



THE LABORATORY OF TREE-RING RESEARCH

presents a talk by

Nicoletta Martinelli

(Dendrodata Laboratory – Verona (Italy))

Living on the water: wood and prehistoric pile-dwellings

Wednesday, April 26, 2017 - 12:00pm to 1:00pm

Room: Bannister 110

The image of stilt houses built along lake shores, thus avoiding the floods, is one of the most striking from central European archeology. It comes from the preservation of most of the bearing structures in wood, creating the so-called “field of posts”, due to the wet and anoxic environment where they were buried for millennia.

That allows the preservation of an extraordinary amount of organic items (wooden objects and tools, basketry, textiles, breads...). Therefore they are a unique source of information on prehistoric communities of farmers and their high technological skills. Their study allows building a true-to-life reconstruction of those villages mainly built in the regions around the Alps from the Middle Neolithic to Late Bronze Age (from 5000 to 500 BC). For these reasons in 2011 UNESCO acknowledged Prehistoric pile-dwellings around the Alps, including settlements located in five countries: Switzerland, France, Germany, Austria, Slovenia and Italy, as the World Heritage Site.

Dendrochronology is crucial for the study of these archaeological contexts, at first for their absolute dating: in northern Italy most of the chronological framework from Early to Late Bronze Age is based on dendrodates coming from pile-dwellings, which are present in central Italy too.

Moreover dendroarcheology is an extraordinary tool for understanding the shape and size of pile-dwelling structures in plan: through identification of the load-bearing posts made from trunks felled at the same time (year or season) we can generate a picture of the main structure of the huts, their dimensions and shapes.

Last but not least, through dendrotypology – which combines dendrochronology, wood science and woodworking typology – it is possible to extract additional information from tree-rings and reconstruct the ancient forest management techniques, and to know how did ancient groups cope against the effects of human impact on the environment in prehistoric times.