# ZooLex and Dwarf Mongoose Author: Brent Shelby

# **Oregon Zoo Predators of the Serengeti: Caracal**

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http://www.zoolex.org/zoolexcgi/view.py?

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#### **LOCATION**

4001 Southwest Canyon Road, Portland, OR 97221, United States. Phone: 01-503-2261561 URL: http://www.oregonzoo.org

#### **KEY WORDS**

African mammal, carnivore, cat, predator prey display

#### **AWARDS**

2010 AZA Exhibit Award

#### **DESCRIPTION**

Predators of the Serengeti provides environments for some of Africa's most endangered carnivores, including lions, cheetahs and African wild dogs. The nearly 10,100 m<sup>2</sup> (2.5-acre), exhibit is also home to red-billed hornbills, a caracal, dwarf mongooses and an African rock python.

Predators of the Serengeti is a remodel of the zoo's 25-year old Alaska Tundra exhibit. Animal exhibits and behind-the-scenes care facilities were enlarged, visitor areas expanded, circulation paths altered, infrastructure modernized and aesthetics upgraded. The exhibit not only includes Serengeti animals, but also incorporates the region's geography and history. In the open-air entrance plaza, the canopy of a life-size replica baobab tree stretches across the sky. Further into the exhibit, the Roaring Canyon pathway evokes the canyons and gorges of Africa's Rift Valley, with ancient petroglyphs and rock art adorning the pathway's walls.

The primary interpretive message for the Predators of the Serengeti exhibit is: It's hard to be a hunter;



Caracal. © Oregon Zoo, 2010



Mongoose. © Oregon Zoo, 2010

# **ANIMALS**

Family	Species	Common Name	Capacity
Felidae	Caracal caracal	Caracal Lynx	1.1.3
Herpestidae	Helogale parvula	Dwarf Mongoose	1.1.4



Site Plan: Siteplan of the Predators of the Serengeti exhibit complex. The caracal outdoor exhibit is number 7, and the caracal holding is number 5 in the plan. ©Oregon Zoo, 2010

they're well-equipped but they face a lot of challenges!

Predators of the Serengeti has five main objectives: to bring African lions back to the zoo, to raise public understanding of predators' important role in nature, to counter the negative and sensationalist representation of predators in Western culture, to assist in the collaborative, captive management of endangered African predators, and to offer opportunities for visitors to directly support African predator conservation programs.

Three previous bird exhibits from the Tundra exhibit were combined into one u-shaped exhibit for caracal in the centre of the predators of the Serengeti complex. Varied terrain, rocks, grasses, shrubs, heated areas and a rippling water feature are home for the small cat. Mongooses can run through acrylic tunnels that cross the caracal exhibit, giving the caracal a glimpse of possible prey and the mongooses additional territory to safely explore.



Mongoose close-up. © Oregon Zoo, 2010



Mongoose Holding. © Oregon Zoo, 2010

#### SIZE

Space allocation is for the entire Predators of the Serengeti exhibit complex: total size: 8320m², outdoor animal space: 3530m², indoor animal space: 415m², staff area: 230m², inside visitor area: 510m², outside visitor area: 300m², service pathways etc: 3335m².

Space allocation in square meters:

use	indoors		outdoors		total
	accessible	total	accessible	total	exhibit
animals	415	415	3,530	3,530	3,945
visitors	510	510	300	300	810
others	230	230	3,335	5,115	5,345
total		1,155	7,165	8,945	10,100

# COSTS

USD 7,064,235 including 7.6 % for design.

Cost allocation is for the entire Predators of the Serengeti exhibit complex: Design - \$537,857; Construction - \$6,166,810; Owner purchased equipment - \$359,568.



