








Project Gallery

An engraved tooth pendant from Donkalis, western Lithuania: a rare discovery in a Mesolithic burial

Adomas Butrimas¹, Marius Iršėnas¹ , Aija Macāne^{2,3} , Kristiina Mannermaa^{2,*} 
Kerkko Nordqvist⁴  & Tomas Rimkus^{1,5,*} 

¹ Institute of Art Research, Vilnius Academy of Arts, Lithuania

² Department of Cultures, University of Helsinki, Finland

³ Institute of Latvian History, University of Latvia, Riga, Latvia

⁴ Helsinki Collegium for Advanced Studies, University of Helsinki, Finland

⁵ Institute of Baltic Region History and Archaeology, Klaipėda University, Lithuania

* Authors for correspondence ✉ tomas.rimkus@ku.lt & kristiina.mannermaa@helsinki.fi

A re-examination of animal tooth pendants from Mesolithic (c. 9000–5000 BC in Lithuania) graves at Donkalis (western Lithuania) revealed one engraved specimen. Among the hundreds of pendants reported for this period in the eastern Baltic, engravings are rare. The discovery offers new insights into the human-animal relationships reflected in northern forager burial traditions.

Keywords: Eastern Europe, eastern Baltic, Mesolithic, *Alces alces* incisor pendants, engravings

Introduction

Between 1981 and 1986, two Stone Age burial sites were excavated on the former islands of Donkalis and Spiginas in Lake Biržulis, western Lithuania. Most graves were filled with ochre-rich soil and many contained multiple perforated or unperforated animal teeth (Butrimas 2012). The buried individuals have been the subject of many studies (e.g. Simčėnka *et al.* 2022), but the animal remains have received less attention (but see Osipowicz *et al.* 2024). Animal teeth are the most common artefacts found in European hunter-gatherer burials, and the Eurasian elk (*Alces alces*) is one of the species most frequently used to produce tooth pendants in north-eastern Europe (Mannermaa *et al.* 2021; Macāne 2022). As part of our research project, scholars from Finland, Latvia and Lithuania are focusing on these teeth to better understand human-animal relationships in this region and period in prehistory, and their role in symbolism and the construction of identities. During the analysis of previously excavated material, short horizontal incisions were identified on a perforated Eurasian elk incisor from Grave 5 at Donkalis. In our experience, engraved tooth pendants are rare in European hunter-gatherer burials; therefore, we present here the first analysis of the pendant and its engraving.

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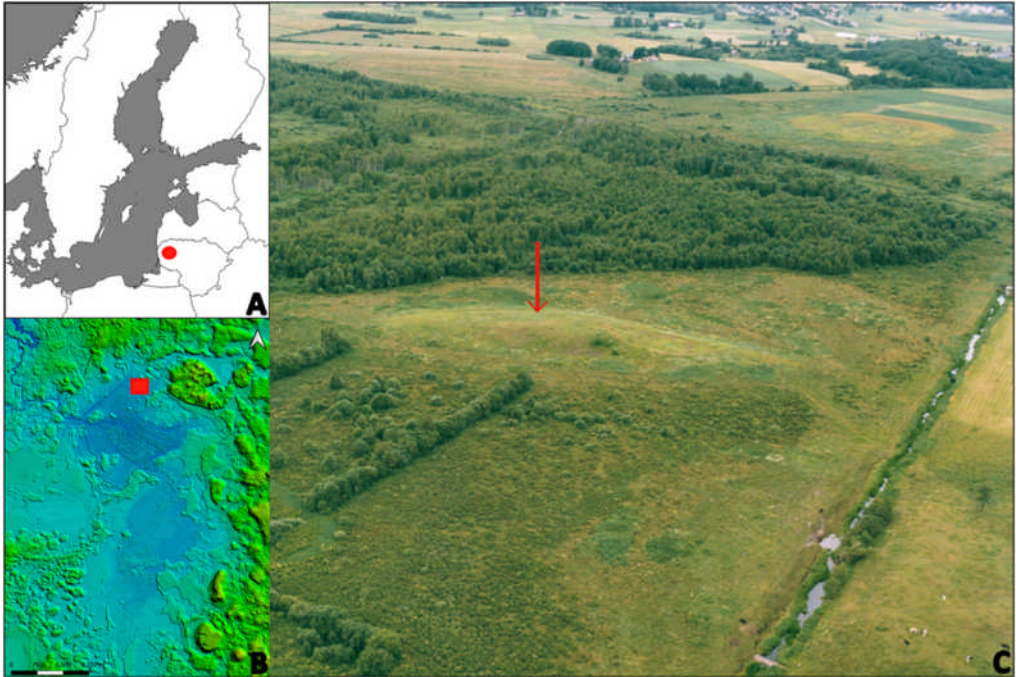


