

ZooLex News & design for August

NEWS

Hello ZooLex Friend, We have worked for your enjoyment!

NEW EXHIBIT PRESENTATION

A mixed species exhibit for Western lowland gorilla and black mangabey is part of the Congo theme area at GaiaPark Kerkrade Zoo in the Netherlands. By collecting old mobile phones, GaiaPark contributes to the recycling of coltan. The exploitation of coltan in Africa causes habitat loss and poaching of gorillas. The theme of GaiaPark Kerkrade Zoo is the theory of Gaia about the complexity of ecological interdependencies between all elements of the planet earth.

<http://www.zoolex.org/zoolexcgi/view.py?id=895>

Richard van Sluis and Maite Eikelenboom were students at van Hall Larenstein University in the Netherlands. Part of their thesis project were exhibit presentations for the ZooLex Gallery. We would like to thank their supervisor, Dr. Tine Griede, and the director of GaiaPark Kerkrade Zoo, Wim Verberkmoes, for this great initiative and hope that other zoos will follow this example.

ALTERNATIVES FOR THATCHED ROOFS

African themes are common in zoos and often associated with buildings which are designed to support an African atmosphere, preferably having thatched roofs. Simon Prince, Manager of The Lapa Company, compared four alternatives for a thatched roof in a case study for the Chessington World of Adventures, Great Britain: http://www.zoolex.org/publication/prince/thatched_roof.html

SPANISH TRANSLATION

Thanks to Eduardo Diaz Garcia we are able to present the Spanish translation of another ZooLex gorilla exhibit presentation: El Monte del Tigre, Parque Zoológico del Bronx <http://www.zoolex.org/zoolexcgi/view.py?id=940>

We keep working on ZooLex ... The ZooLex Zoo Design Organization is a non-profit organization registered in Austria (ZVR-Zahl 933849053). ZooLex runs a professional zoo design website and distributes this newsletter. More information and contact: <http://www.zoolex.org/about.html>

Note for readers from Editor Emeritus: How to use this article ... Quite a number of the articles we publish in ZOOS' PRINT magazine are available on the Web but people with busy schedules sometimes miss out. We try and include ZooLex's feature of the month in ZOOS' PRINT even knowing that you can't possibly benefit much from the black and white printed photos. This is just to give you an idea of what is offered and encourage you to go to your computer. If you are going to do that, you should look this up on the ZooLex website which has even more and bigger photos and more features. Thanks. SRW.

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World Association of
Zoos and Aquariums



GaiaPark Kerkrade Zoo Congo - Gorilla Island

Published 2008-6-9

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KEY WORDS

mixed species, island, EEP, Congo, Africa

ANIMALS

Family: Cercopithecidae

Species: *Lophocebus*

albigena aterrimus

Common Name: Black

mangabey

Capacity: 1.8 + offspring

Family: Hominidae

Species: Gorilla gorilla

gorilla

Common Name:

Western low land

gorilla

Capacity:

1.5+offspring

AWARDS

2006 EAZA

education

Award (for the whole park)



Over view. Circle highlights the Gorilla Island.

©GaiaPark Kerkrade Zoo, 2007

DESCRIPTION

GaiaPark is a zoo, where animals live in spacious naturalistic enclosures. It is also a zoo with one central theme, the Gaia theory, which views the Earth as a complex living organism. The name of the zoo also pays homage to Gaia, the Greek goddess of the Earth. One important goal of GaiaPark is the conservation of nature and species.

GaiaPark opened its gates in April 2005. In two years building time, the first part of the master plan was completed. The theme area Congo was part of this masterplan.

The gorilla enclosure is the biggest enclosure of the Congo theme area of the zoo. A large island exhibits Western lowland gorillas and black mangabeys. Several shelters provide views of the outdoor enclosure. Visitors can observe the animals inside and outside.

Because of elevated parts in the enclosure visitors cannot see the whole enclosure from one place, which motivates them to walk around in order to find the animals.



