This poster will present, in particular, results from XRF analyses, which reveal differences in phosphorus (P) content on and off site. We will also detail the ecological preferences of plants relative to the nutrient content on and off site. The presence of certain plants exclusively inside structures demonstrates the influence of the past human activities (700 years ago) on these micro-socio-ecological systems. However, this “legacy effect” is not apparent on the Bronze Age (4200 years old) enclosure, which raise the question of the time required for the resilience. Another interesting result is the presence of lead inside the medieval cabin and the modern enclosure. These results reveal the soil memory effect link with ancient mining activity. Lake sediment and peat cores taken around the study area revealed lead pollutions during both, the Roman and the Medieval periods. The presence of mines used between the 10th and 13th centuries (Bu et al., 2014), at least attests the local origin of the pollution.

EEA Vilnius 2016, session “Geoarchaeology of prehistoric settlements: new insights into use of space, dwellings, household activities and land use”, Vilnius University, Lithuania.

TH5-10  Abstract 13

Gone with the wind: huts or tree wind-throws at Late Prehistoric open-air settlements of NW Iberia

Author - Teira-Brión, Andrés, Grupo de Estudios para a Prehistoria do NW Ibérico, Santiago de Compostela, Spain (Presenting author)
Co-author(s) - Martín-Seijo, María, Universidade de Santiago de Compostela, Santiago de Compostela, Spain
Co-author(s) - Alves, Maria Isabel Caetano, Landscape, Heritage and Territory Laboratory (Lab2PT), University of Minho, Braga, Portugal
Co-author(s) - Bettencourt, Ana Maria dos Santos, Landscape, Heritage and Territory Laboratory (Lab2PT), University of Minho, Braga, Portugal
Co-author(s) - Sampaio, Hugo Aluai, Landscape, Heritage and Territory Laboratory (Lab2PT), University of Minho, Braga, Portugal

Keywords: domestic contexts, Late Prehistory, windthrows
Presentation Preference - Oral

Until the 80’s of the 20th century, the archaeological research from Neolithic to Bronze Age in NW Iberia was focused on burial sites and rock art. Since then, several research projects and rescue excavations brought new data on housing and domestic contexts during Late Prehistory. In some of the Chalcolithic and Bronze Age open-air settlements studied, together with pits, post holes, hut floors and anthropic hedges, excavations have been recorded oval or circular hollows measuring 1.9 to 3.5 metres wide and 1 metre of depth, usually with an irregular section. These have been considered huts remains built on perishable materials. These structures were commonly filled with two different deposits, an organic and dark brownish layer, and another light and inorganic. From the organic deposits there has been recovered a high concentration of fungal sclerotia that have a symbiotic relationship with roots of trees or bushes. Finally, we would like to highlight that inside these openings are uncommon archaeological evidences, such as sherds or lithic artefacts.

The morphology of the hollows and the lack of archaeological evidences related to these structures, together with the repeated absence of hearths inside them or in their immediate surroundings, lead us to question their anthropic origin. For that reason, new interpretations must be proposed. In fact, in terms of sedimentological events, there is a great similarity between these structures and natural features, such as wind-throw hollows (Dziegielewski 2007; Goldberg and Macphail 2006; Langohr 1993). The archaeobotanical assemblages recovered from these contexts, also can provide valuable information to interpret them as natural features and to understand the natural processes involved in their formation (Schiffer 1987).

There have been developed sedimentological and archaeobotanical studies of samples recovered from hollows related to tree wind-throws. Their results have been compared to the supposed anthropogenic contexts. The distinction between natural and anthropic features in these open-air settlements is crucial to avoid any interpretative distortions of these contexts.

References:

TH5-10  Abstract 14

At the Foot of the Cliff - exploring early human occupation of the inlands of southern Italy

Author - Dr. Van Leusen, Martijn, University of Groningen, Groningen, Netherlands (Presenting author)