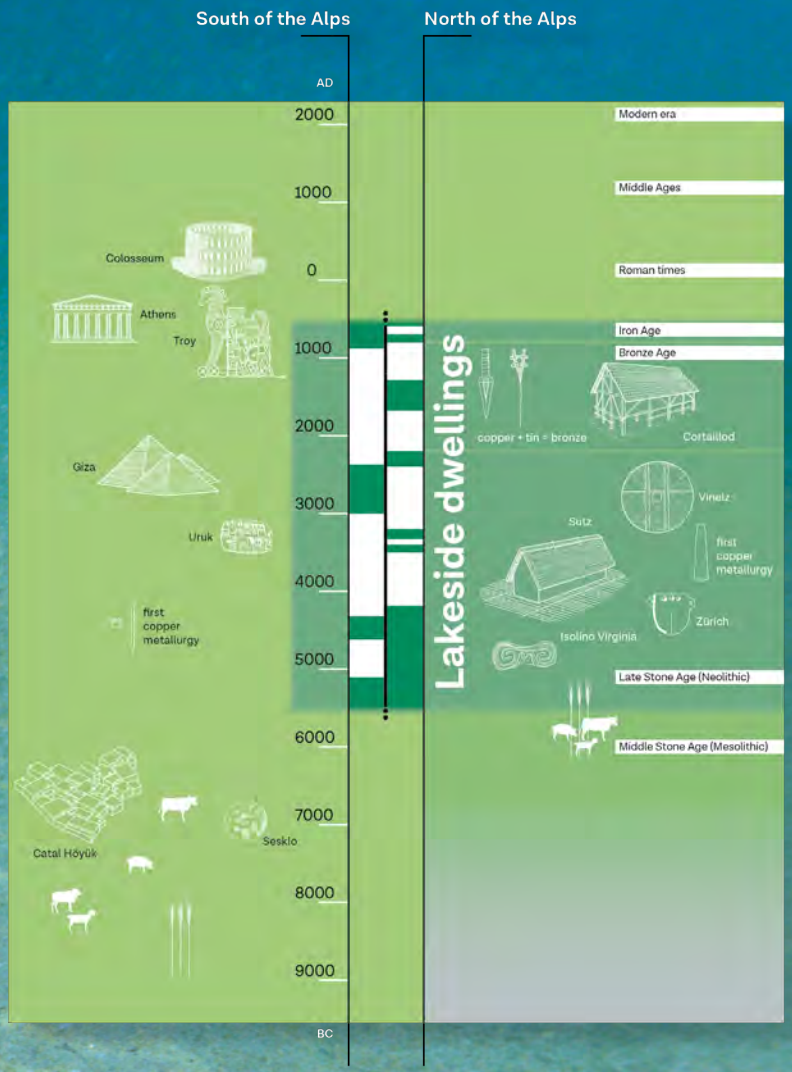
UNESCO WORLD HERITAGE PREHISTORIC PILE DWELLINGS AROUND THE ALPS

PREHISTORIC PILE DWELLINGS
AROUND THE ALPS

United Nations
Educational, Scientific and
Cultural Organization

Prehistoric pile dwellings around the Alps
World Heritage since 2011



TIMELINE:
Important stages of development in the Orient and the Mediterranean (left) – Epochs in the Alps (right) and period of pile dwellings (dark green). White: settlement phases with absolute dates.

FRANCE

UNESCO has recognised **eleven archaeological zones** in eastern France. Nine are located in the Alps, the other two in the Jura Mountains. The sites have been known since the 19th century. In the **Savoie** and **Haute-Savoie** departments, settlements were established during the Neolithic period on the shores of **Lakes du Bourget, d'Aiguebelette, d'Annecy** and **Geneva,** others followed in the Bronze Age. Because of a rise in the lake levels, the remains are today submerged under two to five metres of water. They are currently being explored and maintained using underwater archaeological methods. In the Jura department, **Lakes de Chalain** and **Clairvaux** have been home to farming communities since the early 4th millennium BC. In order to protect their granaries and houses, they chose the seasonally flooded lakeshores to live on. Excavations mounted between 1970 and 2009 uncovered evidence that highlights the importance of the remains.

SWITZERLAND

More than 450 sites have so far been discovered in and around lakes and bogs throughout the whole of western, northern, central and eastern Switzerland. Of these, **56** have been inscribed on the UNESCO list of World Heritage Sites as part of the serial site "Prehistoric Pile Dwellings around the Alps". Thanks to their rich assemblages of finds, several Swiss sites including **Egolzwil, Cortaillod, Pfyn, Horgen** and **Arbon** gave their names to particular periods of the Late Stone and Bronze Ages. The pile dwellings are also an important aspect of Swiss cultural identity and, since their discovery in the mid-19th century, have become a unifying element between the French and German-speaking parts of the country. As a consequence, the pile dwellings are an important subject of Swiss archaeological research and one of the key aspects of study at various universities.

ITALY

A total of **19 components** of the UNESCO site are spread across five regions of present-day Italy: **Lombardy** (10), **Veneto** (4), **Piedmont** (2), **Friuli Venezia Giulia** (1) and T**rentino Alto Adige** (2). The phenomenon characterises the territory between the pre-Alpine lakes in the north and the River Po in the south. The majority of pile-dwelling sites were located on the sites of **Lakes Garda** and **Varese**. The earliest known remains date from the Early Neolithic (c. 5000 BC), with settlement activity intensifying in the Early and Middle Bronze Ages and ending in the late 2nd millennium BC. Excavations have uncovered a large number of artefacts made of bronze, antler, animal bone, stone and, most importantly, pottery. Objects made of perishable materials such as wood and textiles are also noteworthy. The wealth of technological know-how present at Bronze Age pile-dwelling sites formed the basis for successive phases of cultural development.

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What are pile dwellings?

