ZooLex Wild Asia's Elephants Nick de Graaff, Taronga Zoo (author)

Taronga Conservation Society Australia - Wild Asia's Elephants

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LOCATION

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ANIMALS

Family		Common Name	Capacity
Elephantidae	Elephas maximus	Asian Elephant	2.4 +
			young

AWARDS

2005 John Holland Pty Ltd. was awarded for excellence in Environmental Management during construction of Wild Asia by the Master Builders Association of NSW (MBA)

DESCRIPTION

Wild Asia is a display of Asian rainforest animal species that comprises 10 animal exhibit areas, 7 animal holding facilities, and 15 public visitor facilities. The precinct simulates an Asian rainforest setting, featuring both plants and animals typical of the region. Wild Asia at Taronga Zoo is home to more than 24,000 plants, Malayan tapir, small-clawed otter, binturong, chital, silvery gibbon, Francois langur, fishing cat, 45 bird species in two aviaries and elephants. You can find presentations of other Wild Asia exhibits in the ZooLex Gallery.

The design of Wild Asia reflects an Asian style rural village situated on the edge of the rainforest. Wild Asia is divided into two distinct thematic zones: the urban riverside village and terraces on one hand and animal exhibits and immersion trails on the other. The animal exhibits surround the urban village terrace. This zone is densely landscaped to replicate a typical Asian rainforest. Complementing both zones is an interpretive story-line, which informs visitors about the animals and the importance of conserving their natural habitats in South East Asia. Visitors get an opportunity to observe South East Asian wildlife, learn about the interconnectedness of nature and people in South East Asia, and make comparisons with life in Australia.

The largest exhibit complex of Wild Asia is dedicated to Asian elephants. A single storey barn structure with 3 holding pens, elephant restraint device, keeper equipment store, food preparation and storage. The elephants are seen from the village as working



Elephant Drinking: An elephant takes a drink at the pool ©Monika Fiby, 2007



Interactive Display: This display is to educate visitors about the difference between Asian and Australian animals, and why they were separated by continental drift ©Monika Fiby, 2007



Shade for elephants: Elephant under shelter of VIP "stilt house" viewing structure simulating flood plain buildings and provide shade for elephants near the public ©Jon Coe, 2015

animals associated with traditional Asian village life. But from the rainforest and Hillside Link areas they are seen as forest animals. An overview of the complex can be gained from the cable cars.

SIZE

Wild Asia is a themed exhibit precinct of approximately 1.04 ha. While the Wild Asia elephant main exhibit was opened in 2005 covering an area of 4500 m², the bull outdoor facility, including a 2000 m² paddock and a 500 m² exercise yard, was added in 2008.

COSTS

AUD 31,800,000 including 6% for design. The Wild Asia Precinct cost 31.8 million Australian Dollar (excluding taxes, zoo operational expenses etc.).

OPENING DATE: 9 July 2005

PLANTS

The creation of the South East Asian rainforest in Taronga Zoo involved the planting of over 24,000 plants on 1.8 ha.

FEATURES DEDICATED TO ANIMALS

All species in the Wild Asia precinct have a scheduled, documented and supervised enrichment program. They help with balance, co-ordination, dexterity and problem-solving skills. Introduction plans were developed for all species to ensure animal health and wellbeing during translocation and settling into the new facilities.

Taronga's group of elephants inhabits an exhibit surrounded by a simulated river with places for them to swim and frolic. This feature is 60m long, 3m or more wide and 3m deep, with shallow areas at both ends and in the middle for elephant access. Because Taronga is an urban zoo with limited space, the river feature was incorporated to facilitate aquatic aerobic exercise for the elephants to increase cardiovascular fitness with non-weight bearing exercise. It is well



Pool: A water pool in which the elephants bathe, play and drink ©Monika Fiby, 2007



Enrichment: Mud wallows can stimulate play behavior in elephants ©Jon Coe, 2007



Elephant Steps: The lower exhibit area is connected to the upper area with broad boulders forming elephant steps, planning that the elephants would be lead on circuits including swimming and hill climbing as a diverse exercise program ©Jon Coe, 2007



Trees: Wooden logs, poles and tree stumps provide surfaces for the elephants to rub their tusks on and for keepers to hang hay nets on ©Monika Fiby, 2007

used by the elephants. These activities induce natural behaviours and strengthen family bonds. There also is a mud wallow built by staff together with the elephants and greatly enjoyed by the animals. The elephant area was built on two levels with a considerable grade change that the elephants negotiate with steps made from large boulders, also enhancing physical fitness. The lower exhibit has another pool and waterfall for the elephants to enjoy. This area can be separated from the main exhibit area in case there is an animal management need. When they choose, the elephants can use their barn with heating and bathing areas.

