embark on building Australia's largest Platypus Rescue and Rehabilitation Centre. The facility at Taronga Zoo will be pivotal in facilitating the first translocation of Platypus in NSW, bringing Platypus back to the Royal National Park, where they have been locally extinct for 50 years. Taronga's involvement in this translocation also centres around disease risk assessment, health checks and implantation of acoustic trackers for post-release monitoring.

The Platypus Rescue and Rehabilitation Centre in Dubbo includes a dedicated breeding and research centre, a semi-wild conditioning creek system, an ambassador Platypus and a rescue centre able to support 65 Platypus across five river systems in quarantine-level facilities.

Both sites will support intensive breeding research with ambitious outcomes to crack the code of Platypus reproduction by understanding the varied biological and environmental factors that underpin it. Taronga continues to build on its partnership with the University of NSW Platypus Conservation Initiative, supporting in-situ, post-bushfire surveys and collaborating on an evidence-based approach to species recovery and future emergency response plans.

Bellinger River Snapping Turtles

The conservation breeding program for the Bellinger River Snapping Turtle continues to achieve recovery actions under challenging circumstances. The most recent breeding season (2021/22) produced 58 hatchlings, and the insurance population at Taronga Zoo now consists of 160 turtles. An expansion of facilities is under way, which will significantly increase the capacity of the zoo population towards an annual release target of 150 individuals. In November 2021, 30 turtles were released in the upper Bellinger River to increase the wild population. In total, 82 turtles have been released since 2018, aged between one and four years old. Monitoring data from previous releases suggests survival of released and tracked turtles is high, more than 80% over 12 months.

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Taronga continues to spearhead Platypus conservation initiatives in NSW.

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SENIOR HERPETOFAUNA KEEPER ADAM SKIDMORE WITH
BELLINGER RIVER TURTLE EGGS – PHOTO BY HARRY VINCENT





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 15 breeding pairs at Taronga Zoo and Taronga Western Plains Zoo. Furthermore, in October 2021, Taronga, alongside representatives from the NSW Department of Environment's Saving Our Species Program and Birdlife Australia, released 58 zoo-bred birds into the wild in Wonnarua Country on the Kurri Kurri and Cessnock Woodlands. Two of Taronga's released birds successfully fledged a chick in the wild – the first time this was recorded by the release team. A population viability analysis was recently published with key contributions from Taronga staff and is being used to guide the future conservation program strategy.

Plains-wanderer

The Plains-wanderer is a critically endangered bird, endemic to Australia. After the establishment of the successful conservation breeding program, Taronga is working with partner organisations to develop the long-term release strategy for these birds. In March 2022, 10 birds (five males and five females) were released from Taronga Western Plains Zoo into natural habitat in the Hay Riverina, the first release ever in NSW. In October 2021, the first cohort of zoo-bred Plains-wanderer from Taronga was released in the northern plains of Victoria, in partnership with Zoos Victoria. Successful breeding continues at both Taronga Zoo and Taronga Western Plains Zoo, with 16 chicks hatching during 2021/22.

Greater Bilby

Since its establishment in 2018, the Greater Bilby conservation breeding population in the Taronga Sanctuary has flourished. Following the break of the drought in 2020, optimal conditions in the Sanctuary have allowed the population to boom. Keepers estimate at least 100 bilbies are thriving in the program, with evidence of consistent breeding in all mature females observed.

In May 2022, a record 32 Greater Bilbies were translocated and released to the Australia Wildlife Conservancies 'Newhaven' site in the Northern Territory. This translocation represents the largest cohort of mammals released from a Taronga conservation breeding program in a single event. For the first time, research from the Sanctuary has also been published, in the journal *Wildlife Research*, with a second paper currently in review submitted to the *Journal of Wildlife Management*.

Norfolk Island Snail

Over the last year, the Norfolk Island Snail conservation program has contributed a great deal of new information on these illusive invertebrates. Through careful data recording and behaviour observations, life history parameters such as longevity, growth and birth intervals start to unfold. The snails proved more challenging to care for than anticipated and the decision was made to focus on *Advena campbellii*. Additional *A. campbellii* snails were collected in May 2022 to expand the current breeding population. There has been a lot of learning and adjustments to the husbandry (for example, adding palm bases and leaves to the tanks to create more natural hiding places for the snails), which will 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, 932 Southern Corroboree Frog and 745 Northern Corroboree Frog fertile eggs were produced at Taronga Zoo. Of the eggs collected from the two populations to establish an insurance colony of the Northern Corroboree, over 60 metamorphosed, increasing the breeding population held at Taronga Zoo. In early 2022, 50 adult Southern Corroboree Frogs were released into a new, large disease-free enclosure in a remote part of Kosciuszko National Park. Also, more than 300 eggs of each Corroboree Frog species were released to Kosciuszko and Brindabella National Parks in the last year.

Chuditch

A new recovery program for Chuditch (Western Quoll) was established at the Taronga Sanctuary. Chuditch are one of the top 20 priority mammals listed under the Federal Threatened Species Strategy. The species range has been reduced to five per cent of its former distribution. Chuditch are extinct in New South Wales, Queensland, Victoria and the Northern Territory. Extant populations persist in Western Australia, and translocation efforts have re-established populations in South Australia. There are at least eight conservation sites marked for the reintroduction of Chuditch across Australia, and Taronga's program will assist in supplying Chuditch for release.

Eight Chuditch entered the program in April 2022, forming four breeding pairs. In its first six months, the program is showing early success, with all pairs demonstrating breeding behaviour and 17 joeys produced. A first release of program animals to the wild is planned for November, representing major success in less than nine months of operations.





Koala Conservation and Partnerships

In March 2021, Taronga entered into a partnership with Koala Conservation Australia (KCA) to develop a world first ex-situ Koala conservation breed-for-release program at a new, purpose-built facility in Port Macquarie.

The purpose of this program is to undertake strategic supplementation and reintroduction translocations to bolster Koala populations across the NSW mid-north coast and includes comprehensive in-situ field work to identify and monitor sites for releases.

The design for the facility has been finalised and building works have commenced, with completion expected in March 2024. An extensive review of existing habitat and historic population data has also been undertaken, and several sites have been identified that may benefit from release of Koalas. The understanding of existing populations, habitat suitability, disease profiles and genetics is a major determinant of translocation necessity. Monitoring to investigate these variables will commence in September 2022, with population surveys using thermal drones.

Christmas Island Blue-tailed Skink

Taronga has been working with Parks Australia on the conservation recovery of the Christmas Island Blue-tailed Skink (*Cryptoblepharus egeriae*), which is extinct in the wild. After 10 years genetically managing the Blue-tailed Skink using the Maximum Avoidance of Inbreeding (MAI) strategy, this program is now in its final stages and assessment of the status of this population will help guide future strategies. Genomic analyses through the Threatened Species Initiative will help inform future genetic management strategies and supplementation at release sites. In 2021, 125 Blue-tailed Skinks bred at Taronga were released to Pulu Blan Madar, part of the Cocos Islands Archipelago. The existing 10-year conservation plan is also coming to an end, and Taronga has been charged with leading the development of the next Christmas Island reptile conservation plan. An IUCN SSC Conservation Planning Specialist Group convened workshop in 2023 will guide this important conservation plan.

Dingo

The Myall Lakes Dingo Project aims to expand our knowledge of Dingoes – an important native apex predator – and to forge new tools and strategies for human-Dingo coexistence through meaningful engagement with Traditional Owner groups and other key community stakeholders. This collaborative program is driven by Taronga's ecologists in collaboration with the University of NSW, NSW National Parks and Wildlife Service and Mid Coast Council and is an example of Taronga's focus on effective human-wildlife coexistence strategies for keystone species, and the use of science and engagement in conservation management.

This year, the team collared and monitored six packs of Dingoes and collected sighting reports and records on 42 individual Dingoes. Camera-traps collected 1.2 million images, which were initially classified by machine learning. The team engaged 5,000 volunteers internationally to classify roughly 50,000 images containing animals, providing key data on the effectiveness and impacts of potential non-lethal deterrents in the landscape.

A second citizen science approach yielded 141 independent reports of Dingoes in the study area, which were used to confirm pack structures and ranging, alongside the six radio collars that were fitted to packs during this period and generated hourly positions. Using 44 remote camera-traps, the team also surveyed the Dingo population over the 38,000ha study area over a period of three months, identifying 24 dingoes from 745 independent daytime detection events. Collectively, this information is being used to develop non-lethal management tools to enable the effective retention and conservation management of Dingoes in the landscape.

Wildlife Forensics

Taronga is continuing efforts to dismantle illegal wildlife trade through innovation in science and technology, with two complementary forensic projects showing significant promise in protecting wildlife and Australia's borders.

WildEnforce

The science team is developing the use of x-ray fluorescence (XRF) to determine provenance of laundered wildlife in collaboration with partners at the University of NSW, University of Technology Sydney and Australian Nuclear Science and Technology Organisation.

The focus of this 'WildEnforce' team has centred around the refinement of algorithms that can assign Australia's most trafficked species, the Shingleback Lizard (*Tiliqua rugosa*), to either captive or wild origins. This science is based on comparing unique elemental signatures stored in the scales of the lizards that reflect differing diets and aims to prevent the poaching of wild animals.

To date, the team has scanned over 100 Shingleback Lizards, from wild locations in South Australia and NSW and from managed populations at several zoological parks. Data collection from other regions of Australia will be undertaken in the Spring of 2022. This x-ray technology is showing significant promise as a handheld tool to assist enforcement partners at the Department of Agriculture, Fisheries and Forestry (DAFF). Current working models are showing accuracy levels above 80% and field trials with DAFF are planned for mid-2023.

Rapiscan Systems

Taronga has partnered with Rapiscan Systems, a leading detection technology company with detection units across most Australian mail pathways and airports. The postal service is the most common method of smuggling wildlife in and out of Australia's borders. Using Real Time Tomography and 3D x-ray CT technology with hundreds of wildlife specimens tested under varying transport conditions, the team has developed wildlife detection algorithms for deployment across mail pathways.

More than 25 targeted Australian wildlife and non-native species have been scanned to create an image reference library for algorithm detection. A total of 294 scans from 13 species of lizards, birds and fish were used to develop initial wildlife algorithms with a detection rate of 82% and a false alarm rate of 1.6%. In combination with human and biosecurity dog detection, this innovative technology is a promising complementary platform for wildlife detections at Australian international borders, with potential worldwide applications.

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 2021 also included Save Vietnam Wildlife, Botswana Predator Conservation, Cheetah Conservation Botswana and the Australian Wildlife Conservancy.

Box-gum Woodland Rewilding Sanctuary

In March 2022, the NSW Government announced \$16 million of seed funding for a first-of-its-kind 5,000-hectare Woodland Rewilding Sanctuary, which will provide a haven for Koalas and other threatened species.

The Box-gum Woodland Rewilding Sanctuary is a visionary project for Taronga that will see more than 5,000 hectares of Koala habitat and Box-gum Woodlands in NSW – a critically endangered ecological community – restored and revegetated. Crucially, this project prioritises establishing climate change resilient future habitat for endangered Koalas and a significant number of listed threatened species.

The project – the largest of its kind and part of the NSW Koala Strategy – will build on Taronga's leadership as conservation and breed-to-release experts and allow for the establishment of a new reserve that will protect countless species in the long-term. Box-gum Woodlands are themselves critically endangered, so this not only benefits our precious native wildlife but many species of plants as well.

The project will take some time to come to fruition; plans are underway to begin planting Box-gum Woodlands within the next five years. The first step is to identify the right site, which is likely to be along the western slopes of the Great Dividing Range.

In time, at least 40 other threatened species will be able to call the Rewilding Reserve home, and communities and visitors will be able to visit, learn from and enjoy the site.

The Australian Registry of Wildlife Health (The Registry)

Australian fauna has been heavily impacted by the pressures brought on by drought, fires, changes in environmental conditions, land use, and management practices that move or artificially increase wildlife population densities.

Collectively these factors have contributed to an upward trajectory of emerging infectious and non-infectious diseases in wildlife. Wildlife are generally accepted as the most important reservoirs of new infectious agents that pose a biosecurity threat to biodiversity, primary industries and human health.

In 2021, Taronga successfully negotiated the establishment of a collaborative, cost-effective and cost-shared framework to expand the capabilities of the Registry to address the health threats to NSW wildlife.

Registry capabilities will be enhanced to better service government partners and the NSW community through wildlife disease diagnostics that are vital for wildlife conservation and biosecurity threat identification, management and reduction.

The Registry conducted investigations for approximately 338 individual animal cases (comprising 73 wildlife investigations), including a multi-state, multi-species amphibian mass mortality event that commenced in June 2021, and other morbidity and mortality events affecting species such as Fur Seals, Brushtail and Ringtail Possums, Swamp Wallabies, Leatherback Turtles, Echidnas and various parrots.



Spotlight

Amphibian Mass Mortality Investigation

The Registry and other stakeholders began receiving reports of sick and dead amphibians across New South Wales, Queensland, Victoria and South Australia in early June 2021, and this continued well into 2022. State-wide COVID-19 restrictions played a significant role in changing the way in which the Registry conducted this disease investigation.

The scale of the event was unprecedented. Frogs were being found either dead or out in the daytime, ataxic, thin and often with brown or red discoloration. The prognosis for affected frogs was grave, and most died within 24 hours. Among numerous other stakeholders, the Registry worked closely with Dr Jodi Rowley at the Australian Museum during this event and the team prepared communications to support wildlife welfare and rehabilitation, wildlife veterinarians and diagnosticians.

The museum's FrogID received more than 1,600 reports from the public about sick and dead frogs from across all states and territories. Each of these reports

could represent up to 30 individual frogs. At least 40 frog species have been reportedly affected, and approximately 70 per cent of reports are from NSW.

About 72% of frogs tested positive for Chytrid fungus, a result compatible with histological findings. Amphibian ranavirus was excluded by the NSW State agriculture laboratory and Metatranscriptomics were undertaken at record speed in collaboration with the University of Sydney. Toxicological analysis conducted through NSW Environmental Forensics found some animals had evidence of pesticide, rodenticide and other chemical exposure, however, there were no consistent findings to account for the event.

Collectively, there is a lack of significant bacterial and protozoal pathogens consistently across animals sampled, and Chytrid identified in these animals shows no overt evidence of evolution towards increased virulence. Spizellomyces (another order of Chytrid fungi, commonly found in a broad range of environments and not known to be pathogenic) and iridoviruses are being further investigated for a potential role in the event.



AUSTRALIAN SEA-LION PUP 'MALIE' – PHOTO BY RICK STEVENS

Five years of Taronga's Legacy Species Commitment

In 2016, Taronga celebrated its Centenary year and committed to conserving five Australian and five Sumatran species over 10 years. The Koala was added as the 11th Legacy Species in 2019. Five years on from the launch of the program, Taronga and partners have achieved significant progress.

Commitment to Sumatran Legacy Species

It was identified that the best opportunity to improve the trajectory for key Sumatran species is working on habitat protection and restoration and engaging the community in conservation efforts. These efforts have been concentrated in Sumatra's Way Kambas National Park, where a joint program has seen more than 65 hectares undergo restoration and tree plantings. The program has also resulted in improved management of threats such as fire and elephant disturbance, and the employment of more than 50 local people.

In 2018, Taronga also led a successful pilot Sumatra Eco Tour to Way Kambas National Park; plans are in

place to launch further tours once the international tourism market recovers post COVID-19. Taronga's support for Wildlife Protection Units in Way Kambas has also prevented the poaching of critically endangered Sumatran Rhino.

In fantastic news for Sumatran Rhino conservation, a calf was born to female rhino 'Rosa' in Way Kambas National Park in March 2022. Sumatran Rhinos are one of the most endangered species on the planet with less than 80 individuals remaining. This birth is such an important milestone for this iconic species and testament to the hard work of the team at the Sumatran Rhino Sanctuary Way Kambas, YABI Yayasan Badak Indonesia and the International Rhino Foundation. Taronga's Conservation Science Manager, Dr Justine O'Brien, and Taronga Western Plains Zoo's Senior Veterinarian, Dr Benn Bryant, have both provided technical expertise to support 'Rosa's' fertility, and in the care of Sumatran Rhinos.

Closer to home, Taronga has promoted the use of Certified Sustainable Palm Oil through its Tiger Trek and Raise Your Palm Campaign, with more than 147,000 emails sent to companies; many of these organisations are now transitioning to the use of Certified Sustainable Palm Oil in their products.



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Commitment to Australian Legacy Species

Since 2016 Taronga's contribution to its Australian legacy species has been significant.

Over five years, Taronga has released 179 Regent Honeyeaters into NSW and Victoria. The expansion of the Regent Honeyeater program to the Taronga Sanctuary has also doubled Taronga's breeding capacity, and behavioural research into zoo-bred Regent Honeyeaters has improved survivorship rates of these birds, post release.

In 2020, 10 bilbies from Taronga's Sanctuary were translocated to Sturt National Park. This marked the first-time bilbies have been on Wongkumara and Maljangata country in north-western NSW for more than 100 years. This was followed by the release of 32 bilbies into the Newhaven Wildlife Sanctuary in Central Australia in May 2022.

Taronga also established collaborative research projects to determine the origins and identify biologically important habitats for Green Sea Turtles in NSW, while the Taronga Wildlife Hospital has released and rehabilitated more than 23 marine turtles with satellite trackers, providing valuable survivorship and habitat use data.

Wild populations of frogs have been bolstered with the release of more than 2,800 eggs and 300 Southern and 187 Northern Corroboree Frogs into Kosciuszko National Park. Furthermore, monitoring of reintroduced Northern Corroboree Frogs at Brindabella National Park in 2021 found 30 males with nest chambers, of which three had eggs at the time of survey. Twenty-six released males were also resighted, with individuals from releases dating back to 2014 identified.

After a successful rescue and return of Platypus from Tidbinbilla Nature Reserve in the Black Summer bushfires of 2019/20, Taronga secured \$10 million to build facilities to support Platypus conservation and mitigate the impacts of future climate events. Taronga experts also offered advice and consultation that contributed to the banning of Opera House traps in NSW and Victoria. Opera House traps are known to cause mortality in Platypus and other semi-aquatic wildlife.

During the Black Summer bushfires, Taronga mobilised vets and keepers to treat and care for injured and affected Koalas and has since partnered with Koala Conservation Australia to develop a rewilding program for this species. Excitingly, Taronga is also focussing on restoring 5,000 hectares of fire-resistant habitat for Koalas in NSW.

Conservation Action Snapshot

Regional Breeding Program

10

Plains-wanderer birds

released into the Hay Riverina in the first-ever NSW release for this critically endangered species



Amphibian Breeding Programs

Sperm samples collected from

45

frogs

across three species to guarantee genetic diversity in 'breed for release' programs



CryoDiversity Bank

Living samples from

30

identified species of **hard corals** of the Great Barrier Reef are now contained in Taronga's Cryodiversity Bank



Endangered Turtles Released

30

critically endangered

Bellinger River Snapping Turtles

released in November 2021, bringing the number of zoo-bred turtles released since 2018 to 82



Zooniverse Dingo Monitoring

5,000

volunteers engaged to classify 50,000 images as part of the Zooniverse Dingo monitoring citizen science project





ENVIRONMENTAL LEADERSHIP

Lead environmental sustainability
and climate change action



GREEN TURTLE HATCHLING AT TARONGA WILDLIFE HOSPITAL SYDNEY – PHOTO BY HARRY VINCENT

Actions

Launch of the Sustainability Strategy 2021-2025

Taronga's new Strategic Plan prioritises environmental sustainability and climate change action, and in October 2021, Taronga launched its 2021-2025 Sustainability Strategy. This strategy is aligned with several key United Nations Sustainable Development goals and commits to a number of ambitious targets. Taronga has committed to net zero emissions by 2030 with a 70% reduction in absolute emissions, including 100% renewable electricity. The strategy also commits to zero net increase in water use from 2025 (excluding recycled or reclaimed water), applying a sustainable and ethical procurement framework to all purchasing decisions by 2025, and diverting 90% of operational waste from landfill by 2025. Achievements are reported internally and externally to ensure continued progress in helping safeguard a shared future for wildlife and people.

