



The Sedgwick County Zoo uses a variety of resources to fund design construction and maintenance. Typically major contributions fund sustain new exhibits. The exhibit opened in May 2000 after years of conceptual and construction work by the zoo brainstorming team and WDM Design, Wichita, Kansas.

**Plants :**

The intention for planting materials was to match the existing habitat(s) as closely as possible given existing local climate conditions, minimize maintenance, conserve water and conceal animal containment. The plant list specifies the Latin names of the plants used for this exhibit.

**Features dedicated to animals.**

The "furniture" within the exhibit was designed to provide an overlook of the surrounding area. From atop what is called "pride rock", the lions have a full view of Grevy's zebra, warthogs, bontebok, African hunting dogs, meerkats, and Hamadryas baboons, not to mention the birds that inhabit those exhibits. It is interesting to hear the sound of baboon alarm calls in response to lion territorial roars. The baboons are displayed in what was once the old lion exhibit. To promote the use of pride rock, it is heated it with warm non-toxic glycol which is piped through the system. Hot rocks are also strategically located within the exhibit to entice the animals to spend their time near two main glass-viewing sites around the exhibit. In one location, the heating pipes extend into the guest viewing area to provide a warm place for the visitors to sit. To take advantage of the lions' desire to monitor the area surrounding the off exhibit access door, one of the glass viewing structures was placed near this area. The entire exhibit was placed in an east to west axis to take advantage of the morning and the afternoon shade. Both main windows were strategically placed to take advantage of this shade. The



The donor recognition wall at the exhibit entry.



Lion pride sculpture.



Guests first encounter the lion pride is through viewing glass

experience centers around the work of a native African researcher and her documentation of the struggles faced by two young male lions evicted from the pride. "Munabi's Store" was created to facilitate interpretive devices. Sound is used in several areas as are three dimensional reproductions. Each exhibit has species specific interpretive graphics as well.

**Management**

All animals in the Pride of the Plains have off exhibit facilities with multiple indoor holding units. Lions have outdoor holding units as well. Each was designed to facilitate more animals than are currently maintained. All of the off exhibit facilities were enclosed in or hidden by concrete rockwork. All animals are either given access to or brought into the holding facilities nightly.

Multiple forms of enrichment are provided with the most elaborate being artificial termite mounds in the lion exhibit with fabricated meerkats popping out of them. When a lion slaps at the meerkat, it retracts and a food item is dispensed. This is devised to be manually controlled or automatically operated by computer in a random pattern. Unfortunately, we have found no non-perishable food reward of sufficient interest to the lions, and the novelty of catching a plastic meerkat eventually wears off. Use of this device is sporadic.

All exhibits are designed with support facilities for reproduction and parent rearing of offspring.

The warthog exhibit required a compromise of animal management space to allow for fulfillment of the original exhibit concept. The outdoor exhibit is surrounded almost 360° degrees of public viewing. While this provides excellent opportunities for the zoo guest to view the animals, one trade off is that warthogs need to be acclimated to guests in close proximity. The other trade off was not having outdoor holding pens for the pigs. Because of this, manage-

ment is restricted to animals that are compatible and can be displayed at the same time. If long-term separation is required for a particular animal, it must be removed to another area. The holding building, which is completely enclosed in a con-crete rock, has a heated floor, an overhead forced air furnace, and air conditioning. The meerkat exhibit was designed to provide as much management flexibility as possible for these socially aggressive animals. Their exhibit

can be subdivided into two parts by a removable glass door. This configuration allows to manage up to three groups of animals. The holding area is separated into two main areas that can be connected if desired. Each main area is further divisible. The holding area materials are polypropylene plastic, aluminum and galvanized 1"x1" welded wire mesh. All materials were selected for their resistance to rust or other types of deterioration.



The Pride of the Plains visitor has an opportunity to learn about the story line lions movement at the researcher's camp above.



Enrichment is provided at this termite mound. When the lion attacks the pop-up meerkat it is rewarded with a food item. Credit : Sedgwick County Zoo, 2001

lions spend a majority of their day in the areas that were designed to promote guest viewing.

### Features dedicated to Keepers

The safety of the staff working around these dangerous animals was paramount in the design of the holding buildings. The lion building was designed to require the keeper to pass along the sleeping quarters and visually verify the location of the lions before entering the outdoor exhibit. All primary and secondary holding areas were designed with double lock containment. Padlocks throughout the zoo are key retaining to prevent leaving a lock unfastened. The lion exhibit is fitted with a large removable panel for occasional access by tractor or other mechanical devices. Zoo staff designed squeezes into the lion and African hunting dog holding areas. They are valuable for reducing the risk to the animals during vaccinations, examination and tranquilization. Attempts have been made to design a method of mechanical restraint in all animal management areas. So far this has not only proven highly valuable for lions and hunting dogs, but also puma, caracal, Mexican wolves and bison.

### Features dedicated to Visitors

This exhibit has been called "the best lion exhibit in the world" by many zoo professionals who have visited the exhibit. Containing lions, meerkats, warthogs and African hunting dogs as feature animals, the exhibit is built around numerous thematic and guest immersion principles developed during the master planning phase. The exhibit:

- Is built around a kopje rock theme, a feature of certain African grasslands
- Features architectural elements that replicate structures typically found on the African plain
- Immerses guests into the animal's native habitat
- Incorporates a storyline, narrated by a researcher's notes, involving the adventures of two young male lions ejected from their pride and starting out on their own
- Includes a "researcher's camp" comprised of a retired Land Rover, packing crate and safari tent as a setting to remind guests of ongoing research for survival of African species. The camp also camouflages an electrical transformer and a service entrance
- Incorporates state of the art holding facilities within the "kopje" rocks, minimizing the impact of the buildings
- Utilizes a "stream feature" (a feeder branch of the "Zambezi river") to tie all the animal exhibits together and to create additional educational opportunities.

### Interpretation

As an immersion exhibit, every aspect of the guest experience is an opportunity for education regarding both the exhibited species and their native habitat. For Pride of the Plains, that



Animal keepers have protected access to the animal. ©WDM Architects, 2000

### Research

To date, research has only been conducted by high school age participants in a zoo-sponsored program designed to engage them in the principles of scientific inquiry.

### Conservation

The entire exhibit is designed to promote conservation by exposing the visitor to the challenges of survival faced by the exhibited species. Written information at pause points, as well as the storyline developed around the African researcher promotes understanding and conservation. The zoo participates in all pertinent Species Survival Plans and other AZA management programs.

The water moats are fed from existing zoo water features so that no new water is required for daily operation. The waterfall is fed by recirculating moat water. All water used in the zoo's moat systems is pumped from a water table formed by the underground flow of a local river and re-enters the same water table before it leaves the zoo.

### Local Resources

Design and construction was by local contractors. Zoo staff, local artists, and volunteers were used extensively to build the artificial rocks.