Reconstructed pile dwellings and a dugout canoe on the Archaeological Educational Trail at Wauwil Bog (CH)

World heritage under water: piles at Lake Keutschacher See (AT)

Pile dwellings are the remnants of houses and other buildings, which have survived in the form of piles or whole pile fields and other wooden architectural components on lakeshores, below water and in bogs. Due to the fact that such perishable materials are much better preserved in waterlogged soil and submerged in water, some of these villages, known as lakeside or wetland settlements, have yielded many extraordinary finds. So far more than 1000 pile-dwelling sites have been discovered in the circum-Alpine region.

They provide a unique insight into the day-to-day lives of the farming communities of the Alpine states over a 4500-year period (5000—500 BC). Since 2011, a total of 111 such sites in six countries of the circum-Alpine region have been inscribed on the UNESCO list of World Heritage Sites as a transnational and serial site entitled “Prehistoric Pile Dwellings around the Alps”.

Archaeology under water, at lakeshores and in bogs

Just beneath the present-day surface: wooden floors with hearths dating from some 5000 years ago from the bog settlement at Alleshausen in the Federsee region (DE)

timbers
ion and
ording of
airvaux (FR).

An archaeological diver recovering a pottery fragment

When people repeatedly frequent the same places over long periods of time, they leave a lot of evidence behind. Reading and understanding such features is the actual challenge that archaeologists are constantly faced with. Waste, objects that have been lost, faeces and abandoned buildings accumulate over time and form so-called cultural layers, which are left behind when the settlements are abandoned. In cases where several villages were built in the same place, we find natural deposits alternating with cultural layers, much like the layers of a Lasagne, resulting, over the millennia, in rather complex sequences of layers.

Scientific excavations in waterlogged soil or in lakes are particularly challenging due to the complicated conditions under which they take place. Sites in bogs and on lakeshores have to be drained before finds can be recovered. Sites that are permanently submerged, however, have, since as early as the 1930s, been encased in so-called *caissons*, or sheet pile boxes, to allow archaeologists to excavate without getting their feet wet. Sites in deeper water are nowadays examined by professional archaeological divers. In order to maintain good visibility under water, an artificial current is generated. Underwater suction pipes are used to expose the more delicate features and to remove thick layers of soil from the lakebed. Special sacks made of netting attached to the pipes act like filters, ensuring that even the smallest objects are retained for examination.

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Monitoring
the use
of technology, including drones, side-scan sonars, multi-beam and sediment echo sounders as well as digital surveying technology and high-resolution underwater photography. All this equipment allows us to create three-dimensional images of the layer surfaces and to even look into them without destroying any of the contexts.

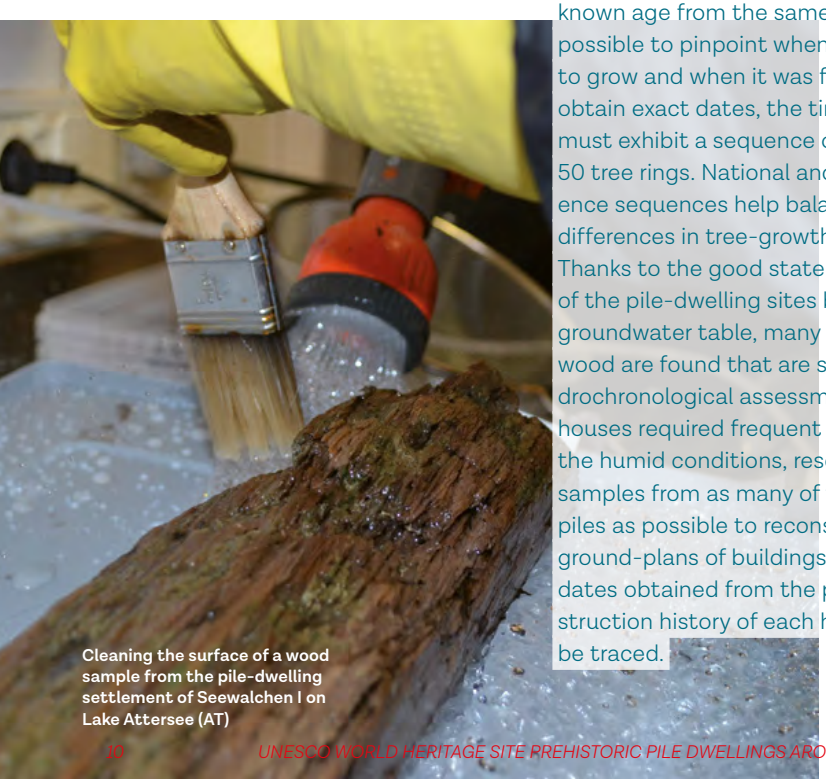
In favourable conditions, the digital imaging results can be used to produce true-to-scale models of the archaeological remains. Most important of all, apart from the technological advances, are well-trained and experienced excavators. The variety and complexity of pile-dwelling sites call for a considerable range of skills and fieldwork experience. When working under water, the safety of divers is another important aspect to bear in mind.

Redeposition of a dugout canoe at Lake Bienne (CH)

A sickle and a comb, both of which have just been uncovered at the excavation at Lucone, Polpenazze del Garda (IT). They are very well preserved thanks to the excellent conditions of preservation for organic materials in the waterlogged ground.

Archaeology under the microscope …

Wood sample from the pile-dwelling settlement of Seewalchen I on Lake Attersee (AT)



Cleaning the surface of a wood sample from the pile-dwelling settlement of Seewalchen I on Lake Attersee (AT)

The exact year in which a tree was felled can be determined using its growth rings. Historical events have been marked for exhibition purposes on this slice of oak from Canton Zug (CH).