Emissions Management

With international calls to limit global warming to within 1.5 degrees, it has never been more important to measure and mitigate carbon footprint. In 2021/22 Taronga continued to measure its greenhouse gas emissions to develop an inventory that identifies emission reductions opportunities and allows Taronga to quantify offsets required to ensure its operations can be Certified Carbon Neutral. To measure carbon footprint, Taronga monitors electricity and gas consumption, animal feed purchases, procurement of office materials like paper and construction materials, among other operations.

Taronga continues to utilise solar energy across both sites, with more than 1,182,402kwh power generated at Taronga Western Plains Zoo alone this year. Supported by the NSW Government, Taronga undertook updated energy audits and a solar feasibility study for both sites, which is an important first step in our net zero emissions pathway. Metering of electricity usage at Taronga Zoo was completed as a first step in a wide-scale monitoring dashboard, and there is ongoing work to understand offsite renewable electricity options and provision for electric vehicle chargers.

Taronga is continually working to reduce emissions associated with the disposal of waste, by implementing improved recycling facilities and educating staff and guests in correct source separation. For example, a new design on coffee cups at Taronga Western Plains Zoo emphasises their compostable quality to maximise recovery for the onsite HotRot aerobic digester. Over the year, Taronga Zoo achieved an average of 69% diversion from landfill.

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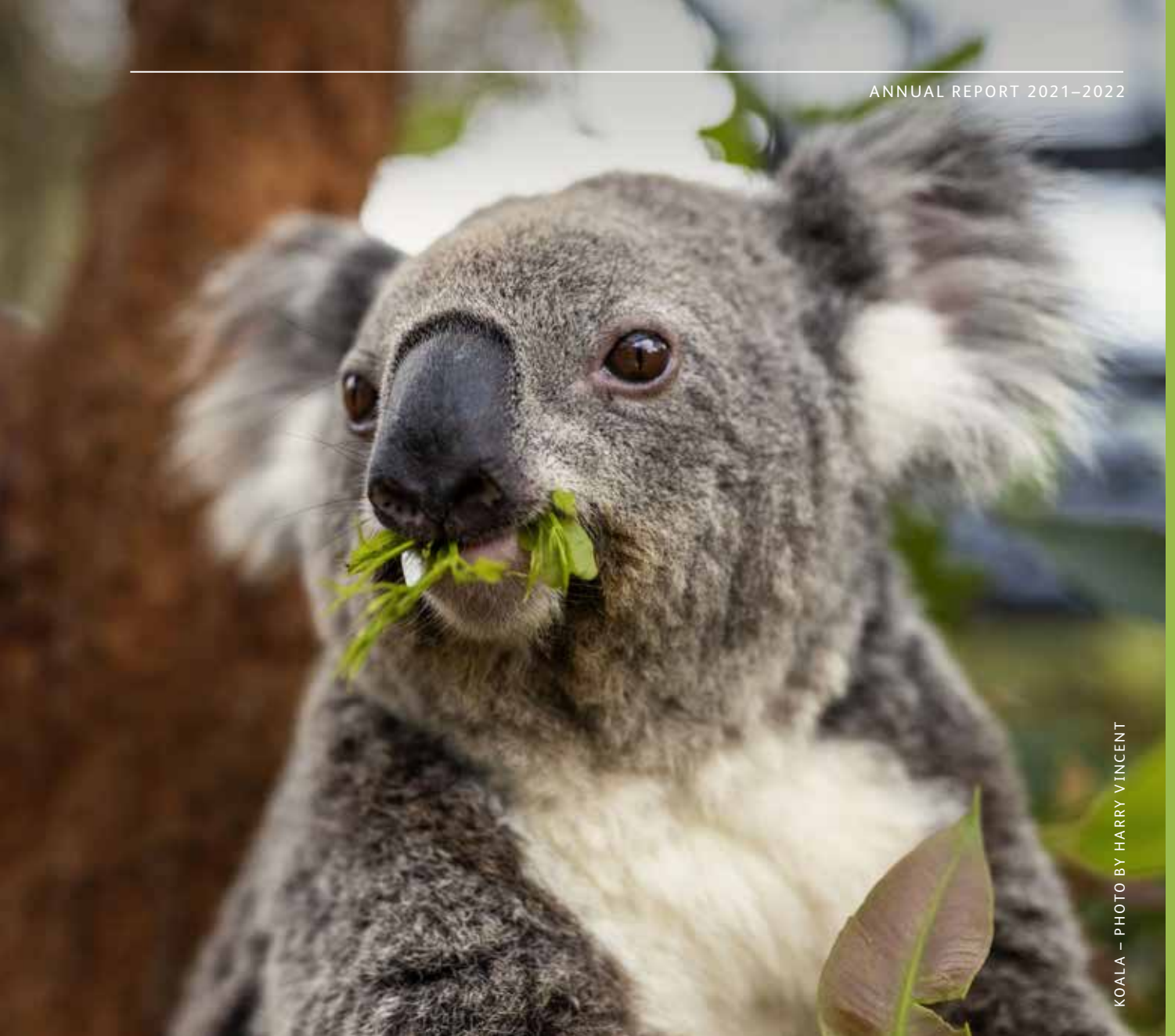
Sustainable Nutrition

Taronga embeds sustainability into every aspect of animal feeding from product development, sourcing and supply to packaging, operations and waste reduction. Animal feed contributes close to seven per cent of Taronga's overall carbon footprint. To improve carbon footprint tracking and evaluate sustainability initiatives, Taronga undertakes a life cycle assessment of animal feed emissions on an annual basis. A review of packaging use initiated a re-use scheme for polystyrene and wax boxes and a reduction of plastic packaging on produce in partnership with suppliers. A soft-plastics collection trial demonstrated enormous opportunity for increased diversion from landfill, which prompted discussions with a local soft plastics recycler.

Taronga favours sustainable practices and added two additional MSC-certified fish wholesalers and a hydroponic vegetable producer to our regular suppliers. Products developed by Taronga, Wombaroo Echidna Diet and Taronga Custom Herbivore Pellet, support the health, welfare and sustainability of animal feed for zoos throughout the region.

E-water Initiative

With many having harmful toxicological effects to wildlife and humans, chemicals used for cleaning are having a significant effect on ecosystems. To reduce chemical footprint, Taronga utilises several eWater units across both sites, which dispense non-toxic and biodegradable cleaning and sanitiser solutions. These solutions are highly effective and can be used to replace most traditional chemicals. During the height of the pandemic, eWater achieved TGA approval for killing viruses like COVID-19, and staff at Taronga have embraced it as a safe way to wash and preserve fresh food, clean surfaces and mop floors. eWater is being used as a replacement for traditional chemicals in the Wildlife Retreat at Taronga, Food Market and Waterhole Café. To date, Taronga has diverted more than 1,261,500 litres of chemicals from our waterways by using eWater.



KOALA – PHOTO BY HARRY VINCENT

Return and Earn

The Environmental Protection Authority (EPA) found that beverage containers made up 44 % of the volume of litter in NSW. Much of this would end up in rivers and oceans, which harms wildlife. Taronga was keen to be a key partner in the NSW Government's largest ever litter prevention program to help contribute to a cleaner environment for wildlife and people. The initial reverse vending machine installed at Taronga was one of the first to go live during the launch of the NSW container deposit scheme. It is immensely popular with the local community and since December 2017, more than 5 million containers have been deposited and recycled. This reverse vending machine has one of NSW's highest donation rates, with refunds from 13,400 of containers deposited being donated to the Taronga Foundation. Each container deposited into a reverse vending machine inside the zoo is a donation to Taronga. To date, over 5,477 containers have been donated.

Keeper-led Circular Economy

The health and well-being of the animals in Taronga's care and the preservation of the planet comes in many forms, shapes and sizes. Through a decade-long partnership with Fire and Rescue NSW, Taronga Zoo has been receiving decommissioned firehoses, which have been collected from fire stations across the state and donated to Taronga. A team of skilled Behavioural Enrichment volunteers have spent the past two decades repurposing and upcycling fire hoses into items like hammocks, swings and puzzles for many of Taronga's animals. This partnership has enabled Taronga and Fire and Rescue NSW to reduce a considerable amount of landfill while also improving the welfare of many zoo residents. In another example of keeper-led initiatives, this year Taronga's Free Flight Bird team collected more than 5kg of eWaste and hard-to-recycle items and sent these onto Terracycle for recycling.



Spotlight

Embedding Environmental Leadership Across Taronga

Taronga believes that a future without wildlife is not an option and collective action is required to 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 our own species' health and prosperity. At no time in history has this been more evident, with drought, bushfires, climate change, global pandemics, habitat destruction, ocean acidification and many other crises threatening natural systems and our own future.

Taronga aims to be an environmental sustainability leader and to inspire climate change action.

Increasingly, the environmental, social, and governance (ESG) framework is an important consideration for businesses, and, for an organisation like Taronga, this framework and thinking is embedded across all operations. Not only has Taronga set its own ambitious sustainability targets, it is also working to save species, sustain robust ecosystems, provide inspiring experiences and create learning opportunities to create meaningful changes for wildlife.

Influence

Sustainability Scorecard Framework

Taronga's ongoing commitment to sustainability extends to all areas of the organisation including working with partners on their impacts in sustainability. Through the formalised Sustainability Scorecard Framework developed as part of Taronga's previous Strategic plan, there have been significant changes in the management of both new and existing partners. To ensure strong alignment to Taronga's overarching objectives in sustainability, a number of partnerships have shifted based on the outcome of the Sustainability Scorecard Framework and the findings through the extensive investigation in this space. Where possible, Taronga works with existing and new partners to assist on their own sustainability journeys. This includes work with internal practices as well as adjusting the understanding and priorities with our partners.

Collaboration with Peters Ice Cream

It is inspiring to see the opportunities Taronga has been afforded to work hand-in-hand with corporate partners to support their incorporation of sustainability in their own supply chains and business models. For example, Taronga's corporate partner Peters Ice Cream has been supplying Taronga with ice creams since 2017. When the partnership began, Peters' Milo Scoop Shake was sold nation-wide alongside a plastic spoon. Having eliminated all of Taronga's own plastic cutlery onsite, Taronga collaborated with Peters regarding removing this piece of plastic from their national offering, with an understanding of the ripple effects could be significant. Taronga was a key contributor to accelerate the change for Peters to implement a change in their supply chain, which has resulted in an FSC-Certified wooden spoon now being supplied with all Milo Scoop Shakes sold around Australia.

Factoring in Peters' national network, the impact is significant, and this change has meant that 5 million plastic spoons are no longer going to landfill. Taronga is excited to collaborate with Peters on their ongoing sustainability plans whilst helping to leverage its engaged audiences to understand the impacts of these goals. No single group or organisation is going to solve the problems of sustainability on their own, but with like-minded organisations working together, real change can be enacted.

Industry Knowledge Sharing

Within Taronga's Strategic plan, a key outcome is recognition for leadership and expertise in sustainability and climate change. As part of this, Taronga is committed to sharing and showcasing best practice sustainability initiatives, and concepts or practices for the benefit of our visitors, partners and industry peers. During 2021/22, Taronga's Sustainability Manager shared knowledge with and presented to several local agencies, including staff at the Australian Museum, RSPCA NSW, the Royal Botanic Gardens Sydney and NSW Treasury. Taronga's Divisional Director of Welfare Conservation and Science was part of a small working group under the umbrella of the World Association of Zoos and Aquariums (WAZA) that has developed a short guide for all zoos, wildlife parks and aquariums on reducing, measuring and offsetting carbon.

Environmental Leadership Snapshot

Solar Power

More than

1,182,402

kWh of solar power generated at Taronga Western Plains Zoo during 2021/22



Waste Diversion

69%

of waste diverted from landfill at Taronga Zoo



eWater Cleaning Technology

More than

1,261,500

litres of chemicals diverted from waterways through the use of eWater cleaning technologies



Taronga's Return and Earn

5 million+

containers recycled through Taronga's Return and Earn reverse recycling station since its installation in 2017



Taronga Foundation

Refunds from

18,877

containers donated to the Taronga Foundation





COMMITMENT TO COUNTRY

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





NEWHAVEN WARLPIRI RANGER ALICE NAMPIJINPA HENWOOD AND LEE NANGALA GALLAGHER WELCOME THE GREATER BILBIES TO NEWHAVEN – PHOTO BY BRAD LEUE/AUSTRALIAN WILDLIFE CONSERVANCY

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

By consulting and engaging with Community, Taronga aims to strengthen its connection, trust and partnership with traditional owners. In 2022, the Taronga Aboriginal Advisory Group (TAAG), Cammeraigal met to discuss Indigenous language use and protocols and TAAG membership length and diversity.

Representation from different Community groups within the committee is important, particularly to support the development and implementation of Sydney Language across the site. An invitation will be extended out to Community for new members to broaden the expertise within the group.

Burbangana

Burbangana, a Dharug word of the Sydney language group meaning "take my hand and help me up", successfully returned to face-to-face delivery on Cammeraigal Country in November 2021.

While existing and new students engaged online over the lock-down period, the true strength and positive impact of this program was seen when each young person returned to Taronga Zoo. These students were able to develop practical skills, confidence and trust with zoo staff while also re-connecting to Country and Culture.

As a result of Taronga's strong partnership with the NSW Department of Communities and Justice Services, additional young people have been referred to the program, including youth from regional areas throughout New South Wales.

The next stage for Burbangana is to launch the 'Sydney Red Gum, Growth & Development Program', a new initiative that will provide 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.

GREATER BILBIES WELCOMED TO WONGKUMARA COUNTRY-AT-STURT NATIONAL PARK PRIOR TO RELEASE – PHOTO BY BOBBYJO VIAL



Menangle Project

Post COVID-19 lockdown, Taronga's Burbangana facilitators noticed a dip in young people's confidence to visit Taronga. As a result, the Menangle Project was launched. The program is facilitated on a rural property in Menangle, 1.5 hours 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. The Menangle Project has been funded until the end of 2022 – Taronga is seeking grants to continue this great initiative, with the aim of building a native frog pond and habitat refuge for wild native species endemic to the region.

Walanmarra

Since returning to onsite delivery on Wiradjuri Country in late 2021, this unique program for Indigenous children has continued to have a positive impact on each child that attends, developing their skills, self-determination and knowledge of land and Country. Through strong Cultural mentoring from Taronga staff and Traditional Custodians, each child is provided with a safe and positive environment to learn and re-connect to their Culture. Over the past six months, participation has increased with an average of four children attending each day; these numbers have remained high due to daily transport being provided by the Taronga Community and Cultural team. This has ensured that each participant can attend the program regularly and has provided the children with stability and trust.

In April 2022, Taronga launched the School Based Traineeship program, employing eight young people across both sites. One of these successful applicants was a Walanmarra graduate. This young person's growth and success is a result of long-term engagement and positive mentoring at Taronga, and they will now play a key role in mentoring current Walanmarra participants.

Birrarany and Malungan Business

This new education program at Taronga Western Plains Zoo aims to reconnect young people to Culture, developing an increased sense of worth and reengaging them back in to education and training pathways. Established in partnership with the NSW Office for Regional Youth and supported by the NSW Department of Education and the NSW Transport Access Regional Grants, the program will connect with 120 students over 18 months. In Term 2 of 2022, the program launched with the first 20 young people from local high schools. Attendance was extremely high with all participants remaining actively involved. Some of the highlights included horticulture activities, Reconciliation Week planning, barista training, Cultural camps and animal handling and presentation skills development.

When the students graduated from the program in June 2022, they received a Youth at the Zoo membership to continue their engagement with Taronga.

Skills Based Apprenticeships Training Program

Eight Indigenous trainees joined Taronga in Term 2 of 2022. Funded by the NSW Department of Education, Aboriginal Outcomes and Partnerships Directorate, these students will be employed at Taronga for two years while they work alongside staff to develop skills and experience in Tourism, Horticulture and Animal Care. The students will be mentored and supported by Taronga Indigenous staff to successfully obtain a certification in their relevant employment area. Already students have been delivering education programs in the Immersive Classrooms, working at the front desk of the Taronga Wildlife Retreat and providing much-needed support to the Taronga Horticulture team.

Gai-mariagal Festival and NAIDOC Week

In 2021, the Wildlife Retreat at Taronga was proud to be the venue for the launch of the Gai-mariagal Festival, which aims to raise awareness of First Nations People living in the Sydney Region. This very special event celebrated 21 years of bringing individuals, families and communities together to celebrate the oldest continuing culture on the planet.

The NAIDOC 2021 theme – Heal Country! – called for greater protections for our lands, our waters, our sacred sites and our cultural heritage from exploitation, desecration, and destruction. Unfortunately, due to COVID-19, many NAIDOC in-person community activities were cancelled, however, staff were encouraged to participate in online events, which included a virtual discussion with author and former Taronga Aboriginal Projects Officer, Nardi Simpson.

CHRISTINE ELLIS, AUSTRALIAN WILDLIFE CONSERVANCY LAND
MANAGEMENT OFFICER, WITH STUDENTS FROM NYIRRIPI SCHOOL
RELEASE A BILBY INTO NEWHAVEN WILDLIFE SANCTUARY
— PHOTO BY BRAD LEUE/AUSTRALIAN WILDLIFE CONSERVANCY



Reconciliation Week

The 2022 National Reconciliation Week theme, 'Be Brave, Make Change', provided opportunities on Cammeragal and Wiradjuri Country for Taronga staff, students and volunteers to reflect on ways to positively contribute to true reconciliation. Events and workshops were held at both sites to provide opportunities to engage in conversation and deepen connections to Community and Culture. At Taronga Western Plains Zoo, an early morning flag raising ceremony was attended by staff to acknowledge Wiradjuri Country and more than 150 staff and Community members attended an Elders lunch hosted by the Community and Cultural team. A morning tea and Q&A with Wiradjuri Wolgalu Community leaders was held at Taronga Zoo as well as a smoking ceremony for Nura Diya Australia and art workshops led by Indigenous art group Dalmarri for guests of the Wildlife Retreat at Taronga.

Nura Diya Australia

Everything about Aboriginal society is inextricably woven with and connected to the land, to Country. Nura Diya Australia – the new Australia experience at Taronga Zoo – will share a Cultural narrative and Cultural visual language that emphasises our fragile and complex symbiotic relationship to the natural world and a contemporary representation of the rich cultural connectedness to Country.

Nura Diya Australia will be a place of gathering and learning. Through recognition, reconnection, relationships, and restoration, a shared story of connecting place and nature and uniting people with the landscape and wildlife unfolds.

“

Our Science and Conservation teams work on projects that involve partnerships with First Nations Peoples to integrate cultural processes and knowledge into our programs.

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Conservation and Science

Our Science and Conservation teams work on projects that involve partnerships with First Nations Peoples to integrate cultural processes and knowledge into our programs. We have a lot of listening, learning and work to do to keep building relationships and continue action on the reconciliation journey that underpins so many of our conservation priorities.

Consultation with Traditional Custodians of the Great Barrier Reef

Consultations with the Indigenous Partnerships Team of the Reef Restoration and Adaptation Program (RRAP) and the Taronga Aboriginal Advisory Group (TAAG) continue to guide our collaborations with First Nations Peoples on coral conservation work. This work involves the transfer of corals from sea Country to cooperative ‘Seed Banks’, also known as Taronga’s CryoDiversity Bank, on Cammeraigal and Wiradjuri Country. Consent from Traditional Custodians of the northern Great Barrier Reef to conduct cryopreservation work has been granted and discussions are underway with Traditional Owners of other regions of the reef. Ongoing consultation with Traditional Custodians from sea and land Country is crucial to ensure the cultural safety of samples at the CryoDiversity Bank and to progress Traditional Owner-led coral restoration work.

Greater Bilby Translocations

Translocation, the act of intentionally moving wildlife from one location to another, can both heal or harm Country. Taronga’s cultural and conservation teams are working to integrate appropriate cultural process and consultation into all translocation programs to ensure they are healing Country and aiding the recovery of threatened species.

On 25 May 2022, 32 Greater Bilbies were translocated from the Taronga Sanctuary on Wiradjuri Country and released into the Australian Wildlife Conservancy Newhaven Sanctuary in the Northern Territory on Warlpiri and Luritja Country. Newhaven is Australia’s largest non-government protected area and located on the traditional lands of the Ngalia-Warlpiri/Luritja people. Greater Bilbies, known as ‘Ninu’ to Central Australian Indigenous communities, were extinct in this region of the Northern Territory and Indigenous Community representatives were present to welcome back the ‘Ninu’ to Country.