Figure 1. A) location of Biržulis Lake; B) Biržulis Lake and Donkalnis burial ground (red square); C) aerial view of Donkalnis burial ground (red arrow) (figure by A. Butrimas & T. Rimkus).

Donkalnis Grave 5

The Donkalnis burial site is in the northern part of Lake Biržulis (Figure 1). Seven graves as well as loose human bones have been found here (Butrimas 2012). Two subadults, respectively aged 7–7.5 years and under five years, were buried in Grave 5 (Figure 2), which had been abundantly filled with red ochre and is radiocarbon dated to *c.* 6000–5900 BC (Simčienka *et al.* 2022). The grave included a microlithic flint point and 45 animal tooth pendants: 19 of aurochs (*Bos primigenius*) or European bison (*Bison bonasus*), 24 of red deer (*Cervus elaphus*) and two of Eurasian elk.

Engraved tooth pendant

The engraved pendant (National Museum of Lithuania, EM2248:466) is made from the first right incisor of a Eurasian elk. The length of the artefact is 43mm and the maximum width is 9mm. The root is flattened, perforated on the mesial and distal sides and ornamented on three sides with incised rows of 1–3mm-long and 0.1–0.6mm-wide regular grooves (Figures 3 & 4). Each surface is characterised by a distinct number of incisions: six on the distal, 12 on the mesial and 18 on the labial surface (Figure 5: 1A–B, 2C–D, 3D–G, respectively). The incisions are arranged in groups of two to four, spaced 1.7–4.1mm apart. The tooth surface is relatively well preserved, with only minor flaking of the enamel, and there is no indication that further incisions have been eroded. Unfortunately, the specimen was consolidated



Figure 2. Donkalnis Grave 5 (figure by A. Butrimas).



Figure 3. Engraved tooth pendant made from a Eurasian elk incisor and found in Grave 5, showing the labial (A), distal (B), mesial (C) and lingual (D) views (figure by T. Rimkus).

with chemicals after excavation in the 1980s. This has obscured most of the working traces and restricts the possibility of more detailed microscopic analysis (see also Osipowicz *et al.* 2024: 8–9).

Insights into past worldviews

Other incised tooth pendants from Mesolithic north-eastern Europe include a Eurasian elk incisor from Popovo (Grave VIII) and a carnivore canine tooth from Stanovoye 4, both in Russia (Płonka 2003; Oshibkina 2016). Engravings are also found on a red deer incisor tooth from the Late Mesolithic site of Smakkerup Huse in Denmark (Price & Gebauer 2005). In each case, the engraved patterns differ from the Lithuanian specimen.

A striking feature of the Donkalnis pendant is the systematic structure of the grooves, engraved on each side in multiples of the number six (or three; see also Jonuks 2023). This indicates a particular logic and intent motivating the incisions. Could they represent a mnemonic aid or a recording system, are they symbolic or purely aesthetic engravings? Incised patterns, although rare on tooth pendants, are more numerous on other artefacts from the Mesolithic; horizontal lines are one of the most frequent geometric motifs incised on bone and other artefacts and are recorded throughout Europe (Płonka 2003; Grünberg *et al.* 2023). Interpretations of these engravings range from simple decorations to representations of symbolic concepts, including communication and protective functions (e.g. Vang Petersen 2021), although the exact meanings of the marks are no longer directly decipherable.

A potential clue to the significance of the incisions could lie in the animal species chosen. The Eurasian elk held a central role in the worldviews of prehistoric people in northern Europe (Macāne 2022), and its incisors were commonly selected for pendants.

