

# ALIVE WITH WONDER Highlights of the South Australian Museum

Feeling inspired by our Wonders exhibition and keen to explore the other extraordinary objects and galleries in the South Australian Museum, but tight on time? This self-guided trail will take you to the must-see objects, the best-kept secrets and some of the wonders that can be found in our permanent galleries across the Museum.

Founded in 1856, the Museum houses collections of earth sciences, biological sciences and cultural material. It is a compendium of over 500 million years of life on earth, from the earliest fossils to contemporary Aboriginal and World cultures.

Exploring with kids? Each gallery highlight below also includes some questions to get everybody thinking and discovering.



South Australian Museum North Terrace, Adelaide samuseum.sa.gov.au



Presenting Sponsor



The South Australian Museum gratefully acknowledges the generous support of the Wonders Leadership Council



## Ground floor

### World Mammals Gallery

The World Mammals Gallery showcases taxidermied specimens from Eurasia, Tropical Asia, Africa and the Americas. The only specimen which is not a real taxidermied animal in here is Nathan the Lion, who may give you a special greeting if you're in the gallery at the right time.

#### **Miss Siam**

One of the tallest creatures in the World Mammals Gallery is the elephant, Miss Siam. Miss Siam was an Indian elephant who lived at the Adelaide Zoo from the 1880s until her death in 1904. When she died, the Museum taxidermist prepared her body for display in the Mammals Gallery. Her articulated skeleton is not on public display, but is housed in the Science Centre where the Museum scientists work.

In 1881, the Museum's taxidermist was George Beazley, a Scotsman with some different anger management techniques. He wrote long letters about how much he hated the new colony, and museum management, and those letters are in the stuffing inside animals such as the moose, alongside the more traditional hay and wood shavings.



Have a look around the Mammals gallery. Can you find an animal that's around the same size as you? Where is it from? What noises do you think it makes?

### Australian Aboriginal Cultures Gallery

The Australian Aboriginal Cultures Gallery celebrates the cultural achievements of Aboriginal people, the world's oldest continuous living culture. This object-rich experience features over 3,000 items across two floors. The pieces of material culture are from communities across the country, drawing from the Museum's extensive collections.

#### The Wyrie Swamp boomerang

This object is in an alcove behind the grinding stones, to the right as you enter on the ground floor.

In amongst the many interesting objects in the Australian Aboriginal Cultures Gallery is this particularly old artefact, preserved for years in a peat bog.

The Wyrie Swamp boomerang was excavated in 1973 by archaeologist Roger Luebbers. Many Aboriginal tools are made from organic materials, and are made to be used, reused, and to ultimately return to the earth. This one was preserved after being buried in a peat bog south of Millicent, South Australia.

This and the other two boomerangs found at the same site are the oldest known examples of boomerangs in Australia. They are around 10,000 years old. For contrast, the Pyramids at Giza in Egypt are only 4,500 years old. Aboriginal technology has endured for thousands of years and many practices continue today.

What other tools can you see around the gallery? Can you find something for carrying, something for cooking, and something for making fire?



### Australian Aboriginal Cultures Gallery

#### Yuendumu school doors

These school doors are a selection of 27 doors currently cared for by the Museum. They come from Yuendumu, on Warlpiri country in the Northern Territory. The doors were painted by five artists in the 1980s to remind the school children of cultural sites and obligations across their country.

## Mezzanine level

### Pacific Cultures Gallery

The Pacific Cultures Gallery opened in 1895 and showcases artefacts from the Pacific regions, including Papua New Guinea, the Solomon and Santa Cruz Islands, Vanuatu, New Caledonia, Fiji and New Zealand. There are around 3,000 objects on display, including costumes, games, musical instruments, weapons, utensils, masks and ornaments.

#### Kula trading necklace

This object is on the western side of the gallery, in the cases surrounding the model house. This necklace is an example of a Kula exchange, or Kula ring. This system of trading in the Trobriand Islands of Papua New Guinea involves 18 island communities, with people travelling to trade red shell disc necklaces clockwise around the ring of islands, and white shell armbands counter-clockwise. Trading Kula items can determine someone's wealth, status and inter-island relationships.

What do you learn at school, and what do you learn at home? Are there special things you learn and do with your family?

For kids

One of the stories in the doors is the honey ant dreaming. Can you guess which one it is? There are 15 countries in the Pacific islands. But there are around 25,000 islands! How would you get around? Can you see some items in the galleries that would help you travel from island to island?

## Level 3

### South Australian Biodiversity Gallery

This gallery explores South Australian fauna, from the arid desert regions in the north, through the temperate regions, to the coast and into the sea in the south. There were more than 12,000 models made specifically for this gallery, and they sit alongside historical taxidermy specimens from the Museum's mammals, birds and reptile collections.

#### Leafy Seadragon

80% of marine life found in South Australia's waters is found nowhere else on earth. Among these unique creatures is the Leafy Seadragon, the official marine emblem for this state. The male seadragon incubates the eggs, which are attached to his tail by the female.

Forkids

## First Life Gallery

#### The shale wall

In the First Life Gallery, we

have examples of some of the oldest complex organisms on Earth. The fossils in this gallery have been collected from the Flinders Ranges in South Australia. These creatures are the basis for defining a new, older period of life: the Ediacaran period, which was 635 to 542 million years ago. This is before the Cambrian explosion, when animals started to develop shells and skeletons, and it is the first new period to be added to the geological time scale in 120 years. These Ediacaran fossils represent the very oldest complex plants and animals.

In the centre of the room is a shale wall, taken from the Flinders Ranges. This would have been the sea floor during the Ediacaran period. If you look closely, you'll see many small fossils, particularly Dickinsonia and Tribrachidium.

