# **ANNUAL REPORT**

OF THE

# SOUTH AUSTRALIAN MUSEUM BOARD

2014-2015

September 2015 South Australian Museum

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# 1 SUMMARY

The Museum and its supporters have enjoyed another achievement filled year, which commenced with the finalisation of the 2014-2020 Strategic Plan.

The Strategic Plan was developed following an extensive consultation process with Museum staff, volunteers and key stakeholders. Themes from the planning process were explored in detail and resulted in four key focus areas being identified. These four key focus areas underpin the objectives and strategies of the Strategic Plan:

- Present a modern and visitor-focused museum;
- Demonstrate excellence in our collections, research and science;
- Secure our long-term financial future through multiple strategies, and
- Deliver vibrant and engaging programs linking collections and research.

The Museum then underwent an organisational structure review, which resulted in resourcing changes targeted at achieving the objectives of the Strategic Plan. One of the most significant organisational changes was the establishment of a new department; Visitor Experience (section 4.3). In this context, visitor experience refers to all the ways in which the Museum presents itself to its visitors, it transcends exhibitions and programs to incorporate all public-facing aspects of the Museum.

The Visitor Experience department is focused on ensuring that Museum visitors' experience meets, or exceeds expectations. The department includes visitor reception/wayfinding, retail opportunities and interactions with Museum personnel. This department is headed by the Manager of Visitor Experience and includes the Museum's Venue Hire and Events, Discovery Centre (previously Information Centre), Shop and Café.

The Museum's Collections continued to develop through donations, field collections and acquisitions. During the year, the Museum accessioned 20 238 items valued at over \$3 million into its Collections, databased 28 952 items, added 25 885 digital images to its databases, welcomed 445 visiting researchers to its Collections and participated in 145 (7013 items) outbound loans to 61 institutions, in 17 countries (section 4.6).

The development of the Museum's Collections extends to the internal management of the items, specifically their digitisation and database maintenance.

The Museum's collections management database, KE EMu (EMu), contains the details of 582 000 individual items, of which over 200 000 items were added in 2014-15 alone. Data of three particularly significant collections were migrated from their legacy formats across to EMu during the year: the Australian Biological Tissues Collection (ABTC), the Australian Helminthological Collection and the South Australian cetaceans sightings database (section 4.6.1.1).

The dedication of the collections management staff and the volunteers of the Digitisation Unit, ensured that the Museum's collections maintained their high level of excellence and outstanding reputation (section 4.6.1.2). The number of: annual acquisitions and their value, researchers who visited the collections, loans, and the number of Museum data downloads from the Atlas of Living Australia (ALA) confirms the significance of the Museum's Collections at the state, national and international levels (section 4.6).

Nineteen of the Museum's dedicated volunteers continued the Australian Aboriginal Material Cultures Collection digitisation program during 2014-15. With support of Museum experts, volunteers photographed and documented 2 761 objects from the collection during the year, taking the total number of objects photographed from the collection to more than 8 000. The publically accessible online aspect of the program was in final draft stage at the end of 2014-15 and is expected to be online in early 2015-16 (section 4.6.4).

Museum research outcomes remained impressively outstanding during the year (section 4.5). Research scientists, Honorary Research Associates (HRA) and students co-supervised by Museum personnel, won 11 competitive, external research grants, worth \$1 284 966, three of which were grants from the Australian Research Council (ARC).

In total, 226 research partnerships were held by Museum personnel across 20 nations during the year. Of these, 36 were with other museums, 99 with university departments, 27 with education departments and 65 with other agencies and research institutions.

Throughout the year, Museum staff and HRA contributed an approximate 2 100 hours of teaching and student supervision, including the direct supervision of 22 PhD students.

A research highlight for the year was the publication in *Nature* on 19 October 2014 by Professor John Long, Honorary Research Associate et al, including Dr Mike Lee, Senior Researcher, Palaeontology. The paper recorded the earliest evidence of male and female sexual structures appearing in the evolution of vertebrates. The publication was acknowledged in the Museum with a display, which included the fossils themselves, annotated photographs and an artist's interpretation of the fish in its environment. A video interview with Professor Long, Dr Lee and Mr Jo Bain, Museum 3D Design Supervisor, accompanied the display.

A special feature of the display was the 3D model developed by Mr Bain, with a video animation of the model. The website accompanying the display included a downloadable 3D file ready for printing for use by educators, researchers or students. This was the first time the Museum made 3D files available to the public.

Advancing Science, Technology Engineering and Mathematics (STEM) learning opportunities through the Museum has been a primary objective during the year. In a partnership between the Commonwealth *Inspiring Australia* program, the South Australian Department of State Development, the University of Adelaide, the University of South Australia and Flinders University; the Museum, as program lead, launched the South Australian *Inspiring Australia* program on 17 April 2015 (section 4.2). The \$1.4 million state-wide initiative is aimed at motivating South Australians to enjoy, engage, do, and be inspired by, South Australian science. The three-year program will boost *National Science Week* activities in South Australia, catalyse arts, civic, community and science groups to join together in holding regional and suburban science events, build science event networks in regional and suburban centres and support the creation of science clubs.

The Museum has entered a period of dynamic change. There is now an increased focus on meeting visitor needs, compelling programming and financial sustainability. These initiatives combined with our world class collections and record of research excellence augurs well for the future of the Museum.

# 1.1 CHAIR'S REPORT

The South Australian Museum has had a successful year during which staff and supporters have combined to chart a course towards a more outward-looking, and visitor-focused, institution. This transformational approach to the Museum's operations has commenced whilst maintaining the core academic and cultural focus on excellence in research and collection management.

In June 2015, Dr Andrew Thomas AO became the first Patron of the South Australian Museum. Dr Thomas was born in Adelaide and was selected from among thousands of applicants to join NASA in 1992. Over a 22 year-long career as an astronaut, he went on four space flights, spent 177 days in orbit, visited the Mir Space Station and undertook a lengthy space walk.

Dr Thomas' connection to the South Australian Museum extends beyond his passion for science, as his great great grandfather, Frederick Waterhouse, was the first Director of South Australian Museum. Dr Thomas is a remarkably accomplished and prominent individual, and it is an honour for the Museum to have him as our Patron.

Once again, the Museum has achieved an impressive level of external competitively funded research grants. The Museum supported 33 PhD, Honours and Masters students and also fostered Science, Technology, Engineering and Mathematics (STEM) learning opportunities with pre-school to year 12 students in programs at the Museum, across metropolitan Adelaide, at regional centers and in remote communities.

Our Museum has a new five year program of exciting exhibitions, with a large focus on exhibitions based on our world class Collections, complemented by international material and exhibitions, which will be shown solely to Adelaide audiences.

It has been widely acknowledged that the Museum's facilities are in need of long overdue refurbishment as well as expansion to accommodate standard sized so-called 'blockbuster' exhibitions which currently bypass Adelaide. The State Budget in 2014-15 made funds available to the South Australian Museum Foundation to develop suitable designs for the North Terrace site. The Museum Board and executive worked closely with the Museum Foundation to deliver such a proposal and also the development of a business case, cost benefit analysis and economic contribution study. This work was completed within the financial year.

None of the Museum's ventures would be possible without the ongoing support of our sponsors, donors, the South Australian Museum Foundation, and the continuing confidence of the South Australian Government. I thank our Board for their commitment and the Director, Staff and Volunteers for their innovative drive, and the community for their ongoing support.

As custodians of such a significant and internationally important institution, on behalf of the Board, I present this annual report with great confidence in the future.

The Hon Dr Jane Lomax-Smith AM Chair South Australian Museum Board

# 2 ROLE, LEGISLATION, STRUCTURE

# 2.1 ROLE

The Museum's role is to increase knowledge and understanding of natural and cultural heritage; to serve the community by acquiring, preserving, interpreting and presenting material evidence concerning people and nature; and to provide opportunities for study, education and enjoyment.

# 2.2 LEGISLATION

Management of the Museum is prescribed under the *South Australian Museum Act 1976*. The Museum is a Division of Arts SA within the Department of State Development. The Museum Board comprises eight people appointed by the Governor, the board functions as a body corporate.

Board members during 2014–15: The Hon Dr Jane Lomax-Smith AM (Chair) Professor David Adelson Ms Juliet Brown OAM Ms Noelene Buddle Ms Helen Carreker Mr Peter Hanlon Mr Alan Noble (appointed on 25 August 2014) Mr David Rathman AM PSM

The Board established a new committee during the year to provide it with oversight of the science and research functions of the Museum. The Science and Research Committee will also ensure that the Museum's science and research activities are consistent with the objectives of the Museum's Strategic Plan, as well as advise on maximising the quality, performance and output of science and research.

## Science and Research Committee

**Chair:** Professor Bob Hill, **Members:** Professor David Adelson, Dr Paul Heithersay Professor Claire Smith, Professor Michelle Waycott, Professor Maria Makrides Throughout the year Museum Board received advice from, and maintained oversight of, the following, pre-existing committees:

Aboriginal Advisory Committee Chair: Mr David Rathman AM PSM Members: Dr Lowitja O'Donoghue AC, CBE, DSG Mr Frank Lampard OAM Ms Sandra Miller Ms Elizabeth Tongerie

#### Mawson Trust Management Committee

Chair: Professor David Adelson Members: Mr Andrew McEwin Mr Alun Thomas.

#### Finance, Audit and Risk Committee

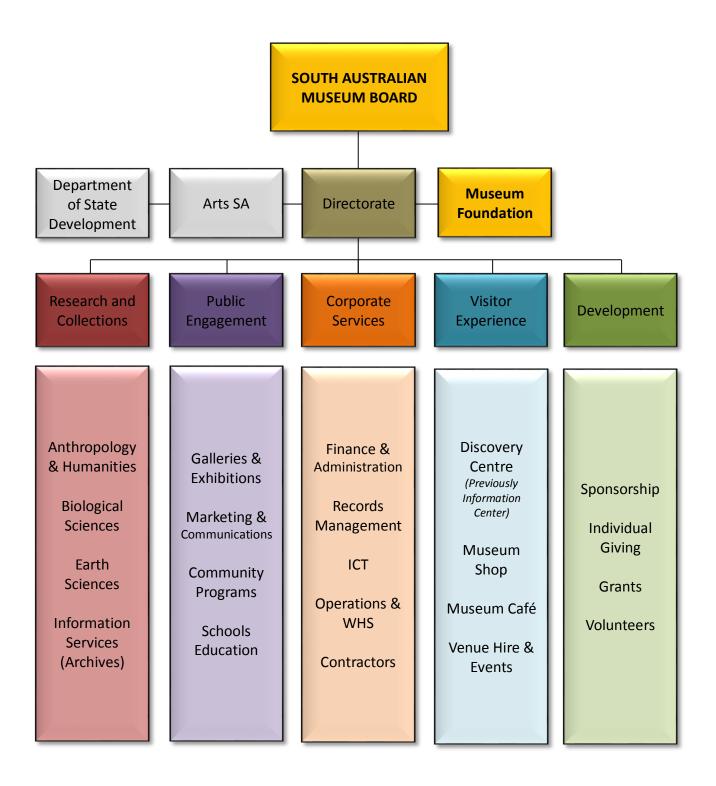
Interim Chair: Ms Noelene Buddle, Members: Ms Juliet Brown OAM, Mr Peter Hanlon, Mr Richard Perkins

# *Investment Committee* Chair:

Ms Noelene Buddle, **Members:** Mr Andrew Bradley, Mr Andrew McEwin,

# 2.3 STRUCTURE

Following the establishment of the Museum's 2014-2020 Strategic Plan in August 2014, the Museum underwent an organisational restructure. The restructure focused on framing an organisational structure which would optimize performance in order to achieve the objectives of the Strategic Plan. The below structure was implemented in January 2015.



# 3 CONTRIBUTION TO SOUTH AUSTRALIAN GOVERNMENT'S STRATEGIC PRIORITIES AND OBJECTIVES

The Museum continues to sustain and develop its contribution to achieving the goals of South Australia's Strategic Plan. The following sections summarise the Museum's commitment and achievements against the priorities and objectives of South Australia's Strategic Plan.

# 3.1 ALIGNMENT WITH SOUTH AUSTRALIA'S STRATEGIC PRIORITIES

The Museum's programs and activities (section 4) allow it to deliver benefits to a diverse audience, with particular emphasis on the following government priorities.

## 3.1.1 An Affordable Place to Live

Once again, the Museum has provided a suite of programs and events, many at no charge, while maintaining free entry to the main galleries. The Museum continued to provide high-end, paid, temporary exhibitions and events, while striving to offer these enhanced offerings at an affordable entry price (section 4.2.1).

## 3.1.2 Creating a Vibrant City

One of the Museum's main aims is to deliver first-class activities and services to those who visit the Museum. The Museum's programs and exhibitions on North Terrace were enjoyed by 733 926 visitors (section 4.1) during 2014–15.

The Museum again delivered two of the largest competitions and exhibitions of their kind in Australia in the heart of the city of Adelaide; the *Waterhouse Natural Science Art Prize* (*Waterhouse*), in July 2014 and the *Australian Geographic ANZANG Nature Photographer of* the Year (ANZANG) in October 2014. These are highly regarded international events which have a strong annual following (section 4.2.1.1). The temporary exhibition gallery also hosted *Iridescence*, an exhibition developed using content from the South Australian Museum collections, *Punuku Tjukurpa*, which was presented by Artback NT and featured works from the magnificent Maruku Arts archive, as well as a special edition of the *Waterhouse - Science* & Art: 12 years of the Waterhouse Prize in June 2015.

The Museum also contributed to key cultural programs held within the city including *Science Alive*, two *BioBlitzes* at the Museum and a Museum tent in the KidZone at *WOMAdelaide*.

# 3.1.3 Every Chance for Every Child

The Museum's Public Engagement department (section 4.2.2) was again supported by the Department for Education and Child Development (DECD). This partnership, and the continued secondment of DECD Education Manager, Karen Hogan, ensured that engaging new student programs were specifically developed, designed and delivered by the Museum.

Over 33 000 students participated in educational programs, which were developed to match the Australian Curriculum. In September 2014, the Museum hosted the *Children's Voice* 

exhibition, which promoted Early Years inspired learning. In response to the exhibition the number of Preschool and Reception aged children formally participating in Museum programs increased by 19%.

New resources to support the Museum's unique Australian Aboriginal Cultures Gallery were produced following funding from the Minister for Education and Child Development. The enhancement of the Gallery's education material resulted in five new inquiry based learning programs including an audio trail, an app and an iBook. Print resources have also been updated. Additional 'hands on' material has also been sourced to compliment pre-existing site material which expand learning opportunities offered by structured educational services (section 4.2.3).

Children in regional and remote areas were supported through the Museum's outreach programs in the Upper Spencer Gulf, Anangu Pitjantjatjara Yankunytjatjara (APY Lands), Coober Pedy and surrounds and Broken Hill. Programs in these regions focused on fostering deep engagement with school-aged children, through workshops and lessons with Museum scientists and program presenters. Over 2 600 students and community members participated in these sessions.

# 3.2 ALIGNMENT WITH SOUTH AUSTRALIAN'S STRATEGIC PLAN OBJECTIVES

The Museum's activities are closely aligned with many of the objectives outlined in South Australia's Strategic Plan (2011), as summarised below.

# 3.2.1 Our Community

In 2014–15, eleven public programs were run at the Museum attracting visitors from all age groups (target 1: urban spaces) (section 4.2.2) along with nine exhibitions (section 4.2.1).

Museum educational programs (section 4.2.3), early childhood learning program (*Tell Me A Story*), School Holiday and NAIDOC Week programs (target 12: early childhood) were also run as well as the *Sprigg Lecture Series* (target 23: social participation; section 4.2.2).

The Museum's active participation in public engagement activities continued to grow the vibrancy of the North Terrace Cultural Precinct, reaffirming it as a premier destination for local, interstate and international tourists (target 3: cultural vibrancy – arts activities and target 4: tourism industry).

The Museum also actively engaged in the Aboriginal Youth Program and again visited the APY Lands as part of the ongoing roadshow program (target 5: multiculturalism, target 6: Aboriginal wellbeing, target 15: Aboriginal education (early years) and target 27: understanding of Aboriginal culture; section 4.2.2.1). The Museum's Information Services processed 360 requests for Aboriginal family and community history, Native Title, exhibitions, websites, documentaries, publications, interpretive signs, private and academic research, education, training, posters and conference material.

With 2015 being the ANZAC centenary, images of South Australian Aboriginal Veterans, from the South Australian Museum Archives, have been used for the *Black ANZAC* mural at Meningie as well as the History Trust of South Australia travelling exhibition *Call of Country*, developed for Reconciliation SA and the Register of Aboriginal Veterans of South Australia (section 4.5.2).

The Museum Board's Aboriginal Advisory Committee is a conduit between Aboriginal communities and the Museum (target 28: Aboriginal leadership). The Museum's Aboriginal staff rate was 2.35 per cent during 2014-15, which is in excess of the Government target of two percent (target 53: Aboriginal employees), however, it strives to enhance Aboriginal employment, and will look to implement new strategies in 2015-16.

The Museum's 229 volunteers and 60 HRAs continue to be integral to the Museum's activities and work in all sections of the Museum including Development, Corporate Services, Information Services and Special Projects, Research and Collections (target 24: volunteering; section 4.7.3). The Museum promotes an active recycling regime throughout staff workspaces in order to reduce waste to landfill (target 67: zero waste) and continued to support a non-smoking environment in and around all Museum buildings (target 80: smoking).

In support of maintaining a safe work environment, appropriate Museum staff, volunteers, students and HRAs were provided with four-wheel driving, first aid and manual handling training. The Museum also maintained systems to safely support remote and regional work (target 21: greater safety at work).

The Museum also promoted nature conservation (target 72: nature conservation) through the annual *Waterhouse* and *ANZANG* competitions, with continued success (section 4.2.1).

## 3.2.2 Our Environment

Despite the limitations imposed by the infrastructure, the Museum continued to strive towards a commitment to ongoing improvements in energy efficiency continued with specific electrical circuitry connected to timers to reduce energy consumption and recyclable or biodegradable refuse systems in use throughout all work spaces (target 59: greenhouse gas emissions; target 61: energy efficiency – government buildings; target 67: zero waste).

The Museum undertook a broad range of research into terrestrial and aquatic ecosystems, which resulted in contributions to the State's conservation activities, for example, Museum personnel conducted studies into the unusual mortality of 41 Bottlenose Dolphins of Gulf St Vincent within 7 months during 2013 (Section 4.5.3.2). The Museum is also conducting research into several indicator species identified in the Strategic Plan – (target 69: lose no species).

## 3.2.3 Our Education

The Museum's commitment to school age education (section 3.1.3 and 4.2.3) resulted in an increase in students participating in structured educational programs, 33 031 in 2014-15 compared with 29 785 in 2013-14 (target 12: early childhood; target 87: reading, writing and numeracy; section 4.2.3). Approximately 3 000 students participated in the *Tell Me a Story* program that used play experiences to engage the senses of 3–5 year old children, nurture their curiosity in culture and the natural environment and create a deep connection and sense of belonging to the Museum (section 4.2.2.2).

## 3.2.4 Our Ideas

The Museum contributed directly to cultural engagement, attracting 733 926 visitors to its activities and events during the year (target 99: cultural engagement – institutions; section 4.1).

Research activity, in partnership with South Australian universities, attracted \$1 284 966 of competitively awarded external research income (target 97: university research income; section

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4.5). The Museum's research, special projects and exhibitions are also well supported by industry (target 95: industry collaboration, research and development commercialisation).

# **4** ACHIEVEMENTS AND INITIATIVES

The Museum is one of Australia's most admired scientific and cultural institutions with collections and research of international importance, the Museum continued to present its collections and research outcomes to the public across South Australia and beyond. Treasures collected over 150 years, cover everything from Australian and international archaeology and anthropology to the history of science, mineralogy and all aspects of the natural world.

The collections are used to conduct world-class research that advances the understanding of the natural world, attracts and retains talented scientists and educates students who will become the next generation of professionals. The Museum continues to inspire the wider community – key achievements and initiatives undertaken in the last year are outlined in this section.

# 4.1 VISITATION

Over the past 12 months, approximately 733 926 people visited the Museum, with 717 283 attending the Museum on North Terrace and 16 643 visiting the Science Centre.

# 4.2 PUBLIC ENGAGEMENT

The Public Engagement department worked to share the stories of the Museum, and life on Earth, through a program of temporary exhibitions, permanent galleries and displays, community programs in traditional and digital communication channels.

Highlights for the year include:

• The establishment of the *Inspiring South Australia* program to increase science engagement across South Australia. This partnership, between the Commonwealth *Inspiring Australia* program, the South Australian Government's Department of State Development, the University of Adelaide, the University of South Australia, Flinders University and the Museum, was launched on 17 April 2015.

• A review of the *Waterhouse* competition and exhibition was completed during the year, resulting in a re-emphasis of the relationship between art and science, along with a broadening of the categories, which will open the competition to new media in years to come. To mark the re-shaping of the competition, an exhibition was developed in partnership with the National Archives of Australia to celebrate the history of the Prize. The exhibition, *Science and Art: 12 Years of the Waterhouse Prize*, presented each of the previous winners of the Prize alongside objects from the Museum's collection, as well as collection material from other institutions which related to the science presented in the art. The exhibition was very well received.

• Following the publication by Professor John Long, Museum HRA and Dr Mike Lee's, Senior Researcher, Palaeontology, in *Nature* on the mating of ancient fish, a display was created and mounted in the Museum's North Foyer. The display included the original fossils, annotated photographs and an artist's interpretation of the fish in its environment, and a video interview with Professor John Long, Dr. Mike Lee and Mr. Jo Bain, 3D Design Supervisor. A special

feature of the display was a 3D model of the fish. The website accompanying the display included a downloadable 3D file ready for printing for use by educators, researchers or students.

### 4.2.1 Exhibitions

#### 4.2.1.1 Main Temporary Exhibition Gallery

Waterhouse Natural Science Art Prize

26 July 2014 - 7 September 2014

In its twelfth year, the annual *Waterhouse Natural Science Art Prize* attracted 627 entries from artists in 11 countries. Judges selected 101 artworks for display in the exhibition and awarded the overall prize to Carole King for *High Tide, Wynnum*. This painting on canvas incorporates collage of cut and torn papers to depict mangrove swamp, with strong messages about human impact on the environment.

Youth Art Prize winner Jennifer Ahrens was voted the People's Choice for her painting on glass *Heartwood #7*, and Wendy Jennings was awarded Dr Wendy Wickes Memoriam Prize Winner for her watercolour *Their lives in our hands*.

Visitation: 11 918

Australian Geographic ANZANG Nature Photographer of the Year

10 October 2014 – 30 November 2014

The Museum's *Australian Geographic ANZANG Nature Photographer of the Year* was held for the 11<sup>th</sup> time, the sixth since coming under the Museum's ownership. In 2014, more than 1 400 photographs were received from entrants in Australia, New Zealand, Papua New Guinea and as far away as Japan, France, USA, Spain and the UK.

The exhibition featured more than 100 images from a strong international field. Judges awarded the overall prize to Matthew Smith of New South Wales for his photograph *Physalia physalis* depicting Bluebottles in Shellharbour, NSW.

Visitation: 5 303

Iridescence

12 December 2014 - 15 March 2015

The South Australian Museum's *Iridescence* exhibition highlighted the beauty and science behind the glistening, multi-coloured natural phenomenon in animals, plants and nature.

Iridescence is the phenomenon of brilliant colours that seem to change with movement. Each of the works included in the exhibition was chosen to emphasise the appeal of iridescence across cultures, class and age, and aimed to inspire curiosity and delight among visitors.

Visitation: 6 953

#### Punuku Tjukurpa

28 March 2015 – 17 May 2015

*Punuku Tjukurpa*, a free exhibition of traditional wood carving and marking by Anangu people, was brought to the Museum by Artback NT and featured works from the magnificent Maruku Arts archive. The punu (wood) on display represented three generations of artists for whom the tradition of wood carving has been passed down.

Visitation: 26 678

Science & Art: 12 years of the Waterhouse Prize

5 June - 19 July 2015

Science & Art: 12 years of the Waterhouse Prize was a retrospective exhibition that displayed each of the overall winning works acquired by the Museum in the first 12 years of the *Waterhouse* prize, paired with material from the collections of the South Australian Museum, National Archives of Australia, the State Herbarium of South Australia and State Records of South Australia to delve further into the science behind the art.

This exhibition was held in place of *The Waterhouse Natural Science Art Prize* in 2015 as the prize underwent a formal review before a planned return as a biennial competition from 2016.

Visitation: 29 638

#### 4.2.1.2 Australian Aboriginal Cultures Gallery temporary exhibition space

Warakurna

29 August 2014 – 30 November 2014

*Warakurna: All the Stories Got into our Minds and Eyes* was an exhibition from the National Museum of Australia that featured contemporary works from the Western Desert community of Warakurna. The paintings combined familiar Western Desert symbols and dots with a more figurative style to re-create scenes of everyday life and to tell historical and contemporary stories.

Visitation: 22 763

Oonyawa – from Museum back to Country

12 December 2014 – 1 March 2015

*Oonyawa – from Museum back to Country* was an exhibition that drew on archival cultural materials held by the South Australian Museum that were taken back into the Aurukun community. During a series of workshops traditional owners, Elders, artists, community members and youth were invited to engage with the present and their past in an active and creative dialogue. Paintings, photographs, film and audio material created during this adventure explored and celebrated the intimate connection of the Wik, Wik Waya and Kugu people with their Country. The exhibition developed by Gina Allain, Louise Ashmore and Guy Allain and presented by the South Australian Museum.

Visitation: 22 714

#### Various locations inside the Museum

All of the below exhibitions were offered free of charge and were integrated into the galleries; hence, visitation figures are unavailable.

#### The Children's Voice

15 September 2014 – 3 October 2014

The Museum invited 24 four-year-old children from four preschools to visit the Museum and Art Gallery of South Australia. Education managers, teachers, artists and parents observed the children's connections with the physical space, and how they conducted meaning from that space. The exhibition featured artwork from the children which depicted their recreations to their favorite objects following multiple visits to the Museum's Pacific Cultures Gallery and the Elder Wing (Art Gallery of South Australia).

The exhibition resulted from a joint research project between the Department of Education and Child Development, the South Australian Museum and the Art Gallery of South Australia, inspired by the principles of Reggio Emilia. Part of the *Museums Alive for Under 5s* project, it was supported by a grant from the Minister for Education and Child Development to the South Australian Museum Foundation.

Canada's Arctic

20 September 2014 – 26 October 2014

Canada's Arctic: Vibrant and Thriving

This exhibition of contemporary photographs from Canadian Geographic gave a brief glimpse into the Canadian Arctic and the lives of Northerners, offering perspectives on the environment and activities that help shape and influence this vibrant region. The photographs were paired with a display of Inuit carvings from the South Australian Museum's collection. The carvings represented hunting and domestic situations in the Canadian Arctic and were collected by Bryan and Margaret Burton in the late 1950s.

## 4.2.1.3 Touring exhibitions

#### Australian Geographic ANZANG Nature Photographer of the Year

The full exhibition of the 2014 Australian Geographic ANZANG Nature Photographer of the Year exhibition travelled to Western Australia after the exhibition closed at the Museum.

- Western Australian Museum Perth: 9 April 1 June 2015
- Western Australian Museum Geraldton: 12 June 2 August 2015

Visitation: Perth: 15 740, Geraldton: 8 638

The previous year's ANZANG exhibition also travelled to Launceston, Tasmania during 2014.

Queen Victoria Museum and Art Gallery: 6 September to 26 October 2014

Visitation: 7 725

Waterhouse Natural Science Art Prize

26 September 2014 – 9 November 2014

An exhibition of 32 prize-winning and highly-commended artworks from the 2014 Waterhouse Natural Science Art Prize travelled to the National Archives of Australia, Canberra.

Visitation: 7 607

## 4.2.2 Community Programs

Community programs at the South Australian Museum offer audiences the opportunity to engage with the Museum's exhibitions, research and collections through high-quality activities. Programming has an emphasis on education at all levels, leadership in the field of science engagement and experiences which develop meaningful relationships between the Museum, its supporters and its audiences.

Community programs span two key areas:

- Outreach Programs: offsite learning experiences for schools and the public
- Public Programs: onsite learning experiences for the public

In 2014-15, over 85 000 people participated in the Museum's community programs.

#### 4.2.2.1 Outreach Programs

The Museum's *Out of the Glass Case* program is an innovative and nationally unique initiative for sharing the Museum collections and research with local, regional and remote communities. *Out of the Glass Case* enables the Museum to travel across South Australia to engage with individuals, groups and communities who are otherwise unable or unlikely to visit the Museum. In 2014-15, the outreach program was generously supported by Beach Energy, Flinders University, BHP Billiton, PepinNini Minerals and the Thyne Reid Foundation.

In 2014-15, the Community Programs team delivered nine outreach programs, including five education roadshows to regional and remote communities, at no charge to the participants, as well as participation in *Science Alive*, two *BioBlitzes* and a Museum tent in the KidZone at *WOMAdelaide*.

The destinations for regional and remote program delivery were the Upper Spencer Gulf, the APY Lands, Coober Pedy and surrounds and Broken Hill. Programs in these regions focused on fostering deep engagement with school-aged children, through workshops and lessons with Museum scientists and program presenters. Over 2 600 students and community members participated in these sessions.

In addition to programs in remote and regional areas, 46 130 people in the metropolitan area experienced a Museum's outreach program through events such as *WOMADelaide* and *Science Alive*. These figures bring overall participation in outreach programs to 48 730.

#### 4.2.2.2 Public Programs

Under the guiding purpose of inspiring in all people, a wonder and curiosity about life on Earth, the South Australian Museum's community programs are activities which invite the public to connect with the Museum's exhibitions, research and collections through exchanges or experiences, rather than through self-directed exploration. Activities may be free or ticketed; they may be targeted towards large, diverse audiences or focus on smaller, targeted groups.

