



Grey heron (*Ardea cinerea*).



Wooden poles – pilots.



Wheel with an axle. City Museum of Ljubljana.

LJUBLJANSKO BARJE

Only a few steps from Ljubljana's last suburban streets spreads Ljubljansko barje (Ljubljana Moor). This almost 15,000 hectares large marshy plain is marked by an interminable mosaic of grasslands, litter woodlands, fields, ditches and hedges. They host numerous endangered animal and plant species.

Ljubljansko barje of present day is a precious and unique green space, dominated by the Ljubljanica river. Due to its natural values it is a part of Natura 2000 network, and since 2008, a designated Nature park. The region has been populated as early as in the Neolithic, when the local population used to build pile – dwellings. Remains of pile-dwellings were discovered as early as in 1875. Later, in 2002, the world's oldest wooden wheel was also discovered here.

Two groups of pile dwellings in Ljubljansko barje are part of a serial transnational nomination for inscription on UNESCO World Heritage List, together with Switzerland, France, Germany, Austria and Italy. With its outstanding universal value they contribute to an exceptional representation of prehistoric pile dwelling civilizations, spanning over a wide geographical area for more than 4500 years.

RESEARCH OF PILE DWELLINGS

More than 130 years have past since the first discoveries of pile dwellings in Ljubljansko barje. Extensive excavations from the end of the 19th century and systematic research in the 20th century have broadened our knowledge about the oldest permanent population in the Ljubljana basin. More than 40 pile dwellings have been identified to this day, with the last one discovered as late as in 2009 in Ljubljana. Since the first pile dwellings were discovered in 1875, Ljubljansko barje became a synonym for a prehistoric village on piles. The pile dwelling findings are kept by the City museum of Ljubljana and the National Museum of Slovenia.



Earthenware found at the excavation. City Museum of Ljubljana.

WHEEL WITH AN AXLE

The world's oldest wooden wheel with an axle according to analyses, over 5000 years old, was found during research of pile dwelling settlement at Stare gmajne near Vrhnika. Besides the remains of the wheel, an separated axle has also been found.

In the spring of 2002, a team from the Institute of Archaeology Scientific Research Center of the Slovene Academy of Sciences and Arts, under the guidance of Dr. Anton Velušček continued with the project of wood sampling at the location of Stara gmajne near Vrhnika. A surprise awaited them in one of the drainage ditches. Besides rich findings and two dugouts, they have also found the remains of a wooden wheel and a separated wheel axle.

The wheel was composed of two ash-wood plates that were connected by four oak wedges. The choice of ash-wood was not coincidental, because of its strength and because it grew in the vicinity. The axle was constructed from one piece of oak wood and was 124 cm long. The wheel is surprisingly accurate and extremely skilfully constructed. The manner of attachment and joining point to an exceptionally skilled master craftsman and a real connoisseur of various types of wood. The wheel from Ljubljansko barje can be regarded as the pinnacle of world heritage due to its age and technical superiority.