Dendrochronology

Dendrochronology or tree-ring dating is used to determine the exact year, and sometimes even the season, in which a tree was felled. This is achieved by measuring the thickness of the tree rings on a fragment of wood. The resulting pattern of wider and narrower tree rings mirrors alternating phases of stronger and weaker growth. By comparing it with tree-ring measurements from other samples of known age from the same region, it is also possible to pinpoint when the tree began to grow and when it was felled. In order to obtain exact dates, the timber fragments must exhibit a sequence of at least 30 to 50 tree rings. National and regional reference sequences help balance out localised differences in tree-growth patterns. Thanks to the good state of preservation of the pile-dwelling sites below the groundwater table, many fragments of wood are found that are suitable for dendrochronological assessment. Because the houses required frequent repairs due to the humid conditions, researchers require samples from as many of the preserved piles as possible to reconstruct individual ground-plans of buildings. Based on the dates obtained from the piles, the construction history of each house can then be traced.

Archaeological excavation at Spica (SLO) in 2010. Late Chalcolithic pile dwellings were discovered here with evidence of metallurgical activity from the 25th to the 26th centuries BC.

Still green just after its recovery, this holly leaf from Zug-Riedmatt (CH) is more than 5000 years old.

Radiocarbon dating

Radiocarbon dating, also known as carbon-14 dating, is a method of establishing the age of organic and thus perishable materials such as plant remains or bone. All living organisms store carbon taken from the atmosphere during their lifetime. When the organism dies, carbon is no longer absorbed and the radioactive carbon isotope ^{14}C within begins to decay. The decay can be measured (half-life period c. 5730 years) and the remaining amount of carbon isotope ^{14}C is then used to determine the age of the organism; the dating accuracy of this method can range from less than one to several centuries. Because the natural carbon content of the atmosphere has varied over the centuries, carbon-dating results must be corrected by means of a calibration curve. Precise dating is therefore virtually impossible. Nevertheless, the method plays an important role in archaeological research because it allows us to determine the approximate age of an object or feature.

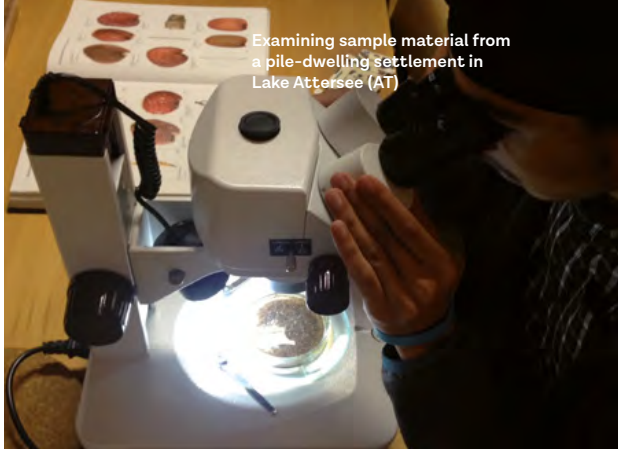
Archaeobotany and archaeozoology

Under normal circumstances, uncharred leaves, fruits, seeds and wood, when deposited in the ground, decay quickly. This is not the case when the organic matter is submerged in water or in a bog. The low levels of oxygen significantly slow down the process of decomposition. The decayed material within the plant cells is replaced by water, which generally means that the form is preserved and the remains can still be identified even after several thousand years. Pile-dwelling sites and their organic finds are therefore indispensable archives that allow us to reconstruct the prehistoric landscape, its vegetation and use. Archaeobotany or palaeobotany studies the remnants of plants such as leaves and mosses, the remnants of fruits, for instance hazelnut shells, strawberry seeds and whole apples, and much more. Amongst other things it deals with the diets of both humans and animals, the use of medicinal plants and the processing and dyeing of textiles.

Under the microscope: linseed (left), opium poppy seed (centre), cereal grains (right)

In ideal conditions, not only fish bones but also fish scales are preserved. Whitefish scales from Zug-Riedmatt (CH)

Archaeozoology mainly studies the bones and teeth of animals recovered from archaeological sites. Its aim is to trace the development of both wild and domestic animals to gain insight into hunting and husbandry practices as well as the supply of prehistoric settlements with animal-based foodstuffs.

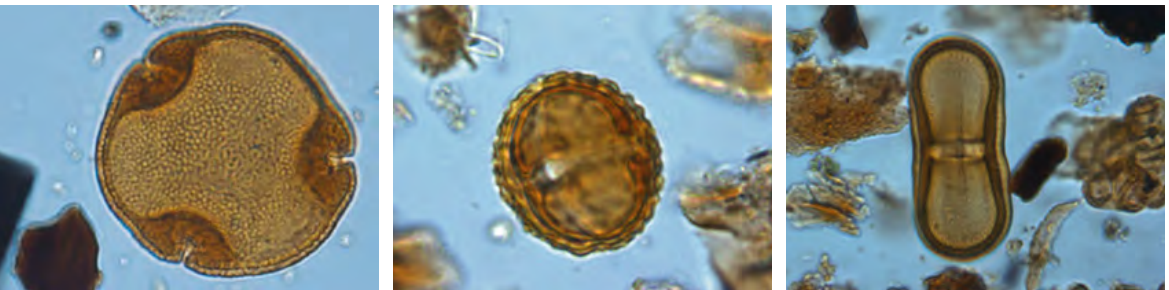


Examining sample material from a pile-dwelling settlement in Lake Attersee (AT)

Pollen analysis

Pollen analysis, also called palynology, is the study of plant pollen and fungal spores. These are found in the cultural layers of settlements and in the natural sediments of bogs and small lakes. Ideally, several metres of deposits have accumulated over the millennia, which can be sampled by extracting cores. In this way the surrounding vegetation since the Last Ice Age can be reconstructed and the human impact on it traced. Forest growth and sequences of certain plant species indicate undisturbed development, whilst fluctuations in the proportions of tree and open-land species point to forest clearances or fires. Pasture-land can also be identified by the presence of pollen from certain plant species and fungal spores.

