Zoo Duisburg AG

Rio Negro



Peter Rasbach, Rasbach Architekten (author) Achim Winkler, Zoo Duisburg (author) Hannelore Bauer, Monika Fiby (editors for ZooLex)

LOCATION: Mülheimer Straße 273, 47057 Duisburg, Germany. Phone: 49-203-3055922; Fax: *49-203-3055922. URL: http://www.zoo-

duisburg.de. **KEYWORDS:** Amazon, aquarium,

tropical

ANIMALS:

Family:	Species:	Common Name:	Capacity:
Callitrichidae	Saguinus midas	Midas tamarin	family group
Ceratophryidae	Ceratophrys omata	Bell's horned frog	10
Indiidae	Inia geoffrensis	Amazon river dolphin	4
Megalonychidae	Choloepus didactylus	two-toed sloth	4
Myrmecophagida e	Tamandua tetradactyla	Southern tamandua	4
Nephilidae	Nephila clavipes	golden silk orbweaver	10
Psittacidae	Ara macao	scarlet macaw	4
Ramphastidae	Ramphastos vitellinus	channel-billed toucan	4

DESCRIPTION: The Rio Negro exhibit shows the flooded forest habitat of a South American river system in a tropical hall. It is a new holding facility for the two Amazon river dolphins which have been kept at Zoo Duisburg since 1975. The facility and the life support system have been designed to be able to hold manatees (Trichechus manatus) in the future since the zoo decided not to acquire river dolphins any more. Visitors move through a tropical hall, experiencing a dense riverine vegetation and animal species of the the Amazon region, such as sloth, tamarin, lesser anteater, toucan and macaw, besides the Amazon river dolphin. A wooden visitor hut offers a view into the tree tops.

SIZE: Tropical hall: 32,50 x 28,50 m, Height: 7,50-10,00 m Technical hall: 22,50 x 8,00 m, Height: 7,20-8,10 m Pool: 650 m³, 450m², Depth: 0,50-3,50 m

COSTS: € 3,300,000 including 15 % for design.

OPENING DATE: 15 September 2005

DESIGN: Beginning: 2002

· Architecture/ Landscape planning: Rasbach® Architekten, Oberhausen · Structural planning: Helmert + Schumacher, Duisburg · Technical planning: Cosanne Ingenieure, Dorsten

CONSTRUCTION: Beginning: 2004

· Building construction: M. Schmidt, Duisburg

· Tropical hall: Marsmann, Münster

· Ventilation: Berns Gebäudetechnik, Kleve

· Heating: Beck GmbH, Schermbeck

· Filtration system: EAS Einhaus-Anlagenservice, Geeste

· Acrylic glas: Aquacone® GmbH, Düsseldorf

See the complete article with large, attractive photos at http://www.zoolex.org/zoolexcgi/ view.py?id=1160

PLANTS: The design of the exhibit follows the example of a large river (Rio Negro) with flooded river banks in the Amazon region of South America .

FEATURES DEDICATED TO ANIMALS: The pool of the river dolphin has varying depths of water ranging from 0.5 to 3.5 meters and can be divided into three separate sections. The sweet water is treated biologically without chemicals. The life support system consists of mechanical filtration by skimming and gravel filters, a biological filter and UV desinfection. Water and air temperature are kept at 28° C, air humidity at more than 70%.

FEATURES DEDICATED TO KEEPERS: The keepers have access to the dolphins along a shallow water zone. They can separate the pool into three parts maximum by inserting steel partitions in two places.

FEATURES DEDICATED TO VISITORS: Two panoramic glass panels that reach to the ground allow good views of the animals. The acrylic glass panels are 12 and 6 meters wide and both 2.2 meter high. The water level at eye height of the zoo visitor offers a view of both, under and above water. A wooden visitor hut offers a view into the tree tops.

INTERPRETATION: Several large colourful information panels show details about the river dolpins and their natural environment in South America. Several smaller colourful information panels offer details about the various animal species in the exhibit.

MANAGEMENT: The maintenance of the building engineering is done through a contracting company with support from the zoo maintenance department. Access to the lights and tree canopies is via cherrypicker from the visitor area. The air conditioning outlets are hidden behind vegetation. Aviaries are available out of sight of visitors in order to separate individual tamarins or birds.

CONSERVATION: A Cooperation with the Non-Government-Organization Yagu Pacha in support of conservation projects in South America has been established.

LOCAL RESOURCES: The planning and the design of the tropical hall were done by local companies, the only exception being the large glass panels, which were built by a specialist company in Japan.