

Hunting of straight-tusked elephants was widespread among Neanderthals 125,000 years ago, finds study

December 5 2023, by Jonas Siehoff



Pelvic bone of a *Palaeoloxodon antiquus* found in Gröbern. Credit: Lutz Kindler, LEIZA

Hunting the now extinct straight-tusked elephant (*Palaeoloxodon*

antiquus) was widespread among Neanderthals, concludes a research team consisting of members of Johannes Gutenberg University Mainz (JGU), the Leibniz-Zentrum für Archäologie (LEIZA), also based in Mainz, and Leiden University in the Netherlands. The study has recently been [published](#) in *Proceedings of the National Academy of Sciences*.

The researchers closely examined the bones of elephants that are approximately 125,000 years old that were discovered in Gröbern in Saxony-Anhalt and Taubach in Thuringia, Germany, decades ago. They were able to identify cut marks made by [stone tools](#) used by the Neanderthals that indicate that the animals must have been hunted before they were extensively butchered.

It was two years ago, during the analysis of bones found at the Neumark-Nord site in a former lignite mine in Saxony-Anhalt, that the same team discovered the very first evidence that Neanderthals actively hunted straight-tusked elephants, the largest terrestrial mammals of the Pleistocene. [That study](#) was published in *Science Advances* in early 2023.

"The results of the more recent examination of the bones from Gröbern and Taubach now show that the hunting of these elephants by Neanderthals was not an isolated phenomenon but must have been a more regular activity," emphasized Sabine Gaudzinski-Windheuser, Professor of Prehistoric and Protohistoric Archaeology at JGU and Director of the Archaeological Research Center and Museum of Human Behavioral Evolution MONREPOS in Neuwied, an institute run under the aegis of LEIZA.

Gaudzinski-Windheuser was extensively involved in the investigation of the bones from Gröbern and Taubach as well as the previous study of the bones from the Neumark-Nord site.

Palaeoloxodon antiquus roamed the landscapes of Europe and Western

Asia 800,000 to 100,000 years ago. With shoulder heights of up to 4 meters and body masses of up to 13 tons, the European straight-tusked elephant was the largest land-living animal at the time, significantly larger than today's African and Asian elephants and even bigger than the extinct woolly mammoth.

"We have estimated that the meat and fat supplied by the body of an adult *Palaeoloxodon antiquus* bull would have been sufficient to satisfy the daily calorie intake of at least 2,500 adult Neanderthals," explained Gaudzinski-Windheuser. "This is a significant number because it furnishes us with new insights into the behavior of Neanderthals."

So far, for instance, researchers had generally assumed that Neanderthals associated in groups of no more than 20 individuals. However, the information now obtained in relation to the systematic exploitation of straight-tusked elephants indicates that Neanderthals must have gathered, at least temporarily, in larger groups or mastered techniques that allowed them to preserve and store large quantities of foodstuffs—or both.

In a follow-up project, the researchers hope to learn more about how Neanderthals hunted these massive elephants and how their hunting activities impacted these and other prey animals as well as their environments.

More information: Sabine Gaudzinski-Windheuser et al, Widespread evidence for elephant exploitation by Last Interglacial Neanderthals on the North European plain, *Proceedings of the National Academy of Sciences* (2023). [DOI: 10.1073/pnas.2309427120](https://doi.org/10.1073/pnas.2309427120)

Provided by Johannes Gutenberg University Mainz

Citation: Hunting of straight-tusked elephants was widespread among Neanderthals 125,000 years ago, finds study (2023, December 5) retrieved 29 April 2024 from <https://phys.org/news/2023-12-straight-tusked-elephants-widespread-neanderthals-years.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.