

# PRO MON TORIO

MORA RIVER AQUARIUM

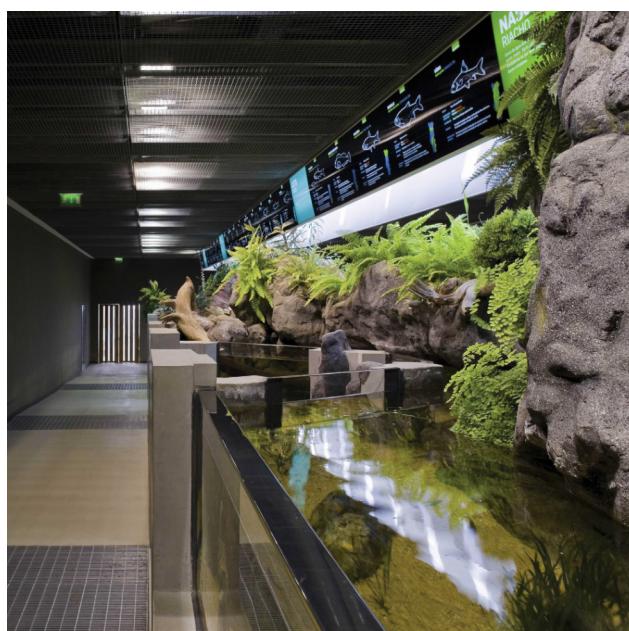
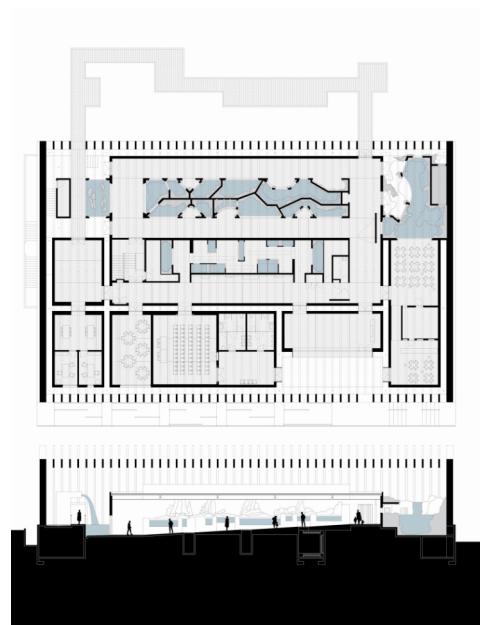
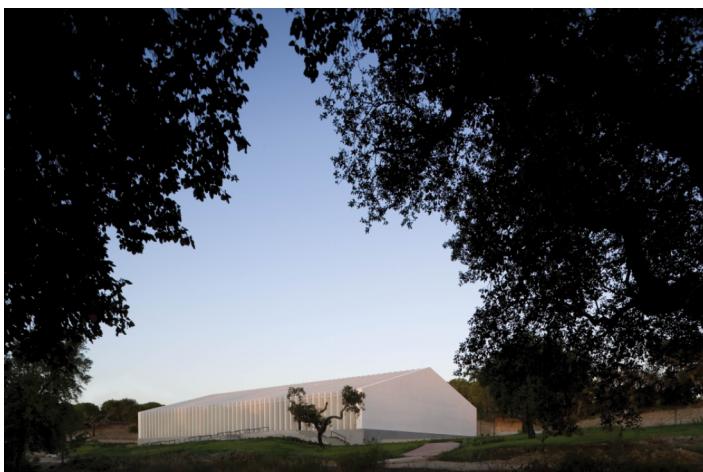
MORA, PORTUGAL

2007–2004

The River Aquarium is located in Mora, a small municipality in the northern Alentejo region. Given the need to shift regional development away from a dependence on an increasingly weaker agricultural economy into the environmental tourism and leisure market, the municipality launched a design-and-build competition for an aquarium that could embody the paradigms of the biodiversity of the Iberian river. Integrated into the Ecological Wild Park of Gameiro and bordering the Raia stream, the building stands amidst a secluded field of cork and olive trees, removed from the more intensive leisure and fishing activities on the river. The plot's gently undulating topography forms a basin at the confluence of two small watercourses. Placing the aquarium at the edge of this quasi-natural retaining lake created a fundamental merger between the building's thematic contents and the presence of fresh water.

Given the blazing Alentejo sun and the need to create shade, the building was devised as a compact and monolithic volume with a pitched shelter of thin white precast concrete porticos with single 33-m spans, evoking the profile of the canonical Alentejo whitewash barns known as *montes*. The shading and cross ventilation systems, combined with the watercourses, enable cooling energy to be saved, as well as providing an increase in sustainable humidity and helping the wellbeing of animal and plant life. Standing on a massive concrete plinth with a built-in stairway-cum-ramp entry, the pitched shed veils a set of mute boxes that contain the programme, namely the reception, ticket booth and shop, cafeteria, a changing display hall, documentation centre, research and education, live exhibits, multimedia and a small auditorium. Inside, the exhibition spaces tend to be dark, in order to minimise the UV impact on the live exhibits and allow visitors a deep view of the aquaria. The outdoor void between these programmatic boxes and the pitched shed generates not only accentuated viewing points onto the outside but also a promenade that culminates in the passageway through a bridge over the lake, which in itself is also a live display of animals and plants collected and nurtured in the region.

The live exhibits — the main feature of any aquarium — flourish with the help of complex life-support systems imitating the different regional natural habitats, allowing various animals and plants to be shown side-by-side. In the basement, these support systems control water temperature stability, pH levels, quality control and filtering for each of the habitat settings, including a duct gallery below each exhibit to supply and monitor the water. The water for the building is taken from a well on the site, pumped into a reserve container and regenerated after use. In addition, the technical floor is equipped with areas for animal quarantine, food preparation, laboratories, staff facilities and logistics. In contrast to the *in-situ* concrete-cast plinth and the white precast porticoes, the programmatic boxes are built in polished-finish plastered terracotta masonry with steel frames and varnished MDF carpentry. With more than 500 live specimens, the aquarium receives a yearly average of 200,000 visitors.



Location: Ecological Wild Park of Mora (Alentejo region), Portugal

Client: Municipality of Mora

Consultants: Cosestudi (museology), Henrique Cayatte (graphic design), Pedro Salgado (scientific illustration), Anyforms (animation), Y-Dreams (multimedia systems)

Contractor: Teixeira Duarte SA

Scope of services: Architecture, exhibition design, lighting design, landscape architecture and signage & graphics

Project brief: Turnkey design-and-build river aquarium

Plot area: 17 ha

Gross floor area: 3,000 sq. m

Construction cost: EUR 6m

Project status: 2004 (public competition, 1<sup>st</sup> prize) – 2007 (built)

Photography: Fernando Guerra, Promontorio (construction)

