
Man the Hunter in the Pleistocene Arctic Siberia

Vladimir Pitulko^{*†1} and Pavel Nikolskiy^{‡2}

¹Institute for the History of Material Culture, RAS – 18 Dvortsovaya nab. St Petersburg 191186, Russie

²Geology Institute, RAS – 7 Pyzhevskiy lane Moscow 119017, Russie

Résumé

Evidence of injuries associated with human hunting on the bones of Pleistocene fauna is overall very poorly represented in the archaeological record. Worldwide, there are around 20 specimens of Pleistocene faunal remains with such damage, mostly on reindeer bone, with a few on human bones. Proboscideans in this set are represented by widely known examples from Kostenki (Russian Plain), Lugovskoye (West Siberia), and Manis (North America). Recently, the number of specimens providing direct evidence of people hunting their contemporaneous Pleistocene fauna increased significantly due to the finds from Arctic Siberia (N=11), notably, from the Yana site complex (locales YMAM, Yana-B, and Yana-NP). While most of them indicate mammoth hunting, there is direct evidence of hunting Pleistocene bison (YMAM, Yana-B, and Yana-NP), reindeer (Yana-NP) and brown bear (Yana-). Mass procurement of mammoths at the Yana complex of sites was primarily due to their tusks as important raw material for manufacturing of hunting equipment and then other items including all kinds of decorations and tools.

Direct evidence of mammoth hunting also comes from the west Taimyr Peninsula (the Sopochnaya Karga mammoth), Nikita Lake site and other locations in the northern Yana-Indigirka lowland, including an extremely rare instance of traces on carnivore remains. In addition to the brown bear atlas from Yana-, which dates to the LGM, a hunting lesion is noted on a Pleistocene wolf humerus from the Bunge-Toll/1885 site (Yunigen Creek, Yana River valley). The latter, along with the Sopochnaya Karga mammoth kill, provides the oldest evidence for human presence in the Arctic ~45,000 years ago. These pieces of evidence are quite important in that for the first time faunal remains taphonomy securely demonstrates the anthropogenic signal in the absence of human-made objects and allows dating the event by direct AMS 14C dates and site geology.

These finds show that both simple bone-tipped projectiles, and bone-tipped projectiles equipped with lithic insets were used for hunting. However, bone injuries often remain unrecognized: only the most credible examples with embedded tool fragments are considered by researchers. Less recognizable examples (with no foreign objects), which are logically more numerous, are not considered by scientists because there is no possibility to identify the human-caused impact pattern. We can argue that some of the animals especially mammoths died due in a repeat encounter with humans.

This work is supported by Russian Science Foundation project No. 16-18-10265-RNF.

*Intervenant

†Auteur correspondant: pitulko.vladimir@gmail.com

‡Auteur correspondant: wberingia@gmail.com

Mots-Clés: Pleistocene, Arctic Siberia, human hunting, bone injuries, mammoth