What ties all of the public programs activities together, is a focus on engagement rather than observation. Public programs will always involve a personal, face-to-face interaction between Museum staff or contractors and audiences.

In 2014-15, the Museum presented eleven public programs, designed for a broad range of visitors of all ages, with free entry on most occasions. A total of 37 076 people participated in these programs.

#### School Holiday Programs

The Museum delivers four school holiday programs annually. These programs offer children and families access to free workshops and activities, which bring the Museum's research, collections and exhibitions to life. School holiday programs typically include a mix of self-guided trails, drop-in sessions and in-depth workshops and activities which require an advance booking. In 2014-15, 28 046 children and their families participated in the Museum school holiday programs.

The 2014-15, school holiday programs were *NAIDOC Week* (7 – 11 July 2014), *Night Creatures* (29 September – 3 October 2014), *Iridescence* (5-23 January 2015) and *Making Music* (13-17 April 2015).

Highlights of the 2014-15 holiday programs included Ngarrindjeri basket weaving with Janice Rigney and Lorna Collinson from the Southern Elders Weaving Group, a unique 'owl fossil workshop' where children were invited into the lab to pick apart owl pellets to discover what bones are found in an owl's stomach, insect pinning sessions for young entomologists and a musical composition workshop inspired by birdsong in the Biodiversity Gallery - this popular session was a collaboration with the Adelaide Symphony Orchestra (ASO), as part of their ASO Jams series.

#### Sprigg Lecture Series

The *Sprigg Lecture Series* shines a light on the cutting edge of scientific research and experience. In 2014-15, the Museum presented five *Sprigg Lectures*. The guest speakers were Dr Wolfgang Haak (August 2014) on the history of agriculture and early human movements, Professor Michael Mohony (November 2014) on bio banking frogs for future climate change, Dr Diego Garcia-Bellido (April 2015) spanning the Cambrian of Kangaroo Island to the Ordovician of Morocco and Peter Gill (June 2015) on blue whales and the Bonney upwelling.

768 people attended the Sprigg Lecutre Series of events in 2014-15.

#### Tell Me a Story

The *Tell Me a Story* program is an interactive, educational program for three to five-year-olds. The program continued to evolve and in late 2014-15 received funding from the Thyne Reid Foundation to increase the number of sessions per month, to meet the high demand for the popular program.

In 2014-15, ten sessions were offered each month for ten months, with approximately 3 000 children and their families participating throughout the year.

#### Public Programs – Other

In addition to regular programs, 2014-15 also saw the presentation of a number of successful one-off activities, including:

- An extensive program of activities as part of *National Science Week 2014*, including a family fun day and various science workshops. Approximately 700 people participated in these activities.
- Exhibition programs for *Iridescence* and *Punuku Tjukurpa*, featuring after-hours talks, demonstrations by artists and the Museum's first audio described exhibition tour for blind and vision-impaired patrons. 670 people participated in these activities.
- In collaboration with ArtLab, the Museum hosted a *'learn to knit the Douglas Mawson balaclava'* workshop. This boutique event allowed a small group of participants to develop a deep connection with a treasured collection item. 20 people participated in this workshop.
- The Museum hosted a lecture by Professor Peter Veth from the Kimberley Foundation Australia, on rock art in the Kimberley. Demand for this event was high, with extra seats being added to meet demand. 230 people attended the lecture and an additional 50+ people accessed an audio version of the lecture remotely.
- Two events were included in the 2015 *About Time Festival* (formerly *History Month*). These were a lunchtime talk by Dr Keryn Walshe and Narungga Heritage Officer/Adjahdura Elder Quenten Agius on their collaborative research into the Museum's collection of Aboriginal artefacts from the Yorke Peninsula and an open-day at Glenthorne Farm, highlighting archaeological work on the site and Glenthorne's role as a re-mount depot for the light horse in WWI. 45 people attended the lunchtime talk and 79 people attended the open day.
- As part of the 2015 ComeOut Festival for children, the Museum presented a series of workshops for 3-6 year olds. These 'Music in my world' workshops explored the musical instruments in the Museum's collections and attracted 120 participants.
- Through an ongoing partnership with the Adelaide University Children's University program, the Museum offered a range of self-guided trails to visitors throughout the year. In 2014-15, it is estimated that, in addition to specific trails on offer during school holiday programs, a further 3 000 children and their families have used these trails.
- As a complement to the free school holiday programs, the Museum regularly offered ticketed torchlight tours for families. These tours were hosted by Professor Flint (a fictional palaeontologist) and were frequently fully booked. In 2014-15, 348 people attended torchlight tours at the Museum.

# 4.2.3 Schools Education

#### 4.2.3.1 The Department for Education and Child Development Education Managers

The Department for Education and Child Development (DECD) continue their partnership with the South Australian Museum by the appointment of a full-time seconded teacher. Seven new inquiry based learning programs were developed for existing galleries as well as support materials provided for temporary exhibitions. The new learning programs cater for students from Preschool to year 10 and reflect current pedagogy as well as Australian Curriculum Outcomes.

#### 4.2.3.2 Museum School Visitation

The total, formal (pre-booked) school visitation to the Museum for 2014–15 was 33 031, which is 3 246 more students than the previous year. Figure 4.2.3.2a (below) details the number and percentage of students accessing various programs throughout the year.

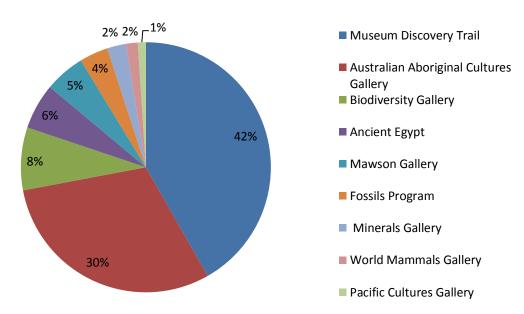


Figure 4.2.3.2a Programs access during 2014-15

The Museum, again, provided to be a popular educational resource for all years of learning. Figure 4.2.3.2b (below) highlights that the Museum was most frequently visited by primary school students during 2014-15.

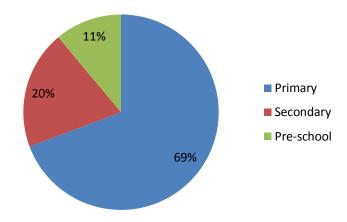


Figure 4.2.3.2b. School Student Level Visitation 2014-15

## 4.2.3.3 Education Highlights

#### Children's Voice

The Museum hosted the *Children's Voice* exhibition in September 2014. This initiative and exhibition promoted Early Years, 'Reggio' inspired learning at the Museum. In response to this exhibition, and other explicit early year's programs being developed, the number of Pre-school and Reception classes attending the Museum increased by 19%.

#### Australian Aboriginal Culture Collection – Resource Development

A funding grant from the Minister for Education and Child Development resulted in the production of new resources created to support teacher and student understanding of the Museum's Aboriginal Culture Collections. Five new inquiry based programs, including; an audio trail, app and iBook were produced to support learning in the gallery. Print resources for the Aboriginal Cultures Galleries were also updated and cultural artefacts acquired to support 'hands on', in gallery experiences and remote school learning.

#### 2014 Science Week

Changes to the 2014 *National Science Week* program resulted in a new collaboration with Museum scientists to create and present programs. Student and teacher feedback was exceptional; it promoted STEM as well as enriching the science content and showcasing the latest research happening at the Museum.

#### North Terrace Cultural Precinct Collaborations

Combining resources with the Art Gallery of South Australia and the Adelaide Botanic Gardens, the Museum created programs that incorporate multi-site experiences to enrich learning for students and teachers. A three-way Ancient Egypt and Aboriginal Cultures experience was developed.

# 4.2.4 Marketing & Communications

#### 4.2.4.1 Digital Communications

The Museum website received 200 889 visits over the past twelve months, compared to 168 718 the previous year. 78% of all web visitors were new visitors and an average session duration was 1 min 24 secs. More than 49 000 visitors spent time on two more pages. The most popular pages were 'visit', 'exhibitions', 'opalised fossils', 'bookings', 'galleries' and 'school holiday program'.

The Museum social media program is primarily focused on *Facebook* and *Twitter*, using a combination of organic and paid posts to promote events and programs, research outcomes and exhibitions. On *Facebook*, the Museum received 14 115 'likes' during year, with an average reach of 1 356 per post and approximately 4 000 people reached each week. On *Twitter*, the Museum has 4 620 followers.

#### 4.2.4.2 Media Communications

The Museum continued its successful media engagement program this year, with 13 general media releases distributed and eight *Unlocked* stories produced to take a deeper look into Museum research and collections.

Highlights included:

- Nature Paper Reveals Evolution of Reproduction in Ancient Fish, which received over 100 million impressions, with local and international coverage including *The Australian*, *The Guardian, the Daily Telegraph, ABC TV, CNN*, the *BBC*, and the *India Daily*.
- *Museum Researcher Reveals How Dinosaurs Evolved Into Birds*, covered by over 200 outlets, including *Fox News*, *SkyNews*, *The Daily Mail*, and *National Geographic*.
- The work of the Museum team investigating a whale stranding at Ardrossan received multiple days of coverage across all Adelaide metropolitan media and multiple South Australian regional outlets.
- The *Waterhouse* and *ANZANG* competitions and exhibitions again received very positive image-led coverage in major national media, including *The Australian, National Geographic*, the *Daily Telegraph*, the *Canberra Times* and *The Sydney Morning Herald*.

#### Media releases

- 1. From the Earth: Exciting new finalist works chosen in Waterhouse Prize
- 2. Double Success for Science at the South Australian Museum
- 3. Have a Ball for Science Week
- 4. Photography Finalists Announced
- 5. Last Chance to See 2014 Waterhouse Exhibition
- 6. Museum Study Puts Small Voices Under the Microscope
- 7. ANZANG Winner Captures Beauty of Underwater Dangers
- 8. Iridescence: Museum Collections a Riot of Colour

- 9. Oonyawa Exhibition Opens
- 10. Out of the Glass Case Roadshow: Coober Pedy and Beyond
- 11. Punuku Tjukurpa Anangu Wooden Artefacts, Objects, Culture and Stories
- 12. A Tent Full of Butterflies, Neuroscience for Kids, and Pop-Up Science at AFL Games...Inspiring Australia SA reborn
- 13. Australia's First Astronaut becomes the South Australian Museum's First Patron

Unlocked - Media Stories from within the Museum's Research and Collections

- 1. Australian Aboriginal Knowledge in Urban Culture
- 2. New Australian Aboriginal Art Movement Unveiled
- 3. Museum Researcher Reveals How Dinosaurs Evolved Into Birds
- 4. Nature Paper Reveals Evolution of Reproduction in Ancient Fish
- 5. Explore Creatures of the Night
- 6. From the Cambrian of Kangaroo Island to the Ordovician of Morocco
- 7. Online volunteers help scientists speed up species discovery and focus research
- 8. Uncharted territory South Australian Museum reveals secrets of the deep ocean

# 4.3 VISITOR EXPERIENCE

During the consultation period that informed the development of the Museum's Strategic Plan 2014-2020, a common theme that emerged was the need to have an increased focus on the Museum's visitor experience. In this context, visitor experience refers to all the ways that the Museum presents itself to its visitors. It transcends exhibitions and programs to incorporate all public-facing aspects of the Museum, including visitor reception/wayfinding, retail opportunities and interactions with Museum personnel. It was also identified that the Museum can implement new strategies to maximise revenue generation Front of House.

Following the finalisation of the Strategic Plan, a Museum organizational restructure created a new workgroup: Visitor Experience. This is headed by the Manager of Visitor Experience, a new role created in early 2015. Included in this workgroup is the Museum's Venue Hire and Events, Information Centre, Shop and Café. This workgroup is responsible for delivering the following of the Strategic Plan's objectives:

- 1.1 Establish ongoing processes which measure and interpret the needs and wants of visitors.
- 1.2 Enhance visitor experience
- 1.3 Manage the public area of the Museum in a unified way with the visitors' experience first and foremost.
- *1.4 Undertake entrepreneurial activity as a means of generating revenue.*

At the end of the 2014-15 period, the Visitor Experience department was in the process of developing a Front of House strategy, which will have an emphasis on both improving the visitor experience and maximising opportunities for revenue generation.

## 4.3.1 The Information Centre

The Information Centre is open daily, 11am-4pm on weekdays and 11am-3pm on weekends. It is staffed by a Manager, two part-time Information Officers, plus a pool of casual staff and volunteers. It has two main target audiences: families seeking hands-on activities with natural and cultural specimens; and members of the public who have a specific query or specimen that they seek Museum expertise in identifying. The Information Centre includes a reference collection of natural history specimens and a library of books and fact sheets to assist with public queries. The Information Centre's collection of live animals, including a working beehive, is very popular with family visitors.

In 2015, a review was conducted, with a view to identifying a name which best reflects the nature of the Information Centre's specific role within the Museum. It was assessed that the name 'Information Centre' encourages it to receive many generic public queries (such as Museum opening times and details of forthcoming events), rather than the specialized services offered by the centre's personnel. A shortlist of alternative names was tested with a sample of Museum visitors, with the name "Discovery Centre" emerging as the preferred option. The name change will be rolled out over the first half of the 2015-16 financial year.

# 4.3.2 Visitor Survey Program

An ongoing program of visitor research commenced in April 2015, with volunteers conducting regular onsite surveys of visitors to the Museum. This has allowed the Museum to build up a demographic profile of visitors and patterns of visitation over the course of the year. A subset of the visitors surveyed onsite agreed to receive a follow-up survey via email; this survey covers which galleries were visited/facilities used, as well as overall satisfaction in the visit.

In the first three months of data collection, approximately 1 234 visitors were approached and invited to participate in the onsite survey. Of these, 866 agreed to participate in the onsite survey, with 111 of these also completing the follow-up survey sent via email. This is intended to be a rolling survey across all days of the week and times of opening, to be used as baseline data and to inform decision-making across the Museum in the future.

# 4.3.3 Public Feedback and Complaints

The Museum has several means by which members of the public may offer feedback or complaints:

- In writing, either by completing a Visitor Feedback Form or writing to the Museum.
- Via email (feedback@samuseum.sa.gov.au has been established for this purpose).
- Via telephone.

The majority of feedback comes via Visitor Feedback Forms completed and returned at Front of House. Across a six-month sample period, 105 feedback forms were received, with positive comments outnumbering negative comments by a factor of approximately 3 to 1. Negative comments are generally relate to infrastructure or maintenance, for example, comments regarding matters of exhibition content or the level of seating provision or lighting in the exhibition galleries.

As part of the Front of House strategy, being developed by the newly-formed Visitor Experience workgroup, will include the formalisation of procedures and guidelines for receiving and managing public feedback and complaints in alignment with Australian Standard *AS/NZS 10002:2014 Guidelines for complaint management in organisations*.

# 4.4 STAFF ACHIEVEMENTS AND AWARDS

Two of the Museum's collection managers, Dr Mary-Anne Binnie (Palaeontology) and Dr Kate Sparks (Arachnids) were both awarded their PhDs in May 2015.

Dr Binnie received her award for her research on South Australian microfossils, the planktonic creatures whose tiny shells form the seabed deposits that become limestone, and which, due to their frequent evolutionary changes in shape, provide a widely used source of information on the relative ages of sediments.

Dr Sparks' PhD research work was on an ecologically important group of ants, in the genus Monomorium. Dr Sparks found that what had been treated as a single, unusually variable and widespread species is a group of different species, with differing distributions. She was able to help clarify the evolutionary relationships among all of the Australian members of this group.

# 4.5 RESEARCH

Research scientists, Honorary Research Associates and students co-supervised by Museum personnel won 11 competitive, external research grants, worth \$1 284 966. Three of these were grants from the Australian Research Council (ARC), on projects involving the evolution, and loss, of sex in freshwater fishes (Museum participant: Mark Adams, Senior Researcher, Evolutionary Biology Unit), the Ice Age fossils of Wellington Caves in NSW, which revisits the first major fossil site discovered in Australia (Museum participants: Dr Gavin Prideaux, Honorary Research Associate, Palaeontology and Dr Mark Hutchinson, Vertebrates), and the evolution, and loss, of social behaviour in an Australian lizard group (bluetongues and rock skinks) (Museum participant: Dr Michael Gardner, Researcher, Evolutionary Biology Unit).

The Museum continued to establish strong collaborative research partnerships during the financial year. In total, 226 partnerships were noted:

- 35 with other museums
- 99 with university departments
- 27 with education departments
- 65 with other agencies and research institutions.

Internationally, Museum scientists and Honorary Research Associates have established, or sustained, 62 productive research collaborations with the following 20 nations: Austria (two separate collaborations), Brazil, Canada (four separate collaborations), Fiji, France (four separate collaborations), Germany (three separate collaborations), Iceland, Iran, Italy (three separate collaborations), Japan, Malaysia, New Zealand (three separate collaborations), Russia (two separate collaborations), South Africa, Spain (four separate collaborations), South Korea, Sweden, Switzerland (two separate collaborations), UK (seven separate collaborations) and the USA (19 separate collaborations).

Throughout the year, Museum staff and Honorary Research Associates have contributed a total of approximately 2 100 hours of teaching and student supervision. They have contributed to the direct supervision of 22 PhD students (20 by staff, three by an Honorary Research Associates), and 11 Honours students (9 supervised by staff, two supervised by Honorary Research Associates).

In October 2014 the Museum community was saddened by the passing of Associate Professor Ian Whittington following a long illness during which he continued to work diligently. As a long term member of the Museum family, Principal Researcher of Parasitology and Head of Biological Sciences, Ian was a highly respected and valued part of the South Australian Museum. Since Ian's passing 2 papers have been published with a new genus and new species named after him in recognition of his expertise on Monogenea and dedication to the field of Parasitology. The publications and names are detailed in section 5.7.25.

# 4.5.1 Anthropology & Humanities

### 4.5.1.1 Aboriginal Material Culture

Senior Researcher, Dr Philip Jones, won a Research Fellowship at the Peabody Museum of Ethnography, Harvard University in October – November 2014. His work there focused on the Tindale-Birdsell collection made in Australia during 1938-1939.



Figure 4.5.1.1: Dr Philip Jones examining an Aboriginal shield at the Peabody Museum of Ethnography, Harvard University, in 2014

Dr Jones also undertook fieldwork and research for ARC-funded investigation into the heritage of Australia's Muslim cameleers. Field time was also used to continue research into historic murals at Yuendumu Men's Museum, for a forthcoming book.

Several other books and book chapters are currently in preparation and are expected to be completed soon. Dr Jones continued research into the life and times of George French Angas, the famous colonial naturalist and artist, for a forthcoming exhibition and book. He also continued research and writing for a new edition of F.J. Gillen's journal of his anthropological expedition across Australia, 1901-1902, due for publication late 2015. Other projects included research towards a new book on Australian Aboriginal material culture with completion of a chapter concerning fire-making techniques and mythology.

Dr Jones is preparing a large exhibition on Aboriginal shields, to be shown at the Museum during early 2016.

## 4.5.1.2 Archaeology

*Roonka*, a significant collection held in Archaeology was successful in gaining funding across the next three years. *Roonka* will be the focus for bioanthropology, archaeology, radiometric and isotopic analysis from 2015 to 2018. The project is in collaboration with, and support from, First People of the River Murray and Mallee Region and led by Associate Professor Judith Littleton, University of Auckland, New Zealand. Other team members include Dr Annie Katzenberg, University of Calgary, Canada; Dr Harry Allen, University Auckland, New Zealand; Dr Fiona Petchey, Waikoto Laboratory, New Zealand; Professor Donald Pate, Flinders University and Dr Keryn Walshe, Senior Researcher, South Australian Museum. Funding is via the Marsden Fund, New Zealand, and equivalent to approximately AUD\$900 000 in total. Professor Art Durband (Texas Tech University) is also continuing facial reconstruction of Roonka skulls as well as working collaboratively with the team. Professor Durband is funded via a Fullbright scholarship and will soon take up a new academic post with Anthropology, University of Kansas. To date, the *Roonka* research has led to a post-gradute student from Texas Tech University and four post-graduate students from the University of Auckland to complete Masters-level research theses. Currently there is another Masters student and one Doctoral student beginning their research thesis on the material. All students have focused on bioanthropology under supervision from Associate Professor Littleton or Professor Durband in conjunction with Dr Walshe. The team, in Adelaide, has been developing the schedule to 2017 including student engagement and Indigenous participation.

#### Yorke Peninsula Bioarchaeology

This project attracted three post-graduate students during the year through the Dental School, University of Adelaide. Two of the students were from the Amsterdam School of Dentistry. All completed their research theses on micro dental wear exhibited in the Yorke Peninsula population. The project was in collaboration with Elder and Narungga Heritage Officer for Narungga Nations, Quenten Agius, and offered interesting and valuable insights into precontact diet and health. The data has also been extremely useful to the other project components, which continue to focus on pre-contact lifestyle.

#### Koonalda Cave

Nullarbor South Australia, was excavated in the 1960s to 1970s and is a significant collection held in Archaeology. Funding gained by Dr Walshe enabled a number of return visits to the site and new radiometric dating. The site was confirmed as equivalent in age to nearby Allen's Cave (circa 35-40,000BP) and portable art from the excavation is at least 17 000 years old.

#### Kangaroo Island

Kangaroo Island (KI) research into wallaby fur processing by whalers and sealers gained public interest when filmed for the 'Coast' Australia series, hosted by the popular Dr Neil Oliver. Dr Walshe worked with Dr Oliver in presenting the site and its fascinating finds. The series on KI was telecast during the year on *SBS/Foxtel*. The impact of European colonisation on KI from circa 1800 led to the extinction of the KI dwarf emu and also, as revealed by this rare site, the tiger quoll; broad faced potoroo and bush rat.

#### Australia's Genetic History

Australia's Genetic History is a recently funded ARC project focusing on the human migration story into Australia. The South Australian Museum holds a significant collection of Aboriginal hair samples from across the country and under the leadership of Professor Alan Cooper, Ancient DNA Lab, University of Adelaide, the project will run until 2018. The project will focus on many aspects of genetics, linguistics, Aboriginal family history and archaeology and includes Museum personnel: Professor Peter Sutton; Dr Keryn Walshe, Mr Ali Abdullah-Highfold, Mr Shane Agius and Ms Isabelle O'Loughlin under leadership from Ms Fran Zilio. The project is in collaboration and is supported by a broad range of external institutions and under the auspice of the recently established Indigenous Genome Centre, Canberra.

## 4.5.1.3 Foreign Ethnology

Senior Researcher, Dr Barry Craig, authored a chapter, with illustrations, on 'Masks of the Sepik River' for the catalogue Myth + Magic: Art of the Sepik River. The catalogue was produced in association with the Sepik exhibition at the National Gallery of Art in Canberra, to be opened 6 August 2015, followed by Dr Craig's paper on 'Slit gongs of the Sepik-Ramu' at the Oceanic Art Society Forum.



Art of the Sepik River 2015 Oceanic Art Society Forum

Dr Craig also contributed text and images for a section in the book *Plumes and Pearlshells. Art of the New Guinea Highlands* based on material in the collections of Stanley Gordon Moriarty in the Art Gallery of NSW, to accompany an exhibition at the Art Gallery of NSW, 30 May-10 August 2014.

Dr Craig presented papers to two major symposia; one on the subject of the War Museum Collection in Museum Victoria, the other a presention to the Papua New Guinea Association of Australia Symposium, 18 September 2014 at the NSW Parliament House in Sydney. Dr Craig is lead author on a book on this topic (*War Trophies or Curios*), to be published October 2015, and presented another paper on this topic, *Tinker, Tailor, Soldier, Sailor: the World War One military collections from German New Guinea in the South Australian Museum*, at a meeting of the Oceanic Art Society, Australian Museum, Sydney, 24 September 2014 and at the Australian National University Symposium, '*A Southern War: Australia, the Pacific and WWI*', 28 November 2014.

Dr Craig obtained \$10 000 funding from the African Studies Association of Australasia and the Pacific for Dr Kivubiro Tabawebbula to digitise around 6500 photographs from the African collections in museums in Australia and New Zealand. This will include the African collections at the South Australian Museum.

# 4.5.2 Archives and Information Services

The Archives processed 360 requests for Aboriginal family and community history, Native Title, exhibitions, websites, documentaries, publications, interpretive signs, private and academic research, education, training, posters and conference material. A number of clients request items from the Board for Anthropological Research collections. These collections are an unparalleled and comprehensive record documenting approximately 5 500 Australian Aboriginal people and Torres Strait Islanders during 48 expeditions.

From 1924 to 1971, multi-disciplinary teams of scientists from the University of Adelaide and the South Australian Museum travelled largely to Central Australia but extended to missions and ration depots all over the country. Using the technologies of the day, scientists recorded empirical anthropological, sociological and cultural data that included linguistics, kinship, relationship to the land and spirituality. The significance of the Board for Anthropological Research collections was recognised by the United Nations Educational, Scientific and Cultural Organization (UNESCO) Australian Memory of the World Committee, inscribing them into the UNESCO Australian Memory of the World Register. The Board for Anthropological Research collections will also be accessed and copies repatriated during consultations for the recently awarded Australian Research Council Linkage Project: *Recovering Australia's lost history – a genetic perspective*.

Archival material was also used for seven Aboriginal cultural and language revival projects. On one occasion, copies of material relating to the Yankunytjatjara were repatriated to the Mimili Anangu School for use by the wider community.

With the ANZAC centenary, images of South Australian Aboriginal veterans have been used for the *Black ANZAC* mural at Meningie as well as the History Trust of South Australia travelling exhibition *Call of Country*, developed for Reconciliation SA and the Register of Aboriginal Veterans of South Australia.

With funding secured from Pitjantjatjara Council, Northern Territory Library and other Aboriginal community groups, John Dallwitz, Manager Ara Iritja Project, has completed the development of the mobile device interface for *Ara Irititja*. The new interface is currently being tested to access the huge multimedia *Ara Irititja* database through iPads and other mobile technology. During 2014-15, 19 000 additional digital archive items were uploaded. The *Ara Irititja* digital collection contains more than 160 000 items, including photos, art and craft works, multi-paged documents, and many hundreds of hours of digitised movies and sound recordings.

# 4.5.3 Biological Sciences

#### 4.5.3.1 Evolutionary Biology Unit

Chief Researcher, Professor Steve Donnellan, has taken advantage of Citizen Science and advanced DNA technology to help solve a 60 year old mystery. The Magpie Fiddler is a distinctive black and white ray (Figure 4.5.3.1a, below) that was, until recently, known only from a single specimen collected in 1954 near Kingscote. However, there has been some doubt as to whether the Magpie Fiddler Ray is a different species from the widespread and common Southern Fiddler Ray, resulting in two very contrasting scenarios for marine conservation. If the Magpie Fiddler Ray were a black and white variant of the Southern Fiddler Ray then it would be removed from the 'Red List' and be of no special conservation significance. Conversely, if it proved to be a different species then it would remain SA's rarest fish species, data deficient and potentially vulnerable to certain inshore commercial fishing operations. Citizen Science involved publicising this problem among commercial and recreational fishers and inviting them, should they be lucky enough to locate a Magpie Fiddler, to report the find to the South Australian Museum. As a result, two more specimens suitable for DNA analysis became available recently and through the application of recently developed advanced DNA technology, the Museum was able to show that it is indeed a black and white variant of the widespread and abundant Southern Fiddler Ray. The Museum's findings provided critical guidance in the assessment of its conservation status and demonstrate the power of Citizen Science to assist ending a 60 year old conundrum for marine conservation.

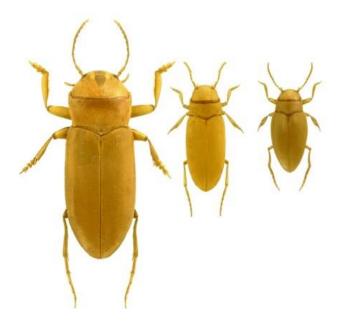


Figure 4.5.3.1a: Magpie Fiddler Ray

A major highlight of Principal Researcher, Dr Steve Cooper's research during 2014-15 came from his study of regressive evolution of "eye genes" in blind dytiscid beetles, a collaborative Australian Research Council funded project with Professor Andy Austin (Adelaide University) and Bill Humphreys (Western Australian Museum), with the hard work in the lab and on the computer conducted by Kathy Saint, Dr Simon Tierney and Dr Terry Bertozzi.

The dytiscid beetles of the underground "calcrete islands" of Western Australia provide a wonderful system to explore the evolutionary changes that accompany the loss of characters such as eyes and pigment when animals move from surface to subterranean environments.

Their research focused on opsin genes, that code for the light sensitive proteins that enable the cells of the retina to perceive light. Analyses showed that, while some genes such as *UV opsin* appeared to have been switched off in all the blind beetle species they studied, a gene known as *long-wavelength opsin* (*lwop*) was found to be expressed and appeared fully functional in one of the blind beetle species. This expression of *lwop* was entirely unexpected and raises the interesting question about whether it plays a different functional role in the blind beetles or whether it merely represents chance retention of a gene evolving under neutral evolution. This research was published in the journal *Royal Society Open Science* in 2015.



*Figure 4.5.3.1b: Three species of dytiscid beetles from the lightless underground calcrete aquifers of Western Australia. All are blind and eyeless.* 

#### ANNUAL REPORT OF THE SOUTH AUSTRALIAN MUSEUM BOARD 2014–15

Carp gudgeons are the most abundant, widespread, and biodiverse group of freshwater fish in southeastern Australia. However, the unacknowledged presence of many "cryptic" species and "semi-clonal" lineages severely hinders or taints all research on this cornerstone group. In collaboration with the University of Canberra, Senior Researcher Mark Adams has recently been awarded a three-year ARC Discovery Grant to carry out a range of genetic, ecological, and breeding studies on carp gudgeons.

