6th Annual Meeting of the

European Society for the study of Human Evolution

14-17 September 2016
MADRID / SPAIN

ESHE

Journal of Human Evolution

ELSEVIER

The *Journal of Human Evolution* concentrates on publishing the highest quality papers covering all aspects of human evolution. The central focus is aimed jointly at palaeoanthropological work, covering human and primate fossils, and at comparative studies of living species, including both morphological and molecular evidence. These include descriptions of new discoveries, interpretative analyses of new and previously described material, and assessments of the phylogeny and palaeobiology of primate species.

2015 Impact Factor*

3.767

*Journal Citation Reports published by Thomson Reuters 2016

Supports Open Access

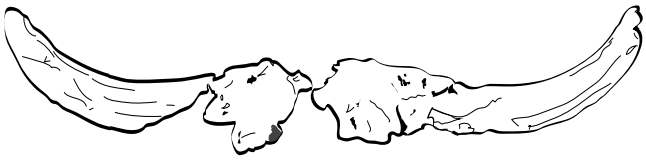
To submit your paper online and for more information, visit:
elsevier.com/locate/jhevol

European Society for the study of Human Evolution

ESHE

6th Annual Meeting

Madrid, Spain 14 -17 September, 2016



Proceedings of the European Society for the study of Human Evolution 5

Cover image: Bison Horns courtesy of the Museo Arqueológico Regional
Proceedings of the European Society for the study of Human Evolution Vol. 5
Citation: PESHE 5, 2016

PESHE 5 compiled and designed by Mikaela Lui

ISSN 2195-0776 (Print)
ISSN 2195-0784 (Online)

Poster Presentation Number 121, Th (18:00-20:00)

Giant deers and large-sized bovids exploited by Quina Neanderthals in the North of Italy

Alessandra Livraghi[1], **Matteo Romandini**[1], **Marco Peresani**[1]

1 - Dipartimento di Studi Umanistici, Sezione di Scienze Preistoriche e Protostoriche, Università degli Studi di Ferrara

The variability of Neanderthal hunting behavior is a topic subject of research in the North-east of Italy, a well-known region where the reconstruction of the Late Middle Palaeolithic settlement system is largely supported by several palaeoenvironmental archives and archaeological deposits. During the Late Pleistocene, Neanderthals exploited different landscapes between the highlands (the Alpine fringe) and the lowlands (the border of the Plain and the subalpine area), supporting their subsistence by hunting a varied range of ungulates. A singular case is represented by the evidence produced from De Nadale Cave, which is a small cavity located at 80 m a.m.s.l., in the Southern slope of the Berici hills. Under a superficial and reworked layer (Unit 1Rim), only one layer (Unit 7) has been recognized as archaeological and contains dense osteological remains and lithic implements ascribed to the Quina method [1,2]. This anthropic layer dates back to 70.2 +1/-0.9 ky BP, on the base of the Uranium-series (U-Th) . The faunal assemblage reveals that the most frequent species are the Giant Deer and the Red Deer, followed by large-sized bovids. The Chamois and the Roe Deer have also been identified, but in a lower quantities. Carnivores are scarcely present, while the presence of birds of different size is relevant; an epiphysis of tarsometatarsus has been recognized as belonging to the Black Vulture (Aegypius cf. monachus). Furthermore, also a deciduous tooth of H. neanderthalensis was identified during the study of the osteological remains . A taphonomic analysis has been carried out and revealed an excellent preservation of the osteological remains. Nearly half of the total amount of bones bears butchering marks: scraping and cut marks, impact notches and spiral fractures have been identified on the surface of several bones shafts. Furthermore, the high number of pieces carrying retouch induced stigmata is astonishing: 204 bone shafts, counting also those coming from Unit 1Rim, showed to have been used as tools in the lithic chaînes opératoires. The faunal association reflects an open plains environment, in a generally cold-temperate climatic context. Moreover, large-sized cervids and Auroch confirm this point of view and suggest the presence of a swampy area with water sources . In general, the zooarchaeological analyses reveal how Neanderthals intensively exploited large-sized herbivores such as the Giant Deer and the bovids, as food supplies. This hunting behavior is peculiar of the site and clearly diverges from the predation model recognized in other sites on the Pre-Alpine belt and can be mostly ascribed to the age and the position of the site, in the middle of the Venetian plain. This unique feature and the presence of the Quina method make the De Nadale Cave an important site to understand the complexity of Neanderthal behavior and his settlement pattern in the North of Italy.

Acknowledgments: Research at De Nadale Cave is coordinated by the University of Ferrara in the framework of a project supported by the Ministry of Culture - Veneto Archaeological Superintendency and the Zovencedo Municipality, financed by the H. Obermaier Society, local private companies (Saf) and local promoters.

References:[1] Jéquier C., Delpiano D., López-García J.M., Lembo G., Livraghi A., Obradovic M., Romandini M., Peresani M., 2015, First report from the excavations at the De Nadale Cave, a single layered Mousterian site in the North of Italy, 57th Annual Meeting of the Hugo Obermaier Society for Quaternary Research and Archaeology of the Stone Age, Heidenheim, April 7th-11th, 2015.[2] Livraghi A., Romandini M., Jéquier C., Peresani M., 2014, The record of human activity impressed on the bone surfaces of a late Pleistocene zooarchaeological assemblage in the North of Italy. Results from the first investigations. In Bassi D., Posenato R. (Eds), 2014, Abstract book of the 7th International Meeting on Taphonomy and Fossilization, Taphos 2014, Ferrara, September 10th – 13th, 2014. Annali dell'Università di Ferrara, Sez. Fisica e Scienze della Terra, volume speciale.[3] Arnaud J., Benazzi S., Romandini M., Livraghi A., Panetta D., Salvadori P.A., Volpe L., Peresani M., in press, A Neandertal deciduous human molar with incipient carious infection from the Middle Palaeolithic De Nadale cave, Italy. (JHE in press).[4] Jéquier C., Peresani M., Romandini M., Delpiano D., Lembo G., Livraghi A., Lòpez-Garcia J-M., Obradovic M., 2015, The De Nadale Cave, a single layered Quina Mousterian site in the North of Italy. Quartär 62, 7-21.