What's in the drawers? If you find a section that you're curious about, open the drawers around it. They contain more specimens like insects, eggs and bones or even poo!

You can also get up close with a wobbegong in the ocean section.

On the floor, you'll find the names and shapes of the Ediacaran biota. One of these, *Spriggina floundersi*, is South Australia's state fossil.

Can you find the *Spriggina* on the floor, and then amongst the fossils and models on the walls?

### Australian Polar Collections Gallery

This much-loved gallery showcases the very best of the Museum's Antarctic collections highlighting expeditions, biodiversity and the myriad achievements of the explorer Sir Douglas Mawson's life.

#### Half-sledge

On one of Mawson's expeditions, both of his sledging companions died. The first, Belgrave Ninnis, plunged into a deep crevasse with a sledge and dog team. Mawson and the other survivor, Xavier Mertz, tried to return to base camp. Though they ate their remaining dogs to fend off starvation, Mertz died on the journey.

Mawson continued for a month. He used a small utility knife to cut his sledge in half so that it was easier to pull on his own. He travelled this way for 160km back to base camp.

The half-sledge can be seen in the gallery, near the ice wall.

### Minerals and Meteorites Gallery

The Minerals Gallery shows just some of the amazing objects from our minerals collection of more than 35,000 specimens.

#### **Colours of Minerals**

The chemical elements that make up a mineral are arranged in a particular structure – for example, halite (salt) grows in a cube structure. The sodium and chloride atoms of salt repeatedly arrange themselves in a cube, and therefore, salt crystals will grow in cubes that are visible to the naked eye. Salt can also form around objects, or inside rocks, like many minerals. When salt grows on the outside of an abandoned ram skull in the middle of the desert, it forms a layer around the ram's skull but that layer is still made up of cubes.

Aside from delighting in the many shades of the Colours of Minerals display (or as it is often referred to, the Rainbow Wall), you can also have a close look at the shapes, and see how they repeatedly express their own atomic structure.

Antarctica is the coldest place on earth! Lots of it is covered in ice. The ice wall here gives just a touch of what that might feel like. Minerals grow naturally in, on and around rocks. But we've also learned how to make some minerals in labs. Can you find the display of humanmade ones in the gallery? Can you tell the difference between the real ones and those made in a lab?

### Megafauna Fossils

This gallery of Australian Megafauna features many of the creatures who lived in the Pleistocene era (2.5 million – 11,700 years ago)

#### Diprotodon

Weighing up to 2.7 tonnes (about the same as a 4x4 vehicle), herbivorous Diprotodon was the largest of Australia's megafauna and the largest known marsupial. Diprotodon fossils have been found across Australia, with many in the Flinders Ranges. There is some evidence that they interacted with the Adnyamathanha people in that area, with fossil sites suggesting that people took pieces of Diprotodon and other large animals to this area cook and eat them. There are also Adnyamathanha stories of the Yamuti, a large creature similar to the Diprotodon that children had to climb trees to escape.

This gallery features a Diprotodon skeleton and also fossilised footprints.



Many animals in this gallery have relatives living today. For instance, Diprotodon are from the order Vombatiformes, which includes wombats and koalas. Can you guess what the other animals and birds in the gallery might be related to?

## Opal Fossils Gallery The Addyman Plesiosaur

When dinosaurs roamed parts of the earth, South Australia was covered by the Eromanga Sea. Large marine reptiles, smaller squid-like belemnites and round ammonites occupied the sea 65-145 million years ago.

The Addyman Plesiosaur is the finest known opalized fossil on Earth. It was found in a mine in Andamooka in 1968, by prospectors John and Molly Addyman. They kept the 36kg potch opal fossil in a bank vault, then in their home, for 32 years, until it was purchased by the Adelaide newspaper The Advertiser, and donated to the South Australian Museum.

Opals are made from a solution of silicon dioxide and water. When water runs into the earth, it picks up silica from sandstone, and this liquid fills any cracks and fossils left by decomposed lifeforms. When dried this forms opals, which are now in the shape of the lifeform. There are many examples of opalised fossils in this gallery.

As well as the gigantic Addyman Plesiosaur, there is also a baby plesiosaur in this gallery. Can you find it? How much smaller is it than the adult plesiosaur?

## Ancient Egypt Gallery

The Ancient Egypt Gallery tells the stories of religion, burial practices and everyday life in ancient Egypt, the period from around 3,100 BCE to 30 BCE. This gallery also includes some older pre-dynastic material and some from the more recent Roman period. This gallery was established in 1939 and is largely unchanged since then. The items in the Ancient Egypt Gallery form part of our World Cultures Collection which holds more than 22,000 items from the Pacific, Asia, Europe, Africa and the Americas.

#### Shabtis

The display to the left as you enter the gallery shows a collection of Shabtis, or servants for the afterlife. These take the form of small figures, often made in the likeness of the deceased tomb owner. They were intended to carry out basic tasks in the afterlife, such as farming. Amongst the collection of shabtis you can see some with tools, inscriptions and different decorative clothing.



The walls in this gallery were painted around 80 years ago. The painter used images from different ancient Egyptian objects to give the impression of the inside of a tomb. What animals can you see? Or in some cases, what half-animals, half-humans?

## Levels G, 1, 2 and 3

Southern end of the Museum

### **Giant Squid**

This model of the giant squid, *Architeuthis dux*, is based on the largest squid ever recorded, found in New Zealand waters. This display is in an old lift shaft and extends over four floors, including the top floor where you can stand over the top of the squid and look down.

The giant squid has a maximum size of around 13 metres (for females) or 10 metres (for males). The squids have eight arms and two tentacles, all of which are covered in hundreds of suction cups. It is common to find circular scars from these suction cups on the heads of sperm whales.



At the top of the squid display, you can stand over the squid. But what do you see if you look up?