Taronga’s Wiradjuri and conservation staff are also working to establish cultural land management practices in the Taronga Sanctuary. In June 2022, Taronga staff attended a cultural burning workshop delivered by Yarrabin Cultural Connections. Taronga’s Wiradjuri staff are leading discussions with Community as to how cultural burning practices can be implemented to improve habitat condition in the Sanctuary.

Commitment to Country Snapshot

Apprenticeships Training Program

8 

indigenous trainees

joined Taronga to take part in a Skills Based Apprenticeships Training Program

Business Education Program

Birrany and Malungan Business education program has connected with

120 

students over 18 months

Reconciliation Week

More than

150 

staff and volunteers attended an Elders lunch hosted by the Community and Cultural team on Wiradjuri Country to mark Reconciliation Week

Bilby Translocation

32 

bilbies translocated from Wiradjuri Country to Warlpiri and Luritja Country in consultation with Indigenous Community representatives



ORGANISATIONAL STRENGTH

Enhance our reputation,
financial position and
organisational effectiveness





CEO CAM KERR AO AND TARONGA STAFF REOPENING TARONGA ZOO SYDNEY AFTER COVID-19 LOCKDOWNS - PHOTO CHRIS WHEELER

Financial Strength

Admissions

Taronga Zoo

Taronga Zoo faced a challenging start to the financial year, however ended with strong visitation numbers, welcoming 403,719* paid guests for 2021/22 and a total attendance of 736,154**. This was a positive result given the Sydney and subsequent State lockdown from late June to October, as well as ongoing mandated COVID-safe measures. Taronga Zoo was officially closed for 114 days, reopening to the vaccinated public on 18 October. State borders began reopening in early November, with international borders opening from February 2022. These impacts saw 66% of our visitors come from Greater Sydney, 14% from intrastate, 16% from interstate and 4% from overseas.

The most significant impact to visitation, outside of COVID-19, was the unseasonably wet weather across summer and autumn, with La Nina bringing heavy rainfall and flooding during the first six months of 2022. Pleasingly, the Easter trading period and the last two months of the financial year saw a break in the rain and visitation bounced back with high Dine & Discover NSW voucher redemptions, which expired on 30 June. Zoo Friends visitation remained strong and consistent throughout the year, with a total of 226,021 members being welcomed through the gates at Taronga Zoo.

*Includes All Paid Admissions and Zoo Friends, Paid Education and Overnight Stays. **Paid and free-of-charge attendance including function guests, event attendees.

Taronga Western Plains Zoo

After a difficult start to the financial year, including key market lockdowns and an eventual closure of the Zoo due to COVID-19 lockdowns through August, September and into October, Taronga Western Plains Zoo recovered well to capitalise on continued interest in Regional NSW travel. As a result, paid visitation saw 121,569 guests welcomed across the year and total visitation reached 218,916 guests.

Taronga Western Plains Zoo also welcomed 26,773 overnight guests, a positive result, considering closures during the important spring school holiday period. The Waterhole continued to be popular with guests and assisted driving a recovery in visitation, particularly during the warmer summer months with the waterplay facility being a popular leisure destination. A continued focus on maintaining and increasing the Zoo Friends membership base saw 50,268 Zoo Friends member visits occur during the year – only 13% behind the previous year, despite the COVID-19 related disruptions.

Overnight Programs

Taronga Zoo

The Wildlife Retreat at Taronga reopened on 22 October 2022 after an extended closure period due to COVID-19. Since reopening, the Wildlife Retreat has performed strongly and welcomed more than 20,400 guests while receiving exceptional feedback.

COVID-19 acutely impacted the available workforce and the ability to recruit new people. The employee shortages, particularly chefs and front-facing employees, meant that the Wildlife Retreat operated on a reduced schedule of five nights a week to help relieve resourcing challenges. As a result of the reduced rooms supply and the increasing demand, the Wildlife Retreat successfully maintained high occupancy levels across open nights. The better-than-expected occupancy levels allowed the Wildlife Retreat to yield higher room rates, improving booking margins and profitability.

For a second year, the Wildlife Retreat was awarded 'Trip Advisors Best of the Best', placing the Retreat in the top 1% of hotels worldwide based on guest feedback. Me-Gal restaurant was again awarded Two Chefs Hats by the Australian Good Food Guide and the property was a finalist at the NSW Tourism Awards for Unique Accommodation and won several awards at the Hotel Management Awards, including Environmental Program of the Year.

Roar and Snore continued to be a successful and popular offering, bringing in 7,041 visitors despite being closed for 160 nights due to COVID-19, with an occupancy rate of 80%.

Taronga Western Plains Zoo

Taronga Western Plains Zoo's range of overnight guest experiences had an outstanding year and helped to lead the recovery from early year closures due to the COVID-19 pandemic. Zoofari Lodge stood out with a total of 10,605 visitors, and an occupancy of 87%. Savannah Cabins accommodated 12,636 guests during 2021/22, at an occupancy rate of 80%. Billabong Camp had 3,532 visitors experience this overnight program – this represented a decrease of 43% on prior year, due to COVID-19 impacts, capacity constraints and reduced school excursions. The addition of a Tasmanian Devil habitat adjacent to Billabong Camp proved popular with guests and was an excellent addition to the evening tour itinerary.



GUESTS ENJOYING TARONGA ZOO SYDNEY – PHOTO BY LAWRENCE FURZE



Spotlight

Dine & Discover NSW

In March 2021, the New South Wales Government launched its Voucher program to encourage the community to get out and about, and provide a more affordable way to support dining, arts and recreation businesses. Taronga has continued to allow guests to redeem both their Dine & Discover and the new Parents NSW vouchers online and included them as the main call to action across all creative and messaging for both paid and organic campaigns.

During 2021/22, 240,875 vouchers were redeemed across Taronga Zoo and Taronga Western Plains Zoo in ticketing, Zoo Friends Memberships and encounter bookings. In June 2022 alone, 78,354 vouchers were redeemed. This incentive to visit not only provided Taronga with a critical injection of funds with which to support its vital conservation work but has also allowed Taronga to provide more of the meaningful experiences and connections we know to be essential in facilitating behaviour change and empowering individuals and families to make a genuine contribution to the conservation of wildlife.



Retail

Taronga Zoo

Retail faced a challenging start to the financial year with COVID-19 lockdowns driving down consumer confidence and capacity restrictions having a cumulative negative impact on revenue. Global supply chain issues affected continuity of stock and rising freight, fuel and manufacturing costs resulted in an increase in cost of goods over the full year. Pleasingly, the last quarter saw strong attendance numbers, robust spending and a successful retail campaign during Wild Lights at Taronga, which drove revenue as well as spend per head delivering 65% of the full year's net profit, with a 23% increase in spend per head for total visitors. An eco-friendly plush range made from recycled PET bottles proved popular with exceptional sales, diverting 94,000 bottles from landfill or our waterways.

Taronga Western Plains Zoo

Taronga Western Plains Zoo's retail outlet performed strongly in spite of COVID-19 related supply chain issues. Store layout research was carried out to maximise customer dwell time along with increasing overall spend per head. This strategy proved particularly useful to maximise revenue through difficult periods.

Catering and Functions

Taronga Zoo

In-grounds catering reopened along with admissions and maintained a focus on COVID-safe and cost-efficient operations. Lower attendance numbers and ongoing challenges with industry-wide skilled staffing availabilities were well managed. The Taronga Centre enjoyed a significant amount of delayed demand from December through to the end of the financial year. In early 2022, Spotless Group sold all catering contracts being operated under the EPICURE brand including Taronga Zoo. A new agreement was negotiated, and Sydney-based Trippas White Group took over all catering operations on 1 April 2022.

Taronga Western Plains Zoo

Taronga Western Plains Zoo's catering had a very successful year considering the trading disruptions experienced. This result was driven by increased average spends at the very popular Waterhole Cafe. In its second year of operation, the Waterhole was a firm favourite with guests, particularly during the warmer summer months when the waterplay feature extended dwell time for families looking to cool down. The introduction of remote food and beverage ordering technology (Mr Yum) further increased average transaction values as well as improving the visitor experience. Taronga Western Plains Zoo's functions result continued to be impacted by the restrictions around gatherings and uncertainty throughout the year. Continued focus on menu and service improvement was well received and remained a focus for the team throughout the year.

Zoo Friends

Zoo Friends Membership had a challenging start to the financial year due to mandated COVID-19 closures. The reopening of both sites at the end of October coincided with the launch of the new Zoo Friends Membership program, which offers greater flexibility, value and benefits to new and renewing members. Initial demand post lockdown was slow, however rapidly increased in both new members and renewals in the second half of the year due to targeted program benefit communications and the ability to redeem both Dine & Discover and Parents NSW Vouchers against a Zoo Friends Membership.

In 2021/22, 26,600 paid members joined, and there were 23,700 paid renewals or reactivations, a significant result when factoring in the impact of closure and uncertainty in the market. Renewals and new memberships experienced a significant surge in June 2022 due to the expiry of NSW Discover vouchers.

Marketing campaigns focussed on the flexible benefits of the new membership program and increased consistent communication highlighting zoo news to encourage repeat visitation. This, combined with positioning Zoo Friends as a 'Membership that Saves Wildlife', helped directly connect our members to helping Taronga achieve its vital conservation goals.

Taronga Foundation

The Taronga Foundation was privileged to receive support throughout the year, generating a record income of \$19.6 million, which is the highest annual result since it was established. 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.

An important focus for the Foundation during 2021/22 was the Wild Futures project, with significant progress made towards securing major gifts to build two state-of-the-art veterinary teaching hospitals at Taronga Zoo and Taronga Western Plains Zoo.

While 2021/22 was a challenging year for many, the Foundation was able to think creatively and find new ways to inspire the Taronga community to give. The Taronga TV Lion Cub Cam was a first-of-its-kind campaign, working with teams across the organisation to encourage donations to access a behind-the-scenes look at five African Lion cubs. The campaign resulted in more than \$40,000 in donations, with significant support from the Zoo Friends membership base who were just

as receptive to the appeal as Taronga's existing donors. Seventy-nine per cent of those who signed up were first time donors, and overall, the campaign had an 88% conversion rate, with a cost per acquisition under \$2.

This innovative campaign paved the way for a second Cub Cam with the arrival of two Red Panda Cubs. This collaboration with Disney+ to support the launch of their new film *Turning Red* allowed Taronga to explore new ways of working with partners.

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 \$3.2 million in cash contributions and more than \$1.5 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 long-term partners whose ongoing support was integral to the financial sustainability of the organisation. Additionally, Taronga engaged various new corporate partners throughout the year including South African Tourism, joining Red Energy, Peters Ice Cream, Coca Cola Amatil and Citi as a Principal Partner of Taronga's conservation efforts.



Fundraising Events and Community Fundraising

The Foundation's fundraising events were successful in 2021/22. The community fundraising program began with the launch of a corporate initiative with partner Veritas where employees were invited to join a month-long 'step challenge' while fundraising for Taronga. In March, the community fundraising program launched Taronga's first peer-to-peer fundraising event that combined behaviour change ideas with a fundraising drive – the Taronga Rubbish Run. This month-long fundraising initiative invited participants to challenge themselves to pick up rubbish daily while exercising. The event raised much-needed funds and attracted new supporters to Taronga. About 80% of the participants and their donor networks were new to Taronga. As COVID-19 restrictions eased, the Taronga Challenge was hosted once again for Taronga's loyal supporters and donors. This unique, fun and competitive challenge-style event was a great success, raising funds for Platypus conservation programs.

Major Gifts and Gifts in Wills

The Taronga Foundation is grateful to the generous supporters who included a gift in their Will, contributing \$2.8 million in support of Taronga's conservation work.

Generous gifts of \$9.5 million were received from a number of individuals, helping fund new initiatives, such as supporting the development of Platypus Conservation Centres in Sydney and Dubbo, as well as establishing a new breed-and-release program for the Chuditch (Western Quoll). These donations also supported the Wild Futures project, providing a new Wildlife Hospital at Taronga Zoo and 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 Taste of Taronga events and Friends of Future lunch.

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

Auxilium Foundation
 Ms Dinah Beeston
 Mr Len Bleasel AM
 Mr and Mrs Les and Dianne Boardman
 Gwynn and Camilla Boyd
 BridgeLane Foundation
 Conen-Spence Trust
 Crookes Family Foundation
 The Crookes Family
 Min Darling and Ian Darling AO
 Max and Dianne Denton
 Mr Richard Elmslie and Mrs Leslie Tilly
 Ferris Family Foundation
 Ms Alexandra Holcomb and Mr Andrew Bird
 Dr Sandra and Mr Graham Humphrey
 Mrs Ingrid Kaiser
 Kennards Hire Foundation
 The Kidman-Urban Family
 The Kinghorn Foundation
 The Tony and Lisette Lewis Foundation
 Maple-Brown Family Foundation
 Lisa Miller and Cameron Adams
 Morgridge Family Foundation
 Mark and Louise Nelson
 Caledonia Foundation
 Ottomin Foundation
 Alan and Lynne Rydge
 Mr and Mrs John and Rosalinda Sample
 Skipper-Jacobs Charitable Trust
 The Suters Family
 Turnbull Foundation
 Elana and Steve Traurig
 Twynam and Kahlbetzer Family
 Vonwiller Foundation
 Ms Rosie Williams and Mr John Grill AO
 Wollemi Capital Group

Friends of the Future Income
 (Funds received from estates 2021/22)

The Estate of the Late John Napier Aitken
 The Estate of the Late Alma Bower
 The Estate of the Late Geoffrey Burfoot
 The Estate of the Late Betty Rose Ellis
 The Estate of the Late Jane Mary Frolich
 The Estate of the Late Jean Dorothy Hill
 The Estate of the Late Denis Stanley Klein
 The Estate of the Late Melinda Knipers
 The Estate of the Late Grayden Le Breton
 The Estate of the Late Don John McClimont
 The Estate of the Late Laraine McDermott
 The Estate of the Late Helen Molesworth
 The Estate of the Late John Neely
 The Estate of the Late Robin Bernice Potter
 The Estate of the Late Terence Raymond Reynolds
 The Estate of the Late Sheila Storrs

Regular Giving

Taronga's Wildlife Defender program raised more than \$1.4 million from new and existing supporters. These supporters are mostly comprised of acquisition via lead generation, conversion from other fundraising programs, upgrades of existing supporters and reactivation of lapsed supporters via telemarketing. The growth of this program through economic uncertainties shows a real commitment from these supporters to Taronga and its conservation programs.

Zoo Parents

Zoo Parents have grown in support with an income of more than \$500,000. Taronga has key periods of Zoo Parent acquisition and engagements around Christmas, Easter, Mother's Day and Father's Day. The introduction of the Platypus Zoo Parent has been popular with the community. A digital renewal and reminders process was introduced, which boosted revenue by 20%.

Strength from our People

Project Elevate

Taronga's progress with the Digital Technology Strategy remains strong with the rationalisation of core applications and processes to address the requirements of growth and expanding the scale of operations. Project Elevate is a multi-year endeavour with Phase One (Finance, Procurement and Analytics) completed in 2019/20. Phase Two commenced in 2020/21, which included the implementation of three new HR systems including core employee data, payroll and scheduling.

During 2021/22, the new HR systems have been better embedded into operations to enable managers to roster our people more effectively, and employees to have more confidence to access, submit and change their own data, including flexible work requests, conflict of interest, working with children checks and COVID-19 vaccination status. Online time sheeting and scheduling meant that visibility and payroll processing was greatly improved for the second COVID-19 lockdown period.

Further work will continue in 2022/23, and the transformation is centred on expanded employee services and the employee experience. The integrated HR system includes talent modules consisting of performance management, a learning management system and recruitment and onboarding.

Mr. Len Bleasel AM Leadership Program

Mr Len Bleasel AM continues to support Taronga and its people with a Leadership Program that launched in March 2021. Mr Bleasel generously committed to funding the Taronga and University of Technology Sydney (UTS) collaborative 18-month program that provides 12 Taronga employees with the opportunity to complete a Diploma of Leadership & Management (UTS).

The program structure involves one module completed every eight weeks over 18 months, incorporating workshops facilitated by UTS as well as self-managed study. The participants have completed the following modules across management theory, communication, financial and risk management as well as operational planning. Further workshops are scheduled to be completed by the end of 2022, including critical thinking, performance and project management.

The group have done exceptionally well, and Mr Bleasel has attended Taronga twice for Leadership Talks with participants and will be involved in the graduation, which is expected to take place in March 2023.

People Matter:

Employment Engagement and Culture

The People Matter Employee Survey is an annual 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 as a whole, a better place to work for everyone.

The survey was undertaken in August 2021. Despite the community being in lockdown and Taronga's Zoos closed to the public with most casuals not having access to meaningful work, 458 survey responses were recorded – a response rate of 57%. Taronga's overall engagement score was 70%, which is 3% higher compared to other organisations in the NSW Public Sector. The results highlighted our people are proud to work for Taronga (80%) and the top scoring areas of the survey were Customer service (76%), Risk and Innovation (74%), Inclusion and Diversity (73%) and Job Satisfaction (70%).

By reviewing survey feedback, Taronga identified four key themes for focus and targeted initiatives across the organisation: internal communication, employee experience, recruitment and onboarding and learning and development.



DAVID PARADICE AO – PHOTO BY AMY RUSSELL

The Taronga Foundation Chairman's Report

It has been another unprecedented year for the Taronga Foundation both in how we have navigated external challenges, and also in how we have charted new territories and explored original opportunities to encourage the Taronga community and the community at large to support our important work. Throughout the past year, support from Taronga's donors totalled \$19.6 million, another record result.

I'm continually inspired and heartened by the commitment of all those who support Taronga's work both in Australia and around the globe, from the individuals and community fundraisers through to major donors and corporate partners.

Over the past five years, Taronga has more than doubled its investment in conservation and large swathes of this work simply would not have been possible without Taronga's supporters. These generous contributions has allowed Taronga's team – including scientists, educators and conservationists – to continue their incredibly important and urgent work and has enabled landmark projects such as the establishment of the Taronga Sanctuary and the Chuditch conservation breeding program.

I would like to acknowledge the fantastic progress that has been made towards realising the Wild Futures program that will see two, state-of-the-art, world leading veterinary teaching hospitals built at Taronga Zoo and Taronga Western Plains Zoo. As Taronga moves ahead with planning and construction for these facilities, I am extremely grateful to those who have recognised the importance and significance of this visionary project. I look forward to the year ahead as we move closer to leaving an important mark on Taronga's legacy.

Finally, my thanks go 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, the animals and the work it delivers. I commend the outstanding work done by Cameron and his team and take much pride in Taronga's position as a world-leading conservation organisation.

David Paradise AO

Chairman, Taronga Foundation



Learning and Development

Taronga is committed to developing its people, and the People, Culture and Safety team 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.

Over the past 12 months, particularly during COVID-19 lockdowns, online learning platforms and training were promoted and accessed. All Taronga employees were provided with access to LinkedIn Learning for professional development, Grace Papers for gender equity and flexible work resources, as well as the Office 365 Resource Hub to boost technology skills.

Taronga partnered with Risk Education eXpress (REX), an iCare provider that offers NSW government agencies a suite of resources to build capabilities that protect people. REX delivers learning that is relevant, practical, accessible and collaborative. More than 60 Taronga employees at both sites attended face-to-face Respect

and Resilience training. Taronga case studies were used to specifically address real customer examples faced around the complex COVID-19 and vaccination protocols.

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.

Taronga's BASIC values were relaunched in line with the 2021-2025 Strategic Plan and were embedded throughout the organisation in campaigns, awards, employee badges and other digital and physical assets:

- Be collaborative, kind and respectful**
- Accept and take responsibility**
- Safely undertake all activities**
- Innovate and take initiative**
- Communicate clearly and constructively**

In December 2021, a hybrid online and face-to-face Silver Shovels Awards night was held, centred around the BASIC Values.

Workplace by Facebook continues to be an engaging communications tool across Taronga. It provides the ability to live stream team updates, share behind-the-scenes updates and gives opportunities to recognise team achievements and share these with the broader Taronga community. This has been critical during lockdown periods where sites were closed and communicating in person was made challenging. With Workplace, the team were able to share the latest developments with our people related to COVID-19 and updates both on and off-site.

Volunteers

Volunteer programs this year saw more than 430 volunteers across both Zoos assist in various roles, including guest experience and animal observation, through to administration and keeping.

