
Cava a Filo (Croara, Bologna, northern Italy): anthropic evidences in a natural karst trap? A taphonomic perspective.

Ursula Thun Hohenstein^{*†1}, Gabriele Nenzioni², Claudio Berto³, Elena Ghezzi⁴, Alice Massarenti¹, Paolo Paronuzzi⁵, and Paolo Reggiani^{‡6}

¹University of Ferrara, Department of Humanities (UNIFE) – Corso Ercole I d’Este 32 44121 Ferrara, Italie

²Museo della Preistoria Luigi Donini di San Lazzaro di Savena – Via Fratelli Canova, 49, 40068 San Lazzaro di Savena, Bologna, Italie

³Università di Firenze, Dipartimento di Storia, Archeologia, Geografia, Arte e Spettacolo – Italie

⁴PaleoGeoGraphic – via Toffoli 38, 30175 Venezia, Italie

⁵Università di Udine, Dipartimento Politecnico di Ingegneria e Architettura – Italie

⁶Museo di Storia Naturale di Venezia – Santa Croce 1730, 30135 Venezia, Italie

Résumé

The recent excavation at Cava a Filo was carried out from 2006 to 2011 and encouraged by the Museo L. Donini di San Lazzaro di Savena. The deposit of Cava a Filo, a paleontological one, is of great importance for the study of chronology and paleo-environmental reconstruction of the Late Upper Pleistocene corresponding to the Last Glacial Maximum (ca. 24,000-18,000 years ago, MIS 2). It testifies to the presence of typical species closely related to the cold climate and open environments with diffused forested areas (*Bison priscus*, *Megaloceros giganteus* and *Capreolus capreolus*). *Canis lupus* is the only carnivore on the site. The small mammal assemblage testifies that the environment surrounding the site was characterized by open and dry meadows, with few low forested areas in cold climate conditions. The new geological data have allowed in particular to understand that the abundant Pleistocene mammalian fauna had settled in a sedimentary context originated in a karstic system with relic fluvio-karstic galleries. Such network of tunnels was excavated during an advanced moment of the Late Pleistocene. These natural "traps" corresponded to a valley close to a sub-horizontal sinkhole, where animals attracted by the water could be trapped. This particular environmental setting, with water, closed depression and karst sinkhole proved favourable for the hunting of various animal species, primarily the great steppe bison, both by human and by medium-large predators like the wolf. The bone remains deriving from the animal carcasses, including those hunted by the Upper Paleolithic hunter-gatherers groups, were then conveyed by the flows of the fluvio-karstic system and redeposited within the tunnel cavities. From the point of view of prehistoric research, this is a particular site because even if it is not a primary deposition site, it presents several "secondary" anthropical evidences that demonstrate the existence, not far away, of hunting

*Intervenant

†Auteur correspondant: ursula.thun@unife.it

‡Auteur correspondant: laboratoriomsn@fmcvenezia.it

activities devoted to bison practised by Upper Paleolithic hunter-gatherers groups. An interesting tibia of bison shows anthropic signs on the bone surface, left by a lithic tool during animal slaughtering. These hunting activities, aimed in particular at the great steppe bison, had to be carried out in correspondence to a karstic sinkhole formed by the Acquafredda river - in the morphological-topographical context of that time - which constituted a natural trap very favourable for hunting large herbivores. Humans and wolves lived thus in the same environment, sharing the same objective: hunting the great steppe bison.

Mots-Clés: Last Glacial Maximum, natural trap, *Bison priscus*, *Canis lupus*, Taphonomy, Cutmarks