The gorillas and mangebeys live together side by side and even groom and play with each other.
©R.J. van Sluis, 2007

SIZE

The enclosure for gorilla and mangabey belongs to the part of the zoo that shows species originating from Congo. The Congo region of the zoo measures about 12% (22.200 m²) of the entire zoo. Five indoor enclosures are available for the gorillas (29, 36, 41, 44 and 50m²) and three for the mangabeys (11, 13 and 15m²). The height of these enclosures varies between 4 and 7,8 meters. At the back of the gorilla house a small outdoor cage of 21m² is situated for the mangabeys.

The gorillas and mangabeys have access to an island of 3443m². Animals and visitors are separated by a moat of 6 meters width or more (total moat: 1865m²).



Indoor enclosure ©GaiaPark Kerkrade Zoo

Space allocation in square meters:

use	indoors		outdoors		total exhibit
	accessible	total	accessible	total	
animals	238	238	2,754	5,308	5,546
visitors	336	336	1,472	4,007	4,343
others	85	85	0	0	85
total	659	659	4,226	9,315	9,974

COSTS:€ 1,200,000

Cost are estimate for the building (with decoration) and outdoor enclosure.

OPENING DATE: 23 April 2005

DESIGN

Beginning: January 2002

Design basic master plan: pja architects + landscape architects, p.s., Seattle, USA

Architect indoor enclosure: Kuiper Oosterheert Wubben, Den Haag

Landscaping: J. Füss, Vollenhove, France

CONSTRUCTION:

Beginning: June 2003

Indoor Enclosure: Bouwbetrijf Coppes BV, Houthem-Valkenburg; Outdoor enclosure: T&G Terrein- en Groenvoorzieningen BV, Schijndel; Installation Advisor: Huygen Installatie Adviseurs BV, Maastricht Indoor equipment: Vacon bv, Susteren; Heating installation: Berman Maasland Installatie, Haelen Electro technique: Insta Zuid, Beek; Glass: Tetterode Glas, Voorthuizen; Doorways to outside enclosure: Deben Techniek, Maastricht Hydraulics: Koster Hydrauliek en Pneumatiek BV, Nuth; Construction Electric Panel: Bouwhuis Regeltechniek BV, Zwolle; Construction: CAE Nederland BV, Rotterdam

PLANTS

Plant species were chosen that are not poisonous for the animals and known to be strong and fast growing, so they can withstand and survive damage by the animals.

FEATURES DEDICATED TO ANIMALS

The outdoor enclosure is shaped like a large hill, so the animals can always escape public attention. Some of the shrubs in the enclosure can be browsed by the animals. Herbs and grasses cover the entire outdoor enclosure and are also eaten by the gorillas.

Two separate climbing structures (made of wood and ropes) for the mangabeys were constructed on the island. A few large tree logs (put down horizontally) provide more climbing structures and are also used by the animals for shade. Several patches of trees and shrubs are protected from destruction by

electric wire and provide additional shade. The animals can seek shelter from the rain under the protruding roof of the indoor enclosure.

Indoors, the gorillas have access to several enclosures. This enables them to get away from each other. They can also get out of sight of the visitors



Enclosure interior: A view of an indoor enclosure, furnished with poles and plateaus. ©R.J. van Sluis, 2007

by lying on the balcony, which is situated above the hallway of the keepers. The mangabeys have their own enclosures, with a separate exit to the island. When the gorillas are staying inside during the day, the mangabeys also have access to the gorilla enclosures.

The interior furnishing of the enclosures is made of wooden poles with some plateaus. These plateaus can be covered with straw or hay, in order to give the gorillas the opportunity to build nests for sleeping. There are two exits for the gorillas and mangabeys to reach the island, but most of the time only one is used. Tree bark is used as substrate, for the natural look.

The animals are fed three times a day outside during presentations. More food is spread throughout the indoor enclosure. Water is provided from drinking nipples.

Lighting in the indoor enclosure is on the ceiling, protected with mesh.