The National Volunteer Week theme for 2022 was 'Better Together', and teams across both sites shared videos and other communications thanking their volunteers for their invaluable support. The week concluded with a lunch at Taronga Zoo, and a morning tea at Taronga Western Plains Zoo, while end of year celebrations were held recognising the contributions of volunteers.

Taronga welcomed back volunteers in time for peak holiday season to support the effective operations of the guest experience team as well as other teams across the organisation. The volunteers enhanced the general experience of guests and aided in smooth operations during a challenging time.

In April, Taronga relaunched volunteer recruitments, bringing on board more than 170 enthusiastic new faces into guest experience, keeping, education, animal observation and nutrition teams. A newly designed flexible and accessible information session format provided information on available roles and volunteering at the Zoo.

Workforce Diversity and Multicultural Themes

Taronga is committed to a diverse workplace, moving towards removing barriers in the physical and social environments. NAIDOC Week, Reconciliation Week, International Women's Day and Sydney Mardi Gras 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.

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Taronga continues to recognise the efforts of people and teams.

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Eight school-based trainees (SBATS) have joined Taronga for up to two years and are studying either tourism, wildlife or horticulture, while completing the practical part of their studies with Taronga.

Work has continued on our Aboriginal Employment Strategy with stakeholder and community representative engagement, and our Indigenous Youth Programs – Burbangana and Walanmarra – have continued to operate in partnership with the NSW Government, delivering over \$2 of social value for every \$1 invested.

Disability Inclusion Action Plan

Taronga participates in the NSW Government's Disability Inclusion Action Plan Steering Committee and through this ensures that it continues to make progress on its commitments for all people including employees, volunteers, students and guests.

During Wild Lights, Taronga presented the first ever 'Night of Inclusion', 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.

The entire Wild Lights experience was made more accessible than ever before, with the inclusion of additional accessibility parking spaces, volunteers designated to support those who need extra assistance, rest areas, along the path an accessible vehicle to assist those who need to leave the experience and a toolkit with all this information for employee and volunteers to support the guest experience.

Assistance Animals

A proud achievement this year for Taronga has been the continued work towards serving our community and guests with all abilities. Taronga has been working on reasonable modifications to our practices and procedures to ensure people with different needs that require an assistance animal can enjoy access to both sites. As part of Wild Lights at Taronga, there were two specifically designed nights where temporary adjustments were made to accommodate guests with assistance dogs. Outside of events, guests who plan to visit Taronga Zoo with a certified Assistance Dog can now do so by notifying the team 72 hours prior to arrival to allow time to arrange support from the relevant wildlife and guest experience teams.



SUNRISE AT ZOOFARI LODGE - PHOTO BY RICK STEVENS

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The safety and wellbeing of our people, volunteers, students and contractors is paramount.

”

Flexible Working

Following the first COVID-19 lockdown in 2020, Taronga introduced a new Flexible Work Policy, modelled off the NSW Government’s best practice recommendations. During 2021/22, flexible work practices, in particular working from home, were significantly accessed and were increasingly effective, particularly with the extended lockdown.

Work Health and Safety (WHS)

The safety and wellbeing of our people, volunteers, students and contractors is paramount. Taronga’s safety management system – TarongaRISE – and early intervention approach to managing injuries continues to provide excellent results.

Taronga experienced a 30% reduction in recordable injuries from last financial year, returning a lost time injury frequency rate of 4.49. In 2021/22, there were six lost time injuries, with five of the six back to work within five days. Twenty-three medical-treated injuries were sustained with slip, trip falls, and manual handling reported as the primary mechanism of injuries. A total of 64% of the injuries resulted in a musculoskeletal disorder requiring physiotherapy as the main treatment. All 29 incidents were investigated to ensure control measures were developed and implemented to prevent a recurrence. Taronga maintains a low-risk appetite for injuries, fostering a culture of early reporting and early treatment to avoid a prolonged injury.

Prevention of occurrences is managed through various key performance measures such as active hazard identification and reporting near miss events. There were no incidents or near miss events reported against high-risk activities. The overall incidence rate decreased 14% from the previous financial year, which is testament to a positive safety culture. Visible safety leadership was demonstrated through constructive safety interactions and observations undertaken by the leadership team.

Taronga undertook a comprehensive COVID-19 risk assessment, which identified the need to mandate vaccinations for persons entering our zoos for a period of time. In line with the NSW Public Health Orders, COVID-19 safety protocols were developed, and these health and safety measures were continuously reviewed by a COVID-19 taskforce. Vaccination hubs were arranged on-site at Taronga Zoo for the convenience of our workers and their families. Employees working from home during the lockdown period were identified as a psychosocial risk, with mitigations including ergonomic assessments and psychological support through the employee assistance program and in house engagement groups.

Improvement Notices and Notifiable Incidents

There were no Regulatory Improvement Notices or Penalties issued in the financial year. There were no reportable significant occurrences.

Organisational Strength Snapshot

Attendance

A total attendance of

955,070

across Taronga’s two zoos

NSW Vouchers

240,875

Dine, Discover and Parent

NSW Vouchers

redeemed across Taronga



Donations

\$19.6 million

in much-needed support **donated** through the Taronga Foundation

Corporate Partners

55 long-term



corporate partners supporting Taronga

Volunteers

170



new volunteers through relaunched recruitment

Guests

54,214

guests stayed overnight across Taronga’s two zoos with a standout 87% occupancy rate at Zoofari





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

APA Group
Brookfield

Cadbury Dairy Milk Freddo
Epicure
FlowBuilders

Genovese
Lifestyle Solutions
Lion Nathan

OPPO Australia
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Champion Sponsors

ASX
Aussie Drops
Baby Jogger

Bayer Cropscience
Boehringer Ingelheim
Bourne Digital

Hulsbosch
IXOM
Minter Ellison

Other Side of The Table
Troy Animal Healthcare

Supporters

BPAY Group
Buds & Bowers
Chartis Technology
Fujifilm

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
Zoetis

STATUTORY FINANCIAL STATEMENTS

Taronga's 2021/22 Financial Results

As for many, the 2021/22 financial year was challenging for Taronga with both zoos closed for almost four months due to mandated COVID-19 closures. Minimal international visitation throughout the pandemic period combined with lower admissions and accommodation bookings due to COVID-safe measures and the mandated closure periods, resulted in Taronga's Consolidated Operations (all activities excluding the Taronga Foundation) booking a net operating loss of \$40m for the financial year.

Pleasingly, in contrast, the Taronga Foundation had a strong result and received excellent support from the community throughout the financial year (even during periods of closure), generating fundraising income of close to \$20m. Taronga Foundation fundraising revenue must be applied to agreed capital and conservation programs and cannot be used to support the general operations of Taronga.

To manage and partially offset the operating deficit incurred in 2021/22, Taronga was reliant on insurance proceeds from its icare business continuity claim, Austrade grant – Supporting Australia's Exhibiting Zoos and Aquariums program and an additional grant from NSW Government. The timing and extent of these grants and insurance proceeds is intended to return Taronga to the financial position it would have achieved, if not for the impact of COVID-19.

During 2021/22 Taronga was the recipient of NSW Government capital funding grants totalling \$48.5m. This funding relates largely to the Wild Futures project (rebuilding the Wildlife Hospitals at both zoo sites and the Amphibian and Reptile Conservation Centre at Taronga Zoo) and Sky Safari Revitalisation. Although most of these funds are yet to be spent and the related cash is noted as Restricted Assets in Note 19 of the Financial Statements, under Australian Accounting Standards revenue from these capital funding grants must be recognised in the year they were received.

Taronga's Income Statement in the Financial Statements reports a positive net result for 2021/22 of \$59m. This positive net result does not reflect the challenges faced by Taronga's operations and the underlying net deficit result. Instead, it can be attributed to the significant revenue from capital funding grants (which must be held as a restricted asset and applied against agreed capital projects), support from Taronga's philanthropic donors towards conservation and capital programs, and receipt of support for Taronga operations (from insurance proceeds and various grants) in light of the impacts of COVID-19. The additional support partially offsets the underlying net deficit incurred by Taronga Consolidated Operations.



WESTERN LOWLAND GORILLA MOTHER AND BABY — PHOTO BY CHRIS WHEELER



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 comprises the Statement by the Accountable Authority, the Income Statement and Statement of Comprehensive Income for the year ended 30 June 2022, the Statement of Financial Position as at 30 June 2022, 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).

I have fulfilled my other ethical responsibilities in accordance with 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 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. 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

23 September 2022
SYDNEY

TARONGA CONSERVATION SOCIETY AUSTRALIA (TARONGA)
FINANCIAL STATEMENTS AND NOTES
FOR THE YEAR ENDED 30 JUNE 2022

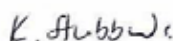
Statement by the Accountable Authority

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
23 September 2022

INCOME STATEMENT
FOR THE YEAR ENDED 30 JUNE 2022

		2022	Restated
	Notes	\$'000	2021
			\$'000
Revenue			
Sale of Goods and Services	2	60,224	65,550
Government Grants	3	76,847	53,801
Investment Revenue	4	761	415
Other Income	5	40,947	30,579
Total Revenue		178,779	150,345
Expenses			
Personnel Services	6(a)	48,160	50,523
Depreciation and Amortisation	6(b)	34,211	35,256
Finance Costs	6(c)	1,456	1,470
Operating Expenses	7	35,680	42,021
Total Expenditure		119,507	129,270
NET RESULT		59,272	21,075

The accompanying notes form part of these Financial Statements.

STATEMENT OF COMPREHENSIVE INCOME
FOR THE YEAR ENDED 30 JUNE 2022

		Restated	
	Notes	2022	2021
		\$'000	\$'000
NET RESULT		59,272	21,075
Other comprehensive income:			
<i>Items that will not be reclassified to net result in subsequent periods</i>			
Changes in revaluation surplus of property, plant and equipment	11	53,615	-
Other comprehensive income for the year		53,615	-
TOTAL COMPREHENSIVE INCOME		112,887	21,075

The accompanying notes form part of these Financial Statements.

STATEMENT OF FINANCIAL POSITION
AS AT 30 JUNE 2022

		2022	Restated 2021
	Notes	\$'000	\$'000
ASSETS			
Current Assets			
Cash and Cash Equivalents	22(a)	24,293	30,799
Receivables	8	5,903	3,531
Inventories	9	1,310	1,224
Other Financial Assets	10	200,000	98,000
Total Current Assets		231,506	133,554
Non-Current Assets			
Property, Plant and Equipment	11		
-Land and Buildings		485,199	463,340
-Plant and Equipment		6,012	7,485
-Infrastructure		111,767	109,677
-Work-in-Progress		27,248	8,254
Total Property, Plant and Equipment		630,226	588,756
Right-of-use Assets	12	153	202
Intangible Assets	13	187	518
Total Non-Current Assets		630,566	589,476
Total Assets		862,072	723,030
LIABILITIES			
Current Liabilities			
Trade and Other Payables	15	23,085	19,845
Other Liabilities	16	39,687	14,325
Borrowings	17	4,940	8,051
Total Current Liabilities		67,712	42,221
Non-Current Liabilities			
Borrowings	17	47,616	45,001
Trade and Other Payables	15	3,183	5,390
Other Liabilities	16	1,005	749
Total Non-Current Liabilities		51,804	51,140
Total Liabilities		119,516	93,361
Net Assets		742,556	629,669
Equity			
Reserves		413,283	359,668
Accumulated Funds		329,273	270,001
Total Equity		742,556	629,669

The accompanying notes form part of these Financial Statements.

STATEMENT OF CHANGES IN EQUITY
FOR THE YEAR ENDED 30 JUNE 2022

	Accumulated Funds	Asset Revaluation Reserve	Total
	\$'000	\$'000	\$'000
Balance at 1 July 2021	261,560	359,668	621,228
Correction of prior period error	8,441	-	8,441
Restated balance at 1 July 2021	270,001	359,668	629,669
Net result for the year	59,272	-	59,272
Other comprehensive income:			
Net change in revaluation surplus of property, plant and equipment	-	53,615	53,615
Total other comprehensive income	-	53,615	53,615
Total comprehensive income for the year	59,272	53,615	112,887
Balance at 30 June 2022	329,273	413,283	742,556

Balance at 1 July 2020	248,926	359,668	608,594
Restated Net result for the year	21,075	-	21,075
Total other comprehensive income	-	-	-
Restated Total comprehensive income for the year	21,075	-	21,075
Restated Balance at 30 June 2021	270,001	359,668	629,669

The accompanying notes form part of these Financial Statements.

STATEMENT OF CASH FLOWS
FOR THE YEAR ENDED 30 JUNE 2022

	Notes	2022 \$'000	2021 \$'000
CASH FLOWS FROM OPERATING ACTIVITIES			
<u>Receipts</u>			
Sale of Goods and Services		85,509	88,902
Interest Received		390	460
Capital grant - NSW Government		69,225	16,317
Recurrent Grant - NSW Government		15,919	16,034
Other Grant - NSW Government		6,442	15,000
Other Grant - Australian Government		4,736	6,789
Insurance Proceeds		21,453	12,092
Total Receipts		203,674	155,594
<u>Payments</u>			
Personnel Services		(51,329)	(52,748)
Suppliers for Goods and Services		(35,135)	(37,600)
Finance Costs		(2,102)	(1,900)
Total Payments		(88,566)	(92,248)
Net Cash inflow from Operating Activities	22(b)	115,108	63,346
CASH FLOWS FROM INVESTING ACTIVITIES			
Purchases of Property, Plant and Equipment		(19,545)	(9,019)
Purchases of Other Financial Assets		(102,000)	(61,000)
Net Cash outflow from Investing Activities		(121,545)	(70,019)
CASH FLOWS FROM FINANCING ACTIVITIES			
Repayment of Borrowings		(69)	(141)
Net Cash flow from Financing Activities		(69)	(141)
Net increase/(decrease) in cash and cash equivalents		(6,506)	(6,814)
Cash and cash equivalents at beginning of the year		30,799	37,613
Cash and cash equivalents at end of year	22(a)	24,293	30,799

The accompanying notes form part of these Financial Statements.

NOTES TO THE FINANCIAL STATEMENTS

Note	Contents
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 2022

1. Summary of Significant Accounting Policies

The principal accounting policies adopted in the preparation of these financial statements are set out below. These policies have been consistently applied to all the years presented, unless otherwise stated.

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 2022 have been authorised for issue by the Board on 23 September 2022.

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.

Historical Cost Convention

The financial statements have been prepared under the historical cost convention, modified by the revaluation at fair value of land and buildings and infrastructure systems.

Critical Accounting Estimates

The preparation of financial statements requires the use of certain critical accounting estimates. It also requires management to exercise its judgement in the process of applying Taronga's accounting policies. The areas involving a higher degree of judgement or complexity, or areas where assumptions and estimates are significant to financial statements are disclosed in the relevant notes to the financial statements.

Rounding

All amounts are rounded to the nearest one thousand dollars and are expressed in Australian currency.

c) Comparative Figures

Comparative amounts in Statement of Financial Position, Note 16 and Note 19 are updated to reflect changes in classification consistent with current year reporting. A material prior period error is corrected in these financial statements therefore comparative amounts are restated accordingly in the relevant sections of these financial statements. Refer Note 1(j) for more details.

All other 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) Revenue Recognition

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*.

f) 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.

g) 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.

h) Fair Value Hierarchy

A number of Taronga's accounting policies and disclosures require the measurement of fair values, for both financial and non-financial assets and liabilities. 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 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.

Refer Note 18 and Note 14 for further disclosures regarding fair value measurements of financial and non-financial assets.

i) Changes in Accounting Policy, Including New or Revised Australian Accounting Standards

Effective for the first time in 2021/2022

All new or revised Australian Accounting Standards, amendments and interpretations applied for the first time in 2021/2022 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 2022
- AASB 2020-3 Amendments to Australian Accounting Standards - Annual improvements 2018-20 and Other Amendments – Applicable from 1 July 2022

j) Correction of Prior Period Error

During 2020/2021 financial year Taronga (Grantee) received a capital grant from NSW Treasury (Grantor) to construct a non-financial asset (Wildlife Hospital). This asset is being constructed on the land owned and controlled by Taronga and after completion of construction, Taronga will own the Wildlife Hospital.

At 30 June 2021, Taronga deferred the unspent amount of \$8 Million as a capital grant under AASB 1058 on the Statement of Financial Position.

Taronga revisited the accounting treatment and determined that there is no enforceable agreement between the grantor and grantee. Therefore in accordance with AASB 1058 the income must be recognised upon receipt of cash.

Based on the above there was an error of \$8 Million in the 2020/2021 Financial Statements which is considered material and must be corrected in the 2021/2022 financial statements for comparatives.

Financial Statements affected

30 June 2020:

As this error was first made in reporting period 2020/2021 there was no impact on the balances for 30 June 2020. Therefore, opening balances of the comparative year (2020/2021) remain unchanged and not required to be restated.

30 June 2021 Comparatives:

Income Statement

- Capital Grant Income was increased by \$8,441,428. As a result, Total Revenue increased, and Net Result also increased by the same amount.

Statement of Comprehensive Income

- Net Result increased by \$8,441,428 and Total Comprehensive Income increased by the same amount.

Statement of Financial Position

- Other Current Liabilities reduced by \$8,441,428 and as a result, Total Current Liabilities and Total Liabilities decreased by the same amount.
- Net Assets increased by \$8,441,428
- Accumulated Funds increased by \$8,441,428
- Total Equity increased by \$8,441,428

Statement of Changes in Equity

- Net Result for the year increased by \$8,441,428
- Total Comprehensive income increased by \$8,441,428
- Total Equity increased by \$8,441,428

Note 3 Government Grants

- Capital grant – NSW Government increased by \$8,441,428. As a result, Total Government Grants increased by the same amount.

Note 16 – Other Current Liabilities

Liabilities arising from transfers to construct non-financial asset is reduced by \$8,441,428. As a result, Total Other Current Liabilities reduced by the same amount.

Note 22 (b) Reconciliation of Operating Surplus to Net Cash from Operating Activities

- Net Result increased by \$8,441,428

- Increase in Contract Liabilities reduced by \$8,441,428

Restatement of Comparative Year Financial Statements

30 June 2021 Comparative Year

INCOME STATEMENT

	Original Balance at 30 June 2021 \$'000	Impact Increase/ (Decrease) \$'000	Restated Balance 2021 \$'000
Revenue			
Government Grants	45,360	8,441	53,801
Total Revenue	141,904	8,441	150,345
NET RESULT	12,634	8,441	21,075

STATEMENT OF COMPREHENSIVE INCOME

	Original Balance at 30 June 2021 \$'000	Impact Increase/ (Decrease) \$'000	Restated Balance 2021 \$'000
NET RESULT	12,634	8,441	21,075
TOTAL COMPREHENSIVE INCOME	12,634	8,441	21,075

STATEMENT OF FINANCIAL POSITION

	Original Balance at 30 June 2021 \$'000	Impact Increase/ (Decrease) \$'000	Restated Balance 2021 \$'000
LIABILITIES			
Current Liabilities			
Other Current Liabilities	23,515	(8,441)	15,074
Total Current Liabilities	51,411	(8,441)	42,970
Total Liabilities	101,802	(8,441)	93,361
Net Assets	621,228	8,441	629,669
Equity			
Accumulated Funds	261,560	8,441	270,001
Total Equity	621,228	8,441	629,669

STATEMENT OF CHANGES IN EQUITY

	Accumulated Funds		Restated Balance 2021 \$'000
	Original Balance at 30 June 2021 \$'000	Impact Increase/ (Decrease) \$'000	
Net result for the year	12,634	8,441	21,075
Total comprehensive income for the year	12,634	8,441	21,075
Balance at 30 June 2021	261,560	8,441	270,001

k) Major Event

The coronavirus (COVID-19) pandemic has been a significant issue for Taronga with a major negative impact on Taronga's revenue from operations during the reporting year. This impact was due to an international travel ban and other COVID-19 related restrictions resulting in the closure of Taronga Zoo from 26 June 2021 to 18 October 2021 and Taronga Western Plains Zoo from 11 August 2021 to 18 October 2021.

In response to this crisis Taronga has implemented a number of management decisions to contain discretionary expenditure and redeployed employees to other NSW Government agencies earlier in the financial year. Business disruption insurance claims have been made to the Treasury Managed Fund via icare and there have been ongoing discussions with NSW Treasury to determine the need for further financial support for Taronga.