Crab apples from c. 5700 years ago found at Alleshausen in the Federsee region (DE)



Pollen grains from archaeological deposits. Lime tree (left), brown knapweed (centre) and white laceflower (right).

How people lived at the time …

This is what the settlement on Lake Inkwil (CH) and its surroundings might have looked like.

Houses and forest management

Well-preserved wooden architectural components of houses are a typical feature of the pile-dwelling sites. They show how skilled people were at working with wood. The piles that were driven far into the soft, waterlogged ground, were most likely to survive. They were weight-bearing components that supported the roof or formed part of the walls. Sometimes they were also part of other structures, such as jetties, bridges, palisades, fish traps or similar facilities. In order to understand the functions of the individual piles, it is crucial to determine the wood species and ascertain the chronological sequence by means of tree rings. It is possible in this way to identify associated structures. Other architectural components that were also made of wood include doors, fences, shingles, roundwood posts from log constructions, planks and sills. From at least the Late Stone Age onwards, people had excellent knowledge with regard to the properties of each type of wood and what it was best used for. Each structural component was generally made from a species of wood whose properties were ideally suited for that particular purpose. Studying the architectural components also often provides information about local forests and their use. Evidence suggests, for instance, that leaf fodder was harvested ("fodder lopping") and that certain tree species were particularly well managed.

Crop cultivation and animal husbandry

In most pile-dwelling villages crop cultivation and animal husbandry were the main sources of food. Cattle, pigs, sheep and goats were used as a source of food and of bones, sinews and hides. Milk was drunk or processed further. The use of working animals is also attested to by evidence of wear and tear on bones.

The main crops cultivated were various types of grain and pulses as well as oil and fibre-producing plants. Late Stone Age cereals were naked wheat, barley, emmer and einkorn. They were probably used not only for baking and cooking, but also for brewing beer. Other cultivated crops were peas, opium poppies and flax. Spelt, millet, broad beans and lentils were added to the menu in the Bronze Age at the latest (c. 2200 BC). Besides stores of grain and waste from processing cereals, remnants

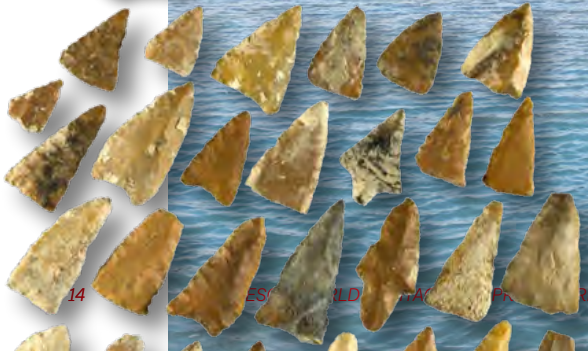
This is what the settlement at Zellmoos (CH) on the peninsula in Lake Sempach might have looked like 3000 years ago.

of food have also been found on ceramic vessels in pile-dwelling sites; these include various types of stews, porridges and probably also baked goods. However, it is only ever possible, from the archaeological finds, to gain an approximate understanding of how the dishes were prepared, what spices were used or what they actually tasted like.

Hunting and gathering

Hunting and gathering continued to be important sources of food for the sedentary farming communities. The gathering of wild fruit, berries and nuts is attested to by pips, seeds and shells. Crab apples, raspberries, blackberries and hazelnuts are very often found. Roots, leaves and mushrooms would have been gathered, but these rarely leave any traces behind. Honey and birds' eggs would probably also have enriched the menu. Besides serving as a source of food, plants were also gathered for their fibres, dyes and medicinal properties. Hunting with bows and arrows is attested to by arrowheads made of wood, bone and flint. Blunt arrowheads made of wood or antler were also used, most likely for hunting smaller birds. However, the main animals hunted were deer, roe deer and wild boar.

Bones such as this bovine skull provide information about which animals were kept and how they were used.