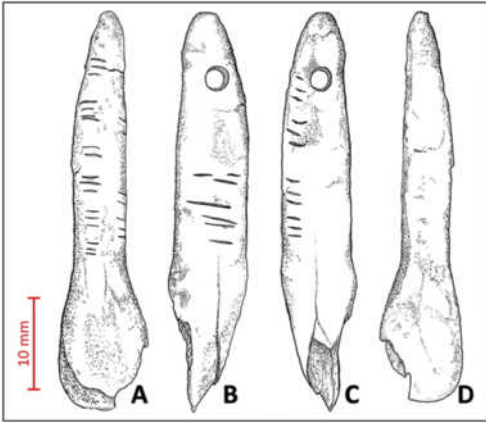


Figure 4. Illustrations of the labial (A), distal (B), mesial (C) and lingual (D) views of the engraved tooth pendant from Grave 5 (figure by M. Gintalas).

Yet, only two elk teeth were present in Grave 5—one of them engraved. In other words, a commonplace species was treated in an unusual way through the addition of engravings. This underlines the situational nature of what is ‘common’ or ‘special’ and exemplifies the multi-relational ontologies of hunter-gatherers. The semantics of the pattern (number three and its multiples) and its occurrence on other osseous media are lines of inquiry for future research, but the Donkalis discovery is a valuable reminder of the importance of

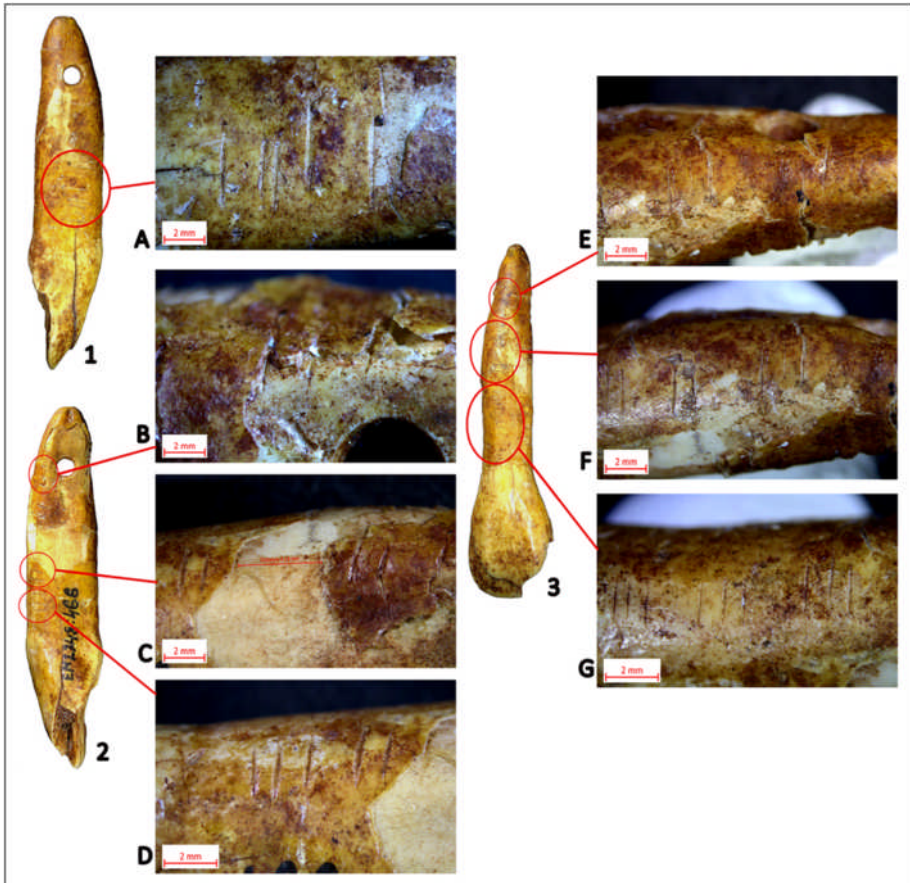


Figure 5. Microscopic examination of groove patterns on different surfaces of the pendant (1, distal; 2, mesial; 3, labial) (figure by T. Rimkus).

detailed (re-)examination of any seemingly ordinary find, including small objects such as tooth pendants.

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