

Hugo Obermaier-Gesellschaft

für Erforschung des Eiszeitalters und der Steinzeit e.V.



52. Jahrestagung in Leipzig

6.-10. April 2010

Hugo Obermaier Society
for Quaternary Research and Archaeology of the Stone Age



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in Kooperation mit dem
MAX-PLANCK-INSTITUT FÜR EVOLUTIONÄRE ANTHROPOLOGIE



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New results from zooarchaeological, taphonomic, and spatial analyses of the Gravettian mammoth bone accumulation at Grub-Kranawetberg (Lower Austria)

The role of humans in the formation of Gravettian mammoth bone accumulations of central and eastern Europe is a heavily debated topic. Grub-Kranawetberg, a multi-layered Gravettian open-air site located approximately 40 kilometres northeast of Vienna (Austria), yielded a bone accumulation adjacent to a campsite (Antl & Fladerer 2004). The bone accumulation is characterized by numerous large faunal remains (NISP: 523), by only a few lithics, and by evidence of burning of bones and sediment. Woolly mammoth dominates the faunal assemblage (NISP: 384; MNI: 8). Other represented animals are wild horse (MNI: 2), woolly rhinoceros, reindeer, giant deer, and wolf (each with a MNI of 1). A most important indication that the humans occupying the adjacent campsite interacted with the bones is provided by the identification of a mammoth left first upper molar from the campsite and its opposite right upper molar found in the bone accumulation. The presence of articulated skeletal portions of mammoth indicates that soft tissue remained on bones at the time of deposition. The rarity of carnivore gnawmarks suggests that the remains were not strongly affected by scavenging carnivores and in turn, that humans would have had first access to these meaty parts. Based on mammoth body part representation and the rarity of stone artefacts, the bone accumulation was interpreted as a dump zone where carcass parts were transported and deposited after butchering. The bone accumulation is further characterized by various indications of burning evident in lenses of burned sediment and abundant traces of heating on the bones. The varied stages of burned bone, as well as reddish burned loess show that it was subjected to a wide range of fire temperatures. Zooarchaeological, taphonomic, and spatial analyses investigate the role of fire in the formation of bone accumulation. Based on our results, we discuss the intentional use of fire as waste removal.

References

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