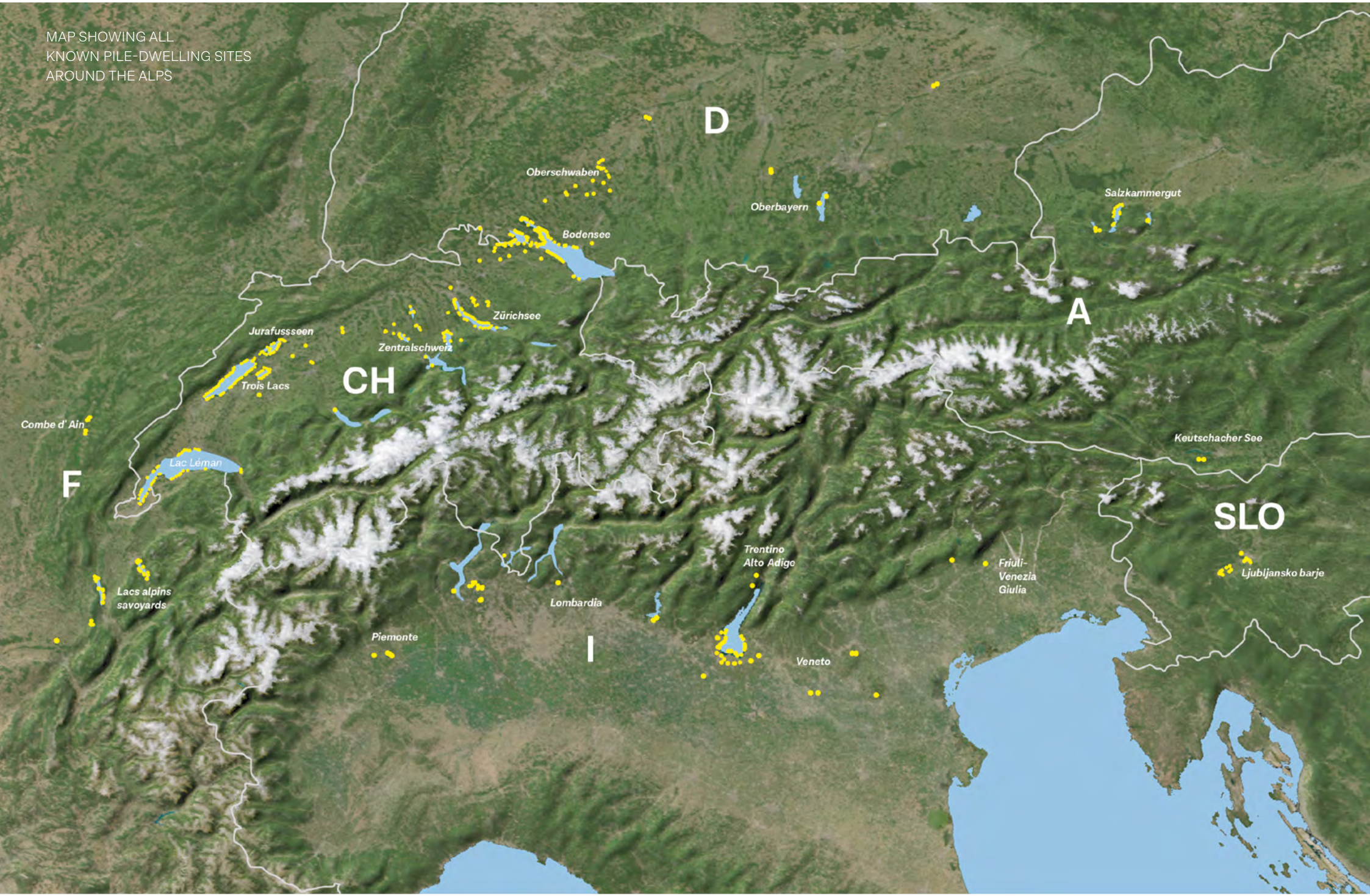


Used for hunting: flint arrowheads from Gachnang/Niederwil on Lake Egelsee (CH)

Such wooden furrowing sticks were used for farming the land.

Fishing and hunting played an important role. Amongst other implements, antler harpoons like these were used.

e of fishing has come to light at
very pile-dwelling site from the
one and Bronze Ages. Remnants
g equipment, boats and paddles
fish themselves are usually found,
the number of fish remains that
vived is hardly an accurate rep-
ion of the actual number of fish
ed at the time, since the delicate
rely survive, even in the most
le conditions. Besides occasional
fish scales, vertebrae and parts of
most often occur.
r, human faeces sometimes con-
of that fish was consumed: eggs of
sites in the excrements show that
was not cooked through.
m large species such as catfish
, many smaller species including
hitefish, lake trout, char, bleak,
nch, carp, bream and rudd have
light in pile-dwelling settlements.
netting and angling, harpooning
use of weir baskets and other
amongst the fishing methods
have been used.


MAP SHOWING ALL
KNOWN PILE-DWELLING SITES
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D
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Oberschwaben
Oberbayern
Salzkammergut
Bodensee
Zürichsee
Jurafussseen
Zentralschweiz
Trois Lacs
Combe d' Ain
Lac Léman
Keutschacher See
Lacs alpins
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Lombardia
Trentino
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Friuli-
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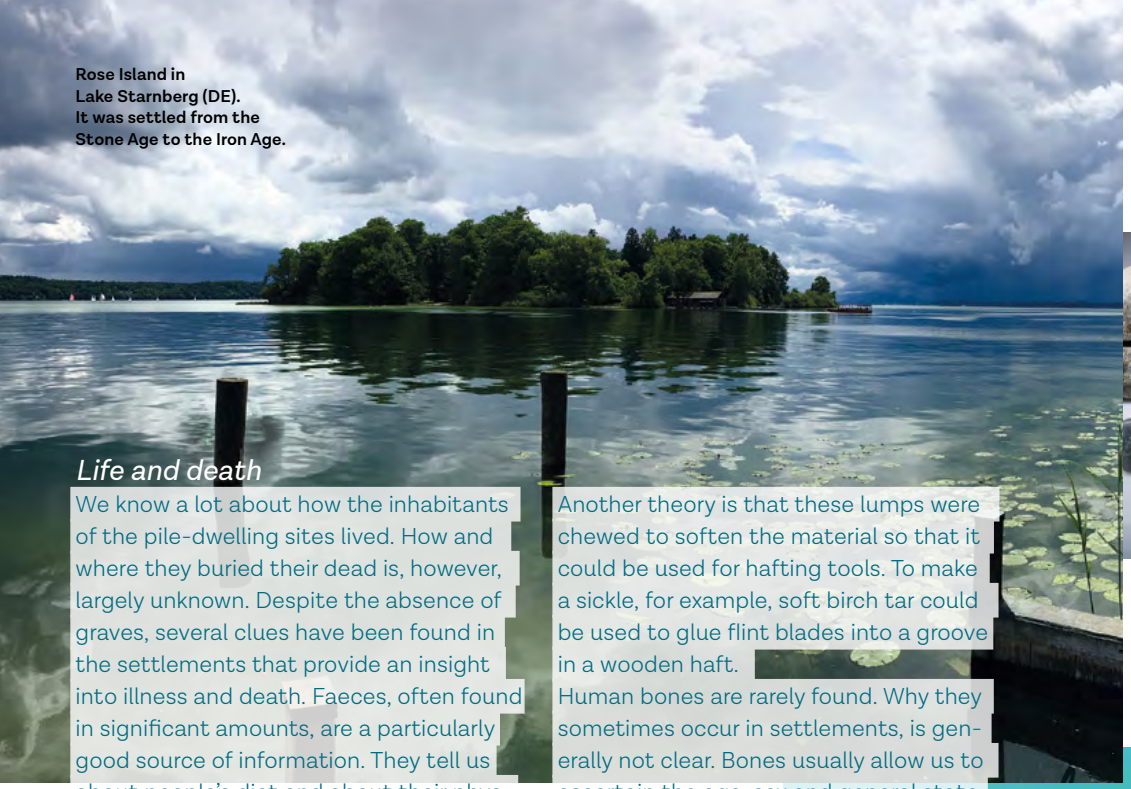


Rose Island in Lake Starnberg (DE). It was settled from the Stone Age to the Iron Age.

