
Cross-referencing relative and absolute chronologies from a submerged prehistoric site in the Northern Adriatic

Katarina Jerbic*¹, Maja Cuka*², and Ida Koncani Uhač²

¹Flinders University – Adelaide, South Australia, Australia

²Archaeological Museum of Istria (AMI) – Pula, Croatia

Résumé

The discovery of the submerged prehistoric pile-dwelling site in Zambratija bay, Croatia, opened up a unique opportunity for international interdisciplinary collaboration. Zambratija bay is located on the Northwest coast of the Istria peninsula in the Croatian Adriatic. The inundated remains of a prehistoric site lay 3 meters underwater in the northwestern part of the bay, inside a natural geological depression, protected from the open sea with natural limestone ridges. The preliminary conclusions and results, as well as the study of ceramic finds, lead to the idea of assessing the site from multiple viewpoints. As far as the preliminary results, the archaeologists collected samples of ceramic fragments, faunal remains and wood. A part of the ceramics was typologically determined as Nakovana style pottery, a terminal Neolithic and Copper Age phenomenon. The one known radiocarbon result from a pile in Zambratija showed an age of 4230–3980 cal BC, which fits around the middle of the so far known Nakovana style radiocarbon dates, the oldest being around 5000 cal BC and the youngest 3200 cal BC. Based on the one date and the found ceramics, a conclusion has been made that the Zambratija settlement was active (either as a multilayered settlement or it was intermittently used through multiple periods) starting as early as Late Neolithic, and ending in the Late Bronze Age. The natural depression seen in the bathymetry, as well as the presence of wooden piles and peat imply that this is a submerged pile-dwelling settlement, similar to those found around the Alpine lakes of Austria, Germany, Italy, Slovenia and Switzerland. The radiocarbon date as well as the ceramic finds fit into the timeframe of the aforementioned settlements. This paper will compare and cross-reference the relative chronology of the pottery and the new radiocarbon dates and dendrochronological results from the site. This is not only a rare opportunity for updating the existing local Neolithic/Copper Age chronology, but also a reminder for the importance of its revision. The significance of the paper lies in the idea of collaborative work, in this case by adding a geoarchaeological aspect into an archaeological investigation where the main idea is that the artefacts are important, but so are the sediments they are found in. Interdisciplinary work is based on being mindful towards the next person in the process of site assessment, which leads to better collaborations and most importantly, better and more accurate results.

Mots-Clés: Northern Adriatic, Prehistory, Ceramics typology, Radiocarbon dates, Dendrochronology

*Intervenant