Predators of the Serengeti Entry. © Oregon Zoo, 2010



Hut. © Monika Fiby, 2009

#### **OPENING DATE**

12 September 2009

#### **DESIGN**

Beginning: 2006

Concept Design: Oregon Zoo, Portland
Exhibit Design: Oregon Zoo, Portland
Interpretive Graphics: Oregon Zoo, Portland

#### CONSTRUCTION

Beginning: August 2008

Exhibit Construction: Oregon Zoo, PortlandGeneral Contractor: 2KG Contractors, Portland

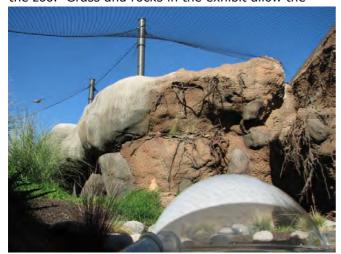
# **PLANTS**

Set amidst the temperate rainforest of the Pacific Northwest, the exhibit's plants replicate the diversity of the African savanna.

The plant list specifies the Latin names of the plants used for this exhibit.

# **FEATURES DEDICATED TO ANIMALS**

The rockwork in the exhibit allows the caracal to reach a raised viewpoint so that it can look out over the zoo. Grass and rocks in the exhibit allow the



Bird Mockup. © Oregon Zoo, 2010



Caracals. © Oregon Zoo, 2010

caracal to perform hiding, jumping and stalking behaviours as they would in the wild. Heated caves provide warmth and shelter from the weather.

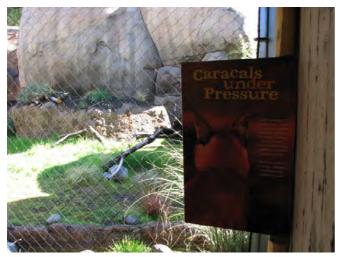
Special provisions for training and enrichment include attachment points in exhibit walls for securing enrichment items, and clear plastic tunnels for the mongooses to run through the caracal exhibit for enrichment for both species. Stalking and jumping at the mongoose running through the tunnels maintains the fitness and well-being of the caracal. By using the tunnels, the mongooses increase their territory and viewpoint. The dwarf mongooses are frequently observed using the tunnels. Indeed, when the tunnels were closed with small barriers, the mongooses actively moved the obstructions so that they could access the tunnels in the caracal exhibit.

# **FEATURES DEDICATED TO KEEPERS**

There is visual access to all animal holding areas to assess safety before entering. Positive locking on all staff service doors to animal spaces and double containment barriers provide additional safety in behind-the-scenes areas. Slide doors and chutes connecting dens can be manouvered to safely manage the animals. Two keepers are provided lead



Sign at Window. © Oregon Zoo, 2010



Caracal Enclosure and Interpretation. © Monika Fiby, 2009

direction from a senior keeper and supervision from an assistant curator.

The caracal exhibit and holding areas are accessible to the keepers through service areas for maintenance.

## **FEATURES DEDICATED TO VISITORS**

Visitors to the Predators of the Serengeti are invited to use all of their senses. The exhibit's savanna themed "plantscape" sets the stage for an "out of Oregon" experience. African drumming and music can be heard among a cluster of thatched roof huts.



Caracal Holding. © Oregon Zoo, 2010



Mongoose Viewing. © Oregon Zoo, 2010

A well-worn path leads past a replicated village well and a towering artificial baobab tree to a rocky overlook where lions rest on warm rocks and prowl through open grassland. All visitor areas are ADA code compliant.

Before the addition of the mongoose tunnels, the caracal was elusive in its enclosure. Now that the mongooses have access to the enclosure, the visitors can see a display of caracal stalking behaviour, as well as the intrepid confidence of the mongoose. The tunnels are placed in full view of the visitors, allowing the visitors to see both species close-up. Even when the mongooses are not using their tunnels, the caracal is more active.

# INTERPRETATION

Hands-on interactive elements invite visitors to compare the vision of a predator with its prey, chart



Jump Like a Caracal. © Monika Fiby, 2009



Caracal with Young. © Oregon Zoo, 2010

the activity of a pack of wild dogs, jump as high as a caracal, perceive the world as a python, climb as quickly as a lizard and leap as far as a lion. Interpretation for the caracal includes signage that encourages the visitors to jump as high as a caracal, as well as informative signs about the behaviour, habitat and social structure of both carnivore species.