Life and death

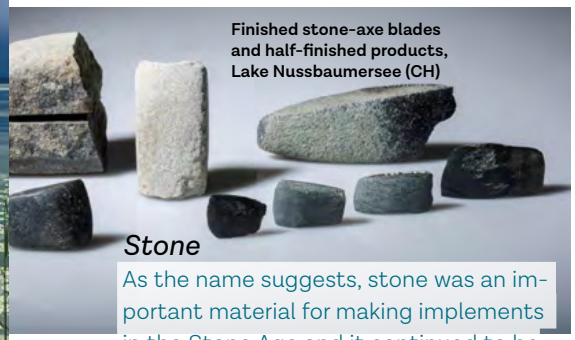
We know a lot about how the inhabitants of the pile-dwelling sites lived. How and where they buried their dead is, however, largely unknown. Despite the absence of graves, several clues have been found in the settlements that provide an insight into illness and death. Faeces, often found in significant amounts, are a particularly good source of information. They tell us about people's diet and about their physical wellbeing. Diseases, often including parasitic infestations, can be detected in excrement. Another impressive type of object are pieces of birch tar with dental imprints, which are seen as the earliest form of chewing gum. The dental imprints even allow specialists to determine the age and condition of the teeth. Because birch tar has anti-inflammatory properties, we presume that it was not just chewed for people's enjoyment.

Another theory is that these lumps were chewed to soften the material so that it could be used for hafting tools. To make a sickle, for example, soft birch tar could be used to glue flint blades into a groove in a wooden haft.

Human bones are rarely found. Why they sometimes occur in settlements, is generally not clear. Bones usually allow us to ascertain the age, sex and general state of health of a deceased individual.

Almost 6000 year-old birch tar "chewing gum" with tooth impressions from the settlement of Hornstaad-Hörnle on Lake Constance (DE)

… and what evidence was left behind



Finished stone-axe blades and half-finished products, Lake Nussbaumersee (CH)

Stone

As the name suggests, stone was an important material for making implements in the Stone Age and it continued to be used alongside the newly discovered metals during the Chalcolithic period (Copper Age) and the Bronze Age. Two important categories of stone can be distinguished: flint and various types of rock. Flint deposits were mined below ground. When flint is struck, it splinters into fragments with very sharp edges. This prompted prehistoric people to produce thin blades and flakes, which could be turned into knife blades, arrowheads, graters and scrapers and hafted into wooden and antler handles.

Rock was used to make millstones, grinding stones, stone axes and pieces of jewellery. Different types of manufacturing technique were employed, including pounding, sawing, grinding, pecking and drilling.

Examining the origins of various types of stone provides evidence of contacts and exchange networks that stretched across Europe and constantly changed and evolved over time.

Ceramic vessels from Isolino Virginia, Lake Varese (IT) with decorations that are typical of the region

Pottery

The manufacture of ceramic vessels in the circum-Alpine region began around 6000 BC. Spindle whorls and loom weights were also created from this material. The clay was extracted from the surrounding area and then mixed with grus (crushed stone), grog (ground fireclay), straw, dung, seashells or ground bone. These tempering agents reduced shrinking of the clay during drying and increased its resistance to cracking.

Small vessels were made by flattening lumps of clay to shape the vessel walls. More elaborate and larger containers were created using coils of clay.

Vessel surfaces could be compacted and polished to a shine using a smooth stone. Patterns were impressed or incised, using either one's fingers or a tool made of wood or bone. Different vessel shapes, types of decoration and styles are often characteristic of a particular period or region. The vessels were fired either in an open fire or in a pit. The latter method allowed a potter to better control the oxygen supply and temperature during the firing process.

Headdress from the Bronze Age site at Fiavé-Carera (IT)

Necklace of amber beads from the settlement at Lagazzi del Vho (IT)

Wooden piles in Lake Mondsee (AT)

Two dugout canoes and a wooden wheel and axle were found during archaeological excavations carried out in 2002 at the pile-dwelling site of Stare gmajne (SLO). The wheel belonged to a two-wheeled cart of exceptional quality made 5150 years ago.

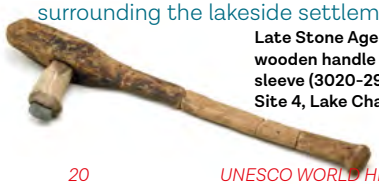
These perforated teeth were probably worn together on a necklace; three wolf's teeth and one pig's tooth that was worked to look like a wolf's tooth (on the left) from Zug-Riedmatt (CH)

Almost 6000 year-old charred linen textile from the site of Arbon-Bleiche 3 on Lake Constance (CH)

Weaving on a reconstructed loom

Wood

Wooden wheels and axles are outstanding finds from pile-dwelling sites. They are some of the oldest surviving remains of wagons worldwide. Late Stone Age wheels, made of boards held together by strips of wood inserted into dovetailed grooves, were technically quite skilful constructions. Boats or dugout canoes, hewn, as their name suggests, from a single tree trunk, are no less impressive. Wood was also used to make parts of tools, such as handles or shafts, whose ingenious shapes can easily compete even with modern, anatomically designed tools. Numerous wooden vessels have also been preserved. Particular care went into selecting the type of wood whose material properties were best suited for the manufacture of an architectural component, tool or vessel. Then as now the most commonly used wood species were oak, fir, ash, alder, willow, poplar, lime and birch etc. Because wood was such an important raw material for the inhabitants of the pile dwellings, the forests were intensively used, and this had a lasting impact on the composition and development of the wooded areas surrounding the lakeside settlements.