2. Sale of Goods and Services

	2022	2021
	\$'000	\$'000
Sale of goods	7,658	8,630
Rendering of services	52,566	56,920
Total Sale of Goods and Services	60,224	65,550

Recognition and Measurement

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

	2022	Restated 2021
	\$'000	\$'000
<i>Grants to Construct a Recognisable Non-Financial Asset to be Controlled by Taronga:</i>		
Capital grant - NSW Government	737	3,478
<i>Grants without Sufficiently Specific Performance Obligations:</i>		
Capital grant - NSW Government	47,800	12,500
Recurrent grant - NSW Government	15,919	16,034
Other grant - NSW Government	6,442	15,000
Other grant - Australian Government	5,949	6,789
Total Government Grants	76,847	53,801

Recognition and Measurement

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.

Where there is no written enforceable agreement in place revenue from capital grants is recognised upon receipt of cash.

Grants without Sufficiently Specific Performance Obligations

Income from grants without sufficiently specific performance obligations is recognised upon receipt of cash.

4. Investment Revenue

	2022 \$'000	2021 \$'000
Term Deposits and Bank Interest	761	415
Total Investment Revenue	761	415

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

	2022 \$'000	2021 \$'000
Sponsorship	4,379	4,228
Donations and Bequests	15,115	14,259
Proceeds from Insurance	21,453	12,092
Total Other Income	40,947	30,579

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

	2022	2021
	\$'000	\$'000
Salaries and Wages (including annual leave)	43,003	45,017
Superannuation - Defined Contribution Plans	4,204	4,196
Superannuation - Defined Benefit Plans*	(2,144)	(2,165)
Long Service Leave	545	434
Workers Compensation Insurance	406	442
Payroll Tax and Fringe Benefits Tax	2,146	2,599
Total Personnel Services	48,160	50,523

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 2022 a defined benefit superannuation actuarial gain of \$2,344,000 is included in superannuation defined benefit expense (\$2,350,000 gain in 2020/2021).

Personnel Service related costs amounting to \$2,038,170 have been capitalised during the year (\$1,461,114 in 2020/2021). These personnel service costs are excluded from the above.

b) Depreciation and Amortisation Expenses

	2022	2021
	\$'000	\$'000
Depreciation		
Land and Buildings	24,910	25,425
Land and Buildings right-of-use assets	20	90
Plant and Equipment	1,807	1,875
Plant and Equipment right-of-use assets	49	51
Infrastructure	7,094	7,196
Amortisation		
Intangible Assets	331	619
Total Depreciation and Amortisation Expenses	34,211	35,256

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

c) Finance Costs

	2022	2021
	\$'000	\$'000
Interest on Borrowings	1,900	1,994
Interest on Lease Liabilities	4	6
Amortisation of premiums relating to borrowings	(448)	(530)
Total Finance Costs	1,456	1,470

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

	2022	2021
	\$'000	\$'000
Advertising and Promotions	2,940	2,489
Animal Husbandry & Research Support	2,786	2,670
Assets Written off	26	5,867
Communications and Digital Technology	2,923	2,447
Contingent Labour	1,135	1,130
Contract Services	3,954	4,885
Cost of Goods Sold	2,676	3,081
Maintenance	6,077	6,257
Supply and Services	11,221	11,000
Utilities	1,942	2,195
Total Other Operating Expenses	35,680	42,021

Total Maintenance Expenses

	2022 \$'000	2021 \$'000
Maintenance expense - Contracted Labour and other (non-employee related) included in Note 7	6,077	6,257
Employee related Maintenance expense included in Note 6(a)	1,373	1,606
Total Maintenance expenses included in Note 6(a) and Note 7	7,450	7,863

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

	2022 \$'000	2021 \$'000
Trade Receivables from Contracts with Customer	4,685	2,915
Less: Allowance for expected credit losses	-	-
	4,685	2,915
Prepayments	1,218	616
Total Trade and Other Receivables	5,903	3,531

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

	2022 \$'000	2021 \$'000
<u>Held for Distribution</u>		
Food for Animals	195	176
Stores and Spare Parts	236	270
	431	446
<u>Held for Resale</u>		
Souvenirs and Catering	879	778
	879	778
Total Inventories	1,310	1,224

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

	2022 \$'000	2021 \$'000
Term deposits:		
91 - 180 Days	19,000	-
181 - 270 Days	88,000	84,000
Over 270 Days	93,000	14,000
Total Term Deposits	200,000	98,000
Less: Allowance for expected credit losses	-	-
Total Other Financial Assets	200,000	98,000

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	Land and Buildings	Plant and Equipment	Infrastructure	Total
	\$'000	\$'000	\$'000	\$'000	\$'000
At 1 July 2021 - fair value					
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
At 30 June 2022 - fair value					
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 current financial year is set out below:

	Work in Progress	Land and Buildings	Plant and Equipment	Infrastructure	Total
	\$'000	\$'000	\$'000	\$'000	\$'000
Year ended 30 June 2022					
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

	Work in Progress	Land and Buildings	Plant and Equipment	Infrastructure	Total
	\$'000	\$'000	\$'000	\$'000	\$'000
At 1 July 2020 - fair value					
Gross carrying amount	5,506	674,951	18,952	153,583	852,992
Accumulated Depreciation	-	(183,978)	(9,939)	(39,360)	(233,277)
Net carrying amount	5,506	490,973	9,013	114,223	619,715
At 30 June 2021 - fair value					
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

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	Land and Buildings	Plant and Equipment	Infrastructure	Total
	\$'000	\$'000	\$'000	\$'000	\$'000
Year ended 30 June 2021					
Net carrying amount at beginning of year	5,506	490,973	9,013	114,223	619,715
Additions	8,256	25	334	-	8,614
Transfers	(5,429)	2,661	20	2,748	-
Disposals	-	(10,366)	(294)	(186)	(10,846)
Expensed	(79)	-	-	-	(79)
Revaluation increment	-	-	-	-	-
Depreciation expense - assets owned	-	(25,425)	(1,876)	(7,196)	(34,497)
Depreciation on disposals	-	5,472	286	89	5,848
Net carrying amount at end of year	8,254	463,340	7,485	109,677	588,756

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 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 on an existing use basis, where there are no feasible alternative uses in the existing natural, legal, financial and socio-political environment. However, in the limited circumstances where there are feasible alternative uses, assets are valued at their highest and best 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 last comprehensive revaluation of Taronga’s land was conducted by Valuer General NSW and Aspect Property in March 2020 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. In the interim period up to June 2022 management has annually assessed the indexation rates in consultation with Valuer General NSW and as a result in June 2022 Taronga has adjusted these assets to reflect the cumulative indexation increase of 10%. The next comprehensive revaluation for land is due to be performed during the financial year 2022/2023.

Mosman – Taronga Zoo (28.1 hectares)

Zoning: Special Activities 1 – Zoological Gardens under Mosman Local Environment Plan 2012.
As per Valuer General NSW valuation in March 2020, based on comparable values for open recreation land and adjusted for cumulative indexation to June 2022, \$85,002,500.

Dubbo – Taronga Western Plains Zoo (758.3 hectares)

Zoning: SP3 Tourist under the Dubbo Local Environment Plan 2011.
As per Aspect Property valuation in March 2020 based on comparable zoning values and adjusted for cumulative indexation to June 2022, \$3,410,000.

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 2022 management has assessed the indexation rates in consultation with Valuer General NSW and in June 2022 Taronga

has adjusted these assets to reflect the cumulative indexation increment of 10.5%. 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 2022 management has annually assessed the indexation rates in consultation with Valuer General NSW and in June 2022 Taronga has adjusted these assets to reflect the cumulative indexation increment of 10.5%. 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%
Computer Equipment	33.30%
Other Items	20.0%
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 2021	102	100	202
Additions	-	20	20
Depreciation Expense	(20)	(49)	(69)
Balance at 30 June 2022	82	71	153

	Land and Buildings \$'000	Plant and Equipment \$'000	Total \$'000
Balance at 1 July 2020	192	102	294
Additions	-	49	49
Depreciation Expense	(90)	(51)	(141)
Balance at 30 June 2021	102	100	202

Lease liabilities

	2022 \$'000	2021 \$'000
Balance at 1 July	202	294
Additions	20	49
Interest Expenses	4	6
Payments	(73)	(147)
Balance at 30 June	153	202

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

	2022 \$'000	2021 \$'000
Depreciation expense of right-of-use assets	(69)	(141)
Interest expense on lease liabilities	(4)	(6)
Total amount recognised in the statement of comprehensive income	(73)	(147)

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

	2022 \$'000	2021 \$'000
Within one year	82	150
Later than one year and not later than five years	172	100
Total (including GST)	254	250
Less: GST recoverable	23	23
Total (excluding GST)	231	227

Taronga had total cash outflows for leases of \$74,684 during 2021/2022 (\$146,955 2020/2021).

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

	Software and other Intangibles \$'000
At 1 July 2021	
Cost (gross carrying amount)	2,427
Accumulated Amortisation and Impairment	(1,909)
Net carrying amount	518
At 30 June 2022	
Cost (gross carrying amount)	2,427
Accumulated Amortisation and Impairment	(2,240)
Net carrying amount	187
Year ended 30 June 2022	
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

	Software and other Intangibles
	\$'000
At 1 July 2020	
Cost (gross carrying amount)	3,576
Accumulated Amortisation and Impairment	(1,650)
Net carrying amount	1,926
At 30 June 2021	
Cost (gross carrying amount)	2,427
Accumulated Amortisation and Impairment	(1,909)
Net carrying amount	518
Year ended 30 June 2021	
Net carrying amount at beginning of year	1,926
Additions (acquisitions)	-
Transfers	-
Disposals	(1,149)
Amortisation	(619)
Amortisation on disposals	360
Net carrying amount at end of year	518

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).

(a) Fair Value Hierarchy

2022	Level 1	Level 2	Level 3	Total Fair Value
	\$'000	\$'000	\$'000	\$'000
Property Plant and Equipment				
Land and Buildings	-	88,698	396,501	485,199
Infrastructure	-	-	111,767	111,767
	-	88,698	508,268	596,966
2021	Level 1	Level 2	Level 3	Total Fair Value
	\$'000	\$'000	\$'000	\$'000
Property Plant and Equipment				
Land and Buildings	-	80,375	382,964	463,339
Infrastructure	-	-	109,678	109,678
	-	80,375	492,642	573,017

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

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

2021

	Buildings \$'000	Infrastructure \$'000	Total Recurring Level 3 Fair value \$'000
Fair Value as at 1 July 2020	410,598	114,223	524,821
Additions	2,685	2,748	5,433
Revaluation increments recognised in other comprehensive income	-	-	-
Disposals	(4,894)	(97)	(4,991)
Depreciation	(25,425)	(7,196)	(32,621)
Fair Value as at 30 June 2021	382,964	109,678	492,642

15. Trade and Other Payables

	2022 \$'000	2021 \$'000
Current Liabilities		
Operating Expense Creditors	4,059	3,153
Capital Creditors	3,035	1,186
Accruals and Other Creditors	3,526	2,079
Personnel Services	12,465	13,427
Total Current Trade and Other Payables	23,085	19,845
Non-Current Liabilities		
Personnel Services	3,183	5,390
Total Non-Current Trade and Other Payables	3,183	5,390
Total Trade and Other Payables	26,268	25,235

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

	2022 \$'000	2021 \$'000
Current Liabilities		
Salaries and Wages Payable	112	1,631
Annual Leave Provision	3,409	3,146
Long Service Leave Provision	8,082	7,787
Defined Benefit Superannuation	862	863
Total Current Payable	12,465	13,427
Non-Current Liabilities		
Defined Benefit Superannuation	3,183	5,390
Total Non-Current Payable	3,183	5,390
Total Personnel Services	15,648	18,817

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.

(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

	2022	Restated 2021
	\$'000	\$'000
Contract Liabilities - Current	18,660	13,986
Liabilities arising from transfers to construct non-financial assets	21,027	339
Total Other Current Liabilities	39,687	14,325
Contract Liabilities - Non-Current	1,006	749
Total Other Non-Current Liabilities	1,006	749
Total Other Liabilities	40,693	15,074

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

	2022	Restated 2021
	\$'000	\$'000
Opening balance of liabilities arising from transfers to acquire/construct non-financial assets to be controlled by the entity	339	-
Add: receipt of cash during the financial year	69,225	16,317
Deduct: income recognised during the financial year	48,537	15,978
Closing balance of liabilities arising from transfers to construct non-financial assets to be controlled by the entity	21,027	339

17. Borrowings

	2022	2021
	\$'000	\$'000
NSW Treasury Corporation (TCorp) Borrowings	51,795	52,851
These loans are due to mature as follows:		
Not later than one year	4,870	7,982
Later than one year but not later than two years	3,583	4,935
Later than two years but not later than five years	13,696	12,558
Later than five years	30,254	27,376
Total NSW TCorp Borrowings	52,403	52,851
Lease Liability - Current	69	69
Lease Liability - Non Current	84	133
Total Borrowings	52,556	53,053

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

	2022	2021
	\$'000	\$'000
Face Value of Loans	51,795	51,595
Add Unamortised Premium	608	1,256
Capital Value of Loans	52,403	52,851

Reconciliation of Changes in Liabilities Arising from Financing Activities

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

2021

	1-Jul-20 \$'000	Cash flows \$'000	Amortisation \$'000	30-Jun-21 \$'000
TCorp Borrowings	53,381	-	(530)	52,851
Total Liabilities from Financing Activities	53,381	-	(530)	52,851

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

Financial Assets Class:	Notes	Category	2022 \$'000	2021 \$'000
Cash and Cash Equivalents	22	Amortised Cost, Fair Value	24,293	30,799
Receivables (1)	8	Amortised cost	4,145	2,505
Other Financial Assets	10	Amortised cost	200,000	98,000
Financial Liabilities Class:				
Payables (2)	15	Financial liabilities measured at amortised cost	26,268	25,235
Borrowings	17	Financial liabilities measured at amortised cost	52,403	52,851

(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, TCorpIM Funds facility, 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 1.77% (2020/2021 0.41%), the weighted average interest rate for the period was 0.99% (2020/2021 0.69%). 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-22	\$'000					Total
	Current	<30 days	30-60 days	61-90 days	>91 days	
Expected credit loss rate	0%	0%	0%	0%	100%	
Gross carrying amount	4,077	24	3	41	-	4,145
Expected credit loss allowance	-	-	-	-	-	-

30-Jun-21	\$'000					Total
	Current	<30 days	30-60 days	61-90 days	>91 days	
Expected credit loss rate	0%	0%	0%	0%	100%	
Gross carrying amount	1,873	489	137	6	-	2,505
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 \$4,145,000 (\$2,505,000 in 2020/2021).

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

	2022 \$'000	2021 \$'000
Trade Receivables Owing from NSW Government Entities	1,606	586
Trade Receivables Owing from Non-Government Educational Bodies	11	70
Trade Receivables Owing from Tourism Operators	153	28
Trade Receivables Owing from Other Entities	560	195
Trade Receivables Owing from Sponsors	76	608
Trade Receivables Owing from Catering Operator	526	1,018
Trade Receivables Owing from Australian Government	1,213	-
Less: Expected credit loss allowance	-	-
	4,145	2,505

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.

Taronga maintains a direct payments facility of \$1.4m. This was unused at 30 June 2022.

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

				Maturity Dates					
	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
30-Jun-2022									
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)	-	
		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
30-Jun-2021									
Non-derivative Financial liabilities									
Trade and Other Payables		6,418	(6,418)	(6,418)	-	-	-	-	-
Borrowings - Fixed Interest Rate	2.75%	52,851	(60,699)	(997)	(8,799)	(6,343)	(15,428)	(29,132)	
Lease Liabilities	2.38%	202	(227)	(35)	(35)	(66)	(91)	-	

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.

Cash held in TCorpIM Funds facilities is exposed to other price risk, a possible impact on profit/loss due to changes in unit price is shown 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	2022	2021
	\$'000	\$'000
Financial Liabilities - Borrowings	52,403	52,851
Variable Rate Instruments		
Financial Assets	24,293	30,799

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
2022	\$'000	\$'000	\$'000	\$'000	\$'000
Financial assets					
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
Financial liabilities					
Payables	26,267	-	-	-	-

		Interest Rate Risk			
		-1%		+1%	
	Carrying Amount	Profit	Equity	Profit	Equity
2021	\$'000	\$'000	\$'000	\$'000	\$'000
Financial assets					
Cash and cash equivalents	18,129	(181)	(181)	181	181
Receivables	2,505	-	-	-	-
Other Financial Assets	98,000	(980)	(980)	980	980
Financial liabilities					
Payables	25,235	-	-	-	-

In the above table the Cash and cash equivalents excludes funds held in TCorpIM Funds Facility as these funds are not exposed to interest rate risk.

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

Other Price Risk – TCorpIM Cash Fund

Exposure to 'other price risk' also arises through the investment in the TCorpIM Cash Fund, which are held for strategic rather than trading purposes. Taronga holds units in the following TCorpIM Funds trusts:

Facility	Investment Sectors	Investment Horizon	Carrying Amount	
			2022 \$'000	2021 \$'000
Hour-Glass Investment – Cash	Cash and money			
Facility	market instruments	Up to 1.5 years	-	12,670

The unit price of each facility is equal to the total fair value of the net assets held by the facility divided by the number of units on issue for that facility. Unit prices are calculated and published daily.

TCorp as trustee for each of the above facilities is required to act in the best interest of the unit holders and to administer the trusts in accordance with the trust deeds. As trustee, TCorp has appointed external managers to manage the performance and risks of each facility in accordance with a mandate agreed by the parties. TCorp has also leveraged off internal expertise to manage certain fixed income assets for the TCorpIM Funds facilities. A significant portion of the administration of the facilities is outsourced to an external custodian.

Investment in the TCorpIM Funds facilities limits Taronga's exposure to risk, as it allows diversification across a pool of funds with different investment horizons and a mix of investments.

TCorp provides sensitivity analysis information for each of the Investment facilities, using historically based volatility information collected over a ten year period, quoted at two standard deviations (i.e., 95% probability). The TCorpIM Funds facilities are designated at fair value through profit or loss and therefore any change in unit price impacts directly on profit (rather than equity). A reasonably possible change is based on the percentage change in unit price (as advised by TCorp) multiplied by the redemption value as at 30 June each year for each facility (balance from TCorpIM Funds statement).

	Change in unit price	Impact on profit/loss	
		\$'000 2022	\$'000 2021
TCorpIM Cash Fund	+/-10%	-	1,267

Fair Value Measurement

Fair Value Compared to Carrying Amount

Financial instruments are generally recognised at amortised cost, with the exception of the TCorpIM Funds facilities, which are measured at fair value. The value of the TCorpIM Funds cash facility is based on Taronga's share of the value of the underlying assets of the facility, based on market value. All of the TCorpIM Funds facilities are valued using 'redemption' pricing.

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	
	2022 \$'000	2021 \$'000	2022 \$'000	2021 \$'000
Financial Assets				
Cash and Cash Equivalents	24,293	30,799	24,293	30,799
Receivables	4,145	2,505	4,145	2,505
Other Financial Assets	200,000	98,000	200,000	98,000
	<u>228,438</u>	<u>131,304</u>	<u>228,438</u>	<u>131,304</u>
Financial Liabilities				
Payables	26,268	25,235	26,268	25,235
Borrowings	52,403	52,851	49,805	57,079
	<u>78,671</u>	<u>78,086</u>	<u>76,073</u>	<u>82,314</u>

Fair Value Recognised in the Statement of Financial Position

Level 1 - Derived from quoted prices in active markets for identical assets/liabilities.

Level 2 - Derived from inputs other than quoted prices that are observable directly or indirectly.

Level 3 - Derived from valuation techniques that include inputs for the asset/liability not based on observable market data.

2022

	Level 1 \$'000	Level 2 \$'000	Level 3 \$'000	Total \$'000
Financial Assets at Fair Value				
TCorpIM Funds	-	-	-	-
	-	-	-	-

2021

	Level 1 \$'000	Level 2 \$'000	Level 3 \$'000	Total \$'000
Financial Assets at Fair Value				
TCorpIM Funds	-	12,670	-	12,670
	-	12,670	-	12,670

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 \$121,240,000 (\$46,054,000 in 2020/2021) have been included in Other Financial Assets as at 30 June 2022. The unexpended restricted funds are held separately from Taronga's unrestricted funds.

