

# BEHAVIOURAL RESEARCH AND ENRICHMENT



notes

ADELAIDE ZOO  
EDUCATION SERVICE

ZOO

The modern zoo plays a vital role in conserving endangered species and where possible, reintroducing them into their natural habitat. An important aspect of this process is encouraging natural behaviour. When an animal is reintroduced to the wild it must have the skills it needs to avoid predators and to find such things as food, shelter and a mate.

Enclosures are designed to represent the animals' natural habitat which will help encourage them to display natural behaviours such as swimming, climbing or swinging.

The Adelaide Zoo, in conjunction with the Psychology Department at the University of Adelaide, has a proud record in conducting research aimed at enriching the behaviour of animals. Over recent years research

has been conducted with Oriental Small-clawed Otters, Siamangs, Cape Hunting Dogs, Corella Parrots, Blackbuck Antelope, Lion-tailed Macaques, Red Pandas, Persian Leopards, Fennec Foxes, Chimpanzees and Orang-utan. This work has provided valuable information for both the Zoo and the university community on how we can best go about ensuring that the natural behaviour of these animals remains intact.

This research has played a major role with the design of the enclosures and the feeding methods and times of the animals.

To learn more about the behaviour of captive animals, volunteers at the Zoo are involved in a ZooWatch program. The Zoo is constantly conducting observational research of the animals

to find out what they are doing at certain times of the day and how they are adjusting to any feeding or exhibit changes or to the introduction of a new animal. ZooWatch volunteers may spend hours of the day, and even the night, watching the animals and noting their behaviour. These notes are then collated and analysed so any patterns can be seen and animal management can be adjusted to maximise natural behaviours.

Another program run by Volunteers at the Zoo is BEEZA (Behavioural and Environmental Enrichment of Zoo Animals). This growing group of volunteers play an important role in the everyday lives of the animals. In the wild, many animals would spend hours searching for food, shelter and even a mate. In a captive situation the animals aren't required to search for these things and therefore the animals can become easily bored. BEEZA volunteers aim to enrich the lives of the animals making their everyday lives more active, exciting and more like their lives would be in the wild.

BEEZA volunteers are involved in constructing such things as feeding devices and hammocks for the Sun Bears, feeding balls for the big cats and climbing frames and swings for the primates. Old fire hose is used to construct many of these devices as it is tough, durable and pliable.

One design that has been copied and used in other zoos is that of the termite mounds. These mounds are made from wood and cement and have holes all through them. They resemble the sort of mounds that animals such as Chimpanzees may come across in the wild. Keepers can place honey, small fruits and insects inside the holes. It is then up to the animals to find a suitable instrument such as a stick, to put into the termite mound to pull out the food.

The BEEZA volunteers also make every day food items more challenging for the animals to retrieve. They may stick food on pinecones, inside old fire hoses, plastic bottles, paper rolls, hollowed-out pumpkins or even taped inside a box. These "toys" challenge the animals and make them work for a food reward.

Many animals rely on their sense of smell to keep them away from danger and to find food. In a captive situation this sense is not often used. BEEZA volunteers use a lot of scented agents to get the animals' noses working and give them something to roll in or dig at during the day. Such things as herbs, perfumes, flowers and even other animals' manure are used to stimulate the sense of smell.

During the warmer months animals can also be given "ice blocks" containing their favourite foods. Fish ice blocks for the otters, fruit for the primates, or even mealworm ice blocks for the meerkats can be seen inside some of the enclosures. The animals must either scratch away at the ice, or wait until it melts to get the treat.

Every Wednesday night the hippo pool is emptied and cleaned. This large pool then takes all of Thursday to refill. It was observed that the two Adelaide Zoo Hippos were often stressed and agitated on Thursdays when the pool water was low. BEEZA volunteers came up with the idea to treat the hippos by throwing pumpkins into the water for them to play with. This diverts the hippos' attention and makes Thursdays less stressful. The hippos soon discovered that pumpkins are quite tasty and today, instead of playing with them, they bite into them as soon as they hit the water. The hippos can be seen eating their pumpkins at 1:30 PM every Thursday afternoon. This is also an excellent time to see the hippos moving about and displaying their large mouth and teeth.

