

ZooLex Sumatran tiger enclosure at Heidelberg Zoo, Germany

See the web version of this article with large, attractive photos at <http://www.zoolex.org/zoolexcgi/view.py?id=985>

NEW EXHIBIT PRESENTATION

The cat house at Heidelberg Zoo in Germany is one of those tiles and bars buildings which still exist in zoos all over the world. This exhibit presentation from Zoo Heidelberg shows what can be done with an outdated exhibit when there is no possibility to tear it down and build new from scratch. One of the species on display in this cat house is the Sumatran tiger which we chose for exemplifying results of the renovation: <http://www.zoolex.org/zoolexcgi/view.py?id=985>

Here is the German original: <http://www.zoolex.org/zoolexcgi/view.py?id=1001>

MULCH IN INDOOR EXHIBITS

One of the most impressive changes in the cats' indoor exhibits at Zoo Heidelberg has happened through the use of bark mulch for bedding. Visitors who know the typical smell and accoustics in cat houses will be surprised about the totally different atmosphere which reminds of forest rather than jail. The cats profit from soft and warm bedding, increased humidity, and less noise.

Similar effects were also achieved by using bark mulch in primate and other facilities. Bark mulch and wood chips make excellent bedding when properly applied and managed.

Are you using bark mulch or wood chips in your indoor animal enclosures?

Please let us know when you have experience with this type of bedding. We would like to know why you decided to use this type of bedding and how it met your expectations. We are planning to compile a paper from these experiences. Publishing will be in the second half of 2009 in ZooLex and elsewhere in agreement with the authors. Privacy and copyrights will be ensured.

SPANISH TRANSLATION

Thanks to Eduardo Diaz Garcia we are able to present the Spanish translation of another tiger exhibit presentation: The Sumatran Tiger Habitat at Orana Zoo. <http://www.zoolex.org/zoolexcgi/view.py?id=1005>

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Zoo Heidelberg Sumatran Tiger

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LOCATION:

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KEY WORDS:

renovation, enrichment

ANIMALS:

Family: Felidae; Species: *Panthera tigris sumatre* (Sumatran tiger); Capacity: 1,1

DESCRIPTION:

The renovation of the tiger exhibit at the Heidelberg Zoo has increased the available area to five times that of the old enclosure. That enclosure was retained and now serves as a 'tiger play room'. The landscape in the new exhibit contains bamboo, natural stone, and a stream planted with water plants and showcases the tigers in a naturalistic surrounding. The visitor can experience the animals up close through reinforced glass or through mesh.

The indoor facilities have not changed in shape, but changed a lot in appearance. What were only hard and barren surfaces now are partly covered with mulch and timber. A bedding of about 40 cm of bark mulch has considerably improved smell, air humidity, accoustics and aesthetics of the space. A change which is presumably appreciated by visitors and cats alike.



Sumatran Tiger ©Zoo Heidelberg, 2002

SIZE:

Space allocation in square meters:

Use	Indoors		Outdoors		Total exhibit
	Accessible	Total	Accessible	Total	
Animals					
Visitors					
Others					
Total		155		720	875

COSTS: Euro 200,000 including ~12% for design. Construction costs were financed through donations.

OPENING DATE: 23 June 2002

DESIGN: Beginning: January 2000. Designer: Planungsbüro Plessing, Heidelberg

CONSTRUCTION: Beginning: 2001. Landscape Construction: Fa. Megagrün, Heidelberg
Ironwork: Fa. Schierbaum, Heidelberg

PLANTS:

Shrubs and bamboo help to replicate the tiger's natural habitat. The stream is planted with water plants and cattails.

In the course of only a few years after completion, the plants have grown so much, that the fences have become nearly invisible and the tigers find a lot of hiding places. Despite the vegetation enduring several litters growing up in this enclosure, keepers have to remove plant material every year - especially bamboo - to keep views for visitors and space for tigers open.