This project will provide unrivalled evolutionary, genomic, and taxonomic insights into this new instance of vertebrate sexual parasitism, which offers a unique mix of research advantages not displayed by any other similar complex world-wide.

The knowledge gained will impact many research fields, including evolutionary theory addressing the unexplainable prevalence of sex, native fish ecology, and environmental monitoring of the Murray-Darling Basin, an ecosystem of world significance. Although only six months into this research, the group had already discovered a remnant population of a key sexual species whose existence was predicted from their earlier genetic studies, but was previously thought to have gone extinct.



Figure 4.5.3.1c: A carp-gudgeon. Some populations of these diverse small freshwater fishes consist entirely of females.

#### 4.5.3.2 Mammals

#### Unusual Mortality Event 2013

The Mammal Section has been collating stranding records of whales and dolphins for over 25 years. This data was crucial to documenting an unusual mortality event of bottlenose dolphins in Gulf St Vincent in 2013. A multi-disciplinary team of scientists, led by Senior Researcher, Dr Catherine Kemper, completed the analysis of the data for the research project and submitted it for publication. The paper described the complex nature of the pathology of the 41 bottlenose dolphins that died during a 7-month period. Almost 70% of the dolphins had immune-histochemical evidence of Dolphin Morbillivirus, a disease that is related to human measles and canine distemper. This is the first record of a *Morbillivirus*-related UME in the Southern Hemisphere and it is likely that other events will follow.

The article pointed out that climate change and environmental degradation may increase the likelihood of future events. Some of the characteristics of the event were similar to Northern Hemisphere UMEs but new discoveries were also made, e.g. the presence of unexplained severe blunt trauma in many of the dead dolphins.

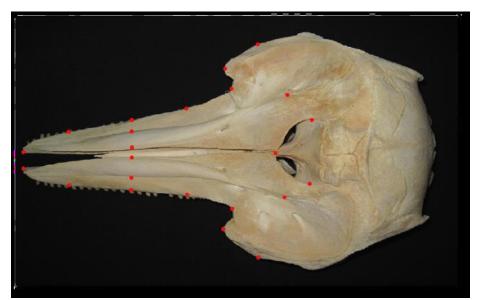


Figure 4.5.3.2a: One of the deceased Indo-Pacific Bottlenose Dolphins that died along the Adelaide coast during the Unusual Mortality Event of 2013.

Two of the important outcomes of the research are 1) that the Museum, through the input of Honorary Researcher Ikuko Tomo, is now recognised as a centre for marine mammal pathology and 2) a sound working relationship has been forged with the CSIRO Australian Animal Health Laboratory in Geelong.

#### Bottlenose Dolphin Taxonomy

Senior Researcher, Dr Catherine Kemper, has been investigating the taxonomic confusion of South Australian bottlenose dolphins for many years. Dr Kemper teamed up with Michael Krutzen, a well-known geneticist at the University of Zurich, to engage a PhD student, Maria Jedensjo, to unravel the relationships of the species occurring in Australian waters. A third species of Australian bottlenose was described recently, however, it is generally not accepted by the scientific community. Maria is nearing completion of her PhD and found compelling evidence that there are two species in Australia and that the newly-described species fits clearly within one of the existing taxa. Her dataset is powerful as it contains hundreds of individuals from around the country and because it uses 3D as well as traditional 2D measurements to describe skull morphology. The study demonstrates how important it is to combine morphological and genetic data in order to gain a clear picture of taxonomic relationships. In May 2015, Maria was invited to present her findings to the Scientific Committee of the International Whaling Commission in San Diego.



*Figure 4.5.3.2b: Bottlenose dolphin skull. The red dots are "landmarks" used to describe shape differences between species.* 

#### 4.5.3.3 Ornithology

Senior Collection Manager, Dr Philippa Horton and Honorary Research Associate, Dr Andrew Black made a comprehensive review of the occurrence in South Australia of the enigmatic Painted Finch. They discovered records made by an equally enigmatic collector, Frank Gibson, in the Flinders Ranges in 1868-69 that are among the earliest and most southerly for the species. Black's investigations into the Brown Thornbill in South Australia demonstrated that the Mount Lofty Ranges form should be regarded as a distinct subspecies, and Dr Black and Dr Horton continued research into hybridisation between the Brown and Inland Thornbills in South Australia. Black investigated the change in status and range of the Crested Pigeon in South Australia from colonial times through the early twentieth century when it was regarded as chiefly a northern bird, to the present day when it is common through much of the state, and possible factors allowing expansion of the species.

#### 4.5.3.4 Herpetology

Research in herpetology has been making use of CT ("computerised tomography") scanning to discover the way that skeletons vary within and between different lizard and snake families and also how they form and grow. During the year a major study representing a collaboration between Senior Researcher, Dr Mark Hutchinson and Ingmar Werneburg of the University of Zürich was published, revealing the embryological pattern of development of the bones of the skull in world's largest lizards, the goannas. These lizards are significant not just because of their size, but because many lines of evidence point to them being similar to the probable ancestor of snakes. By understanding more about how the bones of a goanna's skull develop, the researchers hope to gain insights into the developmental pathways that have resulted in the distinctive highly mobile skull of snakes.

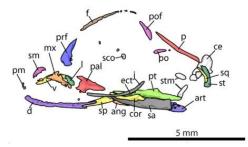


Figure 4.5.3.4a: A 50 day embryo of a yellow spotted goanna. The bones of the skull and jaw are just forming

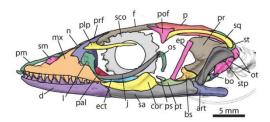


Figure 4.5.3.4b: A full-term embryo (6 months) showing the bones of the skull fully assembled

Honours students have been investigating lizard skeletons too. In 2014 Jaimi Gray worked on the jaw structure of dragon lizards in southern Australia, discovering that fossil jaws from Ice Age deposits at Naracoorte and Kelly Hill Caves included a cold adapted species now confined to Tasmania and eastern Australian mountain tops. In 2015, Bronwen Hancock used the CT approach to examine how the jaws of different major lizard groups vary in their internal bony structure, which, in some cases, includes a hinge half way along each side of the jaw that allow it to flex outwards (handy when swallowing large prey items!).

Major field activity in 2014 was directed at advancing the studies underway in collaboration with newly appointed Honorary Researcher, Dr Marc Jones (University of Adelaide), working on a broad study of skull and jaw anatomy and function in the Australian dragon lizards (Agamidae).

Honorary Researcher in Herpetology, Dr Steve Richards continued his field work in Melanesia, and has also generated a slew of publications reporting his discoveries of new species in two highly diverse groups of New Guinean wildlife, frogs and dragonflies.

# 4.5.3.5 Marine Invertebrates

Research in the marine fauna of the Great Australian Bight continued throughout the year, and will expand in the future. Senior Researcher, Dr Rachael King, is co-investigator in a collective of scientists from Australian museums to be approved for sea time on the *RV Investigator* (CSIRO research vessel) for 2015-2016. The oceanographic trip will be to collect invertebrates from eastern Australian deep sea canyons, sea mounts and plains. Collection Manager, Dr Andrea Crowther, has already involved the Museum in this work during a 14-day *RV Investigator* trip for Dr Crowther to Tasmanian sea mounts (with an "Unlocked" story on the Museum website for World Oceans Day).

Dr King's marine studies also include supervision of PhD student Amelia Lewis who is working on deep sea peracarid crustacean diversity in the Great Australian Bight.

Other studies that relate to Dr King's expertise in crustacean systematics are continuing on freshwater species, in collaboration with Honorary Research Associate, Dr Remko Leijs. The team have described a new species of amphipod endemic to Kangaroo Island and examined the molecular diversity of regional chiltoniid amphipods. The freshwater crustacean work also includes studies of the inhabitants of subterranean calcrete aquifers (see also Dr Steve Cooper's work on beetles from the same habitat, section 4.5.3.1) by Dr King and two PhD Students, Seyedmohammad Javidkar, who completed his thesis at the University of Adelaide during the year, and Danielle Stringer who recently commenced her studies at the University of Adelaide.

# 4.5.3.6 Terrestrial Invertebrates

# Antarctic Terrestrial Invertebrates

Work continued with University of Adelaide PhD student Paul Czechowski which aimed to discover the true level of diversity of Antarctic soil invertebrates by sampling the soil itself and using high-throughput DNA sequencing to reveal the diversity it contains (funded by Australian Antarctic Division and the ARC). Paul submitted his thesis and is in the process of submitting four research publications. His work produced baseline biodiversity data that indicated the presence of soil micro-invertebrates from throughout the Prince Charles Mountains and indicated that diversity increases as distance from the pole increases, and as elevation decreases. Results demonstrate the potential of the approach to conduct large-scale biodiversity surveys of remote terrestrial Antarctic habitats. Combining biodiversity data with soil geochemical and mineral data will enable researchers to further understand the key drivers shaping Antarctic soil biodiversity.

#### Jewel Beetles

The Museum finalised DNA analyses and have commenced writing the first of three publications lead by Dr Peter Lang, which includes approximately 700 individuals representing about 155 species from the family Buprestidae (Jewel beetles), predominantly sampled from South Australia (90%) and supplemented by specimens from elsewhere in Australia.

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#### Pacific Bees

Senior Researcher Terrestrial Invertebrates, Dr Mark Stevens, and Associate Professor Mike Schwarz and Dr Scott Groom (Flinders University) have long term research interests to ensure that the evolutionary and population changes of bees are being mapped in the Pacific. The Pacific research is now in its second 3 years of funding from Australia Pacific Science Foundation (APSF). The latest on this research is on the APSF website http://www.apscience.org.au/projects/APSF\_14\_1/apsf\_14\_1.html



Figure 4.5.3.6a: Bare ground, not dense forest, is the best place to find the nests of native bees in Fiji.

Research on this and other newly introduced species has, during the year, included three Honours students, Ms Carmen da Silva (recently received funding from the Playford Memorial Trust Honours Scholarship and from AJ & IM Naylon Honours Scholarship), Ella Deans and Celina Rebola from Flinders University.

# Australian Arid-zone Research

With Collection Manager Terrestrial Invertebrates, Dr Peter Hudson, the Museum obtained a research grant to Nature Conservation Society of SA to continue work from Australia's aridzone Salt Lakes. The research continued work on the Pogonine beetles endemic to the Salt Lakes. As a result the Museum now has finalised data and analyses for a comparative study on the endemic scorpion *Australobuthus xerolimniorum* found from, and also restricted to, these lakes.



Figure 4.5.3.6b: Australobuthus xerolimniorum, a scorpion specialised for life on salt lakes

Ants

Last year Honorary Research Assoicate, Archie McArthur, published descriptions of 143 species of *Camponotus* ants from Australia. Study continued into 423 specimens of *Camponotus* from separate localities in Australia, none of which are recognised as described species. His "A guide to *Camponotus* ants of Australia" has been placed on the Museum's website and eventually the above species will be also be included; which will be a great benefit for future researchers in the identification of *Camponotus* species around Australia.

# 4.5.4 Earth Sciences

The Earth Sciences researchers at the Museum continued to produce high-quality research with international impact, and of relevance to other areas of the Museum such as Outreach and Public Programs. Over a dozen dedicated volunteers and several active HRA made a major contribution to the division's research. Apart from five external graduate students who are working amongst the Museum's fossil collections, the Museum also has four resident higher-degree students working on Ediacaran and Cambrian fossils.

# 4.5.4.1 Invertebrate Palaeontology

The Invertebrate Palaeontology team (Senior Researcher, Professor Jim Gehling and Honorary Researcher and ARC future fellow Dr Diego Garcia-Bellido) has had a very active year with research on invertebrate animal origins, utilizing globally significant sites for Ediacaran and Cambrian fossils in the Flinders Ranges and Kangaroo Island, respectively. Publications in international journals include those on organisms new to science, analyses and review papers on these earliest animal communities. This research involved cooperation with scientists from the USA, UK, Spain, Canada and China. Such is the interest in the Museum's fossil research

that there have been calls for recognition of sites on the World Heritage Spectrum. Since July 2014, 14 visiting international researchers have come to study the Museum's fossil collections for both individual and joint projects with Museum research palaeontologists, collection managers and two contract research assistants.

# 4.5.4.2 Vertebrate Palaeontology

Three important studies co-authored by Dr Mike Lee, Senior Researcher, Palaeontology, generated widespread international media attention. A study published in *Science* that revealed a pattern of miniaturisation among the dinosaurs, which gave rise to birds, was picked up by major outlets (*TIME, BBC*) and was voted one of the top ten scientific breakthroughs of the year by the American Association of the Advancement of Science. Another paper led by Professor John Long, Museum Honorary Research Associate, and published in *Nature* also attracted similar coverage, and was the subject of an exhibition in the Museum's North Foyer during late 2014 (section 4.2). In the third study, ancient DNA was retrieved from Australian megafauna for the first time, from two species of giant extinct kangaroos.

Alessandro Palci (ARC funded postdoctoral fellow) commenced working on a project involving limb reduction in reptiles.

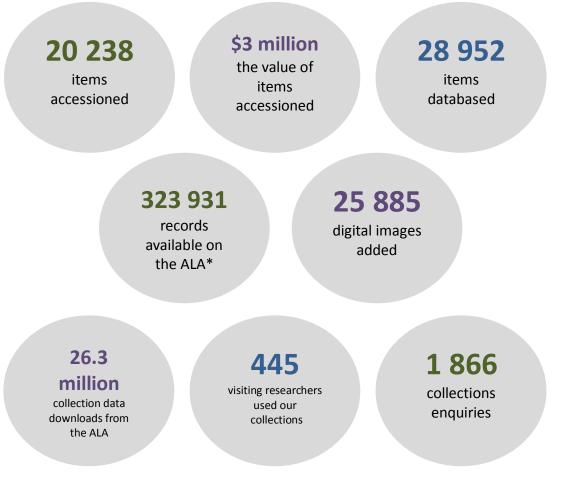
# 4.5.4.3 Mineralogy

September 2014 marked the end of an era at the Museum with the retirement of Professor Allan Pring, Head of Earth Sciences, after 30 years of meritorious service. Professor Pring's time at the Museum will be recognised as a golden era of Mineralogy at the Museum. His major acquisitions program to modernize the collections saw them swell from around 10 000 registered specimens at his commencement to over 35 000 today. Such was the reputation of Professor Pring (and therefore the Museum), that since the financial year 2001-2002 the Museum secured over \$1.7 million worth of mineral donations under the Cultural Gifts Program. During his tenure at the Museum, Professor Pring was awarded over \$10 million in grant funding for his research program, which saw the South Australian Museum rise to be the premier minerals research group in the nation, and a major player on the international scene. Professor Pring remains an Honorary Research Associate in Mineralogy with a half-time position as Distinguished Professor of Chemical Mineralogy at Flinders University.

# 4.6 THE COLLECTIONS

The Collections of the South Australian Museum continue to develop through donations, field collections and acquisitions. The dedication of the collections management staff and the members of the Digitisation Unit who support them, ensures that the Museum's collections maintain their high level of excellence and outstanding reputation. The number of annual acquisitions and their value, researchers who visited our collections, loans, and the number of Museum data downloads from the Atlas of Living Australia (ALA) confirms the significance of the Museum's collections at the state, national and international levels. Below are highlights of exciting advances and notable milestones in the Museum's Collections and Digitisation Unit this past year.

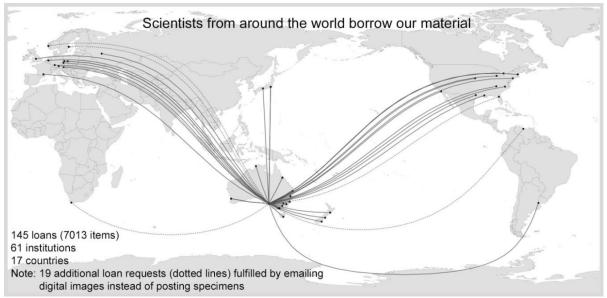
Figure 4.6a below provides a summary of South Australian Museum Collections Statistics 2014-15.



\* Source: Atlas of Living Australia

Figure 4.6a: Summary of South Australian Museum Collections Statistics 2014-15

Figure 4.6b below details the wide range of peer engagement from national and international institutions the South Australian Museum has loaned material to during 2014-15. During the year, the Museum had active collection engagements around the world with its material on loan to institutions such as, Staatliches Museum of Naturkunde, Germany; Museum of Natural History, Poland; Academy of Sciences, Czech Republic; Scripps Institution of Oceanography, USA and the American Museum of Natural History (New York), USA.



*Figure 4.6b: National and international institutions the South Australian Museum has loaned material to during 2014-15.* 

# 4.6.1 Digitisation Unit

# 4.6.1.1 Data Management

The Museum's collections management database, KE Emu (Emu), contains the details of 582 000 individual items, of which over 200 000 items were added in 2014-15 alone. Data of three particularly significant collections were migrated from their legacy formats across to EMu during the year, the Australian Biological Tissues Collection (ABTC), the Australian Helminthological Collection and the South Australian cetaceans sightings database.

The ABTC is one of the largest collections of biological tissue samples in the world. At the time of migration the collection consisted of tissues from 134 258 individual specimens of which over 40 000 have been sampled from specimens held in the Museum's biological collections. The Museum is working in collaboration with the ALA and other Australian museums to establish and implement standards for sharing all Australian collecting institutions' tissues data through the ALA.

The Australian Helminthological Collection (Parasitology) at the time of migration consisted of 42 507 records. The Museum worked with the ALA to be the first institution in Australia to provide parasite data that can be queried by the identification of the host animal.

The South Australian cetaceans sightings database was digitised with the assistance of funding from the Australian Marine Mammal Centre (section 4.6.1.2). The Museum is working with the Marine Mammal Centre to ensure that this data will be made available through both the ALA and the National Marine Mammal Database.

# 4.6.1.2 Volunteer Digitisation Programs

In 2014-15, volunteers took high-resolution photographs and created database records of type specimens from the Terrestrial Invertebrates Collection, completing a very large portion of the Coleoptera (beetles; figure 4.6.1.2a below) collection, which is one of the largest groups in entomology. These records and photos were periodically uploaded onto the ALA, increasing discoverability and accessibility of the Museum's valuable biological collections.



Figure 4.6.1.2a: Digitised Specimen 25-038376 Chalcomela viridimicans Lea, 1903

As part of a grant from the Australian Marine Mammal Centre (within the Federal Department of the Environment), volunteers scanned numerous newspaper articles, photographic slides and other items related to mammal sightings which aid in animal identification. The resulting image files have been imported into EMu and this digital catalogue of marine mammal image records is an invaluable resource.

During 2014-15, the digitisation team commenced work with online volunteers through the ALA's *DigiVol* platform. This platform, developed by the Australian Museum, gives the Museum an opportunity to post images (taken by volunteers) of specimens and their labels (figure 4.6.1.2b), or pages of handwritten text, such as field notes or registers, so that online volunteers can transcribe those items. Once completed, the Museum validates the transcribed records, and imports the data and images into EMu. Crowdsourcing like this is an effective way to tackle the Museum's large databasing programs.



Figure 4.6.1.2b: Digitised Specimen SAMA K4450, Coscinasterias muricata

Over the last twelve months, the Museum has used a mix of in-house, and online volunteering, to digitise 4 100 specimens from the dry Marine Invertebrates and Terrestrial Invertebrates Collections. Items digitised include the Museum's whole dry collections of sea stars, hard corals, and sea urchins, and all specimens from the environmentally significant Syrphidae

family, better known as hover flies. These data and images will be accessible on the ALA for the research community and general public. It also minimises future handling of these invaluable specimens and meets some of the Museum's audit responsibilities.

During 2014-15, the volunteer digitisation team also provided images of 147 specimens and objects across 19 requests in lieu of traditional specimen loans. This made valuable specimens from many of our collections accessible to interstate and international researchers, including in the USA, Germany, Sweden and Norway, without them ever leaving the building.

# 4.6.2 Mammals Collection

In December 2014, seven sperm whales were discovered dead on the beach near Ardrossan, South Australia. This was the first sperm whale mass stranding for South Australia in recent history and a team from the Mammals Section attended to obtain specimens. The full skeleton of one sperm whale and the lower jaws, including teeth, of the other six individuals were collected. The material is being prepared at the Museum's Bolivar Preparation Facility in the macerating vats and will be available for accessioning into the Museum's collection, and study, by the end of 2015. The full set of teeth of seven adult sperm whales adds significantly to the value of the Mammals Collection. Other samples including tissues for genetics, squid beaks from several stomachs, faeces, parasites and barnacles were also obtained for the Collection.

A large (~2kg) piece of fresh ambergris (figure 4.6.2) found near one of the whales was also collected. This was a significant and rare find as only an approximate 5% of individuals produce ambergris, which is usually hidden in the gut. Ambergris is a prized substance used in the perfume industry.



Figure 4.6.2: Fresh ambergris collected in Ardrossan, December 2014

# 4.6.3 Ichthyology Collection

A collaborative research project between the Museum's Ichthyology Section and the Evolutionary Biology Unit, along with researchers from the University of Adelaide and the South Australian Research and Development Institute has provided valuable information on one of South Australia's most mysterious fish, the elusive Magpie Fiddler Ray, Trygonorrhina melaleuca (section 4.5.3.1). Known only from the original Museum specimen from which the species was described, and from a handful of sightings, it was considered South Australia's rarest marine fish. Many ichthyologists, however, suspected that this dramatically patterned black and white ray was simply a mutant colour form of the very common Southern Fiddler, Trygonorrhina dumerilii. Comprehensive comparative genetic and morphological analyses of a specimen recently captured in the Port River revealed that the Magpie Fiddler is, indeed, just a Southern Fiddler in 'fancy dress'. No features, other than body colour and pattern, differentiate them. This finding ensures that scarce resources for endangered species research and conservation potentially earmarked for the Magpie Fiddler can, instead, be directed to bona fide endangered species. The Port River specimen is now registered in the Museum's Ichthyology Collection.

# 4.6.4 Australian Aboriginal Ethnology Digitisation Project

The digitisation of the Australian Aboriginal Material Cultures Collection continued during 2014-15. Nineteen volunteers photographed and documented a further 2 761 objects during the year and more than 8 000 objects have been photographed over the duration of the project. The volunteering aspect of the project was featured in the *Vitality* magazine published by Volunteering SA & NT.

The online delivery system for the images progressed to final draft stage and is expected to be live early in the next financial year. This will enable all community members to engage with the collection through the Museum website. The project has also been able to provide images for a set of posters that were distributed to schools and community centres throughout the APY Lands and assist with image requests for exhibitions and publications, both internally and externally.



Figure 4.6.4: Digitised Object: SAMA: A45713, Basket, Gouldburn Island, Northern Territory

# 4.6.5 Maori Collection Digitisation

The Maori Collection at the Museum started in 1862 with the donation of a Kawe, carrying strap made from woven flax, and has since increased to more than 300 items. In 2014-15, the Museum photographed the objects currently in storage and the remaining artefacts on display in the Pacific Cultures Gallery will be photographed in 2015-16. The aim will be to develop an online delivery system to make this collection accessible to the wider community.



Figure 4.6.5: Digitised Object: SAMA: 48418, Stone Club, New Zealand

# 4.6.6 Human Biology Collection

Ancestral remains from NSW were repatriated to the Australian Museum in 2010. Some of those ancestors are now on the final stage of their journey home when next month, they are reburied at Lake Victoria, NSW. This outcome is the positive and welcome result of much consultation and negotiation between South Australia, New South Wales and the Indigenous representatives for Lake Victoria.

Ancestral remains from the lower lakes and Coorong region, South Australia, were audited by Ngarrindjeri representatives who spent two weeks on this sensitive process. The remains are ready to be repatriated.

In 2014-15 individuation of unprovenanced remains was undertaken by collection staff in collaboration with Indigenous Elder Quenten Agius. This project has enabled the Museum, for the first, time to gain a quantitative and qualitative context for this collection. Unprovenanced remains pose a national issue and the Museum is in continuing dialogue with the National Committee for Indigenous Repatriation on this and issues that challenge repatriation.

The Human Biology Database of archival material was completed in 2014-15. This database did not exist previously making it difficult for Indigenous and non-Indigenous researchers to search documents. The database also allows for the Museum to assess research requests against the protocols established by the Information Section.

# 4.6.7 Collections Stores Project

During the year, pest management and storage issues continued to be addressed in the Mammals and Ornithology Collections. These areas were fitted with custom built cabinets (Figure 4.6.7) especially designed to protect the collections from pest ingress. The introduction of new compactus systems has allowed for the efficient use of space and increased the overall capacity of the rooms.

In the Mammals Section approximately 9 000 items, first put into cold storage, have been rehoused. The refit has provided an opportunity to modify the layout of the collection to improve accessibility and to update their taxonomic arrangement.

The new compactus system in the Ornithology section will increase the overall capacity of the collection room by at least 12%. By the end of the project a total of 33 000 skin/nest specimens moved into cold storage during construction will be recanted into the new facility and approximately 21 000 egg specimens will be transferred into existing steel cabinets, which are better suited to house this delicate collection. Surplus ornithology cabinets will be used in other Museum collections areas.



Figure 4.6.7: New custom cabintry and compactus

# 4.7 SUPPORT ORGANISATIONS

# 4.7.1 South Australian Museum Foundation Incorporated

The South Australian Museum Foundation Incorporated (Foundation) enjoyed another year in which it successfully supported the Museum through a range of fundraising and commercial activities.

The Museum Café continued to offer Museum visitors a quality café service, as well as expanding its catering services for corporate and private events throughout the year.

The Museum Shop underwent a review of retail space which resulted in a reconfiguration of merchandise displays. The Museum Shop also connected with the Museum's website to offer online purchases to a wider audience, keen on the Shop's special interest, and/or uniquely South Australian products. The proceeds of the Museum Shop and Café were returned to the Museum to support its research, collections and public engagement priorities.

During the year a new donor program was established to support the Museum's major special exhibitions. The Leadership Council provide a place of camaraderie for like-minded peers with whom to share extraordinary experiences and opportunities. As essential supporters of the Museum, Leadership Council supporters donate their time, services, and financial resources toward innovative exhibitions that seek to inspire in all people a wonder and curiosity about life on Earth.

The first Leadership Council was for the Museum's *Iridescence* exhibition (section 4.2.1.1). In recognition for their pioneering support, the following *Iridescence Leadership Council* members are acknowledged:

- Dr Mike Snow and Mrs Jan Snow
- Mr Antony Simpson and Mrs Mary Lou Simpson
- Dr Barbara Hardy AO
- Ron and Sonya Langman
- Mr Don Sarah AM and Mrs Meredyth Sarah AM

The Leadership Council program continued beyond the *Iridescence* exhibition, a new Leadership Council has been established for the Museum's major 2015-16 exhibition, *Opals*.

In December 2014, the Foundation's main 'Front of House' donation mechanism was installed. The new donation box, designed by the JamFactory's Metal Design Studio, attracted a significant increase in donations from Museum visitors. The beautifully designed donation box features aspects of the Museum's most unique Ediacaran and Opalised Fossil collections.

Much of the Foundation's outcomes are driven by the Museum's Development department. In addition to co-ordinating the Foundation's annual appeal and targeted fundraising programs, the Development department launched two other significant initiatives during the year; The Thomas Bequest Society and the Corporate Membership program.

The Thomas Bequest Society, named after Dr Morgan Thomas and his gift in 1903 (which is equivalent to \$8 800 000 in 2015), was established to foster relationships between the Museum and its supporters which will facilitate discussions of bequeathed gift intentions.

The new Corporate Membership program enables corporate partners to engage with the Museum in different ways. The program allows for Corporate Members to be involved in activities suited to mutual priorities, across a wide range of offerings, as opposed to traditional, specific sponsorship arrangements.

# 4.7.2 The Friends of the South Australian Museum Incorporated

Throughout 2014-15, the Friends of the South Australian Museum (FOSAM) reviewed the strength of its connectivity to the Museum, specifically with respect to what it can contribute given the Museum's new strategic direction. Although FOSAM's membership numbers had remained static in recent years, by the end of 2014-15 many of the activities they had performed in the past were managed by the Museum. FOSAM Council came to the decision that, in the light of these changes, it would formally request that the Museum Board dissolve the FOSAM. The Museum Board has unanimously acceded to this request.

The Museum Board thanks FOSAM members past and present for the substantial and positive impact they have made to the Museum. It was with tremendous foresight that FOSAM was created fifty years ago – ahead of other Australian museums. In that time it has contributed significant funds for the acquisition of objects and provided visitors with tours and programs that have been well received, an outstanding record for which all those associated with FOSAM should be proud.

# 4.7.3 The Waterhouse Club Incorporated

The Waterhouse Club aims to both engage with the opinion leaders of the community to build a supportive network for the Museum and to raise significant funds, working closely with the Museum's Foundation. To build membership, The Waterhouse Club runs events and expeditions that showcase the Museum's most talented scientists, who provide thought-provoking interpretations – often with a touch of humour – in places of special interest.

The Waterhouse Club donates its annual surplus to the South Australian Museum Foundation for the benefit of the South Australian Museum. In excess of \$815 000 has been transferred to the Museum from The Waterhouse Club since 1989.

# 4.8 VOLUNTEER SUPPORT

The Museum is currently supported by the generous participation of 229 volunteers and 60 Honorary Research Associates who regularly and voluntarily contribute to all aspects of the Museum.

Volunteering enables people to participate actively in all facets of society in a way that is personally satisfying and contributes to the spirit of community involvement. The Museum supports the involvement of capable and innovative volunteers who are committed to helping the Museum achieve its goals. It is recognised that volunteers provide their time and expertise without remuneration and that they are integral to the culture and development of the organisation.

