

The Pile Dwellings at Rose Island. Investigation and Preservation of an endangered UNESCO World Heritage

The pile dwellings of Rose Island in Lake Starnberg south of Munich are one of the rare lake settlements in the Alpine foreland. The archaeological records date from Neolithic Altheimer and Münchshöfener Culture (around 4000 b. C.) up to early La-Tène Age (400 b. C.). Especially the late dwellings are unique in Europe, as elsewhere just at Lake Bourget in France an Iron Age pile dwelling was found. The settlement records were mainly found in the shallow water west of the island (Late Bronze Age) and at the north-east peak (Late Bronze and Iron Age).

A monitoring campaign started in 2015 as cooperation of the Bavarian State Conservation Office¹ and the Bavarian Society for Underwater Archaeology² under the auspices of MARTIN MAINBERGER and TOBIAS PFLEDERER. At first it was necessary to chart the archaeological record, especially piles and horizontal woods. Threats for the site and damages were documented.

The site is as well protected by international regulations of the UNESCO as by national laws, like the Bavarian Conservation Law,³ which prefers the in-situ-conservation of sites to excavations. Areas of restricted access for boats correspond to the targets of the federal and EU bird protection zones.

The research detected as major threats for the archaeological layers the impact of recreational tourism and boat traffic. Especially the boats' anchors and people stepping into the shallow water lead to massive destructions. The major natural danger for the archaeological record is the erosion caused by current and surf. It was enhanced in the last century by human impacts as the destruction of the reed vegetation around Rose Island. As minor threats were determined building projects, as these are widely forbidden on the island, as well as treasure hunting and careless divers, as they have not been reported around the island.

Protection measures were developed responding to these threats. The creation of zones with restricted access will help to prevent further damage through boats and tourists. The barriers have to be controlled by a caretaker, as existing barriers, marking a fishery protected area, are often neglected by the boatmen. Public information can also be an important part of preservation strategies, as it shows the importance of the site to society. It can be promoted through museums, information points at the site, TV broadcasts and else. ULRICH SCHLITZER considers high public attention for the Rose Island settlements as ambivalent, as tourists can also be a source of destruction, like seen in the Altamira Cave in Spain or in the Valley of Kings in Egypt. Protection covers, as installed at similar sites of geotextile and gravel, would be a solution to protect certain especially endangered areas. The north-east peak with the Iron Age records could be saved from erosion accordingly. Rescue excavations, in which archaeological findings are dug, before they get destroyed through erosion, should be an exception, because they in general contradict the guideline of in-situ-conservation. Renaturation, which in this case means the recovery of the reed or macrophyte vegetation around the island, could be a solution, as the plants stabilize the upper layers against erosion. Former attempts to settle reed near the eastern shore of the island failed.

As the appreciation and the UNESCO-certificate of a site depend on its state of preservation, an enduring conservation of the Rose Island site has to be enforced. Otherwise it could lose its UNESCO-certificate, which would lead to a lower protection by law and the loss of financial funds for further measures.

¹ Bayerisches Landesamt für Denkmalpflege.

² Bayerische Gesellschaft für Unterwasserarchäologie e. V.

³ Bayerisches Denkmalschutzgesetz DschG.