Late Stone Age axe with a wooden handle and antler sleeve (3020-2990 BC) from Site 4, Lake Chalain (FR)

Bone and antler

Most of the numerous bone and antler remnants found in the settlements were waste from the slaughter of animals, allowing us to gain information about people's dietary habits. Bone and antler fragments were also used to manufacture a wide range of objects that had to be both robust and flexible. Antler was not only obtained from hunting, shed antlers could also be utilised. Amongst other things bone and antler were used to make various woodworking tools such as chisels and axes as well as awls, needles and other implements for working with leather and textiles. Because of its elasticity, antler is a material suitable for making axe sleeves, pieces of antler fitted between the stone axe blades and the wooden hafts to absorb the shock to the wood on impact and avoid damage to the tools. Jewellery items including combs, pins, pendants and beads were also made of bone, antler or animal teeth. A special type of object found in lakeside settlements was the so-called antler beaker which was carved from the pedicle, the root part of the antler.

Antler beaker from the settlement at Egolzwil, Canton Lucerne (CH)

Carefully worked wooden vessels from the Bronze Age settlement at Fiavé-Carera (IT)

Textiles

Mats, bags and baskets as well as hats, shoes, capes and belts are among the textile finds recovered from pile-dwelling sites. Various types of cord and rope have also been preserved. Delicate fishing nets were made, but also robust ropes, which were probably used chiefly in timber construction. Lime or oak bast, birch bark and flax were mainly processed. However, textiles not only provide information about materials and their use. The sometimes very fragile remnants also help us to reconstruct some of the steps in the process of textile manufacturing. Implements including spindles and spindle whorls, loom weights, combs and heckles were all used as part of this process. Heckle boards from the processing of flax, for instance, demonstrate how the finer fibres were separated from the bast.

Metal

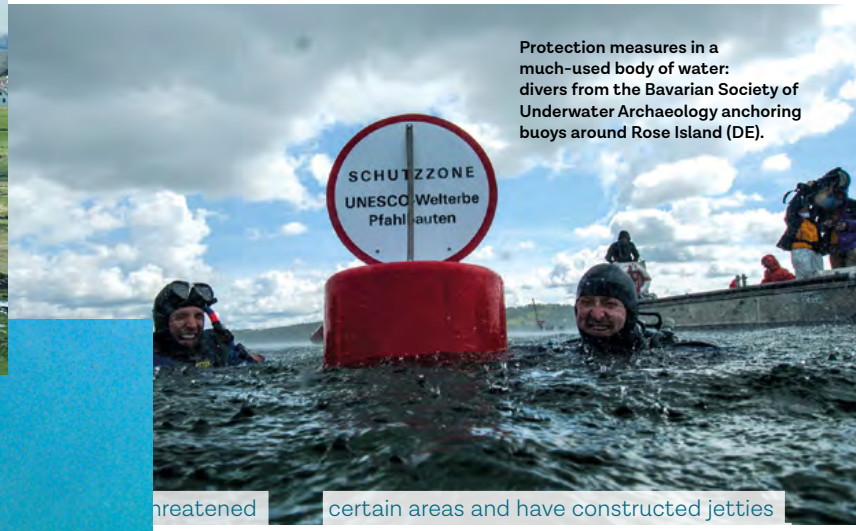
Copper was first processed as a raw material in the circum-Alpine region at the beginning of the 4th millennium BC. Because of its frequent use, the latter part of the Late Stone Age is also called the Chalcolithic period or Copper Age. Initially, copper objects were probably imported from central and eastern Europe, where by that time the extraction and processing of copper ore was already well advanced. It was not long, however, before not only finished metal implements began to appear in pile-dwelling sites, but also tools, for instance crucibles, attesting to the processing of this new raw material at the sites themselves. Compared to working with stone, clay, wood, bone or antler, copper metallurgy was a completely new technology. By the end of the 3rd millennium BC the first objects were being made of bronze, an alloy consisting of copper and tin. This marked the beginning of an era known as the Bronze Age. Adding tin to copper made the casting process easier because the resulting alloy had a lower melting point.
It also allowed craftsmen to devise new uses and create new types of tool because bronze is in fact harder than copper.

Metal production is attested to not only by finished products such as bronze pins (left) and blades (right), but also by crucibles (centre).

Protecting world heritage

Protection (for both the site and the reed bed) by means of gravel-filled geotextile rolls in Lake Zug (CH)

Re-hydration measures and regular monitoring of the water levels as seen here in the Federseemoor area (DE), help to maintain both the sites and the natural environment.



Protection measures in a much-used body of water: divers from the Bavarian Society of Underwater Archaeology anchoring buoys around Rose Island (DE).

World heritage protection – under water and in bogs

Whilst the pile dwellings and their finds have survived for thousands of years, they are very susceptible to environmental changes. The biggest threats to wetland settlements are the drying out of the soil (e.g. due to the draining of bogs), erosion, wave action, construction and leisure activities in shallow water areas around jetties, anchoring areas and lidos.

When applying for UNESCO World Heritage status, the countries involved committed to providing their pile dwellings with special protection. Regular checks ensure that the sites' state of preservation is monitored and, where necessary, protection measures can be put in place, modified or intensified. These are usually intended to preserve the natural covering of the sites by the lake sediments. This is the only way to ensure that the settlement remains are protected by an airtight cover against decay caused by bacteria and other outside influences.

A research diver preparing to record the features under water, Lake Garda (IT)

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sailing
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even pull
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certain areas and have constructed jetties to relieve pressure from shorelines and bogs; there is also a strong focus on the cooperation between archaeology, nature protection, building authorities, municipalities and other stakeholders.