# 4.8.1 Value of Volunteering

The Museum values and recognises the support and contribution of Volunteers in achieving the organisation's purpose, goals and objectives. To formalise this recognition, the Museum has established volunteering development outcomes for the Strategic Plan 2014-2020 with an aim to 'foster an engaged and dynamic volunteer force aligned to the Museum's strategic priorities'. To date, the Museum has developed volunteer, honorary, intern and student policies; developed a volunteer recognition plan; quantified the contribution of volunteer efforts to the Museum; targeted recruitment for expertise/skills sets and broader demographic, and is developing volunteer performance and development plans.

The Museum estimates that each volunteer, or Honorary Research Associate, on average contributes one 7.5 hour day a week of their time to the Museum, totaling 360 hours a year in volunteered time per person. As the Museum has 229 volunteers and 60 Honorary Research Associates, this equates to approximately 104 040 hours volunteered freely, without expectation of reward, in service to the Museum.

In terms of a financial contribution, volunteerism at the Museum is estimated at being just over \$3 million per annum (based on figures from the 2012 Australian Bureau of Statics (ABS) average weekly earnings for Australians and the total hourly contribution of the Museum's volunteers).

The Museum's volunteers conduct ground-breaking research on the Museum's collections and are major contributors to its impressive annual publications record. Additionally, special projects at the Museum are supported by the Museum's volunteers, industry partnerships, project managers and dedicated staff knowledge. These collaborations provide the Museum with invaluable opportunities to run special projects to digitise, preserve, document and make the Museum's collections accessible to local and global audiences. The *Atlas of Living Australia Volunteer Digitisation Project* has been highly successful in bringing the Museum's collections to a global audience through volunteer work locally and internationally through online crowdsourcing.

The Australian Aboriginal Collections Digitisation Project, in partnership with Newmont Asia Pacific and additional support from the State Government, has provided an invaluable opportunity to digitise this unique and unparalleled collection. Through the support of partners to purchase specialist equipment, volunteer training and specialist staff, the Museum has been able to rapidly increase its capacity to digitise the most precious collections.

Volunteers who work directly with the Museum's Visitor Experience, Front of House, Education and Public Engagement departments are often the first point of contact for Museum visitors. The Museum's Volunteer Gallery Guides enables the Museum to offer daily tours and conduct special tours during the last week of each month. On a daily, basis volunteers support staff in answering queries from the public. The Museum's Public Programs are supported by dedicated volunteers who work with staff and students onsite, locally and in remote areas; to foster a passion of culture, science and the natural world. Volunteers work in all sections of the Museum and contribute to the administration and operations of the Museum, specifically through the Development, Information Services and Corporate Services departments.

# 4.8.2 Technological Developments in Volunteering: investing in the future of volunteering

Effective volunteer involvement results from a system of good practice, review and continuous improvement. The Museum has defined the relationships and responsibilities shared between the Museum, volunteers and employees through the creation of volunteer, student and honorary policies. Powered by volunteer support, the Museum has digitised over 570 paper records of past and present volunteers and is in the process of digitising the paper records of our Honorary Research Associates. Digitisation of volunteer records has enabled greater accessibility to volunteer information and the opportunity to analyse and improve the ways in which the Museum works with its volunteers.

The Museum has designed a volunteer management system to house and maintain volunteer records, hours and provide access for volunteers to be able to transparently and securely access their information. The System will assist the Museum, volunteers and direct line managers to manage the contribution of volunteers with greater accuracy and transparency. The system is in testing and development and is expected to be fully operational by December 2015.

Digitisation of records has enabled the creation of a Volunteer Survey which will ensure the accuracy of records and seek feedback from current and exiting volunteers in regards to their experience at the Museum. The Survey will help the Museum better understand its unique volunteering community and assist in the analysis and review of volunteer roles and activities. The Survey is planned for release in November 2015 and data should be transparently available by December 2015.

# 5 PUBLICATIONS, TEACHING AND DISSEMINATION OF RESEARCH AND COLLECTIONS

Museum researchers, both staff and HRA, have continued to actively publish their findings in peer reviewed journals and books and present them at national and international conferences. During this reporting period, a total of three books (by both staff and HRAs), 17 book chapters (four by staff members, nine by HRAs) and 128 scholarly journal articles were published, collectively authored by 23 Museum staff and 23 HRAs as well as 22 other publications (13 by staff, nine by HRAs). In addition, staff and HRAs continued their public and professional academic engagement activities and delivered a total of 29 conference papers at national and international conferences and symposia, and staff and HRAs delivered 38 public talks and tours to schools, societies and organised events. There were also frequent media engagements involving interviews on radio and television.

External research studies related to the Museum's collections resulted in 52 publications.

# 5.1 BOOKS AND MONOGRAPHS

McArthur, A.J. (2014). A Guide to Camponotus ants of Australia. South Australian Museum. 185 pp.

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# 5.4 OTHER PUBLICATIONS

Book reviews, electronic-only publications, non-peer reviewed papers, conference and workshop proceedings, technical reports and opinion pieces.

Curry, M., **Reed, L.** and Bourne, S. (2014). 'Catching the 'marsupial lion' by the tail: Thylacoleo carnifex and the Naracoorte Caves.' *Journal of the Australasian Cave and Karst Management Association* **97**: 6-16.

**Daniels C.B.** (2014). 'Review of The Green Leap: A Primer for Conserving Biodiversity in Subdivision Development', by Mark E. Hostetler, *Quarterly Review of Biology* **89**:171.

Goldsworthy, S.D., Mackay, A.I., **Shaughnessy, P.D.**, Bailleul, F. and McMahon, C.R. (2014). 'Maintaining the monitoring of pup production at key Australian sea lion colonies in South Australia (2013/14).' Final report to the Australian Marine Mammal Centre. South Australian

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Research and Development Institute (Aquatic Sciences), Adelaide. SARDI Publication No. F2010/000665-4. SARDI Research Report Series No. 818. 66 pp.

García-Bellido, D. and Lee, M. (2014). 'Meet our weirdest ever cousins.' Australasian Science, 35 (12): 32-33.

**García-Bellido, D.** (2015). Through the eyes of fossils. An exceptional view into past life. *e*-*Science*, **12**: 37-46.

**Gershwin, L.A.** (2015). Jellyfish Identification Manual: Managing Gelatinous Threats to Salmon Aquaculture Facilities in Tasmania. Consultancy Report for TASSAL Aquaculture, p63.

Gutiérrez-Marco, J.C. and García-Bellido, D. (2014). Gondwanan stratigraphy and palaeontology of the Cabañeros National Park (Central Iberian Zone, Variscan Belt). Gondwana 15 Field Trip Guide. Sociedad Española de Geología, Madrid. p14.

**Jones, P.G.** (2015). Review of M. Edmond 2014, *Battarbee and Namatjira*. Sydney: Giramondo. *Sydney Morning Herald*, 19 February 2015.

**Kemper, C. M**. and **Segawa, S**. (2015). 'Progress report on cetacean research, January 2014 to December 2014, with statistical data for the calendar year 2013'. *Report to Australian Antarctic Division*, Hobart. (completed on line)

Kemper, C., Segawa, T. and Tindall, A. (2015). 'Whale sightings in South Australia: migration of data to internet platform and updating the State's database.' *Final report to Australian Marine Mammal Centre*. p8.

**Kemper, C.** and **Tomo, I.** (2014). 'Monitoring small cetacean mortalities in eastern Gulf St Vincent 2013/14.' *Final report prepared for Adelaide Mount Lofty Natural Resources Management Board*. p19.

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Lee, M.S.Y., Worthy, T.W. (2014). 'Flight of the kiwi.' Australasian Science, Sept 2014, pp22-24.

Lee, M.S.Y. (2014). 'Survival of the littlest.' Australasian Science, Oct 2014, pp20-22.

**Lee, M.S.Y.**, Dyke, G.D. (2014). 'How small birds evolved from giant meat eating dinosaurs.' *The Conversation*, Aug 1, 2014. (online news article, theconversation.edu.au)

Lee, M.S.Y. (2014). Michael S.Y.Lee - interview. In *Issues in Palaeobiology: a Global View* (M. R. Sanchez-Villagra and N. MacLeod, eds). Scidinge Hall Verlag. Zurich. pp.135-141.

Svane, I. and Shepherd, S.A. (2014). 'The environmental impact of prawn trawling in Spencer Gulf.'in: S.A. **Shepherd, S., Gillanders, B.M.,** Murray-Jones, S. and D. Wiltshire, D. (Eds) *Natural History of Spencer Gulf* pp. **359–377**. (Roy. Soc. S. Aust., Adelaide).

**Walshe, K.** (2014). *Samphire Coast, Northern Adelaide: Archaeology Desktop Study.* Unpublished report to AML-NRM, DEWNR.

**Walshe, K**. (2014). *Aboriginal Cultural Heritage Investigation, Hillside, Yorke Peninsula*. Unpublished report to Rex Minerals.

**Walshe, K**. (2015). *Aboriginal Heritage of the Proposed 'Walk the Yorke' Trail*. Unpublished report for Adjadhura Heritage, Narungga Heritage Office.

**Walshe, K**. (2015). *Guide to the Archaeology Display, Original Female Cells, Adelaide Gaol.* Adelaide: Printing Hub.

# 5.5 CONFERENCE PAPERS, TALKS AND LECTURES

# 5.5.1.1 Dr Terry Bertozzi:

Hutson, K.S., Brazenor, A.K., **Bertozzi, T.**, Miller, T.L., Trujillo-González, A., Dinh Hoai, T., Militz, T.A. and **Whittington, I.D.** (2015). Five intriguing characteristics of the harmful fish parasite *Neobenedenia girellae*, *New Zealand Society for Parasitology and Australian Society for Parasitology Annual Conference*, Jun 29-July 2, 2015, Auckland, New Zealand.

# 5.5.1.2 Professor Steven Cooper:

Tierney, S., Hyde, J., **Saint, K., Bertozzi, T.**, Humphreys, W., **Austin, A.** and **Cooper S.** (2014). Eye gene transcriptomes of diving water beetles: a contrast of surface and subterranean photic niches. *Genetics Society of Australasia Annual Conference*, July 7-9, Sydney, NSW.

McLean, A., Lancaster, M., **Cooper, S.** and Carthew, S. (2014). Dunnarts, downpours and deserts: life history of a rare semi-arid marsupial, *Ecological Society of Australia 2014 National Conference*, Sept 28th – Oct 3rd, Alice Springs, NT.

Stringer D. (2015) Using an integrative approach to investigate the systematics and evolution of groundwater-dependent crustaceans from the Australian arid zone. Species Delimitation in the age of Genomics conference, 28th–30th April, Canberra, ACT. (Oral presentation by Steve Cooper's PhD student).

22 May 2015: Evolution of Darwin's 'wrecks of ancient life' from subterranean islands of the Australian desert. Talk presented to the School of Biological Sciences, Flinders University.

# 5.5.1.3 Dr Andrea Crowther:

04 August 2014: The secret lives of sea anemones. Talk presented to the Malacological Society of South Australia.

# 5.5.1.4 Dr Diego Barcia-Bellido:

**Jago, J.B., Gehling, J.G.** and **García-Bellido, D.C.** (2014). A new arthropod with an intriguing feeding apparatus from the Emu Bay Shale Lagerstätte, South Australia. *4th International Palaeontological Congress*, Sep 28 – Oct 3, 2014, Mendoza (Argentina).

García-Bellido, D.C., Paterson, J.R., Edgecombe, G.D., Jago, J.B., Gehling, J.G. and Lee, M.S.Y. (2014). Latest developments from the Emu Bay Shale biota (Cambrian, South Australia), the oldest BST *Lagerstätte* in Eastern Gondwana. *15<sup>th</sup> International Conference on Gondwana*, July 14–18, 2014, Madrid (Spain).

Sá, A.A.; Aceñolaza, G.F., **García-Bellido, D.C.** and Gutiérrez-Marco, J.C. (2014). The first Paleozoic record of the trace fossil *Rotundusichnium* (Middle Ordovician of Portugal): paleoenvironment and behavioural pattern of the trace maker. *15<sup>th</sup> International Conference on Gondwana*, July 14–18, 2014, Madrid (Spain).

# University lectures:

The Cambrian 'explosion': the appearance of Animals, 28 August 2013, *Issues in Evolutionary Biology III*, School of Earth & Environmental Sciences, University of Adelaide.

A glimpse at the marine realm half a billion years ago: the Ediacaran and Cambrian biotas, 8 April 2015, *Frontiers in Marine Biology III*, School of Earth & Environmental Sciences, University of Adelaide.

# Seminars:

Preservación excepcional en el Edicárico y Cámbrico, 9 October 2014, *INSUGEO* and *Universidad de Tucumán*, Tucumán, Argentina.

# **Guest Speaker:**

*Cutting-edge Science*: 'The origin of Animal evolution in Australia', 7 July 2014, CONASTA 63 – Annual Conference of the Science Teachers Association, Adelaide

# Public talks:

The oldest Animals on Earth, 500 million years ago, 26 August 2014, Scouts Rose Park/Norwood, Adelaide.

South Australia: the perfect frame for the Cambrian explosion, 20 August 2014, Adelaide Planetarium, University of South Australia, Adelaide.

From the Cambrian of Kangaroo Island to the Ordovician of Morocco 7 April 2015, *Sprigg Lecture*, South Australian Museum.

# 5.5.1.5 Professor Jim Gehling:

16-18 June 2014. *Australian Criteria for Subdivision of the Ediacaran*. International Commission on Stratigraphy Subcommission on Ediacaran Stratigraphy; Subcommission on Cryogenian Stratigraphy. Third International Congress of Geobiology, Wuhan, China.

9 February 2015: 'Famous Fossils of South Australia' talk to Probus Combined Club of Woodville South Inc. (105 members).

13 March 2015: 'Fossils of South Australia': speaker at the University of Adelaide 'Bright Sparks Club', Horace Lamb Lecture Theatre.

# 5.5.1.6 Dr Lisa Gershwin:

1-7 July 2014: STUNG! Symposium at Le Laboratoire, Paris, France, with Harvard University. A symposium of Harvard students' projects about her book, along with voyage on the Mediterranean looking for jellyfish.

31 July – 2 August 2014: Byron Bay Writers Festival, keynote speaker x2.

10-19 September 2014: TEDx Dublin, Invited speaker: *Perilous Bloom*. Also numerous other speaking events while there, including filming a documentary for BBC *Nature's Weirdest*.

26 October 2014: Keynote speaker, Australian Field Naturalists Annual Meeting, Hobart, Tasmania.

# 5.5.1.7 Dr Peter Hudson:

**Hudson, P.** (2014). Remarkable species diversity on adjacent salt lakes in South Australia.  $12^{th}$  International Conference on Salt Lake Research, 14 - 18 July 2014, Beijing.

## 5.5.1.8 Dr Mark Hutchinson:

6 August 2014, Talk, Scientific Career advisory night presentation, Lincoln College, University of Adelaide.

8-9 December 2014, Spoken Presentation, Micro-computed tomography at the South Australian Museum. The virtual osteology collection *Biting skulls, robot snakes, and electric muscles.* 2014 Interdisciplinary Biomechanics Workshop. University of Adelaide, South Australia.

21-24 January, 2015, Spoken Presentation, **Hutchinson, M. N.,** Gillespie, A. & Archer, M. (2015) The Pygopod-Haunted Rainforests of Riversleigh, Queensland.

Australianan Society of Herpetologists, Annual Meeting.

Holmesglen Rural Learning Centre & Conference Retreat, Eildon, Vic.

14 May, 2015, Spoken Presentation, South Australian Museum Herpetology: Reptile morphological studies at the South Australian Museum. *Royal Society of South Australia meeting*, South Australian Museum.

# 5.5.1.9 Information Services:

2 July 2014: Yankunytjatjara Digitization Project, Elders Reviewing Restricted Archive Material.

8-10 July 2014: Baundik Community, Archives Talk/Tour.

8-9 July 2014: South Australian Museum NAIDOC week activity with children (Gardam, L.).

18 August 2014: Mount Barker High School, Archives Talk and Tour.

19 August 2014: Mobile Language Team, Archives talk and Tour.

20 August 2014: Interviewed for Film Documentary, School Project.

11 September 2014: Murray Bridge Tafe, Family History Workshop.

11 September 2014: Royal Society of South Australia talk. *Norman Tindale: Adelaide's unsung hero. Pioneer Recorder of Aboriginal Heritage and WWII Spymaster*. (Zilio, F., Sutton, P. and Haak, W.).

16 September 2014: Museum Guides, Talk and Tour of the South Australian Museum Archives.

4 - 5th November 2014: Waikerie Education Department, Achives tour and workshop.

11 November 2014: Mimili School group, Talk on the South Australian Museum Archives.

25 November 2014: Whitelion Youth Family History Workshops and Archives Tour.

4 December 2014: Adelaide High School, Archives Talk and Tour.

5 March 2015: MARTU Community, Archives Talk and Tour.

11 March 2015: Waterhouse Club Event: The Dawn of Human Habitation (Zilio, F and Abdullah-Highfold, A. with Cooper, A.).

7 April 2015: Ngarrindjeri Community, Archive Tour.

11 April 2015: Wiltja Kids, Archives Talk and Tour.

11 April 2015: Waterhouse Talk - From the Dawn of Human Habitation.

15 April 2015: SA link Up, Archives Introduction and Tour.

17 April 2015: Jane Lomax Smith and Federal Minister Archives Tour.

5 May 2015: University of SA INFS 5081 Archival Management tutorial and tour (Zilio, F.).

8 May 2015: Adelaide High School, Archives Talk and Tour.

18 May2015: Brenda Croft, Achive Talk/Tour.

21 May 2015: Baundik Elderds, Language/Repatriation project.

11 June 2015: SA link Up Archives, Introduction and Tour.

May 2015: Jane Lomax Smith and Andy Thomas Archives Tour.

#### 5.5.1.10 Information Services – Library

2 September 2015: University of SA Library student.

16 September 2015: South Australian Museum Guides.

#### 5.5.1.11 Dr Philip Jones:

30 September 2014. Paper delivered at National Museum of Australia symposium, 'Aboriginal Artists of the Nineteenth Century: A Celebration'. Paper titled: '*Without the Aid of a Master: the 'Dawn of Art' drawings and their artists*'. National Museum of Australia, Canberra.

4 February 2015. Public lecture: 'Museums and the Play of Objects'. National Library of Australia, Canberra

6 February 2015. Paper delivered at '*Material Encounters*' conference, National Library of Australia: 'Seeing Red and Making Marks: Inscriptions on Frontier Objects'.

7-8 April 2015. Presentation of historic film footage to Anangu elders, Umuwa, Mimili. APY Lands fieldtrip.

11-20 June 2015. Five lectures delivered to members of the Waterhouse Club expedition to Arnhem Land.

#### 5.5.1.12 Dr Catherine Kemper:

#### **Presentations:**

**Kemper, C., Tomo, I.**; Bastianello, S., Wang, J., Bingham, J., Dickason, C., Woolford, L., Gibbs, S., Kelly, D. (2014). Presented at the *Australian Mammal Society Conference*, July 7-10, 2014, Melbourne.

**Kemper, C**. (2015) *Tursiops* in South Australia: biology and threats. Presented at the *Scientific Committee of the International Whaling Commission*, May 22-25, 2015, San Diego.

Jedensjo, M., **Kemper, C.** and Krutzen, M. (2015) Osteological variation questions the occurrence of three species of bottlenose dolphins (*Tursiops* spp.) in Australia. Presented at the *Scientific Committee of the International Whaling Commission*, May 22–25, 2015, San Diego.

# **Public Lectures:**

26 July 2014. C. Kemper, gave lecture and demonstration to Roseworthy veterinary students at Bolivar. 20 students.

17 August 2014. C. Kemper gave tour of Bolivar to visiting cetacean researcher, Eduardo Secchi and family.

22 August 2014. C. Kemper contributed to Citizen Science Survey of Harry Bowey Reserve, Salsibury.

September 2014. C. Kemper, Lecture and practicals given to Flinders University Marine Vertebrate course, Sept. 2014. 40 students.

12 November 2014. C. Kemper and I. Tomo gave tour of Bolivar to a group from the Marine Protected Areas Conference. 6 people attended.

29 November 2014. C. Kemper gave talk to the Friends of South Australian Museum dinner.

28 April 2015. C. Kemper, I. Tomo and D. Stemmer gave tour of Bolivar to Boards of South Australian Museum and SA Water.

# 5.5.1.13 Dr Peter Kruse:

Percival, I. G. and Kruse, P. D. (2014). 'Biostratigraphy and biogeographic affinities of middle to late Cambrian linguliformean brachiopods from Australasia.' *IGCP Project 591 Field Workshop 2014, Kunming, China*.

# 5.5.1.14 Mr Thierry Laperousaz:

Science Week, South Australian Museum, show and tell about iridescent shells, 2 and 5 of January 2015.

# 5.5.1.15 Mr Mark Pharaoh:

Talk for the Australian Geological Society Annual Dinner at The Historian Pub 'The Mawson-Madigan Experience 1911-14', 21 August 2014.

Talk for the Holdfast College for Seniors at St Andrew's by the Sea 'Douglas Mawson (1882-1958), Geologist, Explorer, Traveller', 5 September 2014.

Talk for the Friends of Mawson AGM with Dr Jim Jago, at the Royal Society Rooms, 'Pre-Antarctic Mawson: A young man in a hurry', 2 June 2015.

# 5.5.1.16 Dr Peter Shaughnessy:

**Shaughnessy, P. D.** and Goldsworthy, Simon D. (2014). *A new vernacular name for the fur seal in Australia*. Australian Mammal Society Conference, Melbourne, Victoria, July 2014. Poster presentation, Abstract p. 154.

# 5.5.1.17 Dr Kate Sparks:

18 November 2014: "Minibeasts of Mt Lofty". This talk highlighted some of the lesser known arachnids found in and around gardens and reserves with information on identification, life history and conservation. The talk was presented to the Sturt Upper Reaches Landcare Group, Upper Sturt Memorial Hall.

26 February 2014: "Minibeasts of Mt Lofty". Presented to the Junior Field Naturalists Club, Blackwood Primary School.

## 5.5.1.18 Dr Mark Stevens:

Velasco-Castrillón, A., and **Stevens, M.I.** (2014). Antarctic rotifers, tardigrades and nematodes: assessing molecular and morphological diversity at a continental scale. XXXIII SCAR Open Science Conference, Auckland, New Zealand, 23 August - 3 September 2014.

Czechowski, C., and **Stevens, M.I. (2014).** Insights into the soil biodiversity of the Southern Prince Charles Mountains in the context of the abiotic environment. XXXIII SCAR Open Science Conference, Auckland, New Zealand, 23 August - 3 September 2014.

#### 5.5.1.19 Ms Alexis Tindall:

**Tindall, A.** Many arms (and legs) make light work! Crowdsourcing the digitisation of invertebrate collections at the South Australian Museum, South Australian Herbarium's *It's all about the Plants!* seminar series, Adelaide, May 5 2015.

**Tindall, A.** and Vaughan, A. 'Community Coordination for Australian Herbaria and Zoological Collections', *Digitisation of Biological Collections: A Global Focus*, Atlas of Living Australia, Canberra, 13 – 16 April 2015.

**Tindall, A.** "Museums and Galleries". Lecture, University of South Australia INFS 5104 Information Management Foundations, April 9 2015.

**Tindall, A., Adams, E. and Kerr, D.** Presentation to visiting delegation from the Chengdu Cultural Bureau, China, 5 November 2014.

#### 5.5.1.20 Dr Keryn Walshe:

#### Sole presenter:

Reconstruction of a rare ornament from a Sealer's Site on Kangaroo Island, Australia. *Comupter Applications in Archaeology*, April 2014, Sorbonne, Paris, France.

Aboriginal Collections, South Australian Museum. 2014. FOSAM. Adelaide.

Glenthorne Remount Depot. 3 May 2015. History Festival 'About Time'. Adelaide.

Yorke Peninsula Aboriginal Archaeology. 20 May 2015 History Festival 'About Time'. Adelaide.

Hanging by a Thread. 23-24th May 2015. Archaeology of Portable Art: Asia, Pacific and Australian Perspectives. ANU, Canberra, Australia.

#### Joint Presenter:

Durband, A, Hill, E. **Walshe, K**. (2015). New estimates for stature in the Roonka Flat skeletal sample using the Revised Fully Technique. Nov 2014. Poster Presentation and Abstract to *American Association Professional Anthropologists*.

Hill, E., Durband, A. and **Walshe, K**. Nov. (2014). Risk minimization and a late Holocene increase in mobility in South Australia: an analysis of lower limb diaphyseal shape. Poster Presentation and Abstract to *American Association Professional Anthropologists*.

Durband, A., Ponce de Leon M., **Walshe, K**. and Zollikofer, C. P. (2014). The first digital reconstructions of crania from Roonka, South Australia. Abstract and presentation to *Australian Archaeology Association Conference*, Cairns.

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Littleton, J., Petchey, F. and **Walshe, K**. (2014). New Dates at Roonka, South Australia: Implications for Bioarchaeology. Oral Presentation to Australian Society Human Biology, Adelaide.

#### 5.5.1.21 Associate Professor Ian Whittington:

Deveney, M.R., Forwood, J.F., **Whittington, I. D** (2014). Monogeneans in aquaculture: the future of management. *World Aquaculture Society Conference*. June 8-11, 2014, Adelaide, South Australia.

# 5.6 EXTERNAL RESEARCHER PUBLICATIONS

Based on material in the South Australian Museum's collections.

# 5.6.1 Arachnids:

Framenau V.W. et al (2014). A guide to the Spiders of Australia. New Holland Publishers, London.

Mayoral, J.G. and O.D. Seeman (2015). A review of larval Chyzeria Canestrini, 1897 (Acari: Parasitengonina: Chyzeriidae) systematic parasitology, **90(3)**: 257-268.

Shaw, M. (2014). *Haemolaelaps* Berlese removed from synonomy with *Androlaelaps* Berlese (Acari: Laelapidae) *Zootaxa*, **3841(2)**: 285–292.

Szymkowiak, P (2914). Revision of Australian Species of the Genus Diaea (Araneae: Thomisidae) with Redefinition of Their Taxonomic Status. **64**: 333-477.

# 5.6.2 Archaeology:

Durband, A., Littleton, J. and **Walshe, K**. (2014). 'Patterns in Ritual Tooth Avulsion at Roonka, South Australia.' *American Journal of Physical Anthropology* **154**: 479-485.

# 5.6.3 Evolutionary Biology Unit:

Rodriguez-Zarate, C. J., Carvalho, D. C., **Hammer, M. P**. and Beheregaray, L. B. (2014). A set of microsatellite markers for the threatened Murray hardyhead, *Craterocephalus fluviatilis* (Pisces: Atherinidae) from the southern Murray-Darling Basin. *Conservation Genetics Resources* **6**: 473–475.

# 5.6.4 Entomology:

Assing, V. (2014). 'A revision of the species of *Pinobius* MacLeay, 1871 of the Oriental, Palaearctic, and Australian regions'. *Koleopterologische Rundschau* **84:** 115-191.

Bellis, G.A., Donaldson, J.F., Quintao, V., Rice, A., Tenekanai, D. and Tran-Nguyen, L. (2014). 'New records of Delphacini (Hemiptera: Delphacidae: Delphacinae) from Australia, Timor Leste and Papua New Guinea, and an updated checklist of Delphacini from Australia.' *Austral Entomology* **53**:167-174. Cassis, G. and Symonds, C. (2014). 'Systematics and host plant associations of a new genus of *Acacia*-inhabiting plant bugs from arid Australia (Insecta: Hemiptera: Heteroptera: Miridae: Orthotylinae)'. *Invertebrate Systematics* **28(5)**: 522-554.

Early, J. W. (2014). Establishment of two *Neurogalesus* Kieffer, 1907 species (Hymenoptera: Diapriidae: Diapriinae) in New Zealand. *Records of the Auckland Museum* **49:** 15-20.

Escalona, H.E., Lawrence, J.F., Wanat, M. and Slipinski, A. (2015). 'Phylogeny and placement of Boganiidae (Coleoptera, Cucujoidea) with a review of Australian and New Caledonian taxa.' *Systematic Entomology* DOI:10.1111/syen.12126.

Jałoszyński, P. (2014). 'The curse of Horaeomorphus': taxonomy of misplaced Australian Cyrtoscydmini (Coleoptera: Staphylinidae: Scydmaeninae). *Zootaxa* **3828:**1-76.

Jałoszyński, P. (2014). 'Taxonomic notes on Australian species of *Sciacharis* (magellanoconnus) (Coleoptera: Staphylinidae: Scydmaenidae).' *Zootaxa* **3884**(5):419-428.

Jałoszyński, P. (2015). 'Taxonomy of '*Euconnus* complex'. Part III. Morphology of *Euconnus* subgenus *Napochus* and revision of the Australian species (Coleoptera, Staphylinidae, Scydmaenidae).' *Zootaxa* **3925(1):** 1-24.

Kimsey, L.S. (2003). 'A peculiar new genus of locally abundant Australian Thynninae (Hymenoptera: Tiphiidae).' *The Journal of Hymenoptera Research* **12**(**1**):102-124.

Kristensen, N.P., Hilton, D.J., Kallies, A., Milla, L., Rota, J., Wahlberg, N., Wilcox, S.A., Glatz, R.V., Young, D.A., Cocking, G., Edwards, T., Gibbs, G.W. and Halsey, M. (2015). 'A new extant family of primitive moths from Kangaroo Island, Australia, and its significance for understanding early Lepidoptera evolution.' *Systematic Entomology* **40**:5-16.

Lawrence, J.F. and Slipinski, A. (2013). '*Globorentonium*, a new genus of rentoniine Trogossitidae (Coleoptera: Cleroidea) from Australia and Brazil.' Zootaxa **3710(3)**: 257-270.