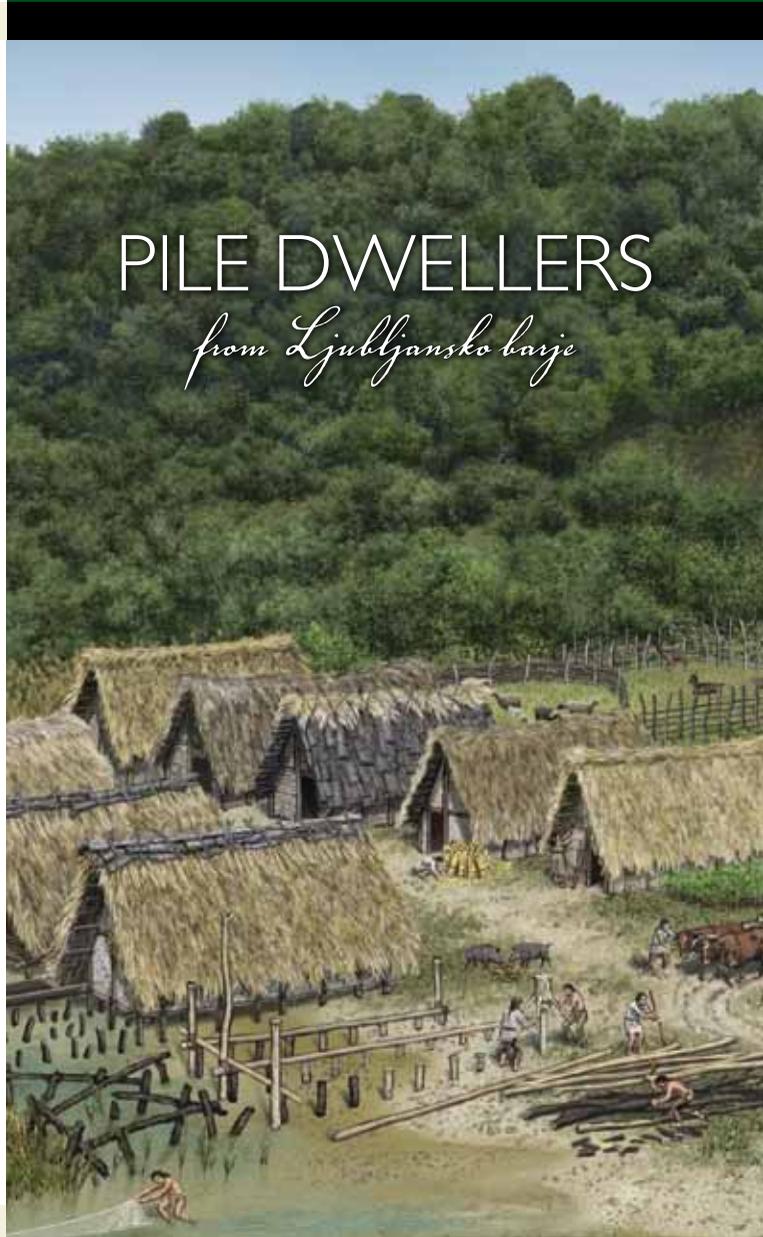


Cleaning and documenting at the conservation workshops.



Ljubljansko barje

KRAJINSKI PARK



PILE DWELLERS

from Ljubljansko barje

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United Nations
Educational, Scientific and
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Slovenian National Commission
for UNESCO

Organizacija Združenih
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za UNESCO



Ljubljansko barje
KRAJINSKI PARK

REPUBLIKA SLOVENIJA
MINISTRSTVO ZA KULTURO



Pile dwellings settlement.



Hunters return.



Anglers on canoe.



Harvesting wheat.

PILE DWELLINGS

Pile dwellings are a special form of dwellings in areas with lakes and marshes. The prehistoric pile dwellings in Europe appear as early as in the Neolithic Age and exist throughout the Copper and Bronze Age. They spread from north over the borders of the Alpine world all the way down to the Balkans.

The largest number of pile dwellings, over one thousand, is to be found in the Alpine region, which also include the pile dwellings of Ljubljansko barje. The common characteristic of pile dwellings is the construction of dwelling places on piles – carrying posts that were used as stabilization in wet environments. The construction method, size of dwelling places, their position and choice of construction materials varied from location to location.



Bone and horn artifacts and stone axes from settlement near Ig. National Museum of Slovenia.

WHAT WAS LIFE LIKE?

How did the people from the pile dwellings settlements live and what did they eat? Settlement of the area was first made possible after the warming that followed the last Ice Age. Gathering, hunting and fishing were soon supplemented by agriculture and cattle breeding. Cereals were cultivated with the use of wooden, stone or horn tools.

The population was most probably already introduced to the grapevine. Fruits and other nature products represented an important part of their nutrition. They bred sheep, goats and cattle while also providing a large quantity of meat by hunting stags, deer, boars, beavers, otters and water birds.

Nowadays, the type of their nutrition, the methods of preparing the food as well as the climatic and environmental conditions they lived in can be deduced on the basis of research on plant and animal remains, that were found in layers of earth in pile dwellers' settlements.



Selected finds from settlement near Ig. National Museum of Slovenia.

TRAVERSING THE DISTANCES

Although there were no roads, the prehistoric people traversed the distances that spanned hundreds of kilometres. This is proven by the imported items and raw materials that arrived from as much as 500 km away.

Pile dwellers did not construct roads. They traversed their land paths by foot, and from 4th millennium B.C. onwards they also used cattle pulled carts. More frequently used were water paths. The most common transport vehicles were boats – up to 12 meters long canoes and dugouts that were made from one single tree trunk.



Reconstruction of two-wheeled cart.

SKILFUL CRAFTSMEN

The first farmers were not only connoisseurs of nature and its characteristics but also skilful craftsmen. The raw materials for tools, weapons and other useful items were gathered from local and distant places. The settlers were well aware of the characteristics and usefulness of individual materials. Individuals that had certain skills, such as ore melting, held an important status in the society of that time. Trade also played an important part in introducing novelties and exchange of goods and materials.

HOW ABOUT PREHISTORIC FASHION?

Who the pile dwellers were and how they looked like, and what was their "fashion" like, cannot really be established. However, it seems that the looks were important.

Textile materials were created out of sheep wool by using distaffs and spindles, and were then dyed with plant pigments. Clothes and footwear were also made from animal hides and other accessible raw materials. They used to sew them together with needles made of animal bones.



Copper bracelets and stone beads necklace from settlement near Ig. National museum of Slovenia.

Pendants and decorated beads were worn as decorations. They would thread drilled shells, animal teeth, wooden and clay beads. Copper bracelets and belt buckles made of animal bones have also been discovered.