Such measures, however, can only be successful if they are in fact put into practice. Therefore, the onus is on us all to protect this outstanding but sensitive world heritage, by sharing knowledge, by supporting measures that contribute to its preservation and by appreciating it. We are all responsible for the preservation of our joint heritage for future generations.

The research vessel of the Kuratorium Pfahlbauten

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IMPRINT AND PICTURE CREDITS

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Petersgraben 51, CH-4051 Basel
info@palafittes.org

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Graphic designers: Barbara Wais, Drahtzieher Design & Kommunikation, A – 1070 Vienna

Printers: Hart Press, CZ – 76502 Otrokovice

Translators: Sandy Hämmerle, Nicoletta Martinelli, Margaux Depaermentier, Dejan Veranič

We would like to thank everyone who contributed to the creation of this booklet and gave us their help and advice.

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UNESCO AND THE WORLD HERITAGE CONVENTION

The *United Nations Educational, Scientific and Cultural Organization* (UNESCO) was founded in London in 1945 as one of 17 specialised agencies of the United Nations. Its constitution came into force in 1946. In view of what had transpired during the Second World War, the international agency intended to provide an opportunity to create and foster the "intellectual and moral solidarity of mankind", because decision-makers were no longer willing to rely on a peace that was based solely on economic and political agreements. The aims of UNESCO therefore include the promotion of education, science and culture as well as communication and the exchange of information.

In 1972 UNESCO, at its 17th general conference, ratified the Convention concerning the Protection of the World Cultural and Natural Heritage – also known as the World Heritage Convention.

The core idea is the consideration "that parts of the cultural or natural heritage are of outstanding interest and therefore need to be preserved as part of the world heritage of mankind as a whole". This protection is afforded by the international community, which supports the individual measures put in place by the countries concerned. Since 1972, almost 200 states have signed and ratified the convention and by 2018, 1092 sites in 167 countries had been inscribed on the UNESCO World Heritage list.

"Since wars begin in the minds of men,
it is in the minds of men
that the defences of peace must be constructed"

[Source: Preamble of the Constitution of UNESCO 1945/2001]

WHO WE ARE – THE INTERNATIONAL COORDINATION GROUP UNESCO PALAFITTES (ICG)

Switzerland, Austria, Germany, Italy, France and Slovenia, as the six countries involved in the World Heritage Site "Prehistoric Pile Dwellings around the Alps", are committed, as equal partners in cross-border collaboration to exploring this shared heritage, safeguarding it for future generations and giving the public a better understanding of the extraordinary value of these sites.

The central tasks of the International Coordination Group UNESCO Palafittes, which was established to achieve this aim, include coordinating the measures of protection, examination and promotion of this heritage, which is often invisible. It is a matter of the utmost importance for us to be able to support public participation at a local, regional and international level and to raise awareness of the unifying aspects of our shared world heritage. Following the lead of the UNESCO World Heritage Convention, we aim to promote a collaboration in science, education and cultural exchange that is characterised by mutual respect.

GERMANY

The World Heritage Site "Prehistoric Pile Dwellings around the Alps" includes **18 sites** in **Baden-Württemberg** and **Bavaria.** Among them are lakeside dwellings on **Lake Constance** and in **Lake Starnberg** as well as settlements in river valleys and bogs in **Upper Swabia** and **Upper Bavaria.** They include eponymous sites such as **Hornstaad** and the most recent pile-dwelling settlement to come to light, **Rose Island,** which dates from around 500 BC. The excellent preservation conditions in these wetlands have stimulated interdisciplinary research approaches and international collaboration. The **Federsee region** and **western Lake Constance** have traditionally been focal points for wetland archaeological research in southern Germany. Our world heritage has always benefitted from a fruitful cooperation between heritage preservation and nature conservation.

AUSTRIA

Most of the pile-dwelling sites currently known in Austria belong to the 4th millennium BC. They are all submerged under water. **Five** are inscribed on the list of UNESCO World Heritage Sites. They are located in **Lake Attersee** and **Lake Mondsee** (both in Upper Austria) and in **Lake Keutschacher See** (Carinthia). Quite unusually, the pile dwellings in Lake Keutschacher See were located on an island in the lake. The village ruins uncovered at **See** in Lake Mondsee yielded an especially abundant assemblage of elaborately decorated Mondsee-type pottery and other finds. The settlement of **Litzlberg Süd** in Lake Attersee is amongst the best-preserved pile-dwelling sites in Austria. Two settlements at **Abtsdorf** will potentially provide much information for future research endeavours. The settlement of **Abtsdorf I** dates from the Bronze Age; the settlement on the western shore of Lake Attersee, **Abtsdorf III,** was probably only briefly occupied.

SLOVENIA

A total of 43 pile-dwelling settlements are known in Slovenia. They are now all located on marshland but in prehistoric times were on lakeshores. **Two groups** of settlements around the present-day municipality of **Ig** have been extensively examined and are part of a UNESCO World Heritage site. The pile dwellings at **Ljubljansko barje** represent roughly 3 millennia of intermittent settlement activity. The houses stood close together but were detached and raised on three rows of piles. The main construction materials were ash and oak, both of which were available in the hinterland. A well-known find is a wooden wheel with an axle dating from 3200 BC, which represents a high point in technological advancement. The inhabitants of Ljubljansko barje also produced high-quality and richly decorated pottery. The last pile dwellers lived on the lakes during the Bronze Age. When lake levels began to decline, people settled on nearby hills.

https://palafittes.org

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Kultur

Baden-Württemberg

BAYERISCHES LANDESAMT FÜR DENKMALPFLEGE

Ljubljansko barje
KRAJINSKI PARK

Progetto finanziato a valere sui fondi Legge 20 febbraio 2006, n. 77 «Misure speciali di tutela e fruizione dei siti e degli elementi italiani di interesse culturale, paesaggistico e ambientale, inseriti nella «lista del patrimonio mondiale», posti sotto la tutela dell'UNESCO»

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