	Unexpended Amount	
	2022	2021
Taronga Foundation and Capital Program	\$'000	\$'000
Taronga Foundation Capital and Conservation Program Fundraising	47,650	32,900
Externally Funded Projects	6,584	4,374
Major Capital Projects Funded by NSW Government	67,006	8,780
Total	121,240	46,054

20. Remuneration of Auditors

The Audit Office fees for auditing Taronga's financial statements were \$111,900 (\$127,200 in 2020/2021). 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
 Mr Steven Hinks – Divisional Director
 Ms Karen Madden – Divisional Director (to 5 Nov 2021)
 Ms Leila Davis – Divisional Director (from 6 Nov 2021)
 Ms Bettina Sammut – Divisional Director (to 17 June 2022)

	2022	2021
Key Management Personnel Compensation	\$'000	\$'000
Short-term employee benefits	1,750	1,665
Other long-term employee benefits	127	44
Total	1,877	1,709

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 Robyn Parker – Deputy Chair (to 31 December 2021)
 Ms Laura Berry (from 26 April 2022)
 Mr Roy Bendall (to 30 June 2022)
 Ms Jennifer Cowley (from 26 April 2022)
 Mr Joe David (from 6 June 2022)
 Ms Catherine Harris (from 6 June 2022)
 Ms Gretel Packer (to 10 May 2022)
 Dr Ian Roth
 Mr Graham Wackett (to 31 December 2021)
 Mr John Walkom (to 1 September 2021)
 Mr Murray Wood (from 11 October 2021)

Board remuneration (including superannuation and payroll tax) of \$124,954.81 (\$211,804 in 2020/2021) was paid. This amount included honoraria of \$36,388 (\$37,512 in 2020/2021) paid to the Chair of the Board and \$90,662 (\$163,648 in 2020/2021) 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 part of their honorarium to Taronga Foundation.

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

	2022	2021
\$0	1	-
\$10,000 - \$19,999	8	8
\$20,000 - \$29,999	-	1
\$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 grant funding from NSW Treasury and Department of Regional NSW (Note 3), DPE, 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, delivering administration services to NSW Ministry of Health.

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:

	2022 \$'000	2021 \$'000
Cash at bank and on hand	24,293	18,129
TCorp Hour-Glass cash facility	-	12,670
Total	24,293	30,799

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

	2022 \$'000	Restated 2021 \$'000
Net Result	59,272	21,075
Depreciation and Amortisation	34,211	35,256
Non Cash Contribution (Capital)	(299)	-
Amounts capitalised in prior years transferred to profit and loss	26	5,867

Change in Assets and Liabilities:

(Increase)/Decrease in GST Receivable	(130)	(173)
(Increase)/Decrease in Accounts Receivable	(1,640)	(699)
(Increase)/Decrease in Inventories	(86)	236
Increase/(Decrease) in Creditors and Accruals	2,352	1,539
(Increase)/Decrease in Prepayments	(601)	323
Increase/(Decrease) in Contract Liabilities	25,621	2,678
Increase/(Decrease) in Employee Entitlements	(961)	27
Increase/(Decrease) in Unfunded Superannuation	(2,209)	(2,253)
Movement in Unamortised (Premium)/Discount on Loans	(448)	(530)
Net Cash Provided From Operating Activities	115,108	63,346

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:

	2022 \$'000	2021 \$'000
Not later than one year	29,508	14,058
Later than one year and not later than five years	1,249	1,031
Total including GST	30,757	15,089

GST Input Tax Credit Claimable on Commitments amounts to \$2,796,037 (\$1,371,724 in 2020/2021).

24. Contingent Assets and Liabilities

Taronga is not aware of any contingent assets or liabilities at 30 June 2022 (nil in 2020/2021).

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

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SUN BEAR 'MARY' — PHOTO BY RICK STEVENS

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

Funds Granted to Non-Government Community Organisations

Name Of Recipient Organisation	Amount of Grant	Program Area
Jane Goodall Institute Australia	\$30,000	Conservation Partnership for Chimpanzees (Tchimpounga Sanctuary)
International Rhino Foundation	\$45,000	Sumatran Rhino Survival Alliance, Southern African Rhino Conservation
International Rhino Foundation	\$75,000	Reforestation Partnership, Way Kambas National Park, Sumatra, Indonesia
Northern Rangelands Trust	\$40,000	Conservation Partnership for Lion, Zebra, Giraffe, African Elephant in Kenya
Save Vietnam's Wildlife	\$20,000	Conservation Partnership for Pangolin in Vietnam
Australia Wildlife Conservancy	\$15,000	Conservation Partnership for Great Desert Skink in Australia
Zoo & Aquarium Association Inc Wildlife Conservation Fund (TRAFFIC partnership)	\$25,000	Conservation Partnership in support of TRAFFIC SE Asia
Botswana Predator Conservation Trust	\$15,000	Large Carnivore Conservation Research Program
Cheetah Conservation Botswana	\$15,000	Wildlife conflict mitigation and livestock guarding dog program in high risk farming communities in the Western Kalahari.

Appendix 3

Research Projects and Conservation Programs

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	Dr L Vogelnest Dr G Tobias		
	Characterisation of the reproductive cycle of the Bellinger River Turtle using ultrasonography, behavioural observations and oviposition	Dr L Vogelnest Mr A Skidmore Ms G Liu		
	Short-beaked Echidna (<i>Tachyglossus aculeatus</i>) nutrition: diet digestibility, microbiota, gastric emptying and post-prandial glucose monitoring	Mr P Thompson Dr L Vogelnest Dr F Hulst Dr K Vinette Herrin Dr G Tobias Dr P Meagher		
4a/02/14, 4b/04/17, 3c/08/20	Satellite tracking of Marine Turtles released from TWH	Dr K Vinette Herrin Ms E Hall		SUEZ
4c/04/17	Use of pedigree to analyse the mode of transmission of Koala retrovirus variants in Taronga Zoo Koalas	Dr K Vinette Herrin Mr P Thompson Dr D Higgins Dr K Chappell	University of Sydney, University of Queensland	University of Queensland
3a/02/22	Wild Koala Breeding and Translocation Program. Establishment of an ex-situ breeding population and ongoing monitoring of in-situ field sites: disease profiling, genetics, habitat quality indicators and existing population monitoring	Mr A Elphinston Dr J O'Brien Ms R Schildkraut Ms C Flanagan Dr D Higgins Dr R Witt Dr M Lott	Koala Conservation Australia, University of Sydney, University of Newcastle, Australian Museum	Koala Conservation Australia Private Donors
	Longitudinal Interferon Gamma Responses in a Captive Asian Elephant Population with a History of Tuberculosis	Dr K Plain Dr V Rutten Dr P van Kooten Mr P Thompson Dr L Vogelnest Dr D Begg Mr G Panag	University of Sydney, Utrecht University, University of Pretoria	
	Sustainable rhino populations: Investigation of infertility in a Black Rhinoceros	Dr B Bryant Dr J O'Brien Dr M Stoops	Omaha's Henry Doorly Zoo and Aquarium, multiple North American zoos	Institute of Museum and Library Services
	Investigation of White Rhino mass mortality event by metatranscriptomic testing	Dr K Rose Dr B Bryant Dr C Sangster Prof E Holmes	University of Sydney	
NSW DPE AEC	Monitoring of the Jenolan Caves captive and remnant population of the Brush-tailed Rock-wallaby	Dr L Vogelnest Dr D Ashworth	NSW Department of Planning and Environment	

AEC no. if Applicable	Project Title	Researchers	Partner Institution	Source of External Funds
	Investigation of pharmacokinetics of ceftiofur crystalline free acid in macropods	A/Prof M Govendir Dr L Vogelnest Mr P Thompson	University of Sydney	
	Early diagnosis and clinical management of chronic degenerative musculoskeletal disorders in zoo felids	Dr C Barton Dr D Phalen Dr L Vogelnest	University of Sydney	Jenna Donley fund
	Periodontal disease and hypercementosis in captive Black Rhino	Dr B Bryant Dr M Campbell-Ward Dr L Tong		
	Vaccination practices and outcomes in zoo felids	Dr K Vinette Herrin	University of Sydney	Jenna Donley fund
	Proventriculopathy in Little Penguins at Taronga Zoo	Dr G Tobias Dr L Tong Dr K Vinette Herrin Dr L Vogelnest Dr F Hulst		
	Python spinal osteopathy	Dr G Tobias Dr L Tong Dr K Vinette Herrin Dr L Vogelnest Dr F Hulst Dr T Allcock		
3b/11/16	Zoo Management of Lord Howe Island Woodhen and Pied Currawong associated with the Lord Howe Island Rodent Eradication project	Mr M Shiels Dr F Hulst Mr P Thompson	Lord Howe Island Board, NSW Department of Planning and Environment	
3a/06/15	Haematologic and biochemical parameters of the Port Jackson Shark (<i>Heterodontus portusjacksoni</i>)	Mr P Thompson Dr F Hulst Dr K Vinette Herrin Dr P Meagher Dr J Day	Macquarie University	
	Molecular investigation of fatal isosporosis in Chestnut-breasted Mannikins in a zoological collection	Dr L Tong Ms S Johnson	University of Sydney	
	Developing a brain imaging database of rare and endangered Australian mammals	Dr A Bongers Prof K Ashwell Dr L Tong Mr C Slatyer Mr H Holewa	University of NSW, National Imaging Facility Australia, Lowy Cancer Research Centre, Australian Museum, CSIRO	
R19B290	Urinalysis reference ranges for monotremes and marsupials	Dr L Vogelnest Mr P Thompson Mrs N Miller Dr O Cohen		
5a/08/19	Pharmacokinetics of NSAIDs in Black Rhinoceros	Dr B Bryant Dr M Govendir	University of Sydney	International Rhino Foundation
	Animal welfare and veterinary ethics in wildlife emergency (bushfire) rescue	Dr M Campbell	Vets Beyond Borders	

AEC no. if Applicable	Project Title	Researchers	Partner Institution	Source of External Funds
3d/06/21	Investigation into the pharmacokinetic profile of oral and injectable paracetamol as an analgesic for Koalas	Dr M Govendir Dr L Vogelnest Mr P Thompson	University of Sydney	
4c/06/22	Vaccination of zoo animals for SARS-CoV-2 at Taronga Zoo and Taronga Western Plains Zoo	Dr L Vogelnest Dr A Wallace		
	Investigating the Health and Disease of Platypuses in New South Wales, Australia	Dr J Whinfield Dr L Vogelnest	Murdoch University	WIRES
	Georges Turtle (Bellinger River Snapping Turtle) virus: finding the source	Dr P Kirkland Dr K Rose Ms J Hall Dr K Parrish Dr E Ariel	NSW NPWS, NSW Department of Primary Industries, NSW Health, Local Lands Services	NSW Environmental Trust
4a/04/18, 3a/12/18	Fire management implications for biodiversity in Kakadu National Park	Dr K Rose	Parks Australia	Parks Australia
3b/12/18	Centre for Pathogen Discovery	Prof E Holmes Prof V Sintchenko Dr J-S Eden Dr Wei-Shan Chang Dr K Rose Ms J Hall Dr H Bender Dr B Hudson	University of Sydney, The Marie Bashir Institute for Infectious Diseases and Biosecurity, NSW Health	University of Sydney
4a/02/18	Invasive animals and confiscated wildlife: Pathogen Discovery and biosecurity	Prof. E Holmes Dr W-S Chang Dr K Rose Dr H Bender Ms J Hall	University of Sydney, NSW Department of Primary Industries, Department of Agriculture, Water and the Environment	University of Sydney, Department of Agriculture, Water and the Environment
3c/10/18	Uluru-Kata Tjuta NP Mala Census	Dr K Rose	Parks Australia	Parks Australia
	Understanding the impact of disease and pollution on New Zealand Fur Seals (<i>Arctocephalus forsteri</i>)	Ms J Hall Dr H Bender Dr B Pitcher	NSW Department of Planning and Environment, National Measurement Institute, Griffith University, NSW NPWS	Department of Planning and Environment Science Division, NSW NPWS
	Persistent pollutants and Green Turtle health	Ms J Hall	NSW Department of Planning and Environment, NSW NPWS	Department of Planning and Environment Science Division
	Christmas Island Flying Fox Health, Ecology and Conservation	Prof J Welbergen Prof D Phalen Dr K Rose Dr H Bender Ms J Hall Ms S Flakus Dr D Westcott Dr J Martin Dr K Bennison	Christmas Island National Park (Parks Australia), University of Sydney, CSIRO, Western Sydney University	Christmas Island National Park (Parks Australia), Western Sydney University, Hawkesbury Institute for the Environment

AEC no. if Applicable	Project Title	Researchers	Partner Institution	Source of External Funds
4b/12/17, 3b/10/18	Christmas Island Reptile Emergent Enterococcus, and Christmas Island Blue-tailed Skink translocation to Cocos (Keeling) Island	A/Prof D Phalen Dr K Rose Dr H Bender Ms J Hall Dr J S Eden Ms J Agius Mr JP Emery Dr N Mitchell Dr S Flakus Mr B Tiernan	University of Sydney, Christmas Island National Park (Parks Australia), University of Western Australia	Perpetual grant, Australia Pacific Science Fund, Holdsworth Wildlife Research Endowment, Parks Australia, University of Sydney
	Wildlife health preparedness (bushfire response)	Dr K Rose Ms J Hall Dr H Bender	University of Sydney, Wildlife Health Australia	Environment Restoration Fund: Wildlife Rescue and Rehabilitation
	Amphibian Mass Mortality Investigation 2021	Dr K Rose Ms J Hall Dr J Rowley	Australian Museum, University of Sydney	
	Beaked Whale Health (Ecotoxicology)	Ms J Hall Dr K Rose	Southern Cross University, Dolphin Marine Conservation Park	Southern Cross University, Ocean Warriors Australia
	Christmas Island Cadmium	Ms J Hall Dr K Rose	Christmas Island National Park (Parks Australia), Department of Planning and Environment (Environmental Toxicology)	Parks Australia
	Swamp Wallaby Trypanosomiasis prevalence: a field study	Ms J Hall Dr K Rose Dr C Herbert Dr C Price	University of Sydney	University of Sydney, University of NSW
	Secondary Pindone Toxicity in Bird of Prey	Ms J Hall Dr K Rose Dr P Taggart Dr C Doyle	NSW Department of Primary Industries, NSW Department of Planning and Environment (Environmental Toxicology)	NSW Department of Primary Industries
	Defining the viral aetiology of Black and White Bird Disease Syndrome	Dr K Rose Ms J Hall A/Prof D Phalen	University of Sydney	University of Sydney, University of NSW
4A0817	Assessing the ecological role of Brush Turkeys in urban Sydney	Dr A Burns Dr J Martin Dr D Hochuli	University of Sydney, Royal Botanic Gardens	
3b/08/16	Social foraging olfaction in marine predators	Dr B Pitcher Dr D Slip	Macquarie University	Macquarie University
	Multimodal communication in marine mammals (Sea Lions on the Edge)	Dr B Pitcher Prof R Harcourt Dr A Charriton Dr I Charrier	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	Dr J Tripovich Dr B Pitcher Dr A Burns Mr A Elphinstone Dr R Crates D Ingwersen	Australian National University, Birdlife Australia	Winifred Violet Scott Charitable Trust
3a/08/18	Behavioural ecology of the critically endangered Plains-wanderer	Dr B Pitcher Dr A Burns Dr M Van Sluys		

AEC no. if Applicable	Project Title	Researchers	Partner Institution	Source of External Funds
	Animal Behaviour & Welfare in managed populations & the wild	Dr B Pitcher Dr A Burns Dr N Jordan Prof R Kingsford Dr S Nakagawa Dr G Samarasinghe Dr A Sowmya Dr A Jordan	University of NSW, Max Plank Institute	
ZV21009	Developing behavioural welfare tools for giraffe	Dr B Pitcher Dr M West Dr S Sherwin Dr H Larsen	University of Melbourne, Zoos Victoria	
	Platypus breeding and climatic resilience	Dr J O'Brien Dr P Meagher A Elphinstone Prof. R Kingsford Dr G Bino Dr T Hawke Dr J Thomas Dr S May Dr N Jordan Dr B Pitcher	University of NSW, Healesville Sanctuary Tidbinbilla Reserve, ACT Government	University of NSW Near Miss Award
	Great Barrier Reef Recovery Initiative	Dr R Hobbs Dr J O'Brien Dr M Hagedorn Dr J Daly Dr L Bay Dr M van Oppen Dr T Ainsworth	Australian Institute of Marine Science, Smithsonian Institution, University of NSW	Great Barrier Reef Foundation
3b/10/20, 4b/08/20	Securing genetic diversity of threatened frogs through strategic biobanking	Dr R Hobbs Dr J O'Brien Mr M McFadden Dr M Magrath Mr D Gilbert Dr A Silla A/Prof P Byrne Mr D Hunter	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)	Dr J O'Brien Dr R Hobbs Dr B Bryant Dr M Stoops	Omaha's Henry Doorly Zoo and Aquarium, multiple North American zoos	Institute of Museums and Library Services
A-2019-935	An Integrated Approach to Understanding and Enhancing Outcomes for Rehabilitated Koalas in Peri-urban Environments	Dr D Higgins Dr J O'Brien Dr N Jordan Dr R Witt Dr K Leigh Dr B Bryant Ms Shelby Ryan	University of Sydney University of NSW University of Newcastle, Department of Planning and Environment, Port Stephens Koala Hospital, Port Macquarie Koala Hospital	University of Newcastle Seed Funding, WWF
A-2022-201, A-2019-935	Koala surveys and movement ecology	Dr N Jordan Dr J O'Brien Dr R Witt S Ryan	University of Newcastle, University of NSW	WWF-Australia, Australian Academy of Science, Mid North Coast Joint Organisation, Royal Zoological Society of NSW, WIRES

AEC no. if Applicable	Project Title	Researchers	Partner Institution	Source of External Funds
19/119B	Myall Lakes Dingo project	Dr N Jordan Dr B Pitcher Dr M Campbell B Alting P Wood Dr K Moon Dr B Smith	University of NSW, NSW NPWS, Mid Coast Council, TIDE	University of NSW Faculty Research Grant, Hermon Slade Foundation, NPWS NSW, Mid Coast Council
4349086/2/1, 20/166b	African Wild Dog communication and cognition	Dr N Jordan Dr J McNutt Dr K Golabek L Ransome B Alting W Hansen M Claase	Botswana Predator Conservation Trust, University of NSW, Griffith University, University of California Santa Cruz University of Stellenbosch	Department of Education, Skills and Employment, National Geographic, Winnifred Violet Scott, Stellenbosch Bursary
3b/06/20, 4a/06/18	Bilby survival and movement ecology	Mr A Elphinstone Dr N Jordan Prof R Kingsford Ms K Cornelsen	University of NSW	Department of Education, Skills and Employment
4b/06/17, 3b/06/20	Sanctuary flora & fauna surveys	Dr N Jordan Ms K Cornelsen Mr A Elphinstone Dr T Gale Prof R Kingsford Ms B Phu Dr E Thompson Ms L Cole	University of NSW	
4349086/2/1, 20/166b	Conservation of Lions and other large carnivores in Botswana	Dr N Jordan Dr J McNutt Dr K Golabek C Radford Prof T Rogers L Ransome Prof D Jones R Appleby Dr A King Dr K Rafiq Dr B Abrahms	University of NSW, Botswana Predator, Conservation Trust, WildSpy, Griffith University, Swansea University, Liverpool John Moores University, University Of Washington	Columbus Zoo, University of NSW, Griffith University, Philanthropic donors, Crowdfunding, Natural Selection Conservation Fund
19/119B	Developing a scent-based management tool for Dingoes and other wild dogs in Australia	Dr N Jordan C Price B Walker B Alting Dr H Bates Dr B Pitcher	University of NSW, Dingo Sanctuary, NSW NPWS	University of NSW Faculty Research Grant, Hermon Slade Foundation, University of NSW, NSW NPWS
UBR/RES/ACUC/010 (University of Botswana)	Leopard movement ecology	Dr N Jordan Dr J McNutt B Walker Prof T Rogers R N Setlalekgomo E Bennitt	University of NSW Botswana Predator Conservation, University of Botswana Natural Selection Conservation Trust	Natural Selection Conservation Trust
4a/10/19	Southern Corroboree Frog Captive Breeding and re-introduction	Mr M McFadden Dr P Harlow	NSW Department of Planning and Environment	
4a/12/17	Experimental re-introduction of Yellow-spotted Bell Frog to the Southern Tablelands, NSW	Mr M McFadden Dr D Hunter	NSW Department of Planning and Environment	