Lawrence, J.F., Slipinski, A., Jäger, O. and Pütz, A. (2013). 'The Australian Byrrhinae (Coleoptera: Byrrhidae) with descriptions of new genera and species.' *Zootaxa* **3745(3):** 301-329.

Lord, N.P. and McHugh, J.V. (2013). 'A taxonomic revision of the genus *Deretaphus* Newman, 1842 (Coleoptera: Cucujoidea: Bothrideridae).' The Coleopterists Society Monograph **12:**1-107.

Moeseneder, C.H., Hutchinson, P.M. and Lambkin, C.L. (2014). 'Revision of the genus *Metallesthes* Kraatz and description of *Metallesthes anneliesae*, a new species of Cetoniinae (Coleoptera: Scarabaeidea) from Queensland and New South Wales, Australia.' *Zootaxa* **3881(4):** 301-327.

Orr, A.G., Kalkman, V.J. and Richards, S.J. (2013). 'Four new species of *Palaiargia* Förster, 1903 (Odonata: Platycnemididae) from New Guinea with revised distribution records for the genus.' *International Journal of Odonatology* **16(4)**: 309-325.

Orr, A.G. and Richards, S.J. (2014). '*Paliargia traunae* sp. n. (Odonata: Platycnemididae), a new Idiocnemidine damselfly from Papua New Guinea.' Australian Entomologist **41(3)**:153-159.

Simonsen, T.J. (2015). '*Elhamma* Walker (Lepidoptera: Hepialidae) revisited: adult morphology, assessment of recently proposed synonyms and desriptions of two species.' *Zootaxa* **3955(3):** 301-328.

Theischinger, G. and Richards, S.J. (2014). 'A new species of *Lanthanusa* Ris from northeastern Papua New Guinea (Odonata: Libellulidae).' *International Journal of Odonatology*. http://dx.doi.org/10.1080/13887890.2014.937776.

Theischinger, G. and Richards, S.J. (2014). 'The species of *Microtrigonia* Förster (Anisoptera, Libellulidae).' *International Dragonfly Fund* – *Report* **76**:1-12.

Theischinger, G. and Richards, S.J. (2014). '*Palaeosynthemis nigrostigma* sp. nov., a new dragonfly from Papua New Guinea (Anisoptera: Synthemistidae).' International Dragonfly Fund – Report **71:**1-7.

#### 5.6.5 Information Services:

Ngaanyatjarra Pitjantjatjara Yunkunytjatjara Women's Council *Manual on Parenting*. Cecil John Hackett Collection (AA122).

McCallum, V. (2015) *William Henry Pettett MLC : Pioneer and Politician of early Victoria.* Tindale Collection (AA338).

McLean, I. (2015) *Rattling Spears – A History of Indigenous Australian Art*. Published by Reaktion Books, London. Ramsey Smith Collection (AA263) and image from museum publication "*Dreamings the Art of Aboriginal Australia*".

Scrimgeour, A. and Haskins, F. "Strike, Strike, we Strike": Aboriginal domestic workers and the Pilbura Strike, Western Australia. 1946-1952 (AA346).

#### 5.6.6 Mammal Section:

Cheng-Hsui, T., Fordyce, R.E. (2015). Ancestor – decendant relationships in eveolution: origin of the extant pygmy right whale, *Caperea marginata*. *Biology Letters* **11**: 20140875.

McDowell, M.C., Haouchar, D., Aplin, K.P., Bunce, M., Baynes, A., **Pridaeux, G.J.** (2015). Morphological and molecular evidence supports specific recognition of the recently extinct *Bettongia anhydra* (Marsulialia: Macropodidae). *Journal of Mammalogy* **96**(2): 287-296.

Cheng-Hsui, T., Fordyce, R.E. (2014). Juvenile morphology in baleen whale phylogeny. *Naturwissenschaften* **101(9)**: 765-769.

# 5.6.7 Marine Invertebrates:

O'Hara, T.D. and Harding, C. (2014). A new species of *Sigsbeia* and additional records of ophiuroids from the Great Australian Bight. *Memoirs of Museum Victoria* **72**: 131-140.

Mindi M. Summers, Iin Inayat Al-Hakim and Greg W. Rouse (2014). Turbo-taxonomy: 21 new species of Myzostomida (Annelida). *Zootaxa* **3873** (**4**): 301-344.

Mindi M. Summers and Greg W. Rouse (2014). Phylogeny of Myzostomida (Annelida) and their relationships with echinoderms hosts. *BMC Evolutionary Biology* **14:** 170.

L. E. Hughes and J. K. Lowry (2015). Two new species of Lysianassidae Dana, 1849 from Australia: *Riwo zeidleri* and *Socarnella delectabilis* (Crustacea: Peracarida: Amphipoda). Zotaxa **3936 (1)**: 082-092.

M. B. Martin, N. L. Bruce and B. F. Nowak (2015). Review of the fish-parasitic genus *Ceratothoa* Dana, 1852 (Crustacea: Isopoda: Cymothoidae) from Australia, with description of two new species. *Zootaxa* **3963** (3): 251-294.

## 5.6.8 Parasitology:

**Barton, D.** and **Smales, L.R.** (2015). Acanthocephalan cystacanths from flatfish (Order Pleuronectiformes) in tropical Australian waters. *Journal of Parasitology*, online March 2015 dx.doi.org/10.1645/15-731.1

**Beveridge, I.**, Bray, R. A., Cribb, T. H. and Justine, J.-L. (2014). Diversity of trypanorhyncha metacestodes in teleost fishes from coral reefs off eastern Australia and New Caledonia. *Parasite* **21:** Article No. 60.

**Beveridge, I.** and Gasser, R. B. (2014). Diversity in parasitic helminths of Australasian marsupials and monotremes: a molecular perspective. *International Journal for Parasitology* **44**: 859–864.

**Beveridge, I.**, Hanh, N., Nyein, S., Cheng, C., Koehler, A., Shuttleworth, M. E., et al. (2014). Description of *Cloacina atthis* sp. nov. from the stomach of the euro (*Macropus robustus*) (Marsupialia: Macropodidae) from Western Australia based on morphological and molecular criteria. *Parasitology Research* **113**: 3485-3493.

**Beveridge, I.,** Jabbar, A. and Shuttleworth, M. (2014). New species of *Cloacina* von linstow, 1898 (Nematoda: Strongylida) from the swamp wallaby, *Wallabia bicolor* (Desmarest, 1804) (Marsupialia). *Transactions of the Royal Society of South Australia* **138**: 237–248.

Jabbar, A., **Beveridge, I**. and Bryant, M. S. (2015). Morphological and molecular observations on the status of *Crassicauda magna*, a parasite of the subcutaneous tissues of the pygmy sperm whale, with a re-evaluation of the systematic relationships of the genus *Crassicauda*. *Parasitology Research* **114**: 835–841.

Moravec, F. and Diggles, B. K. (2014). Two new gonad-infecting species of *Philometra* Costa, 1845 (Nematoda: Philometridae) from marine fishes off the northern coast of Australia. *Systematic Parasitology* **89**: 33-44.

Mulder, E. and **Smales, L.R**. (2015). The endoparasites of *Liasis fuscus* (Serpentes: Boidae) from the Adelaide River floodplain, Northern Territory, Australia. *Australian Journal of Zoology*, online March 2015, 10 pp. dx.doi.org/10.1071/ZO14088.

Purwaningsih, E. and **Smales, L. R**. (2014). New species of *Dorcopsinema* and *Paralabiostrongylus* (Nematoda: Chabertiidae: Cloacininae) from Indonesia, with a key to species of *Dorcopsinema*. *Zootaxa* **3857**: 591-598.

Schaeffner, B. C. and **Beveridge**, I. (2014). The trypanorhyncha cestode fauna of Borneo. *Zootaxa* **3900**: 21-49.

Shamsi, S. (2014). Recent advances in our knowledge of Australian anisakid nematodes. *International Journal for Parasitology. Parasites and Wildlife* **3**: 178-187.

Shuttleworth, M. A., **Beveridge**, I., Chilton, N. B., Koehler, A. V., Gasser, R. B. and Jabbar, A. (2014). Genetic variation within and among species of *Cloacina* (Strongyloidea: Cloacinine) from the swamp wallaby, *Wallabia bicolor* (Marsupialia: Macropodidae). *Infection Genetics and Evolution* **28**: 261-269.

**Smales, L. R**., Aydogdu, A. and Emre, Y. (2015). Acanthocephala from seven species of freshwater fish (Cyprinidae and Cyprinodontidae) from Turkey with the description of a new species of *Paralongicollum* (Pomphorhynchidae). *Comparative Parasitology* **82**: 94-100.

# 5.7 OTHER EVENTS AND ASSOCIATIONS

# 5.7.1 Ms Alice Beale:

Committee member Museums Australia South Australia Branch.

WOMADelaide South Australian Museum Explorers' tent 3 days of workshops.

# 5.7.2 Professor Steven Cooper:

Continued as Editor of the Australian Journal of Zoology and Associate Editor, BMC Evolutionary Biology.

Member of grant assessment panel for Research grants submitted to Australian Biological Resources Study in December, 2014, and for Bush Blitz taxonomy grants in February, 2015.

Member of the organising committee for the Genetics Society of Australasia conference to be held in Adelaide in July, 2015.

Ordinary Member of the Society of Australian Systematic Biologists council, 2014-2015.

Participant in workshop held in Perth, 2-3December 14 on subterranean fauna with representatives from Perth-based environmental consultancy companies.

Acting Head of Biological Sciences from November 2014 to February 2015.

Graduation of PhD students, Seyedmohammad Javidkar, Rebecca Kittel and Alejandro Velasco Castrillon at the University of Adelaide.

# 5.7.3 Dr Andrea Crowther:

Continued sole supervision of three volunteers: Alun Thomas, Amanda Kenley Chung, and Jacob Maher.

Committee member of South Australian branch of AMSA (Australian Marine Sciences Association).

Provided input and specimens for Waterhouse exhibition.

Collaborate with Alexis Tindall to photograph dry specimens for ALA online transcription project.

14 August 2014: after-hours tour of Marine Invertebrate collections for NGO Reef Watch.

14-20 September 2014: APY Lands Roadshow. Developed and delivered an educational program to school children in remote communities about marine animals and their homes.

5 and 19 January 2015: Outreach for Iridescence exhibition in museum foyer.

13 and 20 January 2015: Hosted work experience high school student.

21-22 April 2015: Artist (Grace Lee) visiting collection for JamFactory collaboration/Shimmer exhibition.

30 April 2015: Museum representative (along with Rachael King) at AMSA meet and greet for marine labs in Adelaide.

11 May 2015: Back-of-house tour for Flinders University class.

19 May 2015: Outreach at 'Pint of Science' night.

9 June 2015: Artists (Vicki West and Maree Clark) visiting collection for JamFactory collaboration/Shimmer exhibition.

23 & 25 June 2015: Artist (Seb Arrow) visiting collection for JamFactory collaboration/Shimmer exhibition.

27 June 2015: Outreach for Cirque du Soleil family day at museum.

## 5.7.4 Ms Jan Forrest:

## Talks

2 July 2014, Vermont Church.

6 November 2014, Trees for Life Noarlunga.

25 November 2014, Mitcham Friendship Club.

2 March 2015, Marion Probus Club.

2 March 2015, Lockleys Ladies Probus Club.

5 May 2015, Aldgate Probus Club.

12 May 2015, Adelaide Evening Branch National Seniors.

19 May 2015, Victor Harbor APS.

## Display

23 May 2015, NRM Gawler Resource Centre.

## 5.7.5 Dr Diego Garcia-Bellido:

Elected as Secretary of the Association of Australasian Palaeontologists (AAP), for the term 2014–2016.

Three radio interviews (ABC Radio Adelaide on 13 and 30 October 2014. and Radio Adelaide on 5 April 15).

# 5.7.6 Professor Jim Gehling:

28-29 June 14: *Weekend Australian Magazine*: p 1 'Early life preserved in rock garden of Eden', and p 2: 'Fossils: world listing in site'.

28-29 June 14: *Weekend Australian Magazine*: by Graham Lloyd and Vanessa Hunter: 'Wild Australia: Ediacara's ancient fossil secrets; Rock Stars' pp. 12-15.

07 June 14: Awarded 'unsung Hero of SA Science' at the Science Communicators Awards night.

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#### 4 September 2014: ABC Science

[http://www.abc.net.au/science/articles/2014/09/04/4079443.htm] commentary for article by Anna Salleh: 'Weird mushroom-shaped animal discovered'.

16 November 14 (12-4PM): *The Other Diggers' Picnic* (Waterhouse Club) funding event for Ediacara and Cambrian fossils and living legless lizard species names; acknowledgement of Diggers in WWI and II. Address on a newly discovered Ediacaran arthropod as the answer to 'Darwin's dilemma'.

17 December 14: Geoscience Summer School — workshop on the Ediacaran and Cambrain fossils of South Australia for secondary school students from around Australia: Minerals and Energy SA and South Australian Museum Ediacara Gallery.

## 5.7.7 Dr Lisa Gershwin:

18-23 August 14: Science Week at Tasmanian Museum and Art Gallery (TMAG), Hobart: manning of a booth on pelagic invertebrates, including an aquarium of live jellyfish and plankton under microscopes.

23 November 14: Open Day, Woodbridge Marine Discovery Centre, Tasmania; a facility run by the Department of Education for the purpose of exposing school children to the wonders of marine life.

12 December 14: Investigator Welcome to Port Celebrations, CSIRO Hobart. Event for the public, with an exhibition on jellyfish and marine invertebrates, including a naming competition for a new species.

16-23 April 15: R/V Investigator, National Marine Facility, Tasman Sea voyage INV2015-E03. Discovered 4 new species, 20+ new records, and 240 species photographed for field guide.

Member of the Medical Advisory Panel, St John Ambulance Australia, a national first aid training and provider organization.

Host, Window on Science, a fortnightly science show on 4BC Radio Brisbane.

Eight popular science articles on various aspects of natural history: jellyfish, bioluminescence, worms, spiders, auroras, for example, *Scientriffic, CSIRO Blog, CNN, Tasmanian Geographic*, and others.

Media: More than 200 national and international interviews this year, including three documentaries (BBC (2), SBS (1)).

## 5.7.8 Dr Mark Hutchinson:

17 November, 2014: Live phone interview with ABC (Port Pirie) - Goannas.

13 and 15 January 2015: Public information sessions – Science Unlocked – Iridescence, South Australian Museum foyer.

17 February, 2015. Live phone interview with ABC – Brown Snakes.

## 5.7.9 Information Services – Archives:

#### **Archive Requests**

Archive collections are used for exhibitions, websites, displays, publications, interpretive signage, private and academic research, publications, education and training, Native Title, Indigenous Land Use Agreements, posters and conference material.

200 requests were processed, 29 of which were for Native Title.

#### Aboriginal Family & Community History Requests

160 requests.

#### **Aboriginal Community Consultations & Repatriations of Archive copies**

Repatriation of archive copies took place with Point Pearce families in Adelaide on 26 September and at Point Pearce on 30 September 2014.

Repatriation of archive copies took place with Cherbourg families in Cherbourg on 8 December and in Brisbane on 10 December 2015.

Repatriation of archive copies to Wunambal Gaambera Aboriginal Corporation WA on 2 June 2015.

Repatriation of archive copies Yankunytjatjara Digitisation Project on 4 August 2014.

Repatriation of archive copies Boandik Language Reclamation Project SA on 10 February 2015.

Repatriation of archive copies DPC and DIA WA Tindale Index Project ongoing.

Repatriation of archive copies to Karungkarni Art and Culture WA (Gurindji, Bilinarra Mudburra and Malngin) on 9 April 2015.

#### Exhibitions

Art Gallery of New South Wales exhibition *The Photograph in Australia*. March to June 2015. Captain Sweet Collection (AA492) and Johann Kruger Collection (AA566).

History Trust of South Australia Travelling Exhibition *Call of Country* was developed for Reconciliation SA and Register of Aboriginal Veterans of South Australia. Doreen Kartinyeri's Collection (AA659) and Marjorie Angas Collection (AA676).

*Encounters exhibition* hosted by the National Museum of Australia and the British Museum. Foelsche Collection (AA96) and Charles Woolley Collection (AA380).

Hugh Snelgrove's Black ANZAC Mural at Meningie. Doreen Kartinyeri's Collection (AA659).

Stirling East Primary School Anniversary of 150 years of Education, display. Aborigines Friends Association Collection (AA1).

Historic sign for Uluru Camel Farm. Dr Willaim Delano Walker Collection (AA357).

University of South Australia Lewis Obrien Room (AA346).

#### **Documentaries**

John Moore's feature documentary *Putuparri The Last of the Rainmakers*, directed by Nicole Marr. Board of Anthropological Research Collection (AA346).

Luke Barrowcliffe's education resource *Kids on Country* for students in southern Queensland. Tindale Collection (AA338).

Joyleen Thomas Documentary Uncle Syd Strangway SAMA 1083 AARD Collection.

Edorado Crismani NITV Documentary Point Pearce to Paris SAMA 1047 Kevin O'Loughlion and SAMA 1083 AARD Collection.

#### **UNESCO** Australian Memory of the World Register

UNESCO Australian Memory of the World Committee has approved the inscription of the Board for Anthropological Research collection held in the South Australian Museum and University of Adelaide onto the UNESCO Australian Memory of the World Register.

#### Grants

A grant was secured from the Milton Foundation to work with Aboriginal young offenders. The aim is to improve self-esteem, motivate and give a sense of identity to decrease risk-taking behavior. In the last financial year 40 young people have attended the family and community history workshops.

With Dr Keryn Walshe, Professor Peter Sutton, Isabel O'Loughlin and Lesley Williams, *Using Genetic Markers to Recover Australia's Lost History*, an Australian Research Council Linkage Project grant was secured. Research Partners include University of Adelaide, La Trobe University, University of Melbourne, Australia National University, Australian Genome Research Facility, Harvard Medical School, Wellcome Trust Sanger Institute, National Geographic Society and Bioplatforms Australia Ltd.

#### **Archive Collections processed**

Our honorary George Smith and a number of volunteers have been processing the backlog. Eleven collections have been completed and uploaded onto the web.

## 5.7.10 Information Services – Library

#### **Library Requests**

16 external requests were processed for South Australian Museum library books and journals.

117 internal requests were processed for South Australian Museum books and journals.

#### **Inter Library Loans**

42 loans were processed to researchers in United Kingdom, New Zealand, United States of America, Switzerland, Victoria, New South Wales, Northern Territory and Tasmania.

10 loans were processed for South Australian Museum staff.

#### **Retro conversion**

859 books and journals have been added to the library database which were formerly only in the card catalogue. This involves reconciling the card catalogue description with the book or journal.

#### Donations

11 donors have contributed their collections to the South Australian Museum Library.

# 5.7.11 Information Services – Ara Irititja

Text for A<u>r</u>a Irititja in Mathe, B. (2014). 'Whose Pictures are these? Indigenous Community Access and Control of Digital Archives', *International Council of Archives Conference*, Oct 11-15, 2014, Girona, Spain.

Dallwitz, J., Inyika, J., Lowish, S. and Rive, L. (2014). 'Our art, our way: Towards an Anangu art history with Ara Irititja', Art Centres Art Histories Symposium, Sept 4, 2014, Alice Springs.

16 August 14: A<u>r</u>a Irititja presentation to Wankangurru Yaruyandi Aboriginal Corporation, Port Augusta.

27-28 October 14: Ara Irititja presentation and workshops at NT Library, Darwin.

## **Images and Research Requests**

12 requests for community permission for external publications were processed.

9 requests for images and family history for funeral and memorial brochures were processed.

5 requests for images and research for external documentary videos were processed.

# Donations

75 donors contributed their material and digital collections to the Ara Irititja collection.

# 5.7.12 Dr Philip Jones:

28 July 2014, Radio Adelaide interview re Aboriginal art and artefacts, Yuendumu.

11 September 2014, 'N.T. News' interview re his book, Behind the Doors. An art history from Yuendumu. (2014).

17 December 2014, ABC television interview re his book and research, Australia's Muslim Cameleers.

18 December 2014, BBC radio interview re his book & research, Australia's Muslim Cameleers.

3 March 2015, 'N.T. News'. Interview with Kieren Finnane, re Yuendumu Men's Museum.

# 5.7.13 Dr Catherine Kemper:

20 August 2014, Interviewed by ABC radio regarding whales and dolphins.

12 November 2015, Interviewed by Michael Smyth (ABC radio) regarding a stranded pygmy right whale on Kangaroo Island.

10-15 December 2014, Interviewed many times about the sperm whale strandings at Ardrossan.

6 January 2015, Article in Whyalla News regarding dead dolphins.

12 January 2015, Interviewed by Ann Jones (ABC Sydney) regarding a program on Port Pirie.

13 January 2015, Interviewed by Sonja Feldhoff ABC radio.

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26 January 2015, Interviewed by Spence Denny (*ABC Radio*) regarding the beaked whale stranding on Yorke Peninsula.

31 January 2015, Interviewed by *Channel* 7 regarding the beaked whale stranding near Port Lincoln.

2 February 2015, Interviewed by *ABC radio (Port Lincoln)* and *Port Lincoln Times* regarding the whale stranding near Port Lincoln.

25 March 2015, Interviewed by Peter Caldicott (*Channel 9*) regarding the stranded beaked whales.

27 April 2015, Interviewed by Judith Peppard (*Radio Adelaide*) about the Omura's whale recently found in Western Australia. Story went online and international.

5 May 2015, Interviewed by Michael Smyth (*ABC Radio*) regarding the sperm whales at Ardrossan in December.

21 June 2015, Public lecture at Pine Point, Yorke Peninsula, organized by the Friends of Gulf St Vincent.

23 June 2015, Public lecture at Kingscote, KI on whale strandings and research.

24 June 2015, Presented to DEWNR workshop on strandings, Kingscote, KI.

# 5.7.14 Dr Catherine Kemper, Mr David Stemmer, Ms Ikuko Tomo (and many other helpers/volunteers)

10 December 2014–12 December 2014: Attended a mass sperm whale stranding near Ardrossan, Yorke Peninsula. One whole animal and the lower jaws with teeth of the other six animals that perished during the event were collected. This was the first sperm whale mass stranding in South Australia during recent history. The Museum collaborated with Yorke Peninsula Council, the Department of Environment, Water and Natural Resources and Adelaide University during the event. The event was also covered in the media (most/all regular news channels and various print media).

## 5.7.15 Dr Rachael King:

Went on maternity leave for 8 months.

Reviewed a PhD thesis for the University of Sydney: "*The evolution and diversity of deep sea asellote isopod crustaceans*" by Luana Lins, Supervisors: Nathan Lo, Simon Ho, & George Wilson (Australian Museum).

## 5.7.16 Dr Peter Kruse:

Voting member of Cambrian Stage Subdivision Working Group of International Union of Geological Sciences since 2004.

# 5.7.17 Dr Mike Lee:

Dr Lee's papers on miniaturisation of dinosaurs leading to birds (Lee et al., *Science* 345: 562-566) and early evolution of advanced reproduction in fossil fish (Long et al., *Nature* 517: 196-199) received very wide international media coverage; e.g. *Time, BBC, Voice of America*. The fish research also formed the basis of an exhibition in the Museum lobby in late 2014.

# 5.7.18 Mr Graham Medlin:

**2014:** Contributed to two species conservation summaries in "The Action Plan for Australian Mammals 2012", edited by Woinarski, Burbridge and Harrison, and published 2014. Broad-cheeked Hopping-mouse *Notomys robustus* p. 620 and Long-eared Mouse *Pseudomys auritus* p. 621.

**2014:** On 8 July 2014, supplied 24 Barn Owl pellets to teacher Paul Beltrame from Kildare College for Year 9 students to participate in the Oliphant Science Awards. Their project was titled: "Using the Barn Owl as a Biological Control for Mouse Plagues". On 11 August, Five students and a Lab Technician, together with their supervising teacher, visited the Subfossil Lab at the South Australian Museum to ask for help in identification of the species they had dissected from the pellets.

**2014:** On 5 July 2014, analysed 20 Nankeen Kestrel pellets supplied by Nerissa Haby (DEWNR) from the Nantawarrina Pastoral Lease to determine the prey species.

**2014:** Contributed to the "Bioblitz" (Citizen Science) at Oaklands Wetlands on 29 August 2014 run by Dr Philip Roetman from UniSA. Contributed two sessions, one on the identification of tracks, scats and other traces using the Anabat machine to identify bat calls in the field.

**2014:** Assisted PhD student Giles Hamm with the identification of small mammals from an archaeological site (Warratyi Rock Shelter) in the northern Flinders Ranges during August 2014.

**2014:** In September 2015, identified small mammals from the stomach contents of foxes for Nature Foundation SA. The foxes were caught on Witchelina and Hiltaba Stations in SA, both now run as conservation reserves.

**2014:** With help of volunteers Marjorie Jones and Jessie Treloar ran two owl pellet dissection workshops as part of the school holiday program on Tuesday, 30 September and Wednesday, 1 October, 2014.

**2014:** Attended the Southern Yorke Peninsula Conservation Action Plan group meeting in Port Victoria from 14–15 October, 2014 to talk on the potential to re-introduce regionally extinct mammals previously found in subfossil deposits on southern Yorke Peninsula.

**2014:** On Friday 14 November, gave a talk to the Friends of Woorabinda Bushland Reserve at Stirling, discussing the type of work done in the Subfossil Laboratory with the help of volunteers. The extinct species recently found in old owl roosts by Museum volunteer John Light, in caves in the River Murray cliffs near Mypolonga, were discussed in some detail.

**2015:** On 9 February 2015, hosted 3 separate groups of third year Palaeontology students from Flinders University and explained the kind of work we do in the Subfossil Laboratory.

2015: On 11 March 2015 attended an Animal Ethics Course at Bonython Hall from.

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**2015:** On 25 March attended a presentation by Honours Student, Jessie Treloar, currently working in the Subfossil Laboratory at the Museum.

From July 2014–June 2015 pellets from Nankeen Kestrels, Black-shouldered Kites, Letterwinged Kites, Wedge-tailed Eagles, Barn Owls and Grass Owls were dissected by volunteers to determine the prey species. In additions loose bone accumulations from caves in the Nullarbor Plain were also analysed. Most pellets were from old or recent Barn Owl roosts and hundreds have been dissected.

Site where the pellets or loose bone remains were collected include:

Raptor and Warbla Caves on the Nullarbor Plain, Coondamabo Station near Glendambo, the Bubbler Mound Spring SE of William Creek, Peculiar Knob near Prominent Hill, Mt Crispe in the Witjira National Park, Kalkali Creek, Hinkley Range SA, an old abandoned mining camp near Innamincka, Billa Kalina Station north of Woomera, Kachumba Waterhole on Cordillo Downs Station and Nilpena Station in the Flinders Ranges.

(Overseas from April 27 to June 3, 2015).

Committee Member of the Sir Hubert Wilkins Interest Group, coordinated and introduced the Inaugural Meeting with talk by Jeff Maynard at the Armoury 28 January 2015.

Committee member (and editor of quarterly newsletter) of Friends of Mawson Inc. and was MC for their event on 8 November in the Mawson Centre for the launch of a new polar publication, as well as 15 July AGM talk by Dr Herbert Dartnall in the Royal Society Rooms.

## 5.7.19 Dr Peter Shaughnessy:

Member of the writing group producing a chapter on marine mammals for the United Nation's World Ocean Assessment with colleagues from USA, Canada and Mexico: Smith, T. D., Bannister, J., Bracho, L., Hines, E., Reeves, R. and **Shaughnessy**, P. Marine Mammals, In 'World Oceans Assessment', Chapter 37.

Member of the Marine Mammal Working Group of the Southern and Eastern Scalefish and Shark Fishery coordinated by the Australian Fishery Management Authority (AFMA).

## 5.7.20 Dr Kate Sparks:

28 Aug 2014: Bioblitz at Marion wetlands. Working with UniSA staff and members of the public to promote local biodiversity and museum collections.

14-20 Sep 2014: APY Lands Out of the Glass Case Roadshow. Delivery of educational program on terrestrial invertebrates.

6-9 Mar 2015: WOMAD. Delivery of an outreach educational experience based around microscopic terrestrial invertebrates to children and adults as part of the Museum's Explorer Tent.

# 5.7.21 Mr David Stemmer:

Treasurer of the Australian Mammal Society: Managing the Society's finances, providing regular reports and advice to the council, presenting the Society's finances to members at the AGM.

# 5.7.22 Dr Mark Stevens:

Presentations in the 'kids zone' at the March, 2015 Womadelaide Festival.

# 5.7.23 Ms Alexis Tindall:

Citizen Science workshop, South Australian Museum Broken Hill Roadshow, June 16 to 20, 2015.

Member, Faunal Collections Informatics Group, a sub-committee of the Council of Heads of Australian Faunal Collections (June to October 2014).

Chair, Faunal Collections Informatics Group, a sub-committee of the Council of Heads of Australian Faunal Collections (from October 2014).

Cyanotyping workshop, South Australian Museum APY Lands Roadshow, September 14 to 19, 2014.

Member: North Terrace Precinct Volunteer Coordinators' Network.

# 5.7.24 Dr Keryn Walshe:

Participation in 'Coast Australia', filmed by SBS Foxtel, segment on Kangaroo Island, South Australia.

# 5.7.25 Associate Professor Ian Whittington:

Co-investigator on a successful ARC Discovery grant for 2015-2017 (\$344,000 to study the evolutionary origins of sexual parasitism in carp gudgeons).

Undertook 17 on-demand genetic identifications on fruit fly maggots, as supplied by Biosecurity SA (part of PIRSA).