Children and adults learn that predators come in all sizes and that all are essential to the health of a fully-functional ecosystem. Inspired by the field work of African wildlife biologists depicted in interpretive displays, visitors are invited to donate to their favorite predator conservation project.

The interpretive plan identifies a total of 15 distinct areas throughout the Predators of the Serengeti exhibit. Each area features either a distinct predator species, introduces one of the sub-themes, or has a specific function. Within each area, anywhere from one to twelve ideas are introduced through a combination of different delivery methods. Predators includes a total of 54 educational components comprised of exhibit labels, interactives, audio-visual elements and interpreter guided experiences.

#### **MANAGEMENT**

The daily routine includes cleaning the exhibits and holding areas, evaluation of animals for any medical or behavioural issues, providing the prescribed diet,

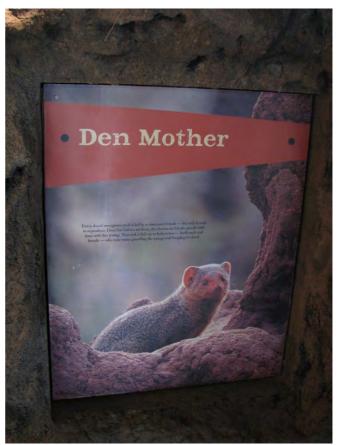


Caracal Enclosure. © Oregon Zoo, 2010



Caracal Enclosure Plan: The caracal and dwarf mongoose enclosure plan. Note the mongoose tunnels running from one enclosure to the other. ©Oregon Zoo, 2010

training animals in husbandry and veterinary behaviours (scale platform training for weights, shifting, etc.), providing approved enrichment items and activities and insuring the safety of the animals, staff and public by inspecting the animal exhibits for integrity. Two keepers are provided lead direction from a senior keeper and supervision from an assistant curator. Code compliant fire extinguishers, alarms and marked egress routes are present throughout Predators of the Serengeti. There is a smoke detection and fire suppression system.



Dwarf Mongoose Signage. © Monika Fiby, 2009



Caracal Mongoose Plan. © Oregon Zoo, 2010

The caracal enclosure allows for the introduction of another caracal into the zoo with the provision of an extra holding den for separation.

#### **RESEARCH**

In 2006, the zoo's Conservation Manager developed a front-end, on-line survey instrument to learn what the general public knew and thought about predators. Approximately 1,000 people completed an on-line questionnaire. In 2007 a formative evaluation study, under the guidance of an external evaluation consultant (MPR Museum Consulting) used prototypes by the in-house design team to test the impact and effectiveness of a variety of potential interpretive messages and strategies on visitors. Two summative evaluations have been completed since the exhibit opened in September of 2009. Evaluation results reflect high visitor satisfaction with the exhibit, above-average exhibit stay time and an increased understanding of predators, their role in nature and current survival threats.

# **CONSERVATION**

The Oregon Zoo participates in all Taxon Advisory Group (TAG), Species Survival Plan (SSP) and/ or Population Management Plan (PMP) programs for Predators species (lion, cheetah, African wild dog, caracal, rock python, dwarf mongoose, red-billed hornbill, African bullfrog and spiders) and is committed to following all recommendations. The importation of a captive-born male caracal from South Africa, as requested by PMP managers, will form a breeding pair of known lineage within the zoo.

In the course of planning and developing Predators of the Serengeti, the zoo's Conservation Manager established relationships with three organizations involved with in situ predator conservation efforts in Africa. The Kilimanjaro Lion Conservation Project (Kenya) focuses on practical measures that encourage coexistence between people, livestock, and lions. The Painted Dog Education Program (Zimbabwe) aims to raise conservation awareness about this endangered species. The Action for Cheetahs-Kenya develops research and education programs. Each of these three organizations provided the zoo with information and images depicting their field-based conservation activities. These were used to produce three large interpretive panels installed in the public viewing areas adjacent to the lion, wild dog and cheetah exhibits, respectively. Zoo visitors have opportunities, in the form of "wishing wells," to contribute directly to the success of these projects at the end of their Predators of the Serengeti experience.



Caracal Waiting. © Oregon Zoo, 2010