AEC no. if Applicable	Project Title	Researchers	Partner Institution	Source of External Funds
101025/05	Experimental re-introduction of Northern Corroboree Frogs to the Brindabella National Park, NSW	Mr M McFadden Dr D Hunter	NSW Department of Planning and Environment	
140203/01	Experimental re-introduction of Southern Corroboree Frogs to the field enclosures	Mr M McFadden Dr D Hunter	NSW Department of Planning and Environment	
AE16/19	Silver Spoon start to life: Nutritional Requirements of the critically endangered Corroboree Frog	Mr M McFadden Dr P Byrne Dr A Silla Prof S Robinson Dr P Harlow	University of Wollongong, NSW Department of Planning and Environment	ARC Linkage, NSW DPE, Zoos Vic, University of Wollongong
3c/12/20	Testing the efficacy of microclimate manipulation for mitigating heat stress in flying-foxes	A/Prof J Welbergen Dr C Turbill Dr J Martin	Western Sydney University	NSW Department of Planning and Environment
19/2017	Big City Birds	Dr J Martin Dr A Burns Prof D Hochuli Dr L Aplin Dr B Klump Dr G Fehlmann Ms J Penndorf Mr M Hall	The University of Sydney, Max Planck Institute for Animal Behavior	
A12217	Flying-fox Movement and Navigation	A/Prof J Welbergen Dr C Turbill Dr J Martin Dr J Meade Ms M Walker Ms E McCarthy Ms S Yabsley	Western Sydney University	ARC Discovery
2018/600	Nature In The City (assessing kids connection to nature)	Prof D Hochuli Dr J Martin Prof L Given Mr R Keith	The University of Sydney	
3a/10/20	Hollows As Homes	Dr J Martin Prof D Hochuli Dr B Law Dr K Matic	The University of Sydney, NSW Department of Primary Industries Forestry	Wildlife Rescue and Rehabilitation Grants (Commonwealth)
	The Urban Field Naturalist Project	A/Prof T van Dooren Prof D Hochuli Dr J Martin Dr Z Sadokierski Dr A Burrell	The University of Sydney, University of Technology Sydney	
	Vulnerability of Australian bats to white-nose syndrome	Dr C Turbill A/Prof J Welbergen Dr J Martin Dr J Hufschmid Dr L Lumsden Prof C Willis Prof F Geiser	Western Sydney University, University of Melbourne	ARC Linkage, Western Sydney University, Wildlife Health Australia, ZOOS VIC, Commonwealth Department of Agriculture, Water & Environment, Australian Speleological Federation

AEC no. if Applicable	Project Title	Researchers	Partner Institution	Source of External Funds
	Wildlife Assist - One Welfare Project	Ms M Shaw Dr J Martin Dr B Jones Dr P McManus Dr P McGreevy Dr C Herbert Dr D Raubenheimer Dr S Finnerty Dr A Lykins Dr B Kennedy Ms D Evans	University of Sydney, University of New England, RSPCA, WIRES, NSW NPWS	Wildlife and Habitat Bushfire Recovery Program grant, RSPCA, WIRES
2021/204 (Human ethics)	Learning By Doing (increasing school kids involvement in citizen science and STEM)	A/Prof A Motion Dr Y Golumbic Dr J Martin Dr A Black Dr C Preston Ms C Kenneally	The University of Sydney	
	Increasing amphibian immunity to combat disease causing mass extinction	A/Prof L Skerratt Prof K Zenger A/Prof L Berger Dr D Hunter Prof J Robert Mr M McFadden Mr D Gilbert	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
	Wild shark migration, movements and social networks	Dr J Day Prof C Brown Dr N Knott Dr T Guttridge	Macquarie University, NSW Fisheries, Sonotronics, Bimini Biological Field Station	SeaWorld Research & Rescue Foundation, ARC Linkage, Macquarie University
3a/06/15	Social preferences, activity patterns and learning in Port Jackson Sharks	Dr J Day Prof C Brown Ms J Kadar	Macquarie University	Woolworths, Macquarie University
	Resolving the warming East Australian Current's impact on a marine food web	Dr D Slip Prof R Harcourt Dr I Jonsen Prof I Suthers A/Prof M Roughan A/Prof M Doblin Dr M Cox	Macquarie University, University of NSW, University of Technology Sydney, Australian Antarctic Division	ARC Linkage, Macquarie University
	Trophic interactions between key marine apex predators off the Uruguayan coast	Dr D Slip Prof R Harcourt Dr Vincent Raoult	Macquarie University, University of Newcastle, Dirección Nacional de Recursos Acuáticos - National Direction of Aquatic Resources	PADI Foundation
	Developing the next generation of animal telemetry tools	Dr D Slip Prof R Harcourt Dr I Jonsen	Macquarie University, Sydney Institute of Marine Science (Animal Tracking Facility), Bird Studies Canada and Arcadia University (MOTUS), Dalhousie University, Vemco, US Office of Naval Research	Macquarie University, MOTUS, SIMS, Vemco, ONR/ATN
	Improving the effectiveness of electronic deterrents to prevent shark bites	Dr D Slip A/Prof N Hart A/Prof C Huveneers Dr L Ryan Dr J Everett Dr V Peddemors	Macquarie University, Flinders University Le Centre Sécurité Requin (Shark Security Centre), Iles Reunion Oceans Research South Africa, University of Miami, Sea World Queensland	ARC Linkage, Sea World

AEC no. if Applicable	Project Title	Researchers	Partner Institution	Source of External Funds
	Using eDNA and acoustic surveys to determine the impact of changing prey availability on Australian Little Penguin populations in NSW	Dr J Day Dr B Pitcher Dr D Slip Prof R Harcourt Dr M Stat Dr M Huggett	Macquarie University, University of Newcastle	Macquarie University
4a/04/21	Investigating the microbiome of Little Penguins	Dr J Day Dr B Pitcher Dr M Stat Dr M Huggett Prof R Harcourt	Macquarie University, University of Newcastle	NSW NPWS
	How effective are Australian Marine Parks at protecting EPBC listed species	Dr D Slip Prof R Harcourt Dr A Grech Dr V Tulloch	Macquarie University, James Cook University, University of British Columbia, Department of Agriculture Water and the Environment	Australian Government Our Marine Parks
	Australian Shark Incident Database	Dr P Meagher Dr D Slip Dr C Huevenueers Dr C Bradshaw Dr M Theile Dr V Peddemors	Flinders University, Department of Primary Industries Fisheries	
3a/02/21	Nutritional requirements of growing Southern Hairy-nosed Wombats	Ms M Shaw Dr G Tobias Dr L Vogelnest Dr F Hulst Dr K Vinette-Herrin Dr J Whinfield	University of New England	
S-2020-092, 11/02/2021, 3a/08/21	Short-beaked Echidna (<i>Tachyglossus aculeatus</i>) nutrition: diet digestibility, microbiota, gastric emptying and post-prandial glucose monitoring	Ms M Shaw Dr D McLelland Dr I Smith Prof F Grutzner Prof K Jones Dr T Perry	University of Adelaide, Adelaide Zoo, Western Sydney University	
	Investigating the diets of the critically endangered Regent Honeyeater (<i>Anthochaera phrygia</i>)	Ms A Jarman Ms M Shaw Dr C Grueber	University of Sydney	
	Investigating the diets and vitamin E status of Plains-wanderer (<i>Pedionomus torquatus</i>)	Ms A Jarman Ms M Shaw Dr C Grueber	University of Sydney	
	Assessing the sustainability of zoo diets	Ms M Shaw Ms B Corcoran		
	Improving the Koala feedbase with rapid assessment tools and an artificial leaf to sustain bushfire-affected Koalas	Ms M Shaw Dr B Moore Dr J Zhou C Flanagan	Western Sydney University, Port Macquarie Koala Hospital	Regional Bushfire Recovery for Multiregional Species and Strategic Projects Program
	Effect of Taronga herbivore diet on feed intake, faecal consistency, and behaviour in various ungulate species	Ms M Shaw	University of Sydney	

AEC no. if Applicable	Project Title	Researchers	Partner Institution	Source of External Funds
	Will transfaunation from an overweight Tree Kangaroo improve condition in an underweight individual?	Ms M Shaw Mr S Bennett Dr R Eisenhofer Dr C Greuber	University of Sydney, University of Adelaide	
3c/12/19	Genetic management of the Regent Honeyeater breeding program	Dr J Day Dr V Sluys Dr B Pitcher Dr R Crates Dr C Hogg Dr E McLennan	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	Dr J Day Dr P Meagher Dr J van de Merwe Dr O Coffee Dr R Pearson	Griffith University	Bioplatforms Australia, Wettenhall Environment Trust, James N. Kirby Foundation
	Population genetics of Yellow-spotted Bell Frogs and Booroolong Frogs	Dr J Day Mr M McFadden Prof S Donnellan Dr J Rowley	South Australian Museum, Australian Museum	Bushfire Wildlife Recovery Fund
A21008	Collaborative science for monitoring of Northern Territory marine megafauna	Prof S Banks Dr C Palmer Dr J Day A/Prof C Salgado Kent Dr A Grech Prof R Harcourt Dr V Udyawer Mr B Smith Ms Y Sutherland Mr F Moyle Mr D McAdam Mr J Smith	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
3d/12/20	Disrupting illegal wildlife trade through forensic science - Testing XRF technology to determine provenance of wildlife	Dr P Meagher Dr L Tong Ms M Shaw Dr K Brandis Dr D Mazumder Dr D Ramp Dr J O'Brien Mr J Cincotta	University of NSW, ANSTO, University of Technology Sydney, TRAFFIC	Australian Geographic, For Animals Foundation
	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	Dr P Meagher Dr V Pirotta Dr J O'Brien	Rapiscan	Department of Agriculture, Fisheries and Forestry

AEC no. if Applicable	Project Title	Researchers	Partner Institution	Source of External Funds
	Securing threatened frogs from bushfire impact	Prof M Mahony A/Prof J Clulow A/Prof Hayward Prof Donnellan Dr Callen Dr Klop-Toker Dr J Rowley Dr D Bower Dr S Clulow Mr Slade Mr Daly Dr N Calatayud Dr R Hobbs Dr J O'Brien	University of Newcastle, University of New England, Macquarie University, Forest Corporation NSW, NSW DPIE, Australian Museum, South Australian Museum, Gaia Consulting	Department of Agriculture, Water and the Environment

Appendix 4

Human Resources

Program Area	Ongoing				Temporary			
	2019	2020	2021	2022	2019	2020	2021	2022
Executive	13	13	12	11	1	1	1	0
Clerical	109	122	114	121	72	67	48	45
General	25	26	29	17	0	2	7	10
Professional	14	16	14	15	1	0	3	3
Services	69	60	31	31	7	36	9	11
Technical	4	7	6	6	2	1	0	1
Trades	170	180	165	165	17	22	32	35
Total	404	424	371	366	100	129	100	105

Program Area	Casual				Total			
	2019	2020	2021	2022	2019	2020	2021	2022
Executive	0	0	0	0	14	14	13	11
Clerical	52	48	35	30	233	237	197	196
General	1	1	3	0	26	29	39	27
Professional	4	5	5	9	19	21	22	27
Services	340	313	250	293	416	409	290	335
Technical	0	0	0	0	6	8	6	7
Trades	95	98	60	92	282	300	257	292
Total	492	465	353	424	996	1018	824	895

Previous to 2021 this report would have included employees with multiple positions

Movements in salaries and wages

- 2.04% increase to salaries, wages and salary related allowances TCSA Salaried Employee Award effective 5 July 2021
- 2.04% increase to salaries, wages and salary related allowances TCSA Wages Employee Award effective 5 July 2021
- 2.04% increase to salaries, wages and salary related allowances TCSA Retail and Restaurant Award effective 5 July 2021

Amendments to industrial relations policies and practices

Taronga is currently undertaking a policy review with all awards reviewed in consultation with the relevant unions.

Appendix 5

Consultants' Fees Incurred in 2021/22

Consultants Equal to or More Than \$50,000

Capital Projects – \$113,775

Consultants Less Than \$50,000

During the year five consultancies were engaged in the following area:

Management Services – \$49,051

Capital Projects – \$24,139

Total Consultancies less than \$50,000 = \$73,190

Total Consultancies = \$186,965

Appendix 6

Workforce Diversity

EEO Target Groups (Permanent and Temporary Staff Only)

Trends in the Representation of EEO Groups

EEO Group	"Benchmark or Target"	2017	2018	2019	2020	2021	2022
Women	60.0%	62.4%	63.7%	53.5%	61.7%	67.4%	63.3%
Aboriginal People and Torres Strait Islanders	2.6%	2.4%	2.5%	1.4%	1.40%	3.40%	3.1%
People Whose Language First Spoken as a Child was not English	19.0%	5.4%	6.3%	5.3%	5.1%	2.5%	*
People with a Disability	n/a	1.8%	1.2%	0.8%	0.9%	1.6%	0.8%
People with a Disability Requiring Work-related Adjustment	1.5%	0%	0%	0%	0%	1%	0.5%

Trends in the Distribution of EEO Groups

EEO Group	"Benchmark or Target"	2017	2018	2019	2020	2021	2022
Women	100	96	94	93	90	92	98
Aboriginal People and Torres Strait Islanders	100	80	76	87	99	90	56**
People Whose Language First Spoken as a Child was not English	100	92	102	103	95	113	*
People with a Disability	100	85	89	88	89	93	75
People with a Disability Requiring Work-related Adjustment	100						

*Data not currently available.

** Includes 8 school students undertaking various Aboriginal Traineeship scheme programs.

Workforce Diversity Achievements in 2021/2022 include:

Strategic Plan 2021-2025 Incorporated Cultural Strategic Pillar	<p>Six Strategic Pillars form the base framework of the new Strategic Plan. 'Commitment to Country' is one of these six Pillars:</p> <p><i>"Commit to and embed a way of working that respects and includes Indigenous peoples, cultures and place"</i></p>
Workforce Diversity Celebrations	<p>NAIDOC Week, Reconciliation Week, International Women's Day, Harmony Day and Sydney Mardi Gras were amongst the celebrations to promote a greater understanding of our diverse community. These celebrations were acknowledged through virtual communications platform Workplace this year.</p> <p>To celebrate the Sydney Mardi Gras the Taronga team were part of the COVID-safe parade at Sydney Cricket Ground and actively promoted these celebrations on Workplace, spreading awareness and engagement across the organisation.</p>
Indigenous Youth Programs	<p>The Taronga Zoo Burbangana and Taronga Western Plains Zoo Walanmarra Youth Programs have continued to operate in partnership with the NSW Government.</p> <p>The programs connect vulnerable, at risk or trauma affected young people to Country, Culture and Wildlife. Taronga has employed graduates from the programs, representing a significant achievement for these young people and Taronga. Importantly, the programs overall deliver over \$2 of social value for every \$1 invested. Taronga is committed to continuing and expanding these programs.</p>
Aboriginal Employment Strategy	<p>Taronga is working on the Aboriginal Employment strategy and has been actively engaging with various stakeholder and community representatives throughout the past year. Opportunities such as education and training pathways have been identified across both sites and strategies implemented to ensure cultural safety and support from the Taronga Aboriginal Advisory Group.</p> <p>Additional Identified and Targeted roles have also been recruited to closely mentor young people participating in a range of community and cultural programs on Wiradjuri and Cammeraigal Country.</p>
Reconciliation Action Plan (RAP)	<p>Taronga's Reconciliation Action Plan continues to evolve by building and enhancing cultural appreciation among our staff and visitors. Taronga's active engagement with a working group of indigenous and non-indigenous staff consult with Zoo staff and others outside the Zoo with special expertise, providing advice and important grounded cultural knowledge.</p> <p>Taronga acknowledges the contribution that the local inhabitants made in developing a strong connection and respect for Australian animals and the principles of sustainability and conservation, and it's critical this connection continues into the future.</p>
Flexible Work	<p>Taronga released the Flexible Working Policy in 2020 which sets out to ensure that all roles can be flexible, and all employees can access flexible working arrangements. Flexible working empowers employees to create better work life balance and encourages healthy wellbeing, whilst also enables Taronga to develop a workforce that is inclusive, productive and fulfilling. Taronga has seen the number of formal flexible working arrangements in place increase by more than double since the implementation of this policy.</p>
Gender Diversity Leadership Group	<p>Taronga's commitment to gender diverse leadership is evident through recruitment processes and the current leadership group.</p>

Return to Work Parents	Taronga have and will continue to consult with employees returning to work after periods of parental leave. Taronga gives due consideration to any flexible work requests outside of the parental leave period. Taronga actively works towards the 'if not, why not' commitment from NSW government in making all roles flexible by 2020 using the Make Flexibility Count Framework.
Disability Plan	Taronga has continued its partnership with Autism Spectrum Australia to deliver Access @ Taronga Zoo activation which has been received positively by the communities by providing early entry into the zoo. This program provided a great opportunity to revisit Taronga's inclusion strategies. Taronga also supports volunteers with disabilities to be placed in various roles throughout the zoo. In addition, Taronga have installed Hearing Loop facilities in the major Taronga buildings open to guests, including the Savannah precinct.
Community Service Program	Our Community Programs team continues to deliver Burbangana and Walanmarra Programs. These programs were developed to create a new outreach program for Indigenous youth to gain practical, career development skills in horticulture, carpentry and animal care. The Community and Cultural programs team also works in partnership with the Department of Juvenile Justice, facilitating community service placements and practical work experience for low risk offenders.

Key Workforce Diversity strategies proposed by Taronga for 2021/22 include:

Taronga's Cultural & Strategic Plan	Taronga will continue to consult and engage with the Taronga Aboriginal Advisory Group (TAAG) on Cammeragal Country and Wiradjuri Elders to continue to work towards the 2022/23 targets. These targets involve multiple areas across the organisation but are not limited to building development, employment, education and procurement. The TAAG are an integral part of our Taronga family and will continue to advise on key aspects of our operations.
Aboriginal Employment Strategy	In collaboration with Department of Planning and Environment Taronga has continued to work to the Aboriginal Employment Strategy. This dedication to the strategy and collaboration with our key partners will continue. Cultural Awareness programs are now part of both employee and volunteers induction process as well as being embedded within our Knowledge Library on Workplace.
Mental Health Awareness	<p>Taronga currently have 39 representatives that are accredited and practice Mental Health First Aid supporting teams across the organization. Mental Health Masterclass refresher training facilitated by the World Mental Health Institute ensures a consistent and effective approach to supporting our people.</p> <p>Taronga recognises mental health issues within wider society is on the rise and therefore ongoing refresher training and workshops will ensure our representatives have the ability to stay in touch with the latest methods of providing support. This has been particularly important during the COVID-19 lockdown(s) and the implications have been felt in our people.</p>
Workforce Diversity Celebrations	Taronga's commitment to the promotion of Equal Employment Opportunity will continue to evolve. Taronga's Diversity strategies support Aboriginal Employment, Disability, Multiculturalism and Women in Leadership. The Wildlife Retreat Employment Strategy allowed for appropriate workplace support to ensure all internal and external stakeholders were able to engage with the benefits of a diverse Taronga workforce. This year Taronga were strongly linked to the Department of Planning and Environment's NAIDOC and Reconciliation Week Celebrations.

Appendix 7

Taronga Disability Action Plan

Taronga participates on the Department of Planning and Environment Steering Committee focusing on the cluster's Disability Inclusion Action Plan; this ensures Taronga continues to progress with the commitments captured in this plan. Access Taronga is a successful event coordinated with Autism Spectrum Australia. During the event Taronga welcomes guests with autism and their family and friends to enjoy early entry to Taronga Zoo. Access Taronga is a great opportunity for guests to enjoy the peace and quiet of the Zoo before it opens to the general public. Taronga understands that guests have varying needs and may require special assistance during their visit – there are a range of services available to aide guests requiring additional assistance due to Autism and detailed information is provided on Taronga's website.

Additionally, the team were working through Taronga's Guide Dog policy 2021, making strong headway and steps forward for all guests.

Taronga is focused on the internal capacity of its Human Resources team and on increasing its ability to provide reasonable adjustments throughout the recruitment process and ensuring a safe environment for candidates and employees.