Associate Professor Ian Whittington unfortunately passed away October 2014. Since that time, 2 papers have been published with a new genus and new species and named after Ian in recognition of his expertise on Monogenea and dedication to the field of Parasitology. The publications and names are as follows:

Santos Neto, J. F., Rodridgues, A. R. O. and Domingues, M. V. (2015). Proposal of *Whittingtonocotyle* n. gen. (Dactylogyroidea: Dactylogyridae), with the description of two new species from the gills of *Hoplerythrinus unitaeniatus* (Characiformes: Erythrinidae) in Brazil. *Zootaxa* **3937**: 191–200.

- Whittingtonocotyle caetei n. sp
- Whittingtonocotyle jeju n. sp

Kearn, G., Karlsbakk, E., Evans-Gowing, R. and Gerasev, P. (2015). A new species of *Entobdella* Blainville in Lamarck, 1818 (Monogenea: Capsalidae: Entobdellinae) from the Greenland halibut, *Reinhardtius hippoglossoides. Acta Parasitologica* **60**: 361–370.

• Entobdella whittingtoni sp. nov

# 6 STAFF LIST

# 6.1 DIRECTORATE

Director B. Oldman, BA (Hons) (Commenced 2 January 2014)

Associate Director S. Clark, BSc(Hons), BSoc Ad, M Pol Man (Re-assigned to Department of State Development – January 2015)

Executive Officer K. Ross, Adv. Dip Management

Directorate Administrative Assistant JA. Jackson (started December 2014)

Administration Officer N. Mladenovic

# 6.2 CORPORATE SERVICES

Manager Corporate Services B. Macdonald

Operations Manager B. Collett, Dip Man

Museum Services Officers R. Simon IT Network and Systems Manager P. Carter, CertIV IT CS; CertIV IT NM; Dip IT N

Helpdesk Officer T. Cheng, As Dip Bus (Computer Programming)

# 6.3 **DEVELOPMENT**

Head of Development J. Parsons, BA (Hons), MA (Museum Studies)

Senior Manager, Individual Giving G. Elron (commenced September 2014, resigned June 2015)

Development Officer P Pearson (commenced August 2014)

Volunteer & Intern Coordinator M. Filsell

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6.4 VISITOR EXPERIENCE	Development and Design Manager
	D. Kerr, B Ed (Hons), BA
Manager, Visitor Experience	
R. Forrest, BSc(Hons), Grad. Dip. ScComm, PhD.	Senior Exhibition Designer
Sceomin, ThD.	B. Chandler, BAVA, BAFT
Venue Hire and Event Manager	
A. Ferrari	Senior Designer
	C. Midson, BA
Supervisor Information Centre	2D Design Managar
M. Gemmell	3D Design Manager
	J. Bain
Information Officers	Museum Services Officer
L. Builth, Dip Nat Res Management	G. Parnell
J. Smith, BSc (Hons)	G. I amen
	Multimedia Supervisor
	T. Peters, BA Fine Art
6.5 PUBLIC ENGAGEMENT	
Head of Public Engagement	Public Programs Coordinator – Marketing
K. Nitschke, B.Sc, Grad. Dip. Ecology and	A. Hua, BA (Journalism), MA (Marketing)
Management, Grad. Cert. Prof Comm	(resigned November 2014)
Public Programs Coordinator – Executive	Manager, Communications & Marketing
E. Thomson, BSc	A. Murphy, BA (Hons), Grad Dip Applied
	Sc (Cultural Heritage Management), RVisComm (Craphia Dasign) MA
6.5.1 Galleries and Exhibitions	BVisComm (Graphic Design), MA (Communication Management)
Manager, Temporary Exhibitions & Special	(started December 2014)
Projects	
T. Gilchrist, BA, Grad Dip Comm (PR)	Manager of Community Engagement
	L. Underwood, BT, B Edu
Public Programs Coordinator – Exhibitions	(resigned January 2015)
A. Guy, BA Aboriginal Studies	S. Morris, Dip T
(resigned February 2015)	(Transferred to another agency October 2014)

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Manager, Community Programs L. Torr, BVA (Hons) (started December 2014)

Education Officers K. Hogan, BEd, (DECD Secondment)

Education Administration Officer C. Pietrantonio (resigned May 2015)

Community Engagement Officer L. Bloomfield

Public Programs Coordinator - Programs K. Tucker

# 6.6 RESEARCH & COLLECTIONS

#### 6.6.1 Administration

Head Research & Collections M. Hutchinson, BSc (Hons), PhD

Manager Science Administration L. Strefford

Senior Administrative Officer D. Churches

Head of Collections R. Morris, BA (Hons), M Soc Sci (Resigned July 2014) Atlas of Living Australia Digitisation Project, Manager Volunteer Digitisation

A. Tindall, BA (Hons), Grad Dip Arts (Museums & Collections)

Entomology Stores Project Project Coordinator L. Chenoweth, BSc (Hons), PhD Project Digitisation Officer K. Maguire, BA (Hons), Grad Dip (Information Management)

#### 6.6.2 Anthropology and Humanities

Senior Researcher Australian Ethnology P. Jones, LLB, BA (Hons), PhD

Senior Researcher Foreign Ethnology B. Craig, BA (Hons), Dip Ed, MA (Hons),

PhD

Researcher, Archaeology K. Walshe, PhD Casual staff: P. Blacksmith (end date 30/6/15) E. Taylor (end date 30/6/15) Q. Agius (end date 30/6/15) K. Marshall (end date 30/6/15)

Senior Collection Manager Anthropology

A. Beale, BArch (Hons), Grad Cert (Museum Studies)

Collection Manager, Foreign Ethnology

E. Adams, BSc (Hons), MA (Museum & Curatorial Studies)

A. Hudson (nee Rose), BA, Grad Dip Mus St, M A

Assistant Collection Manager, Anthropology

- T. Collier (part time until 27/6/15)
- S. Loveband (until 27/6/15)

Collection Manager, History of Science and Polar Collections

M. Pharaoh, BA (Hons), MA, Grad Dip Information Services (Archives)

#### 6.6.3 Earth Sciences

Head of Earth Sciences

A. Pring, BSc (Hons), PhD, ScD, FMSA, F Min Soc (retired September 2014)

Senior Researcher, Palaeontology M. Lee, BSc (Hons), PhD

J. Gehling, BSc (Hons), MSc, PhD

Senior Collection Manager B. McHenry, BSc (Hons), MSc

Collection Manager M. Binnie, BEd (Geology), PhD Research Assistants/Scientists Z. Jing, PhD P. Elliott, Phd D. Brautigan, Phd PhD Students: K. Li A. Altree-Williams E. MacMillan

6.6.4 Biological SciencesHead of Biological SciencesS. Donnellan, BSc (Hons), PhD

## 6.6.4.1 ENTOMOLOGY

Senior Researcher Terrestrial Invertebrates M. Stevens, PhD

Casual staff:

A. Velasco (end date 30/5/15)

Collection Manager Terrestrial Invertebrates P. Hudson, PhD

Assistant Collection Manager Entomology C. Lee

**Databasing Project** 

M. Moore (end date 30/6/15)

J. Skarbnik-Lopez, BSc (Hons) (end date 30/6/15)

I. Van Streepen, BSc (Environmental Science) (end date 30/6/15)

J. Wood (end date 30/6/15)

6.6.4.2 ARACHNOLOGY

Collection Manager Arachnology K. Sparks, BSc (Hons), PhD (Part time)

# 6.6.4.3 PARASITOLOGY

Principal Researcher/Head of Biological Sciences, Parasitology

I. Whittington, BSc (Hons), PhD (deceased 26/10/14)

Collection Manager Parasitology L. Chisholm, BSc, MSc, PhD

# 6.6.4.4 MARINE INVERTEBRATES

Researcher Aquatic Invertebrates R. King, BSc (Hons), PhD

Collection Manager Marine Invertebrates T. Laperousaz, BSc (Hons)

Collection Manager Marine Invertebrates

A. Crowther, BSc (Hons), Grad Dip Env Mgt, PhD

Assistant Collection Manager Marine Invertebrates

C. Lee

# 6.6.4.5 HERPETOLOGY

Senior Researcher Herpetology M. Hutchinson, BSc (Hons), PhD

Collection Manager Herpetology B. Kovach

# 6.6.4.6 ICHTHYOLOGY

Collection Manager Ichthyology R. Foster

# 6.6.4.7 MAMMALOGY

Senior Researcher Mammology C. Kemper, BSc, PhD

Collection Manager Mammalogy D. Stemmer, BSc

Researcher Mammalogy T. Segawa (finished December 2014)

Researcher Mammalogy I. Tomo, BVSc, MVSc, DVM (Japan) (finished June 2015)

Researcher T. Reardon, Cert Sc Tech

Bolivar Casual StaffJ. Light (finished June 2015)M. Buss (finished June 2015)T. Segawa (finished June 2015)

# 6.6.4.8 ORNITHOLOGY

Senior Collection Manager Ornithology P. Horton, BSc (Hons), PhD

Collection Manager Ornithology M. Penck, BSc (Hons)

#### 6.6.4.9 EVOLUTIONARY BIOLOGY

Head of Evolutionary Biology/Chief Researcher Evolutionary Biology S. Donnellan, BSc (Hons), PhD

Principal Researcher, Evolutionary Biology S. Cooper, BSc (Hons), PhD

Senior Researcher Evolutionary Biology M. Adams, BSc (Hons)

Researcher Evolutionary Biology T. Bertozzi, BSc (Hons), PhD T. Reardon, Cert Sc Tech L. Wheaton Mike Gardner, BSc (Hons), PhD

Principal Technical Officer K. Saint, BSc

Technical Officer R. Foster

Casual Staff

- J. Mohammad (finished June 2015)
- T. Bradford(finished June 2015)
- A. McLean (finished June 2015)
- M. DeBoo (finished June 2015)
- A. Manuel (finished June 2015)
- A. Gardner (finished June 2015)

6.6.5 Information Services (Archives)

Manager Information Services F. Zilio, B A, MIMS

Library Services Officer J. Evans

Archives Collection Manager L. Gardam (Part-time)

Family and Community History ConsultantA. Abdullah-HighfoldA. Guy, BA Aboriginal Studies (Part-time)

Archive Access and Community Outreach Officer S. Agius

Manager Ara Iritja Project J. Dallwitz

## 6.6.5.1 HONORARY RESEARCH ASSOCIATES

K. Armstrong, BSc, PhD (Biological Sciences)

A. Austin, BSc, PhD (Biological Sciences)

S. Barker, PhD (Biological Sciences)

D. Barton, PhD (Biological Sciences)

I. Beveridge, BSc, PhD (Biological Sciences)

A. Black, PhD (Biological Sciences)

V. Boll, PhD (Anthropology)

S. Burnell, BSc (Biological Sciences)

J. Brugger, PhD (Earth Sciences)

A. Cooper, PhD (Biological Sciences)

B. Cooper, BSc, PhD (Earth Sciences)

C. Daniels, BSc, PhD (Biological Sciences)

P. Elliott, BSc (Hons), PhD (Earth Sciences)

J. Forrest, OA (Biological Sciences) (Honorary Associate)

A. Fyfe, BA, PhD (Anthropology)

D. Garcia-Bellido, BSc, MSc, PhD (Earth Sciences)

M. G. Gardner, BSc, PhD (Biological

Sciences)

L. Gershwin, BSc, PhD (Biological

Sciences)

B. Gillanders, BSc, PhD, (Biological Sciences)

R. V. Glatz, BSc, PhD (Biological

## Sciences)

P. Greenslade (Biological Sciences)

W. Haak, PhD (Biological Sciences)

M. Halt, BSc (Hons) (Biological Sciences)

M. Hammer, BSc (Hons), PhD (Biological Sciences)

J. Jago, BSc (Hons), PhD, F Aus IMM (Earth Sciences) G. R. Johnston (Biological Sciences) B. Kear, PhD (Earth Sciences) P. Kolesik, PhD (Biological Sciences) P. Kruse, BSc, PhD (Earth Sciences) R. J. Lavigne, PhD (Biological Sciences) R. Leijs, MSc, PhD (Biological Sciences) J. Long, PhD (Biological Sciences) A. J. McArthur, OAM, BE (Biological Sciences) C. Madden, BSc, M Env St (Biological Sciences) E. Matthews, BA, PhD (Biological Sciences) G. Medlin, BSc, Dip T (Biological Sciences) M. O'Donoghue, B Ed, Grad Dip Rel Ed, M Ed (Foreign Ethnology) N. Pledge, BSc (Hons), MSc (Earth Sciences) G. Prideaux, BSc (Hons), PhD (Earth Sciences) A. Pring, BSc, PhD, ScD (Earch Sciences) L. Reed, BA (Hons), PhD (Earth Sciences) D. Rice (Earth Sciences) (Honorary Associate) S. Richards, PhD (Biological Sciences) G. Rouse, PhD (Biological Sciences) T. Schultze-Westrum, PhD (Foreign Ethnology) P. Shaughnessy, BSc (Hons), MSc, PhD (Biological Sciences) S. Shepherd, BA, LIB, M Env St, PhD

(Biological Sciences)

G. Smith (Information Services)

M. Snow, BSc, PhD (Earth Sciences)

P. Sutton, BA, MA, PhD (Anthropology)

I. Tomo, BVSc, MVSc, DVM (Japan) (Biological Sciences)

A. Tomkins, PhD, BAppSc (Earth Sciences)

M. Tyler, MSc, DSc. AO, (Biological Sciences)

L. Warner, BSc, PhD (Biological Sciences)

C. Watts, BSc (Hons), PhD (Biological

Sciences)

P. Weinstein, BSc, PhD (Biological Sciences)

R Wells, BSc (Hons), PhD (Earth

Sciences)

C. Wilson-Roberts (Mawson Collection) (Honorary Associate)

W. Zeidler, BSc (Hons), MSc, PhD (Biological Sciences)

# 7 HUMAN RESOURCES

The South Australian Museum, through the Department of State Development, reported to the Office for the Public Sector its 2014-15 Workforce Information Collection. Further human resources information is available from the Commissioner for Public Employment via <a href="http://publicsector.sa.gov.au/">http://publicsector.sa.gov.au/</a>

## Full-Time Equivalents

Agency	Arts SA – South Australian Museum
Persons	85
FTE's	72

# 7.1 WORKFORCE DIVERSITY

#### Gender Diversity

Gender	% Persons	% FTE
Female	47.1	52.6
Male	52.9	47.4

## Number of employees by age bracket, by gender

Age bracket	Male	Female	Total	% of total
15–19	0	0	0	0
20–24	1	0	1	1.18
25–29	3	5	8	9.41
30–34	2	8	10	11.76
35–39	5	5	10	11.76
40–44	3	4	7	8.24
45–49	6	6	12	14.12
50–54	5	2	7	8.24
55–59	3	7	10	11.76
60–64	7	6	13	15.29
65+	5	2	7	8.24
Total	40	45	85	100

# 7.1.1 Workplace Adaptation

## Total number of employees with disabilities (according to Commonwealth DDA definition)

Male	Female	Total	% of agency
0	0	0	0

#### Types of disability (where specified)

51 5 5 (	1 0 /			
Disability	Male	Female	Total	% of agency
Disability requiring workplace adaptation	0	0	1	0
Physical	0	0	0	0
Intellectual	0	0	0	0
Sensory	0	0	0	0
Psychological/psychiatric	0	0	0	0

# 7.1.2 Executives

#### Number of executives by status in current position, gender and classification

Classification	Or	ngoing		'erm nured		erm enured	(i	ther inc. sual)				Total	
	М	F	М	F	М	F	М	F	М	% of total	F	% of total	Total
Gender													
SAES1					1				1	100			1
Total					1				1	100			1

# 7.2 LEAVE MANAGEMENT

	-			
Leave type	2011-12	2012-13	2013-14	2014-15
Sick leave taken	0.9	5.5	6.1	7.1
Family carer's leave taken	0.3	0.6	1.2	1.0
Miscellaneous special leave	1.2	0.2	1.0	1.5

#### Total average days of leave taken per Full time equilvalent

# 7.3 Performance Development

# Documented review of individual performance management

Documented review of individual performance management	Total
% reviewed within the last 12 months	0
% review older than 12 months	63.53
% not reviewed	36.47

# 7.4 LEADERSHIP AND MANAGEMENT DEVELOPMENT

Training and development	Total cost	% of total salary expenditure
Total training and development expenditure	\$4 667.00	0.06
Total Leadership and Management Development	\$0.00	0.00

## Leadership and management training expenditure

# 8 WORK HEALTH SAFETY AND INJURY MANAGEMENT (WHS&IM)

# 8.1 Key Achievements

Key achievements during the reporting period 2014-15 are as follows:

Provision of training for workers, volunteers, students and HRAs including first aid, four wheel drive and manual handling

Ongoing review of the Museum WHS management system to align with the Work Health and Safety Act 2012.

Purchase of safety equipment to support the workers operating in remote and regional locations.

Purchase of manual handling and ergonomic equipment.

# 8.2 DISABILITY ACCESS AND INCLUSION PLANS

The Museum continued to enhance its services to improve the experiences of all visitors. Disability access services and special needs groups were frequently welcomed at the Museum throughout the year, with many community groups being able to participate in the Museum's public programs. During the year the Museum conducted these specific programs in support of enabling disability access.

- In May, the Museum presented a series of free 'Making Music' workshops for 3-5 year olds as part of the Come Out festival. This included a dedicated, accessible session for junior primary students from the South Australian School for Vision Impaired. Students from the school were also able to participate in a tactile handling session of artefacts relating to the Museum's Australian Aboriginal Cultures Gallery.
- Also in May, the Museum held its first audio described exhibition tour for blind and vision impaired visitors. The tour focused on the Punuku Tjukurpa exhibition and included audio description and tactile handling opportunities.
- The Punuku Tjukurpa exhibition also offered blind and vision impaired visitors the opportunity to access selected audio descriptions of artworks in the exhibition via an MP3 device. These devices were available from the Museum information desk and meant that audio description was available every single day of the exhibition, as well as at the live AD tour.

# 8.3 EQUAL EMPLOYMENT OPPORTUNITY PROGRAMS

The Museum continued to function as an Equal Employment Opportunity employer. During the period the Museum remained strongly committed to employing on merit based selection processes which does not discriminate against race, gender, sexuality, marital status, age, pregnancy or disability for all positions within the organisation. The Museum's position to operate with such processes was heavily supported by the Board, Executive Management and workers.

# 8.4 WHS REPORTING

## Prosecutions, notices and corrective actions taken

Number of notifiable incidents pursuant to WHS Act Part 3 Section 35	1
Number of serious injuries pursuant to WHS Act Part 3 Section 36	0
Number of provisional improvement notices served pursuant to WHS Act Sections 90, 191 and 195	0
Number of prosecutions pursuant to WHS Act Part 2 Division 5	0
Number of enforceable undertakings pursuant to WHS Act Part 11	0

# Agency gross workers compensation expenditure for 2014–15 compared with 2013–14

• • • •	-	•	-	
EXPENDITURE	2014–15	2013-14	Variation	Change
EAPENDITURE	(\$)	(\$)		(%)
Income maintenance	0.00	0.00	0.00	0.00
Lump sum settlements redemptions – sect.42	0.00	0.00	0.00	0.00
Lump sum settlements permanent disability – sect.43	0.00	0.00	0.00	0.00
Medical/hospital costs combined	2 645.27	788.75	+1 856.52	+235.37
Other	0.00	0.00	0.00	0.00
Total claims expenditure	2 645.27	788.75	+1 856.52	+235.37

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	Base: 2009–10	Performance 12 months as at 30.06.2015			Final target
	Numbers or %	Actual	Notional target	Variation	Numbers or %
1. Workplace fatalities	0	0	0	0	0
2. New workplace injury claims	3	1	2	-1	2
3. New workplace injury claims frequency rate	0	0	0	0	0
4. Lost time injuries frequency rate	0	0	0	0	0
5. New psychological injury frequency rate	0	0	0	0	0
6. Rehabilitation and return to work:					
6a. Early assessment within two days	66.67	100%	80%	20%	80%
6b. Early intervention within five days	0	100%	90%	0	0
6c. Days lost <= 10 days	0	0	0	0	0
7. Claim determination					
7a. Claims determined for provisional in seven calendar days	0	100%	100%	0	100%
7b. Claims determined in 10 business days	66.67	33.33%	75%	-41.67%	75%
7c. Claims still to be determined after three months	0	30.33%	3%	30.33%	3
8. Income maintenance payments for recent injuries	0	0	0	0	0
2012–13 injuries (at 24 months development)	0	0	0	0	0
2013–14 injuries (at 12 months development)	0	0	0	0	0

# Safety Targets in the Museum 2010–15 Targets Report as at 30.06.2015

# 9 OVERSEAS TRAVEL

Number of employees	Destination(s)	Reason for travel	Total cost to agency
1	London, Bangkok	Representing the museum in London at the first international mtg of Global Genome Biodiversity Network, meeting collaborators in Asia for the project Tracking the development of agricultural lifestyles in island SE Asia	\$5 962
1	Zhengzhou, Henan and Beijing, China	Attending 5th International Conference on Rodent biology and management, presenting papers.	\$0.00
1	Indonesia	Waterhouse Club trip to raise funds for the museum foundation and to showcase the museum's research and public programs capabilities to an audience of potential benefactors.	\$0.00
1	Massachusetts, USA	To take up the Peabody Museum Indigenous Australia Curatorial Fellowship he was awarded, examine the Ethnographic collections and also participate in other associated research tasks.	\$0.00
1	Fiji	Field collecting targeting Native Bees. Collaborating on fieldtrip with students and colleagues from Flinders	\$0.00
1	Europe/UK	Scientific collecting fieldtrip and collaboration trip to visit colleagues in Paris for the Collembola research project and also the British Antarctic Survey team, Cambridge England in conjunction with Mark's Antarctic Research.	\$7 613.21
1	USA	Invited to present a summary to the International Whaling Commission meeting on Bottlenose Dolphin research in South Australia	\$300.00
1	London	Meetings with The Royal Collection, Natural History Museum, British Museum, National Maritime Museum	\$2 207.00
1	China	Premier-led mission to Shandong Province in China for the 2nd Shandong-South Australia Co- operation and Development Forum	\$0.00 (covered by DSD)

# **10 FRAUD AND LEGISLATIVE COMPLIANCE**

The Museum has maintained a comprehensive system of checks and balances to control and prevent fraud, under the advice of the Auditor General's Department. During the 2014-15 period, no suspected or actual instances of fraud were detected.

#### Whistleblowers Protection Act 1993

As an entity of the South Australian Government, the Museum remained committed to supporting and encouraging staff to demonstrate integrity and conduct ethical professionalism as part of the public sector ethical standards. Reporting, as defined by the Whistleblowers Protection Act, is encouraged by the Museum should it be necessary.

For the 2014–15 reporting period there were no occasions where public interest information has been disclosed to the responsible officer.

# **11 FREEDOM OF INFORMATION STATEMENT**

## Agency structure and functions: section 9(2)(A)

The following information is contained in this Annual Report and is deemed to be consistent with the requirements of the *Freedom of Information Act 1991*:

- statement of role and objectives
- legislation responsibilities
- resources employed

Agency performance is monitored regularly. Each year specific targets and objectives are formulated and major achievements, improvements and initiatives reported.

#### Effect of agency's functions on members of the public: section 9(2)(B)

The Museum has a direct effect on the general public in two quite different ways. First, as an institution whose display galleries are open for public education and enjoyment and second through the scientific divisions whose research and information are available to other government departments as well as the public.

The impact and involvement of each division of the Museum in this process can be obtained from the achievements and initiatives section of this annual report.

#### Arrangements for public participation in policy formation: section 9(2)(C)

The board of eight members is appointed by the Governor. These appointments are from the general public and provide an avenue for public participation in policy formulation.

For any major development, such as the development of displays relating to living cultures, advisory committees are established for the period of the project to ensure that there is full and proper provision for public participation.

The Museum also maintains regular contact with Aboriginal community groups through the board-appointed Aboriginal Advisory Committee, which deals specifically with matters relating to custodianship and access to collections.

#### **Freedom of information requests**

The Museum received 2 enquiries under the Freedom of Information Act during 2014–15, both of which were managed in accordance with Freedom of Information Act guidelines.

#### Description of kinds of documents held by the agency: section 9(2)(D)

The Museum classifies all documents into the following categories:

• Board minutes

The minutes of the Museum Board meetings are numbered, approved, signed by the Chair and recorded in a board minute book. Board papers are also numbered and filed in a similar manner. The papers contain all documents and correspondence relating to each board meeting. Current minute books and papers are kept in the director's office, with older minute books and papers, dating back to 1940, stored in the Museum Archives section. Board papers and minutes up to 1940 are permanently stored in State Records.

• Dockets

The Museum continued to administer the formal document recording/registration and archiving via its docket database system. Administration staff coordinated the process of document management for each of the Museum's departments. Dockets hold all documents concerned with the day-to-day management of the Museum and are classified as in the areas of research, collection management, public programs and directorate activities.

• Policy statements

The Board has published several policy statements which are available for use by the general public. These include: *Professional and Commercial Services, Statement on Secret/Sacred Collection, Collections Policy, Policy on Human Skeletal Remains Collection, Honorary Appointments, Guidelines for the Acquisition, Operation and Management of Computers in the Museum, Access to Personal Information – policy and procedures, Procedures for Records Management. Copyright Policy and Procedures, Museum Inbound Funds Policy, Museum Budget Policy and South Australian Museum Board Investment Policy, Museum Board Risk Management Policy & Museum Child Protection Policy.* 

#### Access arrangements, procedures and points of contact: section 9(2)(E)(F)

To gain access to Museum documents, other than those identified above as available, it is necessary to apply in writing under the Freedom of Information Act to:

Contact Officer, Freedom of Information

C/- The Director

South Australian Museum

North Terrace, Adelaide 5000

# 12 INDEPENDENT AUDIT REPORT OF FINANCIAL STATEMENTS



Auditor-General's Department

Level 9 State Administration Centre 200 Victoria Square Adelaide SA 5000 DX 56208 Victoria Square Tel +618 8226 9640 Fax +618 8226 9640 Fax +618 8226 9688 ABN 53 327 061 410 audgensa@audit.sa.gov.au

## To the Chair Museum Board

As required by section 31(1)(b) of the *Public Finance and Audit Act 1987* and section 16(3) of the *South Australian Museum Act 1976*, I have audited the accompanying financial report of the Museum Board for the financial year ended 30 June 2015. The financial report comprises:

- a Statement of Comprehensive Income for the year ended 30 June 2015
- a Statement of Financial Position as at 30 June 2015
- a Statement of Changes in Equity for the year ended 30 June 2015
- a Statement of Cash Flows for the year ended 30 June 2015
- notes, comprising a summary of significant accounting policies and other explanatory information
- a Certificate from a Member, Museum Board and the Director, South Australian Museum.

## The members of the Museum Board's Responsibility for the Financial Report

The members of the Museum Board are responsible for the preparation of the financial report that gives a true and fair view in accordance with the Treasurer's Instructions promulgated under the provisions of the *Public Finance and Audit Act 1987* and Australian Accounting Standards, and for such internal control as the members of the Museum Board determine is necessary to enable the preparation of the financial report that is free from material misstatement, whether due to fraud or error.

## Auditor's Responsibility

My responsibility is to express an opinion on the financial report based on the audit. The audit was conducted in accordance with the requirements of the *Public Finance and Audit Act 1987* and Australian Auditing Standards. The auditing standards require that the auditor comply with relevant ethical requirements and that the auditor plan and perform the audit to obtain reasonable assurance about whether the financial report is free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial report. The procedures selected depend on the auditor's judgement, including the assessment of the risks of material misstatement of the financial report, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation of the financial report that gives a true and fair view in order to design audit procedures that are appropriate in the circumstances. An audit also includes evaluating the appropriateness of the accounting policies used and the reasonableness of accounting estimates made by the members of the Museum Board, as well as the overall presentation of the financial report.

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

#### Opinion

In my opinion, the financial report gives a true and fair view of the financial position of the Museum Board as at 30 June 2015, its financial performance and its cash flows for the year then ended in accordance with the Treasurer's Instructions promulgated under the provisions of the *Public Finance and Audit Act 1987* and Australian Accounting Standards.

Elvarde\_\_\_\_

Andrew Richardson Auditor-General 21 September 2015

# **Museum Board**

# **Annual Financial Statements**

for the year ended 30 June 2015

## **Museum Board**

# **Certification of the Financial Statements**

We certify that the attached general purpose financial statements for the Museum Board:

- · are in accordance with the accounts and records of the Board;
- comply with relevant Treasurer's Instructions issued under section 41 of the *Public Finance and Audit Act 1987* and relevant Australian Accounting Standards; and
- present a true and fair view of the financial position of the Museum Board as at 30 June 2015 and the results of its operations and cash flows for the financial year.

We certify that the internal controls employed by the Museum Board over its financial reporting and its preparation of the general purpose financial statements have been effective throughout the financial year.