View into the exhibit. Rock hide-outs, bamboo and bushes provide the animals with a naturalistic surrounding. ©Monika Fiby, 2004

FEATURES DEDICATED TO ANIMALS:

Several items such as bamboo, elevation changes, natural stone, old tree roots and a stream are built into the enclosure in order to enrich the space for the animals.

A sandstone ledge offers the tigers an unobstructed view of the surrounding exhibits: the African steppe and the flamingo pond.

A tall locust tree stump with a pulley system is located in the center of the exhibit and allows meat or flesh to be hung at a height of 5 meters. Tigers are encouraged to climb in order to get at their prey. Locust was chosen for its hardness and durability.



View into the exhibit. A locust trunk in the center of the enclosure encourages the tigers to climb when food is suspended. ©Zoo Heidelberg, 2007

The old tiger enclosure was kept and converted into a 'tiger play room'. It is furnished with items such as bags stuffed with sheep or camel hair.

The interior pens are covered with mulch while wood and bamboo poles offer the animals retreat opportunities.

FEATURES DEDICATED TO KEEPERS:

The metal fence by the bridge can be removed to serve as an entry into the exhibit.

FEATURES DEDICATED TO VISITORS:

The visitor is offered several viewing opportunities into the exhibit. The first two views into the interior come from reed-covered huts that project into the enclosure itself. The tigers can be viewed up close through 3 cm thick glass panes. The third view into the old enclosure allows the visitor to see the contrast between the old and the new facility in the background. The fourth view is from within the Predator House. This view provides a new



Central support as scratching post. The old outdoor exhibit is furnished as a 'play room'. ©Monika Fiby, 2004



View through the glass. 3-centimeter thick glass allows the visitor an unobstructed view of the enclosure. ©Zoo Heidelberg, 2002

perspective of the tigers in the outdoor exhibit. In the Predator House the visitors experience the tigers in a different sound scape. The fifth view is from the bridge through the metal fence.

INTERPRETATION:

An information board includes a 3-D jaw model where visitor may feel the bone structure. The zoo offers tours through the zoo. The internally run zoo school provides lessons about tigers.



Removable fence panel. The fence panel is removable to allow access into the enclosure. ©Monika Fiby, 2004

MANAGEMENT:

The mulch in the interior enclosure is kept moist by being watered about once a week, depending on humidity. It is daily aerated with a grubber down to a depth of 10 to 20 cm in order to prevent mildew. The mulch absorbs liquids and odors. Keepers collect scat and food waste on a daily basis. About every 12 months a new layer of mulch is added. About every other year (every 24 months) the mulch is totally exchanged.

Sound-proof isolation and birthing cages are available for sick or pregnant cats. The 'tiger play room' also serves as a second outdoor enclosure during repair work. This outdoor enclosure can be made available for the animals during the night.

CONSERVATION:

The male represents a rare bloodline and is therefore of particular importance of the European Species Survival Program (EEP).



Shelters with seating. ©Dirk Petzold, 2002



Information board with 3-D model. ©Monika Fiby, 2004



Water basin. ©Monika Fiby, 2004



Hanging sacks with scented fillings.
©Monika Fiby, 2004



Feeding tree. The old tree stump serves as a tie-down for meat pieces. Live trees are protected from scratching. ©Monika Fiby, 2004



Varied substrates. ©Monika Fiby, 2004



Natural rocks. Natural boulders serve as rear cover, provide protection from the elements, and resting areas. ©Monika Fiby, 2004



Vines cover the wire caging. ©Monika Fiby, 2004



Structuring of old interior exhibits. Bamboo poles in the interior room provide the animals retreat opportunities. ©Monika Fiby, 2004



Sack filled with animal hair. ©Monika Fiby, 2004



Screen from branches. There was no screen between the wire walls of the interior cages. ©Monika Fiby, 2004



Bark mulch. Mulch absorbs odor and liquids. ©Zoo Heidelberg, 2007



Scratching posts. ©Zoo Heidelberg, 2004