



Until the last twenty years or so, the high mountain areas were almost excluded from the archaeological research. Firstly, because it was assumed that above 2.000 m.a.s.l. in Europe climatic and environmental settings preclude any stable human settlement. Secondarily, because the steep slopes and the rugged terrains typical of the mountain areas make difficult to implement systematic surface surveys. However, this latter point is only partly true. Sampling strategies for flat terrains are difficult to apply in abrupt mountain areas. Nevertheless, recent projects of research in high mountain Alpine and Pyrenean areas have been applying new sampling strategies, which allow to surveys extensive surfaces in this kind of environments. This presentation discusses the methodological organization of the systematic surveying of mountain areas between 1.700 and 2.900 areas in Central Pyrenees, more specifically in the National Park of Aigüestortes i Estany de Sant Maurici. This debate involves not only the field organization of survey and the sampling strategies, but also other problematic: e.g., how to record disperse but continuous evidences over the space.

As a result of these new surveys in high-altitude environments, unexpected humanized past landscapes are emerging. New images that challenge the historical reconstructions and the visions of the mountain areas traditionally proposed from archaeology.

ORAL

9. UNCOVERING THE FROZEN PAST- SURVEYING & MONITORING GLACIAL ARCHAEOLOGICAL SITES

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Glacial archaeological sites are usually located in remote mountainous regions. Many of these sites are now melting and retreating due to warming climates. Managing heritage sites in ice patches, glaciers and in permafrost is particularly challenging for a number of reasons. Firstly, they sometimes contain fragile organic artefacts and eco-facts of great scientific value that need to be recovered quickly. Secondly, the melting processes are uneven and occur over long periods of time, making long-term monitoring necessary. Thirdly, the remoteness of many of these sites means that there are often serious logistical issues to be addressed before archaeological surveying and monitoring can begin.

As global climates look set to continue to warm up, sites will continue to degrade and new artefacts and sites will be exposed. This is the case both in glacial archaeological regions already identified and in several regions around the world where targeted surveys have yet to be organised. For this reason it is important to undertake a review of the surveying and monitoring methods currently employed within this field.

In this presentation, we will look at examples of glacial archaeological sites from around the world and at some of the artefacts and information they have produced about how humans have used remote mountain landscapes in the past. We will also review the different surveying and monitoring approaches that have been employed in the different regions.

ORAL

10. MISSING ELEMENTS IN CULTURAL UNDER-STANDING OF HYDROTHERMAL LANDSCAPE OF CARPATHIANS IN MIDDLE PALEOLITHIC

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As soon as in 1950', when the excavations at Middle Paleolithic sites in Slovakia (such as Ganovce, Horka-Ondrej, Beharovce or Bešenova) had begun, the correlation between archeological inventories connected with microlithic Taubachian and presence of travertine (sedimentary rock, formation of which in many cases is related to hydrothermal activity) was observed. Connection between two phenomena, cultural and geological, has never played a major role in the discussion of Neanderthal presence in Central Europe, as many sites outside of the Carpathians have not displayed any connection with travertine or thermal waters. Nevertheless, new analysis of data leads to the conclusion, that in light of some new evidence, this problem should be discussed again, especially in context of layer XIX of Obłazowa Cave.

ORAL

11. MIDDLE-LATE PLEISTOCENE MOUNTAIN HU-MAN OCCUPATIONS IN THE KARST OF PINILLA DEL VALLE (SPANISH CENTRAL SYSTEM)

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The karst system of Calvero de la Higuera (Pinilla del Valle) formed in Late Cretaceous limestones and dolomites at the Upper Lozoya valley pop down located in the Eastern part of the Spanish Central System at the Guadarrama mountain range. The archaeological fieldworks, started in 2002, revealed the presence of a middle elevation mountain (1,100 m asl) fossil multilevel karst modeled by lithological-structural controls and Quaternary local base lowering. At least three levels of subhorizontal caves detected hanging above the current thalweg of the Lozoya River. The whole karst system dismantled as result of bed rock weathering and surface processes, and istotally infilled by Middle-Late Pleistocene alluvial sediments, with debris and colluvium deposits. The systematic fieldwork shown Middle-Late Pleistocene human activity and carnivores inhabitants at the complex karstic system composed by the caves of Buena Pinta, Camino, Des-Cubierta and Navalmaillo rock shelter. Camino and Buena Pinta sites were identified such as carnivores inhabitants where the paleontological record summary includes human remains (Homo neanderthalensis). At the upper level (Des-Cubierta cave) was identified Middle-Late Pleistocene human activity with important paleontological remains. Finally in the Navalmaillo rock shelter recognized like as Neanderthal site with abundance artifact records.

ORAL

12. MOUNTAINOUS SETTLEMENTS MODALITIES DURING PALAEOLITHIC IN THE LESSER CAUCASUS (REPUBLIC OF ARMENIA)

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If the Great Caucasus is a strong border in the isthmus between Black and Caspian seas, the Lesser Caucasus, with its piedmont with volcanic plateaus, is looking like an area more opened and crossed during Palaeolithic; however, it remains a mountainous region, close of a "middle stage mountain" in Western Europe, with strong topographic and climatic factors.

Recent works in Republic of Armenia allow us to compare very different strategies of settlements and economic exploitations: the set of Middle Palaeolithic sites in the Kasakh middle valley (Aparan district), the Kalavan 2 site Mousterian layers and the Kalavan 1 Epigravettian settlement (Gegharkunik district).

At first, we will explain how these sites have been spotted: a large survey based on geomorphologic problematic with specified goals versus diachronic survey in the known area of a prospector.

Then, we will suggest the patterns we have built with our results: to try to get further than the classical dichotomies Neandertal-residential versus anatomically