Knar Oldmark

Mr Brian Oldman Director South Australian Museum

SUCE

Ms Noelene Buddle Member Museum Board // September 2015

# Museum Board STATEMENT OF COMPREHENSIVE INCOME for the year ended 30 June 2015

	Note	2015 \$'000	2014 \$'000
Expenses		\$ 000	\$ 000
Staff benefits	4	7 703	7 806
Supplies and services	6	4 355	4 323
Accommodation and facilities	7	2 885	2 884
Depreciation and amortisation	8	2 080	1 999
Grants		150	7
Total expenses		17 173	17 019
Income			
Grants	9	1 358	913
Fees and charges	10	503	820
Donations and bequests		428	465
Donations of heritage assets		1 437	1 434
Sponsorships	11	268	319
Interest and investment income	12	183	155
Resources received free of charge	14	534	450
Recoveries		230	270
Net gain from the disposal of non-current assets	13	247	52
Sale of goods		1 262	1 234
Other income	15	354	265
Total income		6 804	6 377
Net cost of providing services		10 369	10 642
Revenues from SA Government			
Recurrent operating grant		10 508	10 286
Capital grant		563	870
Total revenues from SA Government		11 071	11 156
Net result		702	514
Other Comprehensive Income			
Items that will not be reclassified to net result:			
Change in value of land and buildings	17	-	863
Total other comprehensive income		-	863
Total comprehensive result		702	1 377

The net result and total comprehensive result are attributable to the SA Government as owner

The above statement should be read in conjunction with the accompanying notes

#### Museum Board

# STATEMENT OF FINANCIAL POSITION

# as at 30 June 2015

	Note	2015 \$'000	2014 \$'000
Current assets			
Cash	24	4 596	3 590
Receivables	16	590	640
Inventories		106	86
Total current assets		5 292	4 316
Non-current assets			
Receivables	16	3	10
Property, plant and equipment	17	40 730	42 282
Intangible assets	18	104	94
Heritage collections	19	364 056	362 579
Investments	20	782	947
Total non-current assets		405 675	405 912
Total assets		410 967	410 228
Current liabilities			
Payables	21	764	632
Staff benefits	22	917	950
Provision	23	8	9
Total current liabilities		1 689	1 591
Non-current liabilities			
Payables	21	125	133
Staff benefits	22	1 395	1 430
Provision	23	20	38
Total non-current liabilities		1 540	1 601
Total liabilities		3 229	3 192
<b>NN N</b>		407 738	407 036
Net assets			
Net assets Equity			
		270 498	270 498
Equity			270 498 136 538

Unrecognised contractual commitments25Contingent assets and liabilities26

The above statement should be read in conjunction with the accompanying notes

#### **Museum Board**

# STATEMENT OF CHANGES IN EQUITY

# for the year ended 30 June 2015

	Revaluation surplus	Retained earnings	Total
	\$'000	\$'000	\$'000
Balance at 30 June 2013	269 635	136 024	405 659
Net result for 2013-14	-	514	514
Gain on revaluation of land and buildings	863	-	863
Total comprehensive result for 2013-14	863	514	1 377
Balance at 30 June 2014	270 498	136 538	407 036
Net result for 2014-15	-	702	702
Total comprehensive result for 2014-15	-	702	702
Balance at 30 June 2015	270 498	137 240	407 738

All changes in equity are attributable to the SA Government as owner

The above statement should be read in conjunction with the accompanying notes

# Museum Board STATEMENT OF CASH FLOWS

for the year ended 30 June 2015

for the year ended 50 bune 2015			
	Note	2015 \$'000	2014 \$'000
Cash flows from operating activities			
Cash outflows			
Staff benefits		(7 781)	(7 685)
Supplies and services		(3 975)	(6 421)
Accommodation and facilities		(2 885)	(2 884)
Grants		(150)	(7)
GST payments to the ATO		(90)	(177)
Cash used in operations		(14 881)	(17 174)
Cash inflows			<u>_</u> _
Grants		1 416	913
Fees and charges		503	1 557
Donations and bequests		428	465
Sponsorships		234	283
Interest and investment income		187	192
Recoveries		230	270
Sale of goods		1 471	1 234
Other		354	463
Cash generated from operations		4 823	5 377
Cash flows from SA Government			
Recurrent operating grant		10 508	10 286
Capital grant		563	870
Cash generated from SA Government		11 071	11 156
Net cash provided by/(used in) operating activities	24	1 013	( 641)
Cash flows from investing activities			
Cash outflows			
Purchases of heritage collections		(57)	(361)
Purchases of property, plant and equipment and intangibles		( 394)	(1 189)
Purchases of investments		(1 211)	(511)
Cash used in investing activities		(1 662)	(2 061)
Cash inflows			
Proceeds from sale of investments		1 655	536
Cash generated from investing activities		1 655	536
Net cash (used in) investing activities		(7)	(1 525)
Cash flows from financing activities			
Cash inflows			
Cash from consolidated entities		-	1 506
Cash generated from financing activities		-	1 506
Net cash provided by financing activities		-	1 506
Net increase/(decrease) in cash		1 006	( 660)
Cash at the beginning of the financial year		3 590	4 250
Cash at the end of the financial year	24	4 596	3 590

The above statement should be read in conjunction with the accompanying notes.

# **Museum Board**

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- 3 New and revised accounting standards

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# **Museum Board**

#### 1 Objectives of the Museum Board

The functions of the Museum Board (the Board), as prescribed under the South Australian Museum Act 1976, are as follows:

- to undertake the care and management of the Museum
- to manage the premises of the Board
- to carry out, or promote, research into matters of scientific and historical interest
- to accumulate and care for objects and specimens of scientific or historical interest
- to accumulate and classify data in regard to any such matters
- · to disseminate information of scientific or historical interest
- to advise the Minister on matters relating to scientific or historical research or collections
- to carry out any other functions assigned to the Board by this or any other Act or the Minister.

#### 2 Summary of significant accounting policies

#### 2.1 Statement of compliance

These financial statements have been prepared in compliance with section 23 of the *Public Finance and Audit Act 1987*.

The financial statements are general purpose financial statements. The accounts have been prepared in accordance with relevant Australian Accounting Standards (AAS) and comply with Treasurer's Instructions and Accounting Policy Statements (APS) promulgated under the provisions of the *Public Finance and Audit Act 1987*.

The Board has applied AAS that are applicable to not-for-profit entities, as the Board is a not-for-profit entity.

Except for AASB 2015-7 which the Board has early adopted, AAS and interpretations that have recently been issued or amended but are not yet effective have not been adopted by the Board for the reporting period ending 30 June 2015.

#### 2.2 Basis of preparation

The preparation of the financial statements requires:

- the use of certain accounting estimates and requires management to exercise its judgement in the process of applying the Board's accounting policies. The areas involving a higher degree of judgement or where assumptions and estimates are significant to the financial statements, are outlined in the applicable notes
- accounting policies are selected and applied in a manner which ensures that the resulting financial information satisfies the concepts of relevance and reliability, thereby ensuring that the substance of the underlying transactions or other events are reported

- compliance with APS issued pursuant to section 41 of the *Public Finance* and Audit Act 1987. In the interest of public accountability and transparency the APS require the following note disclosures, which have been included in the financial statements:
  - a) revenues, expenses, financial assets and liabilities where the counterparty/transaction is with an entity within the SA Government as at reporting date, classified according to their nature
  - b) expenses incurred as a result of engaging consultants
  - c) staff targeted voluntary separation package information
  - d) staff whose normal remuneration is equal to or greater than the base executive remuneration level (within \$10 000 bandwidths) and the aggregate of the remuneration paid or payable or otherwise made available, directly or indirectly, by the entity to those staff
  - e) Board/committee member and remuneration information, where a Board/committee member is entitled to receive income from membership other than a direct out-of-pocket reimbursement

The Board's Statement of Comprehensive Income, Statement of Financial Position and Statement of Changes in Equity have been prepared on an accrual basis and are in accordance with historical cost convention, except for certain assets that were valued in accordance with the valuation policy applicable.

The Statement of Cash Flows has been prepared on a cash basis.

The financial statements have been prepared based on a 12 month operating cycle and are presented in Australian currency.

The accounting policies set out below have been applied in preparing the financial statements for the year ended 30 June 2015 and the comparative information presented.

#### 2.3 Reporting entity

The financial statements and accompanying notes cover the Board as an individual reporting entity. It is a statutory authority of the State of South Australia, established pursuant to the South Australian Museum Act 1976.

The Board's consolidated financial statements have been prepared by combining the financial statements of the Museum Board, SA Museum Foundation Incorporated and the SA Museum Foundation Fund in accordance with AASB 10 Consolidated Financial Statements.

In forming the view that the SA Museum Foundation Incorporated and SA Museum Foundation Fund (the entities) are controlled, the Board considered its involvment with the entities and determined that its substantive rights give them the current ability to direct the major relevant activities of the entities and is exposed or has rights to variable returns from its involvement, contributing to the furtherance of the Board's objectives.

The activities of the entities are not material and therefore a full consolidated presentation has not been adopted.

Consistent accounting policies have been applied and all inter-entity balances and transactions arising within the consolidated entity have been eliminated in full. Comparative information has been updated to reflect the consolidation of these reporting entitites as at 30 June 2014.

#### 2.4 Sources of funds

The Board's principal source of funds consists of grants from the State Government. In addition, the Board also receives monies from sales, admissions, donations, bequests, sponsorships and other receipts, and uses the monies for the achievement of its objectives.

#### 2.5 Income and expenses

Income and expenses are recognised in the Board's Statement of Comprehensive Income to the extent it is probable that the flow of economic benefits to or from the Board will occur and can be reliably measured. Income and expenses have been classified according to their nature, and have not been offset unless required or permitted by a specific accounting standard, or where offsetting reflects the substance of the transaction or other event.

#### Income

Income from the sale of goods is recognised upon the delivery of goods to customers. Interest revenue is recognised on a proportional basis taking into account the interest rates applicable to the financial assets. Investment income is recognised when the Board obtains control over the funds. Income from the rendering of a service is recognised upon the delivery of the service to the customers. Government grants are recognised as income in the period in which the Board obtains control over the grants. Bequests, donations and sponsorships are recognised as an asset and income when the Board obtains control or obtains the right to receive the bequest, donation or sponsorship and the income recognition criteria are met (i.e. the amount can be reliably measured and the flow of resources is probable).

Donated heritage collections received by the Board are recognised as income in the Statement of Comprehensive Income in the year of receipt at fair value.

#### Resources received free of charge

Resources received free of charge are recorded as income and expenditure in the Statement of Comprehensive Income at their fair value.

Under an arrangement with Arts SA and Artlab Australia, divisions of the Department of State Development, Artlab Australia receives SA Government appropriation to perform conservation services on the Board's heritage collections. The value of this work performed is recognised as resources received free of charge in income (note 14) and a corresponding amount included as conservation work expenditure in supplies and services (note 6).

Under an arrangement with the Services Division of the Department of State Development, financial services and human resource services are provided free of charge to the Board. The value of these services is recognised as resources received free of charge in income (note 14) and a corresponding amount included as a business services charge in supplies and services (note 6).

#### Net gain on disposal of non-current assets

Income from the disposal of non-current assets is recognised when the control of the asset has passed to the buyer and has been determined by comparing proceeds with carrying amount. When revalued assets are sold, the revaluation surplus is transferred to retained earnings.

#### Staff benefits expense

Staff benefits expense includes all costs related to employment including wages and salaries, non-monetary benefits and leave entitlements. These are recognised when incurred.

#### 2.6 Current and non-current classification

Assets and liabilities are characterised as either current or non-current in nature. The Board has a clearly identifiable operating cycle of twelve months. Assets and liabilities that will be realised as part of the normal operating cycle have been classified as current assets or current liabilities. All other assets and liabilities are classified as non-current.

#### 2.7 Cash

Cash in the Statement of Financial Position includes cash at bank, cash on hand and short term cash deposits with fund managers.

For the purposes of the Statement of Cash Flows, cash is as defined above. Cash is measured at nominal value.

#### 2.8 Receivables

Receivables include amounts receivable from goods and services, prepayments and other accruals.

Receivables arise in the normal course of selling goods and services to other government agencies and the public. Receivables are generally settled within 30 days after the issue of an invoice or the goods/services have been provided under a contractual arrangement.

Collectability of receivables is reviewed on an ongoing basis. An allowance for doubtful debts is raised when there is objective evidence that the Board will not be able to collect the debt. Bad debts are written off when identified.

#### 2.9 Investments

Investments are brought to account at cost in accordance with Accounting Policy Framework IV *Financial Asset and Liability Framework* APS 2.1.

#### 2.10 Inventories

Inventories are measured at the lower of cost or their net realisable value. Cost of inventory is measured on the basis of the first-in, first-out method. Net realisable value is determined using the estimated sale proceeds less costs incurred in marketing, selling and distributing to customers. Inventories include stock held by the Museum cafe and shop.

#### 2.11 Non-current asset acquisition and recognition

The cost method of accounting is used for the initial recording of all acquisitions of assets. Cost is determined as the fair value of the assets given as consideration plus costs incidental to the acquisition. Assets donated during the year have been brought to account at fair value.

All non-current assets with a value of \$10,000 or greater are capitalised.

Componentisation of complex assets is only performed when the complex asset's fair value at the time of acquisition is greater than \$5 million for infrastructure assets and \$1 million for other assets.

#### 2.12 Valuation of non-current assets

All non-current assets are held at fair value and a revaluation of non-current assets or a group of assets is only performed when its fair value at the time of acquisition is greater than \$1 million and estimated useful life is greater than three years.

Land and buildings and heritage collections are re-valued every 6 years. However, if at any time management considers the carrying amount of an asset materially differs from its fair value, then the asset will be revalued regardless of when the last valuation took place. Non-current assets that are acquired between revaluations are held at cost until the next valuation, where they are revalued to fair value.

Any revaluation increment is credited to the revaluation surplus, except to the extent that it reverses a revaluation decrement of the same asset class previously recognised as an expense, in which case the increase is recognised as income.

Any revaluation decrement is recognised as an expense, except to the extent that it offsets a previous revaluation increase of the same asset class, in which case the decrease is debited directly to the revaluation surplus to the extent of the credit balance existing in the revaluation surplus for that asset class.

Upon revaluation, the accumulated depreciation has been restated proportionately with the change in gross carrying amount of the asset so that the carrying amount, after revaluation, equals its revalued amount.

Upon disposal or de-recognition, any revaluation surplus relating to that asset is transferred to retained earnings.

#### Land and buildings

Land and buildings have been valued at fair value. Valuations of land and buildings were determined as at 30 June 2014 by certified independent valuer Valcorp Australia Pty Ltd.

#### Plant and equipment

Plant and equipment, including computer equipment, has been deemed to be held at fair value on acquisition.

#### Intangible assets

An intangible asset is an identifiable non-monetary asset without physical substance. Intangible assets are measured at cost. Following initial recognition, intangible assets are carried at cost less any accumulated amortisation and any accumulated impairment losses.

The useful lives of intangible assets are assessed to be either finite or indefinite. The Board only has intangible assets with finite lives. The amortisation period and the amortisation method for intangible assets is reviewed on an annual basis.

#### Heritage collections

The Board's collections were revalued as at 30 June 2011 using the valuation methodology outlined below in accordance with fair value principles adopted under AASB 116 Property, Plant and Equipment. These valuations were undertaken by both external valuers and internal specialists.

The collections were broadly valued on the following basis:

Collection
Heritage collections
Natural history collections

Method of valuation Net market valuation Cost of recovery

Heritage collection status applies to those collections where an established market exists. The net market valuation applied has been assessed either by valuation undertakings by staff and valuers or by applying valuations determined under the Cultural Gifts Program.

Natural history collections have been valued at fair value on the basis of the cost of fieldwork, preparation and documentation to replace the material in its present condition. The most recent revaluation saw an increase in the value of each holotype from \$1,000 to \$5,000 per specimen.

Internal valuations were carried out by staff specialists in their related fields. These valuations were based on a knowledge of the particular collections, an understanding of valuation techniques and the markets that exist for the collection items. Independent external valuers were engaged to review the methodology adopted for valuation to verify the valuations applied by internal specialists via sampling techniques, and to carry out independent valuations where required.

Heritage collections deemed to have market value are Australian ethnology, foreign ethnology, malacology, butterflies, industrial history collection, mineralogy, museum library, archives/artworks and rare books.

Natural history collections valued at cost of recovery are the Australian biological tissue bank, the Australian helminthological collection, entomology, arachnology, marine invertebrates, ichthyology, herpetology, ornithology, mammalogy, palaeontology and archaeology.

The archaeology collection was valued for the first time in the 30 June 2011 valuation. Previously the collection was inaccessible due to storage limitations.

In June 2012, the archives/artwork collection was valued by Theodore Bruce Auctions Pty Ltd. Resource limitations had previously prevented the valuation of the collection.

The external valuations were carried out by the following recognised industry experts:

Collection
Foreign ethnology
Mineralogy
Malacology (marine invertebrates)
Butterflies (terrestrial invertebrates)
Mammalogy
Archives/artwork

Industry expert H Gallasch R Noble I Van Streepen L Mound R Schodde JFB Bruce Heritage collections assessed internally by staff with the necessary expertise:

Collection	Industry expert
Australian ethnology	P Jones
Foreign ethnology	B Craig

Collections deemed to be culturally sensitive, including human remains or items which are secret and sacred to Aboriginal communities have not been included within the current valuation and are deemed to be at zero valuation. These collections are human biology, secret sacred and archives.

#### 2.13 Impairment of assets

All non-current assets are tested for indications of impairment at each reporting date. Where there is an indication of impairment, the recoverable amount is estimated. The recoverable amount is determined as the higher of the asset's fair value less costs of disposal and depreciated replacement costs. An amount by which the asset's carrying amount exceeds the recoverable amount is recorded as an impairment loss.

For re-valued assets an impairment loss is offset against the revaluation surplus.

#### 2.14 Fair value measurement

AASB 13 defines fair value as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants, in the principal or most advantageous market, at the measurement date.

The Board classifies fair value measurement using the following fair value hierarchy that reflects the significance of the inputs used in making the measurements, based on the data and assumptions used in the most recent revaluation:

- Level 1 traded in active markets and is based on unadjusted quoted prices in active markets for identical assets or liabilities that the entity can access at measurement date.
- Level 2 not traded in an active market and are derived from inputs (inputs other than quoted prices included within level 1) that are observable for the asset, either directly or indirectly.
- Level 3 not traded in an active market and are derived from unobservable inputs.

#### Non-financial assets

In determining fair value, the Board has taken into account the characteristic of the asset (e.g. condition and location of the asset and any restrictions on the sale or use of the asset); and the asset's highest and best use (that is physically possible, legally permissible and financially feasible).

The Board's current use is the highest and best use of the asset unless other factors suggest an alternative use is feasible. As the Board did not identify any factors to suggest an alternative use, fair value measurement was based on current use.

The carrying amount of non-financial assets with a 'fair value at the time of acquisition that was less than \$1 million or an estimated useful life that was less than three years' are deemed to approximate fair value.

#### 2.15 Depreciation/ amortisation of non-current assets

All property, plant and equipment and intangibles, having a limited useful life, are systematically depreciated/ amortised over their useful lives in a manner that reflects the consumption of their service potential.

Assets' residual values, useful lives and depreciation/ amortisation methods are reviewed and adjusted if appropriate, on an annual basis.

Land is not depreciated.

Depreciation/amortisation is calculated on a straight line basis over the estimated useful life of the following classes of assets as follows:

Class of asset	<u>Useful life (years)</u>
Buildings and improvements	20-100
Plant and equipment :	
Exhibition	10
Other	3-25
Computer equipment	3-5
Intangibles	5-10

Exhibitions with a life of less than one year are expensed.

Heritage collections are kept under special conditions so that there is no physical deterioration and they are anticipated to have very long and indeterminate useful lives. No amount for depreciation has been recognised, as their service potential has not, in any material sense, been consumed during the reporting period.

#### 2.16 Payables

Payables include creditors, accrued expenses and staff on-costs.

Creditors and accrued expenses represent goods and services provided by other parties during the period that are unpaid at the end of the reporting period. All payables are measured at their nominal amount and are normally settled within 30 days from the date of the invoice or date the invoice is first received.

Staff on-costs include superannuation contributions and payroll tax with respect to outstanding liabilities for salaries and wages, long service leave, annual leave and skills and experience retention leave.

#### 2.17 Staff benefits

These benefits accrue for staff as a result of services provided up to the reporting date that remain unpaid. Long-term staff benefits are measured at present value and short-term benefits are measured at nominal amounts.

No provision has been made for sick leave as all sick leave is non-vesting and the average sick leave taken in future years by staff is estimated to be less than the annual entitlement of sick leave.

#### (i) Salaries, wages, annual leave and SERL

Liabilities for salaries, wages, annual leave and skills and experience retention leave have been recognised as the amount unpaid at the reporting date at remuneration rates current at reporting date. The annual leave liability and the SERL liability are expected to be payable within 12 months and are measured at the undiscounted amount expected to be paid.

#### (ii) Long service leave

The liability for long service leave is measured as the present value of expected future payments to be made in respect of services provided by staff up to the end of the reporting period using the projected unit credit method.

The estimated liability for long service leave is based on actuarial assumptions over expected future salary and wage levels, experience of staff departures and periods of service. These assumptions are based on employee data over SA Government entities. Expected future payments are discounted using market yields at the end of the reporting period on government bonds with durations that match, as closely as possible, the estimated future cash outflows.

(iii) On-costs

Staff benefit on-costs (payroll tax and superannuation) are recognised separately under payables.

(iv) Superannuation

The Board makes contributions to several State Government and externally managed superannuation schemes. These contributions are treated as an expense when they occur. There is no liability for payments to beneficiaries as they have been assumed by the respective superannuation schemes. The only liability outstanding at balance date relates to any contributions due but not yet paid to the relevant superannuation schemes. The Department of Treasury and Finance centrally recognises the superannuation liability, for the schemes operated by the State Government, in the whole-of-government financial statements.

#### 2.18 Workers compensation provision

The workers compensation provision is an actuarial estimate of the outstanding liability as at 30 June 2015 provided by a consulting actuary engaged through the Office for the Public Sector. The provision is for the estimated cost of ongoing payments to staff as required under current legislation.

#### 2.19 Leases

The Board has entered into a number of operating lease agreements for accommodation and motor vehicles where the lessors effectively retain all of the risks and benefits incidental to ownership of the items held under the operating leases. Operating lease payments are representative of the pattern of benefits derived from the leased assets and accordingly are charged to the Statement of Comprehensive Income on a straight-line basis over the lease term.

#### 2.20 Comparative information

The presentation and classification of items in the financial statements are consistent with prior periods except where specific Accounting Standards and/or Accounting Policy Statements have required a change.

Where presentation or classification of items in the financial statements have been amended, comparative figures have been adjusted to conform to changes in presentation or classification in these financial statements unless impracticable to do so.

The restated comparative amounts do not replace the original financial statements for the preceding period.

#### 2.21 Taxation

The Museum Board, the SA Museum Foundation Incorporated and SA Museum Foundation Fund are separate registered GST entities for taxation purposes.

The Museum Board is a deductible gift recipient member of the Arts SA GST Group. GST relating to the activities of the Museum Board are not recognised as a receivable/payable in the Statement of Financial Position as Arts SA is responsible for the remittance and collection of GST on behalf of the GST group.

The Board is liable for payroll tax and the emergency services levy.

The Museum Board, the SA Museum Foundation Incorporated and SA Museum Foundation Fund are not subject to income tax.

Income, expenses, assets and liabilities are recognised net of the amount of GST. The amount of GST incurred by the Board as a purchaser that is not recoverable from the Australian Taxation Office (ATO) is recognised as part of the cost of acquisition of an asset or part of an item of expense.

The net GST receivable by the SA Museum Foundation Incorporated and the SA Museum Foundation Fund is disclosed in note 16.

#### 2.22 Events after the reporting period

Adjustments are made to amounts recognised in the financial statements, where an event occurs after 30 June and before the date the financial statements are authorised for issue, where those events provide information about conditions that existed at 30 June.

Note disclosure is made about events between 30 June and the date the financial statements are authorised for issue where the events relate to a condition which arose after 30 June and which may have a material impact on the results of subsequent years.

#### 2.23 State Government funding

The financial statements are presented under the assumption of ongoing financial support being provided to the Board by the State Government.

#### 2.24 Rounding

All amounts in the financial statements and accompanying notes have been rounded to the nearest thousand dollars (\$'000).

#### 2.25 Insurance

The Board has arranged, through SAICORP, a division of the SA Government Financing Authority, to insure all major risks of the Board. The excess payable is fixed under this arrangement.

# 2.26 Unrecognised contractual commitments and contingent assets and liabilities

Commitments include operating, capital and outsourcing commitments arising from contractual or statutory sources and are disclosed at their nominal value.

Contingent assets and contingent liabilities are not recognised in the Statement of Financial Position, but are disclosed by way of a note and, if quantifiable, are measured at nominal value.

Unrecognised contractual commitments and contingencies are disclosed net of the amount of GST recoverable from, or payable to the ATO. If GST is not payable to, or recoverable from the ATO, the commitments and contingencies are disclosed on a gross basis.

#### 3 New and revised accounting standards

Except for AASB 2015-7 which the Board has early adopted, AAS and Interpretations that have recently been issued or amended but are not yet effective, have not been adopted by the Board for the period ending 30 June 2015. The Board has assessed the impact of the new and amended standards and interpretations and considers there will be no impact on the accounting policies or the financial statements of the Board.

In accordance with the new AASB 10 Consolidated Financial Statements which became effective for the first time in 2014-15, it has been determined that for the reporting period the Board had control over the SA Museum Foundation Fund and SA Museum Foundation Incorporated and hence has consolidated these entities. The Board did not have control over any additional entitites and does not have any joint arrangements within the scope of AASB 11 Joint Arrangements. Refer to note 2.3 for further information about the Board's involvement with the SA Museum Foundation and SA Museum Foundation Incorporated.

The Board will continue to review its involvement and arrangements with entities it is connected with to determine the impact of AASB 10 for future years.

### 4 Staff benefits

	2015	2014
	\$'000	\$'000
Salaries and wages	5 935	6 031
Long service leave	243	227
Annual leave	480	491
Skills and experience retention leave	31	29
Staff on-costs - superannuation	629	632
Staff on-costs - other	330	314
Board fees	18	18
Other staff related expenses	37	64
Total staff benefits	7 703	7 806

#### **Remuneration of staff**

The number of staff whose remuneration received or receivable falls within the following bands:

	2015	2014
\$141 500 to \$151 499	-	1
\$211 500 to \$221 499	1	-
Total	1	1

The table includes all staff who received remuneration equal to or greater than the base executive remuneration level during the year. The executive base level remuneration rate for 2014-15 is the same as the 2013-14 rate (ie there has been no increase in executive remuneration since 1 July 2013). Remuneration of staff reflects all costs including salaries and wages, payments in lieu of leave, superannuation contributions, fringe benefits tax and salary sacrifice benefits. The total remuneration received or receivable by these staff members for the year was \$219 000 (\$144 000).

There were no targeted voluntary seperation packages paid in 2014-15 or 2013-14.

#### 5 Remuneration of board and committee members

Members during the 2014-15 financial year were:

#### **Museum Board**

Hon Dr J Lomax-Smith AM (Chairperson) Prof D Adelson Ms J H Brown Ms N Buddle Ms H Carreker Mr P Hanlon Mr D Rathman PSM Mr A Noble (appointed 25 August 2014)

#### **Aboriginal Advisory Committee**

Mr D Rathman PSM (Chairperson) Dr L O'Donoghue AC, CBE, DSG Mr M Turner (term ended 28 August 2014) Ms E Tongerie Mr F Lampard OAM Ms S Miller The number of members whose remuneration received or receivable falls within the following bands:

	2015	2014
\$0 - \$9 999	13	17
Total number of members	13	17

Remuneration of members reflects all costs of performing board/committee member duties including sitting fees and superannuation. Total remuneration received or receivable by members was \$20 000 (\$19 000).

Amounts paid or payable to a superannuation plan for board/committee members were \$2 000 (\$1 000).

Members of the Museum Foundation Board did not receive remuneration in 2013-14 or 2014-15.

#### **Related party disclosures**

Board members or their related entities have transactions with the Board that occur within a normal customer or supplier relationship on terms and conditions no more favorable than those with which it is reasonably expected the entity would have adopted if the transactions were undertaken with any other entity at arm's length in similar circumstances.

#### 6 Supplies and services

	2015	2014
	\$'000	\$'000
Cost of goods sold	483	484
Insurance and risk	389	391
Marketing	270	305
Administration	442	394
IT	276	328
Maintenance	77	154
Artlab conservation work	362	321
Business services charge	172	129
Collections	56	88
Exhibitions	250	204
Research	313	344
Travel and accommodation	95	104
Contractors	151	267
Motor vehicle expenses	54	53
Minor equipment	78	59
Fees	163	185
Consultants	332	92
Hire, rent and equipment	39	44
Audit fees	52	79
Legal fees	4	24
OHS&W	31	24
Bad and doubtful debts	16	-
Other	250	250
Total supplies and services	4 355	4 323

#### Consultants

The number and dollar amount of consultancies paid/payable (included in the supplies and services expense shown above) fell within the following bands:

	2015 Number	2014 Number	2015 \$'000	2014 \$'000
Below \$10,000	7	4	24	6
Above \$10,000	8	4	308	86
Total	15	8	332	92
Auditor's remuneration			2015 \$'000	2014 \$'000
Audit fees paid/payable: Auditor-General's Department for the audit of Other auditors for the audit of the Mawson Co		nts	36 1	36 1
Other auditors for the audit of the SA Museum and SA Museum Foundation Fund	Foundation Inco	rporated	15	42
Total audit fees			52	79

No other services were provided to the Board by the Auditor-General's Department or the other auditors of the Mawson Collection Trust, SA Museum Foundation Incorporated and SA Museum Foundation Fund.