The bull facility is a 2000m² exhibit paddock with pool, wallow, exhibit enrichment devices, landscaping and shade structure; additionally, a 500m² exercise yard adjoins the barn with pool, wallow, exhibit enrichment devices, landscaping and shade. This was built within the existing heritage listed Elephant Temple dating from 1916. The historic temple now is open to the public, providing visitors a glimpse into the past with information on the long history of elephants at Taronga Zoo.

FEATURES DEDICATED TO KEEPERS

Attention has been paid to the ease of draining and filling pools remotely. Floors drain easily and all animal areas have special finishes that allow cleaning to be undertaken with a minimum of manual scrubbing. The facilities include an ability to easily load and unload animal crates, provide access for major exhibit furniture and the flexible use across a range of species with holding facilities able to cater for a diverse range of species from otters to tapir. A fully filtered system to maintain water bodies has eliminated the need to drop and manually clean all major water bodies - a significant move forward in the elimination of manual handling duties for keeping staff. The daily elephant baths are ideal chances for the keepers to carry out thorough health checks.

FEATURES DEDICATED TO VISITORS

Visitors can explore the Asian village that contains authentic stilt houses, a retail facility, a public amenities facility, a food & beverage facility, and animal displays, including underwater viewing of otters and tapirs and tree top viewing in the rainforest forest section. One stilt house in the village is built across the river in the elephant area, which is accessible by an overhead bridge for special tour and VIP events. This structure also provides shade and enrichment features for the elephants, drawing them near to the public.

Especially for visitors, the barn features a behindthe-scenes area to view the elephants' facilities, learn more about how zoos care for them and get an insight into the real issues affecting elephants today.



Interactive Elephant: This elephant creates a photographic opportunity for visitors who can pretend to be filing its toenails! ©Monika Fiby, 2007



Elephant Exhibition Hall: An exhibition hall with display cases and interactive features for the visitors ©Monika Fiby, 2007

The elephants' bath-time is a popular attraction for the visitors and provides an opportunity for the keepers to educate about these animals. This presentation details the use of elephants over many centuries, what they are used for today as well as the dangers and threats to the species' future survival.

INTERPRETATION

The majority of the animal exhibits in Wild Asia can be viewed from vantage points that allow for several species to be seen at once (e.g. elephants and tapirs) thus reinforcing the interpretive messages of the interconnection of wild animals in the rainforest and the ecological niche each fills. Overall, there are 48 individual interpretive installations in addition to species information labels and way-finding signage.

MANAGEMENT

The Hillside Link building is an adjunct to the Wild Asia precinct. It includes a building for the water treatment equipment and services associated with the Wild Asia precinct, offices and retail areas and an essential access route between the two adjoining precincts, Wild Asia and the Great Southern Ocean. Many of the animal exhibits link to each other via management facilities. This feature also allows Wild Asia at Taronga Zoo to respond to future needs of endangered species from South East Asia and provide the spaces for breeding for those species most in need of captive propagation.

RESEARCH

A formal evaluation of the visitor experience was undertaken by Environmetrics during October 2005. The majority of visitors indicated that they were satisfied with their Wild Asia experience overall, having found it larger and containing a greater variety of animals than expected. At least 79% of visitors rated aspects of Wild Asia favourably, with the quality of building and landscaping most favourably rated. Around three quarters of visitors said they would visit Wild Asia again, and 71% indicated that they would recommend it to others. Pre- and post-occupancy observation studies were carried out for most species to gain an understanding of exhibit use and future enrichment needs.

CONSERVATION

Crushed concrete was used for drainage layers. Retaining walls in many locations were built from recycled rubber tyres. Water for moat filling and irrigation is recycled to reduce runoff. Several balustrades were made from bamboo.

The Wild Asia exhibit links to a number of in-situ conservation programs through fundraising, education and in-kind support. Taronga Zoo has a long history of providing funds and support to many conservation projects for Asian Elephants around the world, such as the Way Kambas National Park in Sumatra and Elephant Transit Home (ETH) and the Biodiversity and Elephant Conservation Trust in Sri Lanka.

Taronga Zoo is part of the Australasian conservation breeding program for Asian Elephants, which are endangered in the wild. These types of zoo programs aim to intervene where there are threats of potential extinction of a species. In the case of Asian Elephants, the Australasian program aims to preserve 90% of the genetic diversity of the entire species over a 100 year period.

These programs are endorsed by the Australian Government as 'Cooperative Conservation Programs' (CCPs) with agreed principles, and implementation of international treaties including the Convention for International Trade of Endangered Species (CITES).



Egyptian Elephants: A plaque of an old painting, showing the Egyptians carrying elephant ivory tusks ©Monika Fiby, 2007



Divides in the Barn: The barn divides the elephants for feeding, checking health and breeding purposes ©Monika Fiby, 2007



Waterfall: Lower elephant exhibit area with pool and waterfall for elephant enrichment. Note steep bank elephants traverse between lower and upper display areas, encouraging exercise and physical fitness ©Monika Fiby, 2007