A view of the outdoor enclosure: the climbing structure ©R.J. van Sluis, 2007

Further light is provided by several windows in the roof.

FEATURES DEDICATED TO KEEPERS

All sliding doors are hydraulic and can be operated from the keepers' area through a control panel. The mesh width of the indoor enclosure measures 5x5cm: this prevents the gorillas from grasping keepers walking in the hallway. Keeper doors to the enclosures have safety locks: the keepers need to push a handle before they can open the door. Besides this lock there is also a padlock. A cage enables the keepers to separate animals for feeding, medical checks, etc.



Keepers area ©R.J. van Sluis, 2007

A kitchen and storage space is situated in the indoor enclosure; there is no refrigerator in the building because food is brought from a central kitchen.

FEATURES DEDICATED TO VISITORS

Several places were designed to give visitors good views of the enclosure. On one side of the enclosure a shelter was built. Benches can be found around the enclosure for visitors to sit while watching the animals. Every day a feeding presentation is given in front of a grandstand for visitors. During bad weather visitors can watch the animals indoors.

Barriers between the visitors and the animals are subtle and give the visitors the feeling they can come close to the animals. The indoor enclosures are separated from the visitors by glass walls. The same substrate is used on the pathway in front of the indoor enclosures and inside, in order to create the feeling of being close to the animals. On the outside, visitors are kept from falling into the water moats by broad stretches of low vegetation between the paths and the moats.

The glass between the visitors and the animals in the indoor enclosure is three-layered to prevent condensation, so visitors always have a good view of the enclosure.

INTERPRETATION

Education is encouraged through the use of signs. The signs give general information about gorillas and mangabeys. Four types of large information panels are placed twice on different sides of the enclosure; near the grandstand and in the indoor enclosures. This enables people to read the panels even when they don't walk around the entire enclosure. The first sign is about the different gorilla species (low-land versus mountain gorillas), the second about their behaviour, the third deals with gorilla motherhood. The last informs people how the Gaiapark group is funded and what its future plans are. All panels and signs are written in Dutch, English and German.

A showcase inside shows the differences between the anthropoid apes. The skeleton of a female lowland Gorilla is displayed. There are also skulls of a gorilla, a human, a chimpanzee and an orang-utan together with face prints from an adult male and female and a juvenile gorilla and the hands and feet (from synthetic material) of gorillas for comparison with human hands.



Indoor view: From the indoor enclosure visitors can view the animals on the island.
©R.J. van Sluis, 2007

Everyday three feeding presentations are given at Gorilla Island. A keeper feeds the animals and gives the visitors information about the individual gorillas and how they are living together with the mangabeys. Threats to their native habitat are discussed to arouse awareness for the importance of protecting the rainforests. Visitors are allowed to ask questions about the animals and the work of the keepers. Several large panels (two at the indoor enclosure, one at the grandstand, at the entrance of the zoo and near the restaurant) show the times at which the feeding presentations are given.

MANAGEMENT

The Gorilla Island is managed by one animal keeper per day. Dirty straw and dung are removed daily and the windows are cleaned when necessary.



Safety door: This door gives access to the gorilla enclosure. It is opened by removing a safety lock and a padlock. ©R.J. van Sluis, 2007

RESEARCH

No research has been conducted relating to the enclosure at this point.

CONSERVATION

The Western lowland gorilla is managed in an EEP. Gaiapark strives to breed this species in order to ensure a viable and healthy population in zoos around the world.

Gaiapark takes part in a project collecting old mobile phones. These phones contain a substance (Coltan), which originates from central Africa. By collecting the phones this substance can be recycled, in order to stop the digging in the central African rainforest. A barrel is placed at the indoor enclosure in which visitors can deposit these phones.

The holding building has a green roof. This reduces stormwater run-off.

LOCAL RESOURCES

Almost all of the companies involved in design and construction are situated near Kerkrade. Most of the companies not situated around Kerkrade have been recommended through Gaiapark's partner, Apenheul, and are located near Apeldoorn, where Apenheul is situated.