#### 7 Accommodation and facilities

	2015 \$'000	2014 \$'000
Accommodation	910	902
Facilities	1 043	1 088
Security	932	894
Total accommodation and facilities	2 885	2 884

#### 8 Depreciation and amortisation

	2015	2014
Depreciation	\$'000	\$'000
Buildings and improvements	1 423	1 354
Plant and equipment	632	621
Computer equipment	10	14
Total depreciation	2 065	1 989

Amortisation		
Intangibles	15	10
Total amortisation	15	10
Total depreciation and amortisation	2 080	1 999

#### 9 Grants

	2015	2014
	\$'000	\$'000
State government grants	370	337
General grants	877	513
Commonwealth grants	111	63
Total grants	1 358	913

# 10 Fees and charges

	2015	2014
	\$'000	\$'000
Admissions	236	408
Functions	115	85
Fees for service	93	287
Other	59	40
Total fees and charges	503	820

# 11 Sponsorships

	2015	2014
	\$'000	\$'000
Cash sponsorships	234	283
In-kind sponsorships	34	36
Total sponsorships	268	319

### 12 Interest and investment income

Total interest and investment income	183	155
Investment income	45	61
Interest	138	94
	\$'000	\$'000
	2015	2014

# 13 Net gain (loss) from the disposal of non-current assets

	2015	2014
S S S S S S S S S S S S S S S S S S S	\$'000	\$'000
Investments		
Proceeds from disposal	655	536
Less: Net book value of assets disposed (1	376)	( 470)
Net gain from disposal of investments	279	66
Plant and equipment		
Proceeds from disposal	-	-
Less: Net book value of assets disposed	(15)	(5)
Net loss from disposal of plant and equipment	( 15)	( 5)
Heritage assets		
Proceeds from disposal	-	-
Less: Net book value of assets disposed	(17)	(9)
Net loss from disposal of heritage assets	( 17)	(9)
Total assets		
Total proceeds from disposal	655	536
Less: Total net book value of assets disposed (1	408)	( 484)
Total net gain from disposal of assets	247	52

#### 14 Resources received free of charge

	2015	2014
	\$'000	\$'000
Business services charge	172	129
Artlab conservation work	362	321
Total resources received free of charge	534	450

#### 15 Other income

	2015	2014
	\$'000	\$'000
Lab consumable recharge	152	93
Commissions and royalties	27	50
Competition entry fees	68	34
Exhibition hire	26	14
Other	81	74
Total other income	354	265

#### 16 Receivables

	2015	2014
	\$'000	\$'000
Current		
Receivables	424	483
Less allowance for doubtful debts	( 15)	-
Prepayments	31	29
Accrued income	15	19
GST receivable	135	109
Total current receivables	590	640
Non-current		
Receivables	1	1

Receivables	1	1
Prepayments	2	9
Total non-current receivables	3	10
Total receivables	593	650

#### Interest rate and credit risk:

Receivables are raised for all goods and services provided for which payment has not been received. Receivables are normally settled within 30 days. Receivables, prepayments and accrued income are non-interest bearing. Other than recognised in the allowance for doubtful debts, it is not anticipated that counterparties will fail to discharge their obligations. The carrying amount of receivables approximates net fair value due to being receivable on demand. In addition, there is no concentration of credit risk.

a) Maturity analysis of receivables - refer Note 28

Categorisation of financial instruments and risk exposure information

b) - refer Note 28

#### Allowance for doubtful debts

The allowance for doubtful debts is recognised when there is objective evidence that a receivable is impaired. Bad and doubtful debts expense has been recognised in supplies and services in the Statement of Comprehensive Income for specific debtors and debtors assessed on a collective basis for which such evidence exists.

Movements in the allowance for doubtful debts are as follows: 2015	2014
\$'000	-•··
Carrying amount at the beginning of the period	-
Increase in allowance 16	-
Amounts written off (1)	-
Carrying amount at the end of the period 15	-
17 Property, plant and equipment	
2015	2014
\$'000	\$'000
Land, buildings and improvements	
Land at fair value 5 300	5 300
Buildings and improvements at fair value 73 036	72 962
Less: Accumulated depreciation (42 800)	(41 377)
Total land, buildings and improvements 35 536	36 885
Work in progress	
Work in progress at cost 465	56
Total work in progress 465	56
Plant and equipment	
Plant and equipment at cost (deemed fair value) 8 870	8 859
Less: Accumulated depreciation (4 148)	(3 535)
Total plant and equipment4 722	5 324
Computer equipment	
Computer equipment at cost (deemed fair value) 49	49
Less: Accumulated depreciation (42)	( 32)
Total computer equipment 7	17
Total property, plant and equipment40 730	42 282

#### Valuation of land and buildings

The valuation of land and buildings was performed by a certified independent valuer from Valcorp Australia Pty Ltd as at 30 June 2014. The valuer arrived at fair value based on recent market transactions for similar land and buildings in the area taking into account zoning and restricted use.

#### 18 Intangible assets

	2015	2014
	\$'000	\$'000
Computer software		
Computer software at cost	104	104
Less: Accumulated amortisation	( 25)	(10)
Total computer software	79	94

Work in progress

Work in progress at cost	25	-
Total work in progress	25	-
Total intangible assets	104	94

# 19 Heritage collections

	2015	2014
	\$'000	\$'000
Social/industrial history	278	278
Australian Aboriginal ethnographic	24 839	24 788
Foreign ethnology	8 470	8 462
Australian polar collection	4 808	4 808
Archives/artwork	16 839	16 735
Archaeology	69 301	69 301
Minerals	17 979	17 764
Malacology	7 752	7 686
Butterflies	41	41
Australian biological tissue bank	17 631	17 631
Australian helminthological collection	25 009	24 483
Entomology	80 145	80 145
Arachnology	11 481	11 389
Marine invertebrates	15 553	15 553
Ichthyology	5 053	4 837
Herpetology	6 520	6 488
Ornithology	12 526	12 494
Mammalogy	7 963	7 963
Palaeontology	25 470	25 335
Library	6 398	6 398
Total heritage collections	364 056	362 579

# Reconciliation of carrying amounts of heritage collections

	Balance 1 July 2014	Additions	Disposals	Balance 30 June 2015
	\$'000	\$'000	\$'000	\$'000
Social/industrial history	278	-	-	278
Australian Aboriginal ethnographic	24 788	51	-	24 839
Foreign ethnology	8 462	8	-	8 470
Australian polar collection	4 808	-	-	4 808
Archives/artwork	16 735	104	-	16 839
Archaeology	69 301	-	-	69 301
Minerals	17 764	215	-	17 979
Malacology	7 686	66	-	7 752
Butterflies	41	-	-	41
Australian biological tissue bank	17 631	-	-	17 631
Australian helminthological collection	24 483	543	(17)	25 009
Entomology	80 145	-	-	80 145
Arachnology	11 389	92	-	11 481
Marine invertebrates	15 553	-	-	15 553
Ichthyology	4 837	216	-	5 053

Carrying amount at 30 June 2015	362 579	1 494	(17) 364 056
Library	6 398	-	- 6 398
Palaeontology	25 335	135	- 25 470
Mammalogy	7 963	-	- 7 963
Ornithology	12 494	32	- 12 526
Herpetology	6 488	32	- 6 520

Reconciliation of carrying	amounts of he	ritage collect	ions	
	Balance			Balance
	1 July			30 June
	2013	Additions	Disposals	2014
	\$'000	\$'000	\$'000	\$'000
Social/industrial history	278	-	-	278
Australian aboriginal ethnographic	24 778	10	-	24 788
Foreign ethnology	8 456	6	-	8 462
Australian polar collection	4 808	-	-	4 808
Archives/artwork	16 726	9	-	16 735
Archaeology	69 305	-	(4)	69 301
Minerals	17 462	307	(5)	17 764
Malacology	7 686	-	-	7 686
Butterflies	41	-	-	41
Australian biological tissue bank	17 611	20	-	17 631
Australian helminthological collection	24 026	457	-	24 483
Entomology	79 917	228	-	80 145
Arachnology	11 026	363	-	11 389
Marine invertebrates	15 553	-	-	15 553
lchthyology	4 824	13	-	4 837
Herpetology	6 480	8	-	6 488
Ornithology	12 475	19	-	12 494
Mammalogy	7 963	-	-	7 963
Palaeontology	25 314	21	-	25 335
Library	6 398	-	-	6 398
Carrying amount at 30 June 2014	361 127	1 461	(9)	362 579

#### 20 Investments

	2015	2014
	\$'000	\$'000
Non-current		
Shares, convertible notes and other investments in companies	782	947
Total investments	782	947

The market value of investments as at 30 June 2015 is \$764 000 (\$1.208 million).

Of the three investment accounts; Museum Board, Norman B Tindale Memorial and the Mawson Collection - there are restrictions in place for both the Norman B Tindale Memorial and Mawson Collection relating to funds totalling \$489 000 (\$557 000).

#### 21 Payables

	2015	2014
Current	\$'000	\$'000
Creditors and accruals	644	510
Staff on-costs	120	122
Total current payables	764	632
Non-current		
Staff on-costs	125	133
Total non-current payables	125	133
Total payables	889	765

As a result of an actuarial assessment performed by the Department of Treasury and Finance, the percentage of the proportion of long service leave taken as leave has decreased to 37% (40%). The average factor for the calculation of employer superannuation cost on-cost has remained unchanged at 10.3%. These rates are used in the staff on-cost calculation. The financial effect of this change on staff on-costs and staff benefits expense is immaterial.

#### Interest rate and credit risk

Creditors and accruals are raised for all amounts billed but unpaid. Sundry creditors are normally settled within 30 days. Staff on-costs are settled when the respective staff benefit that they relate to is discharged. All payables are non-interest bearing. The carrying amount of payables approximates net fair value due to the amounts being payable on demand.

a) Maturity analysis of payables - refer Note 28

Categorisation of financial instruments and risk exposure information

b) - refer Note 28

#### 22 Staff benefits

\$'000	
ψ 000	\$'000
492	543
58	56
322	273
45	78
917	950
	58 322 45

Non-current		
Long service leave	1 395	1 430
Total non-current staff benefits	1 395	1 430
Total staff benefits	2 312	2 380

AASB 119 contains the calculation methodology for long service leave liability. The actuarial assessment performed by the Department of Treasury and Finance has provided a set level of liability.

AASB 119 requires the use of the yield on long term Commonwealth Government bonds as the discount rate in the measurement of the long service leave liability. The yield on long term Commonwealth Government bonds has decreased from 2014 (3.5%) to 2015 (3.0%).

This decrease in the bond yield, which is used as the rate to discount future long service leave cash flows, results in an increase in the reported long service leave liability.

The net financial effect of the changes in methodology and actuarial assumptions in the current financial year is immaterial. The impact on future periods is impracticable to estimate as the long service leave liability is calculated using a number of assumptions. A key assumption is the long-term discount rate.

The salary inflation rate remained unchanged at 4.0% for long service leave. The salary inflation rate applied to annual leave and skills and experience retention leave has decreased from 2014 4.0% to 2015 3.0%. The resulting financial effect of the change is immaterial.

#### 23 Provision

	2015 \$'000	2014 \$'000
Current		
Provision for workers compensation	8	9
Total current provision	8	9
Non-current		
Provision for workers compensation	20	38
Total non-current provision	20	38
Total provision	28	47
Reconciliation of the provision for workers compensation		
Provision at the beginning of the financial year	47	44
(Decrease)/increase in provision during the year	(19)	3
Carrying amount at the end of the period	28	47

#### 24 Cash flow reconciliation

#### **Reconciliation of cash**

For the purposes of the Statement of Cash Flows, cash includes cash on hand, cash held for investments and cash at bank. Cash as at the end of the financial year as shown in the Statement of Cash Flows is reconciled to the items in the Statement of Financial Position as follows:

	2015	2014
	\$'000	\$'000
Deposits with the Treasurer	1 615	735
Cash other	2 977	2 851
Cash on hand	4	4
Cash as recorded in the Statement of Financial Position	4 596	3 590

#### **Deposits with the Treasurer**

Deposits with the Treasurer are a combination of funds held in the "Museum Board Account", an account held with the Treasurer of South Australia pursuant to section 21 of the *Public Finance and Audit Act 1987*, and funds held in the Arts SA Operating Account. This account is held with the Treasurer of South Australia pursuant to section 8 of the *Public Finance and Audit Act 1987*. There are stipulated restrictions on the use of the Zimmerman Bequest component of the cash funds available \$107 000 (\$103 000) and the Bonython Bequest component of the cash funds available \$21 000 (\$21 000).

#### Cash other

Cash other is term deposits, cash held for investments with fund managers and cash held by the SA Museum Foundation Incorporated and SA Museum Foundation Fund. There are restrictions in place for the cash accounts for Norman B Tindale Memorial and Mawson Collection \$938 000 (\$676 000).

#### Cash on hand

Cash on hand includes petty cash and floats.

#### Interest rate risk

Cash and cash equivalents are recorded at nominal value. Interest is calculated based on the average daily balances of the interest bearing funds. The interest bearing funds of the Board are held in the section 21 interest bearing account titled the "Museum Board Account" and in the accounts identified in cash other.

# Reconciliation of net cash provided by operating activities to net cost of providing services

	2015 \$'000	2014 \$'000
Net cash provided by operating activities	1 013	(641)
Less revenues from SA Government	(11 071)	(11 156)
Add/(less) non-cash items:		
Depreciation & amortisation expense	(2 080)	(1 999)
Bad and doubtful debts	(16)	-
Donations of heritage collections	1 437	1 434
Net gain on disposal of non-current assets	247	52
Net assets transferred in on consolidation	-	830
Accounting policy changes on consolidation	-	( 293)
Changes in assets and liabilities		
(Decrease) in receivables	( 42)	(667)
Increase/(decrease) in inventories	20	(6)
Decrease in payables	36	1 938
Decrease/(increase) in staff benefits	68	(132)
Decrease/(increase) in provisions	19	(2)
Net cost of providing services	(10 369)	(10 642)

#### 25 Unrecognised contractual commitments

#### **Operating lease commitments**

Commitments under non-cancellable operating leases at the reporting date not recognised as liabilities in the financial statements, are payable as follows:

	2015	2014
	\$'000	\$'000
Within one year	29	17
Later than one year but not longer than five years	29	28
Total operating lease commitments	58	45

The operating lease commitments comprise non-cancellable motor vehicle leases, with rental payable monthly in arrears. No contingent rental provisions exist within the lease agreements and no options exist to renew the leases at the end of their terms.

#### **Remuneration commitments**

Commitments for the payment of salaries and other remuneration under employment contracts in existence at the reporting date but not recognised as liabilities are payable as follows:

	2015	2014
	\$'000	\$'000
Within one year	265	205
Later than one year but not longer than five years	396	512
Total remuneration commitments	661	717

Amounts disclosed include commitments arising from executive and other service contracts. The Board does not offer remuneration contracts greater than five years.

#### Other commitments

	2015	2014
	\$'000	\$'000
Within one year	1 155	1 004
Later than one year but not longer than five years	702	212
Total other commitments	1 857	1 216

The Board's other commitments are for agreements for security and cleaning.

Contingency provisions within the contracts require the minimum contract payments to be increased by variable operating costs and wage rises. Options exist to renew the contracts at the end of their terms.

#### 26 Contingent assets and liabilities

The Board is not aware of any contingent assets or liabilities as at 30 June 2015.

#### 27 Events after balance date

There are no known events after balance date that affect these financial statements in a material manner.

#### 28 Financial instruments/financial risk management

#### 28.1 Financial risk management

Risk management is managed by the Board's corporate services section and Board risk management policies are in accordance with the *Risk Management Policy Statement* issued by the Premier and Treasurer and the principles established in the Australian Standard *Risk Management Principles and Guidelines.* 

The Board is exposed to financial risk - liquidity risk, credit risk and market risk. There have been no changes in risk exposure since the last reporting period.

#### Table 28.2 Categorisation of financial instruments

Details of the significant accounting policies and methods adopted including the criteria for recognition, the basis of measurement, and the basis on which income and expenses are recognised with respect to each class of financial asset and financial liability are disclosed in note 2 *Summary of significant accounting policies.* 

Category of financial asset	Statement of	Note	2015	
and financial liability	Financial Position line item		Carrying amount	Fair value
			\$'000	\$'000
Financial assets				
Cash and cash equivalents	Cash	24	4 596	4 596
Investments	Investments	20	782	764
Loans and receivables	Receivables (1) (2)	16	410	410
Financial liabilities				
Financial liabilities at cost	Payables <sup>(1)</sup>	21	608	608

Category of financial asset	Statement of	Note	2014	
and financial liability	Financial Position line item		Carrying amount	Fair value
			\$'000	\$'000
Financial assets				
Cash and cash equivalents	Cash	24	3 590	3 590
Investments	Investments	20	947	1 208
Loans and receivables	Receivables (1) (2)	16	484	484
Financial liabilities				
Financial liabilities at cost	Payables (1)	21	475	475

<sup>(1)</sup> Receivable and payable amounts disclosed here exclude amounts relating to statutory receivables and payables. In government, certain rights to receive or pay cash may not be contractual and therefore in these situations, the requirements will not apply. Where rights or obligations have their source in legislation such as levy receivables/payables, tax equivalents, commonwealth tax, audit payables etc they would be excluded from the disclosure. The standard defines contract as enforceable by law. All amounts recorded are carried at cost (not materially different from amortised cost).

<sup>(2)</sup> Receivables amount disclosed here excludes prepayments. Prepayments are presented in note 16 as trade and other receivables in accordance with paragraph 78(b) of AASB 101. However, prepayments are not financial assets as defined in AASB 132 as the future economic benefit of these assets is the receipt of goods and services rather than the right to receive cash or another financial asset.

#### **Credit risk**

Credit risk arises when there is the possibility of the Board's debtors defaulting on their contractual obligations resulting in financial loss to the Board. The Board measures credit risk on a fair value basis and monitors risk on a regular basis.

The carrying amount of financial assets as detailed in table 28.2 represents the Board's maximum exposure to credit risk.

The Board has minimal concentration of credit risk. The Board has policies and procedures in place to ensure that transactions occur with customers with appropriate credit history. The Board does not engage in high risk hedging for its financial assets.

Allowances for impairment of financial assets are calculated on past experience and current and expected changes in client credit rating. Currently the Board does not hold any collateral as security to any of its financial assets. There is no evidence to indicate that the financial assets are impaired.

Financial assets item	Overdue for < 30 days			Total
	\$'000	\$'000	\$'000	\$'000
2015				
Not impaired Receivables	10	40	68	118
2014				
Not impaired Receivables	99	21	364	484

Table 28.3 Ageing analysis of financial assets

#### Table 28.4 Maturity analysis of financial assets and liabilities

The following table discloses the ageing of financial assets past due:

The following table discloses the maturity analysis of financial assets and financial liabilities:

		Contractual maturities			
	Carrying amount	< 1 year		> 5	
			1-5 years	years	
	\$'000	\$'000	\$'000	\$'000	
2015					
Financial assets					
Cash	4 596	4 596	-	-	
Receivables	410	410	-	-	
Investments	782	-	-	782	
Total financial assets	5 788	5 006	-	782	
Financial liabilities					
Payables	608	608	-	-	
Total financial liabilities	608	608	-	-	

2014				
Financial assets				
Cash	3 590	3 590	-	-
Receivables	484	484	-	-
Investments	947	-	-	947
Total financial assets	5 021	4 074	-	947
Financial liabilities				
Payables	475	475	-	-
Total financial liabilities	475	475	-	-

#### 29 Fair value measurement

The Board categorises non-financial assets measured at fair value into a hierarchy based on the level of inputs used in measurement.

Fair value measurements recognised in the Statement of Financial Position are categorised into the following levels as at 30 June 2015. The Board has no valuations categorised into level 1.

#### Fair value measurements at 30 June 2015

Recurring fair value measurements	Level 2 \$'000	Level 3 \$'000	2015 \$'000
Land (note 17)	250	5 050	5 300
Buildings & improvements (note 17)	1 203	29 033	30 236
Plant & equipment (note 17)	-	4 722	4 722
Computer equipment (note 17)	-	7	7
Heritage collections (note 19)	-	364 056	364 056
Total recurring fair value measurements	1 453	402 868	404 321

#### Fair value measurements at 30 June 2014

Recurring fair value measurements	Level 2	Level 3	2014
	\$'000	\$'000	\$'000
Land (note 17)	250	5 050	5 300
Buildings & improvements (note 17)	1 154	30 431	31 585
Plant & equipment (note 17)	-	5 324	5 324
Computer equipment (note 17)	-	17	17
Heritage collections (note 19)	-	362 579	362 579
Total recurring fair value measurements	1 404	403 401	404 805

There were no transfers of assets between level 1 and 2 fair value hierarchy levels in 2015. The Board's policy is to recognise transfers into and out of fair value hierarchy levels as at the end of the reporting period.

#### Valuation techniques and inputs

Valuation techniques used to derive level 2 and 3 fair values are at notes 2,17 and below. There were no changes in valuation techniques during 2015.

Land with restricted use is classified within input Level 3

Buildings specialised are classified as input Level 3

Heritage buildings - Market buying price has been estimated by the written-down replacement cost of a modern equivalent or reproduced comparable asset, not the replacement cost of an existing asset on a like with like materials basis.

The following table is a reconciliation of fair value measurements using significant unobservable inputs (level 3)

Reconciliation of Level 3 recurring f	air value measurements at 30 June 2015
---------------------------------------	--

	Land \$'000	Buildings & improv. \$'000	Plant & equip. \$'000	Computer equipment \$'000	Heritage assets \$'000	Total \$'000
Opening balance at 1 July 2014	5 050	30 431	5 324	17	362 579	403 401
Acquisitions	-	-	54	-	57	111
Donated assets	-	-	-	-	1 437	1 437
Transfers between asset classes	-	-	14	-	-	14
Disposals	-	-	(15)	-	(17)	(32)
Subtotal	5 050	30 431	5 377	17	364 056	404 931
Total gains/(losses) for the period recognised in net result						
Depreciation	-	(1 398)	(632)	(10)	-	(2 040)
Other	-	-	(23)	-	-	(23)
Subtotal	-	(1 398)	( 655)	( 10)	-	(2 063)
Closing balance at 30 June 2015	5 050	29 033	4 722	7	364 056	402 868

Reconciliation of Level 3 recurring fair value measurements at 30 June 2014

	Land \$'000	Buildings & improv. \$'000	Plant & equip. \$'000	Computer equipment \$'000	Heritage assets \$'000	Total \$'000
Opening balance at 1 July 2013	4 600	30 621	4 479	31	361 127	400 858
Acquisitions	-	-	93	-	27	120
Donated assets	-	-	-	-	1 434	1 434
Transfers between asset classes	-	743	1 387	-	-	2 130
Disposals	-	-	(5)	-	(9)	(14)
Subtotal	4 600	31 364	5 954	31	362 579	404 528
Total gains/(losses) for the period recognised in net result						
Depreciation	-	(1 346)	(621)	(14)	-	(1 981)
Other	-	-	(9)	-	-	(9)
Subtotal	-	(1 346)	( 630)	( 14)	-	(1 990)
Total gains/(losses) for the period recognised in other comprehensive income						
Revaluation increment	450	413	-	-	-	863
Subtotal	450	413	-	-	-	863
Closing balance at 30 June 2014	5 050	30 431	5 324	17	362 579	403 401

#### 30 Transactions with SA Government

The following table discloses revenues, expenses, financial assets and liabilities where the counterparty/transaction is with an entity within the SA Government as at the reporting date, classified according to their nature.

	Note	SA Government 2015 \$'000	Non-SA Government 2015 \$'000	Total 2015 \$'000
Expenses				
Staff benefits expenses	4	330	7 373	7 703
Supplies and services	6			
Cost of goods sold		-	483	483
Insurance and risk management		387	2	389
Marketing		2	268	270
Administration		-	442	442
IT services and communications		86	190	276
Maintenance		4	73	77
Artlab conservation work		362	-	362
Business services charge		172	-	172
Collections		11	45	56
Exhibitions		6	244	250
Research		3	310	313
Travel and accommodation		-	95	95
Contractors		-	151	151
Motor vehicle expenses		42	12	54
Minor equipment		2	76	78
Fees		-	163	163
Consultants		-	332	332
Hire, rent and equipment		-	39	39
Audit fees		36	16	52
Legal fees		4	-	4
OHS&W		-	31	31
Doubtful debts expense		-	16	16
Other		21	229	250
Accommodation and facilities	7			
Accommodation		509	401	910
Facilities		649	394	1 043
Security		-	932	932
Total Expenses		2 626	12 317	14 943
Income				
Sponsorships	11			
Cash sponsorships		-	234	234
In-kind sponsorships		-	34	234 34
Grants	9	-		7
State government grants	Ŭ	370	-	370
General grants		570	877	877
Commonwealth grants		-	111	111
Johnnonwealth grants		-	111	

Fees and charges	10			
Admissions		-	236	236
Functions		6	109	115
Fees for service		5	88	93
Other		3	56	59
Interest and investment income	12			
Interest		42	96	138
Investments		-	45	45
Resources received free of charge	14			
Business services charge		172	-	172
Artlab conservation work		362	-	362
Other income	15			
Lab consumable recharge		-	152	152
Commissions and royalties		-	27	27
Competition entry fees		-	68	68
Exhibition hire		-	26	26
Other		-	81	81
Sale of goods		-	1 262	1 262
Total Income		960	3 502	4 462
Financial Assets				
Receivables	16			
Receivables		3	422	425
Less allowance for doubtful debts		-	(15)	( 15)
Prepayments		-	33	33
Accrued income		4	11	15
GST receivable		-	135	135
Total Financial Assets		7	586	593
Financial Liabilities				
Payables	21			
Creditors and accruals		36	608	644
Staff on-costs		120	125	245
Total Financial Liabilities		156	733	889

	Note	SA Government 2014 \$'000	Non-SA Government 2014 \$'000	Total 2014 \$'000
Expenses				
Staff benefits expenses	4	314	7 492	7 806
Supplies and services	6			
Cost of goods sold		-	484	484
Insurance and risk management		386	5	391
Marketing		7	298	305
Administration		-	394	394
IT services and communications		83	245	328
Maintenance		6	148	154
Artlab conservation work		321	-	321
Business services charge		129	-	129
Collections		37	51	88
Exhibitions		7	197	204
Research		5	339	344

Travel and accommodation		-	104	104
Contractors		-	267	267
Motor vehicle expenses		12	41	53
Minor equipment		-	59	59
Fees		-	185	185
Consultants		-	92	92
Hire, rent and equipment		-	44	44
Audit fees		36	43	79
Legal fees		24	-	24
OHS&W		1	23	24
Other		8	242	250
Accommodation and facilities	7			
Accommodation		483	419	902
Facilities		634	454	1 088
Security		1	893	894
Total Expenses		2 494	12 519	15 013
Income				
Sponsorships	11			
Cash sponsorships		23	260	283
In-kind sponsorships		20	200 36	36
Grants	9	-	30	30
	9	007		007
State government grants		337	-	337
General grants		83	430	513
Commonwealth grants	10	-	63	63
Fees and charges	10		100	
Admissions		2	406	408
Functions		9	76	85
Fees for service		25	262	287
Other		8	32	40
Interest and investment income	12			
Interest		45	49	94
Investments		-	61	61
Resources received free of charge	14			
Business services charge		129	-	129
Artlab conservation work		321	-	321
Other income	15			
Lab consumable recharge		8	85	93
Commissions and royalties		-	50	50
Competition entry fees		-	34	34
Exhibition hire		-	14	14
Other		-	74	74
Sale of goods		-	1 234	1 234
Total Income		990	3 166	4 156
Financial Assets				
Receivables	16			
Receivables		264	220	484
Prepayments		-	38	38
Accrued income		4	15	19
GST receivable		-	109	109
Total Financial Assets		268	<b>382</b>	650
1 otal 1 manual A33613		200	302	000

Financial Liabilities				
Payables	21			
Creditors and accruals		80	430	510
Staff on-costs		120	135	255
Total Financial Liabilities		200	565	765

#### SA MUSEUM BOARD RECONCILIATION OF PROPERTY, PLANT AND EQUIPMENT AND INTANGIBLES 2014-15

	Land <b>\$'000</b>	Buildings & improvements <b>\$'000</b>	Work in progress <b>\$'000</b>	Plant & equipment <b>\$'000</b>	Computer equipment <b>\$'000</b>	Total Tangible assets \$'000	Computer software <b>\$'000</b>	Work in progress intangible assets <b>\$'000</b>	Total Intangible assets \$'000
Carrying amount at 1 July 2014	5 300	31 585	56	5 324	17	42 282	94	-	94
Additions	-	-	497	54	-	551	-	25	25
Disposals	-	-	-	( 42)	-	( 42)	-	-	-
Accumulated depreciation on disposals	-	-	-	27	-	27	-	-	-
Depreciation and amortisation	-	(1 423)	-	(632)	(10)	(2 065)	(15)	-	(15)
Transfers between asset classes	-	74	(88)	14	-	-	-	-	-
Other	-	-	( )	(23)	-	( 23)	-	-	-
Carrying amount at 30 June 2015	5 300	30 236	465	4 722	7	40 730	79	25	104

### **RECONCILIATION OF PROPERTY, PLANT AND EQUIPMENT**

2013-14

	Land <b>\$'000</b>	Buildings & improvements <b>\$'000</b>	Work in progress <b>\$'000</b>	Plant & equipment <b>\$'000</b>	Computer equipment <b>\$'000</b>	Total Tangible assets \$'000	Computer software <b>\$'000</b>	Work in progress intangible assets <b>\$'000</b>	Total Intangible assets \$'000
Carrying amount at 1 July 2013	4 850	30 621	2 356	4 479	31	42 337	-	-	-
Additions	-	-	1 051	93	-	1 144	45	-	45
Disposals	-	-	-	(238)	-	( 238)	-	-	-
Accumulated depreciation on disposals	-	-	-	233	-	233	-	-	-
Depreciation and amortisation	-	(1 354)	-	(621)	(14)	(1 989)	(10)	-	( 10)
Revaluation increment/(decrement)	450	413	-	-	-	863	-	-	-
Transfers between asset classes	-	1 905	(3 351)	1 387	-	(59)	59	-	59
Other	-	-	-	(9)	-	(9)	-	-	-
Carrying amount at 30 June 2014	5 300	31 585	56	5 324	17	42 282	94	-	94