Taronga also ensures information about training and development opportunities is accessible and compliant with Web Content Accessibility Guidelines (WCAG 2.0 AA) standards.

Accessibility forms part of any capital works project at Taronga. There are many new developments currently underway, such as new animal exhibits and office refurbishments and upgrades. Accessibility considerations include:

- Disabled amenities
- Accessible walkways and lifts
- Modified equipment and workstations for students and employees

Taronga will continue to champion and develop processes to support and remove any barriers to inclusion and accessibility through various initiatives planned in the coming year.

Appendix 8

Services improved/changed in response to complaints/suggestions

There were three main areas of complaints

COVID-19 Concerns	Taronga has addressed the COVID-19 complaints by keeping high standards with cleaning, adhering to social distancing and mask wearing when social distancing is not possible. COVID-19 signage was also updated to adhere to NSW Health guidelines.
Wild Bird Behaviour	Taronga has been working on developing bird control measures, training our staff and placement of bins.
Food and Beverage	Taronga continues to monitor its customer feedback via Revinate surveys. We are working with our team to make improvements in this area.

Complaints per 1000 guests (1)	2020/21	2021/22
Total visitation*		791,354
Taronga Zoo	0.4	0.03
Taronga Zoo	0.29	0.24

(1) Calculation excludes Twilight and Vivid attendees at Taronga Zoo and function guests at both Zoos.

* Total Visitation (Paid admissions and FOC) includes the following:

- Includes Zoo Friends, paid education and overnight stays.
- Includes function guests and Twilight Concert and Vivid attendees at Taronga Zoo.
- Includes function guests at Taronga Western Plains Zoo.

Appendix 9

Payment of Accounts

Aged payables analysis by quarter	Current	31-60	61-90	91+	Total
September quarter	1,181,932	476,019	1,228,143	95,299	2,981,393
December quarter	1,984,097	747,360	14,771	85,254	2,831,481
March quarter	2,717,410	520,943	382,733	214,549	3,835,635
June quarter	3,862,489	144,921	28,746	274,633	4,310,788

Accounts Paid on time by quarter	Target	Actual	Total paid	Paid on time
September quarter	100%	88%	9,317,299	8,191,410
December quarter	100%	82%	10,257,650	8,458,058
March quarter	100%	77%	15,556,669	11,945,026
June quarter	100%	82%	21,213,080	17,352,121

Average days taken to process accounts in September quarter	24
Average days taken to process accounts in December quarter	24
Average days taken to process accounts in March quarter	28
Average days taken to process accounts in June quarter	27
Average days taken to process accounts in 2022	26

No interest has been paid on overdue accounts in the 2021/22 year.

Reasons for accounts not been paid on time

Taronga aims to meet vendor payment terms. Measurement of accounts being paid on time is based on 30 days from invoice date. In some cases vendors request payment 30 days from the end of the month after the invoice is raised. There are also instances of accounts being in dispute, necessitating withholding of payment until resolution of that dispute.

Appendix 10

Risk Management and Insurance Report

Risk Management

Taronga's Risk Management Policy and Enterprise Risk Management (ERM) Framework enables Taronga to identify 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 2021/22, with assistance from the Department of Planning and Environment's Climate Risk Ready team, Taronga established climate risk champions to inform the integration of climate change risks into Taronga's ERM Framework and to commence development of an adaptation plan in response to identified climate risks.

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 11

Internal Audit and Risk Management Attestation Statement for 2022 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

Risk Management Framework	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
Internal Audit Function	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
Audit and Risk Committee	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
- Member – Ms Penny Bingham-Hall
- Member – Cllr Roy Bendall (retired June 2022)
- Member – Mr Graham Wackett (retired December 2021)
- Member – Mr Joe David (appointed June 2022)

Penny Bingham-Hall

Chair

Taronga Conservation Society Australia

Appendix 12

Multicultural Policies and Services Program

Objective	Strategies	Achievements – 2021/22	Program for 2022/23
Promote, respect and accommodate cultural difference amongst Taronga staff	Strategic Plan 2021-2025: Incorporated Cultural Strategic Pillar	Commitment to Country	Ongoing
	Internal communications subcategory: Cultural Awareness	This details Taronga's acknowledgement of traditional owners of the land and linking employees directly to the cultural awareness e-Learning module.	Ongoing
	Provide and promote vocational educational opportunities at Taronga particularly for people from non-English speaking backgrounds	The Taronga school work experience program at both sites delivers VET opportunities to a significant number of students from a non-English speaking background.	Ongoing
Continuing development of Taronga's internal communications	To provide and disseminate information to all employees regardless of cultural and language background	Content is available on Workplace by Facebook for all employees and volunteers. This includes recordings of major updates and presentations, as well as internal group updates.	Ongoing
	Organisational Updates provided through varying methods	Questions for panel members and executive team can be submitted anonymously prior to the event.	Ongoing
Ensure Taronga's recruitment activities support the principles of EEO and the promotion of a culturally diverse workforce	Ensure all Taronga employment practices and processes are flexible and inclusive to help ensure a wide range of applications from diverse backgrounds	Recruitment practices continue to be refined and redacted in line with multicultural attraction in mind. Successfully recruited and appointed Indigenous Traineeship positions. Review of all cultural content being developed for guest and student engagement to ensure community consultation and Indigenous staff involvement throughout all stages.	Ongoing All content being reviewed and supported by Community.
Promotion of the zoos and the services of Taronga within ethnic communities		The Taronga Zoo Tourism team have this year continued their push into new markets. There has been continued growth and engagement through the agent base in our main target markets and continue to focus on both FIT and Group travel. The team also focused on Business events with more engagement in this sector. The team continue to focus on Inbound Tour Operators (ITO's), Online Travel Agents (OTA's) and front-line travel agents as well as a renewed focus on invigorating our presence in travel brochures and publications as well as in-market promotions.	The Taronga Zoo Tourism team will be working on various projects to improve and digitise booking processes for all tourism bookings. The team has also focussed on brand and product awareness and industry engagement ahead of the reopening of international borders in 2022.

Objective	Strategies	Achievements – 2021/22	Program for 2022/23
		Taronga Education program Wildlife Workshops specifically developed and targeted to inbound students. Utilising travel organisations including JTB, Kintestu, Jalpak, and foreign language schools.	Ongoing
	Promote Taronga Zoo to a diverse audience through engagement of foreign and LOTE media	While limited by border closures, PR and media departments at both zoos facilitated interviews and distributed news media materials to LOTE media and foreign media outlets.	Ongoing program will continue in accordance with requests received.
	Promote Taronga Zoo to a diverse audience in alignment with key calendar milestones	To coincide with Lunar New Year, Taronga ran a paid social campaign to offer a Lunar New Year discount for two weeks, reaching a total audience of 35,000 people.	Ongoing
		Joint Partnership with Sydney Opera House to utilise the services of an in-market representation company in China, the service provider, to act as an extension of the Sales Team at Taronga Zoo and update the local Chinese Travel agents and Wholesalers about activities and promotions at Taronga Zoo.	Ongoing
Integrate ethnic affairs initiatives into all Taronga business and capital plan activities	Ensure all relationships with key country personnel are strong and supportive of long-term outcomes	Wildlife Retreat at Taronga's tours in conjunction with community.	Ongoing
		Provided opportunities and support for eight employees to work in-situ and support local communities' projects and conservation programs internationally utilising the Zoo Friend Conservation Fellowships program. Most of the fellowships that included international travel components were postponed due to COVID-19.	Ongoing
		Participated in various Tourism Trade events including overseas missions hosted by DNSW and Tourism Australia aimed at targeting overseas agents. Assisting to develop significant growth in this sector for Taronga. Some of these planned travels were postponed due to COVID-19.	Ongoing – Due to border closures these events have moved online and have been used to keep brand and product awareness up and keep up engagement with the wider industry.
Increase the multi-cultural service capacity at both zoos	Continue to embed employees training and volunteer training in customer service with a particular focus on cultural appreciation and diversity	Cultural Awareness Training at Taronga was rolled out for a variety of team members in 2020. The Wildlife Retreat at Taronga's training had a significant cultural drive in the developed training. All team members at Taronga had the opportunity to complete the accompanying eLearning module which had an overview of the Cultural factors that are woven into the Retreat as well as an overview of our aboriginal history. This training ensures enhanced cultural support in communication throughout all roles in the organisation.	Ongoing

Objective	Strategies	Achievements – 2021/22	Program for 2022/23
Delivering high quality education and engagement programs for culturally diverse students and groups		Taronga's outreach programs led by the Zoomobile target NESB and ESL schools, especially schools that have challenges attending the zoos. Along with the Zoomobile the education team provides access to meaningful, and curriculum aligned programs through digital channels.	Ongoing
		The Community Zoomobile supports these communities by providing animal and engaging experiences to regional and community-based events such as NAIDOC and Threatened Species week. Unfortunately, a number of these events were postponed due to COVID-19.	Ongoing
		The partnership programs with the NSW Department of Community and Justice continue to deliver strong educational outcomes to students facing significant hardships. Both Burbangana and Walanmarra – Community and Cultural Programs at both Taronga Zoo and Taronga Western Plains Zoo – have expanded and support highly disadvantaged and at-risk children.	Ongoing
		The second year of ELVA, a new integrated program with the Department of Community and Justice, continues to deliver meaningful outcomes for trauma effected young people in out of home care.	Ongoing
		"Animals of the Dreaming," a cultural outreach program for schools and community groups, works with schools and groups across NSW. It is co delivered by Colin Hardy OAM an Aboriginal Elder from Brewarrina.	Ongoing
Provide overseas guests with translated material including maps to ensure a high value onsite experience		Support programs and student services programs are available and accessible to ESL students of Taronga Training Institute.	Ongoing
		The Zoos have several translated different language maps distributed at the Zoo's information desk – including Mandarin, Korean and English. Animal fact sheets are also provided: Korean, Spanish, Chinese, Vietnamese, German, Italian, and French.	Ongoing – will be updated in line with changes such as Upper Australia once open as well as opening of international borders.
		Taronga's app offers a Mandarin-language option.	Ongoing
		The Taronga Zoo and Taronga Western Plains Zoo app uses symbols and pictorials that have been designed and tested to function for use by non-English speaking guests.	Ongoing
Provide interpretive and directional signs and educational graphics which are more pictorial in nature		Both Zoos continue to embrace the use of non-text directional and interpretative signage. This enables non English-speaking groups to access all areas of the zoo and understand key educational concepts without relying on reading.	Ongoing

Appendix 13

Work Health and Safety

Severity Rate

Severity Rate	2020/21	2021/22
Lost time injury frequency / workplace accidents for both Zoos	2.47%	3.98%

Staff Turnover	2020/21	2021/22
Taronga Zoo	26%	
Taronga Western Plains Zoo	24%	

Causation Factor	2020/21	2021/22
Falls, Trips & Slips	22%	26%
Bites, stings, scratches (non collection animals)	8%	12%
Contact with collection animal	10%	9%
Body Stressing	9%	5%
Hitting Objects with a part of the body	26%	5%
Being hit by moving objects	13%	12%
Vehicle Incidents	13%	9%
Chemicals and other substances	3%	2%
Heat, electrical and other environmental factors	13%	10%
Mental Stress	1%	3%

Appendix 14

Statutory Financial Statements – Taronga's 2021/22 Financial Results

Please refer to audited financial statements on page 96.

Appendix 15

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 2021-22 financial year, Taronga received no requests for review under Part 5 of the *Privacy and Personal Information Protection Act 1998*.

Appendix 16

Investment and Liability Performance

Investment Performance

Taronga had \$200 million invested in fixed term deposits with various banking institutions at 30 June 2022.

The average interest rate earned on these deposits was 1.77% pa.

Liability Performance

At 30 June 2022, Taronga had total borrowings of \$52.4 million.

These borrowings represent sixteen fixed interest rate loans with TCorp maturing at various dates out to 2031.

Liability Performance	Actual	Benchmark
Market value of borrowings at 30 June 2022*	\$49.8m	n/a
Cost of funds pa	2.77%	2.77%**

*Market value of borrowings represents the value if all debt had to be settled at 30 June 2022 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.

Appendix 17

Senior Executives and Staff

Executive

- Cameron Kerr BSc (Hons), MCom – *Chief Executive Officer*
- Angeli Aquino BA, GradDipPP – *Executive Officer*

Taronga Zoo Operations

- Simon Duffy AM, BEd, BTeach GAICD – *Executive Director, Taronga Zoo*
- Paul Maguire, PSM, BEd – *Director, Education*
- Rodd Stapley, BSc – *Director, Asset Management*
- Alex Emson, HND BusMgmt – *Director, Guest and Commercial Operations*
- Elio Bombonato – *Manager, Wildlife Operations*
- Natalie Scobie, BBus (Hosp Mgt) – *Manager, Tertiary Products*
- Matthew Nelson (Employed by the Department of Education), BEd (Prim) – *Manager, School Education*
- Lucinda Cveticanin, BAppA BEd – *Manager, Community and Cultural Programs*
- Belinda Fairbrother, BSc (Env) – *Manager, Community Conservation and Engagement*

Taronga Western Plains Zoo

- Steve Hinks, DipMgt, DipBus, MMgt – *Divisional Director, Taronga Western Plains Zoo*
- Kathleen Oke, Cert IV T&A, Cert IV FM, Cert IV Hort, Dip Mgmt – *Facilities and Asset Operations Manager*

People Culture and Safety

- Bettina Sammut, BA, Cert (PR), Grad Cert (HRM) Grad Cert (Change Mgt) – *Director, People Culture and Learning*
- Valerie Moushigian, Dip WHS, AdvDip BusMgmt – *Manager, Work Health and Safety*
- Rebecca Edwards, BBA, BA Psych – *Manager, Organisation Development and Learning*
- Alison Flack, BEc (Soc Sci), BTeach (Sec) – *Manager, HR Systems and Transactions*

Welfare, Conservation and Science

- Nick Boyle, BSc (Comms)/LLB – *Divisional Director, Welfare, Conservation and Science*
- Dr Justine O'Brien, BScAgr (Hons), PhD (Veterinary Science) – *Manager, Conservation Science*
- Andrew Elphinstone, BSc (Env), MEnv – *Manager, Conservation, Recovery and Restoration Programs*
- Claire Ford, BSc – *Manager, Population Development and Welfare*
- Jessica Moore-Jones, BVSc, MBA, MSc (Wildlife Biology) – *Manager, Wildlife Health & Rehabilitation*
- Dr Larry Vogelnest, PSM, BVSc (Hons), MVetStud (Wild Med Husb), MANZCVS (Zoo Medicine) – *Senior Veterinarian Taronga Zoo*
- Dr Benn Bryant, BVSc, MVS, MANZCVSc (Zoo Medicine) – *Senior Veterinarian Taronga Western Plains Zoo*
- Michelle Shaw, BSc, MSc, PhD candidate – *Zoo and Wildlife Nutritionist*
- Bridget Corcoran, BSc, BA, Cert IV T&A – *Manager, Environmental Sustainability*

Corporate Services and Governance

- Narelle Beattie, BCom, MA, CA – *Divisional Director, Corporate Services and Governance*
- Paul White, JP, MACS CP – *Director, Information and Digital Technology*
- Brad Milner, BEng – *Director, Capital Programs*
- Emma Roberts, BA FCCA – *Manager, Finance*
- Bruno Da Silva, B of Agr. Ec, MBA, Prince 2 Practitioner (Project Management) – *Manager, Procurement*
- Emma Hurford, BA, LLB – *Manager, Governance and Risk*

Marketing, Communications and Fundraising

- Leila Davis, Dip Mktg – *Director, Marketing, Communications and Fundraising*
- Helen Wright, Dip IDM – *Fundraising and Memberships Manager*
- Suzie Baker, BCom – *Head of Marketing*
- Laura Minns, BA – *Manager, Media and Communications*
- Suzy Scheiblin, BA – *Manager, Corporate Partners*
- Monika Townsend, AssocDip Tourism Management – *Trade Sales Manager*

2021/22 – Senior Executive Bands

Band	Total Senior Executives	Average Remuneration (package) end current year
SE Band 1	12*	\$217,006
SE Band 2	1	\$283,950
SE Band 3	1	\$381,825
Total	14	\$232,457

In 2021/22 4 positions in the Senior Executive Bands were filled by female employees.
7.86% of total employee-related expenditure in 2020/21 related to Senior Executives.

Appendix 18

Government Information (Public Access) Act

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
0

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	0	0	0	0	0	0	0	0	0	0%
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	0	0	0	0	0	0	0	0	0	
% of Total	0%	0%	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)	0	0	0	0	0	0	0	0	0	0%
Access applications that are partly personal information applications and partly other	0	0	0	0	0	0	0	0	0	0%
Total	0	0	0	0	0	0	0	0	0	
% of Total	0%	0%	0%	0%	0%	0%	0%	0%		

*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	0	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%
Total	0	

*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	0	0%
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%
Total	0	

Table F: Timeliness

	Number of Applications*	% of Total
Decided within the statutory timeframe (20 days plus any extensions)	0	0%
Decided after 35 days (by agreement with applicant)	0	0%
Not decided within time (deemed refusal)	0	0%
Total	0	

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%
Total	0	0	0	
% of Total	0%	0%		

* 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%
Total	0	

Table I: Applications Transferred to Other Agencies

	Number of Applications Transferred	% of Total
Agency-Initiated Transfers	0	0%
Applicant-Initiated Transfers	0	0%
Total	0	

Appendix 19

Cyber Security Annual Attestation Statement for 2022 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:

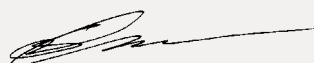
Provisioning Managed Security Services including Monitoring and Incident Response Retainer

Implementing security controls in accordance with the ISMS and Essential 8 mitigation strategies to raise Essential 8 Maturity levels

Recruitment of technical and project related support roles to the Information and Digital Technology team to ensure appropriate resourcing for Cyber projects

Developing an organisational training policy for Cyber security and privacy in alignment with the DPE cluster and Payment Card Industry standards

Reviewing of all existing Cyber security and technology policies to ensure alignment with the DPE cluster and NSW Government Cyber Security Policy



Penny Bingham-Hall

Chair

Taronga Conservation Society Australia

Appendix 20

Public Disclosure Statement

In accordance with the Public Interest Disclosures Act 1994 (NSW), Taronga has a Public Interest Disclosures Policy that is available to all staff via the Taronga intranet. The policy designates senior officers of Taronga (the Chief Executive, Executive Team and Manager, Human Resources) as being responsible for receiving public interest disclosures on behalf of Taronga.

Taronga Conservation Society Australia had no public interest disclosures in the period 1 July 2021 to 30 June 2022.

Appendix 21

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 lacertiformus* demonstrates multiple disease transmission routes and the in-vivo efficacy of antibiotics, Scientific Reports, 11, 13858.

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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

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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

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- Landy S., Peralta S., **Vogelnest L.** and Fiani N. (2021) The Macroscopic and Radiographic Skull and Dental Pathology of the Tasmanian Devil (*Sarcophilus harrisii*). *Front. Vet. Sci.* 8:693578. doi: 10.3389/fvets.2021.693578
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Grey Literature (non-peer reviewed)

Martin, J., Klump, B., Aplin, L. (2021) Clever cockatoos in southern Sydney have learned to open kerb-side bins — and it has global significance, *The Conversation*: <https://theconversation.com/clever-cockatoos-in-southern-sydney-have-learned-to-open-kerb-side-bins-and-it-has-global-significance-164794>

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Wildlife First Response for NSW Firefighters Handbook – written by Taronga (**Libby Hall**) 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 NR.**

Crane, J. Honours Thesis. (2022) "Habitat Selection by Nesting Platypuses (*Ornithorhynchus anatinus*) on the Snowy River". University of NSW Sydney. Supervised by **Jordan NR**

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

Workshops convened

Rose, K., Hall, J., Dobson, N. Australian Registry of Wildlife Health Project Reference meeting, online, 25 May 2022

Vogelnest, L., Hulst F., Arthur, E., McConnell, E., Hall E., Pritchard, D., Devaney, G., Tobias, G., Robey, R. Veterinary Professional Training in Wildlife Treatment and Care

Appendix 22

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.



KEEPER DANNIELLE HAYLOCK WITH RED PANDA CUB – PHOTO BY HARRY VINCENT



CRITICALLY ENDANGERED BLACK RHINO AT TARONGA WESTERN PLAINS ZOO – PHOTO BY RICK STEVENS