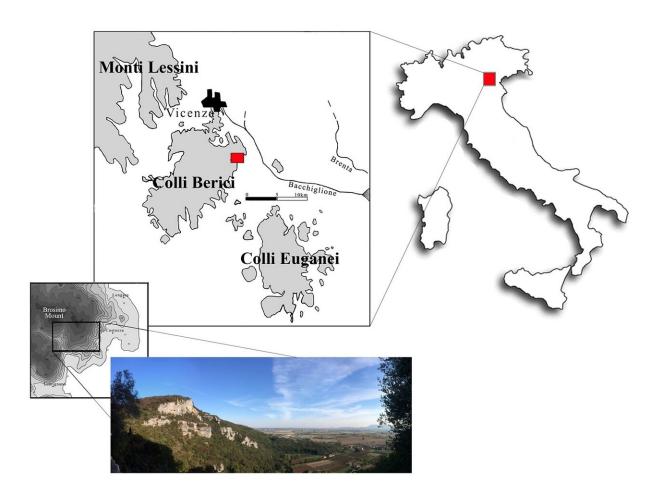


## A 48,000-year-old tooth that belonged to one of the last Neanderthals in Northern Italy

September 17 2020



The findings retrieved from the "Riparo del Broion" are still being analysed. However, preliminary results show that this site had been used for a long period of time as there are signs of hunting activities and butchering of large prays. Credit: *Journal of Human Evolution* 



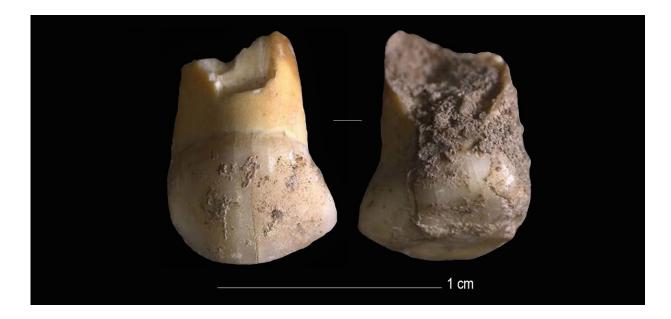
A milk tooth found in the vicinity of Riparo del Broion on the Berici Hills in the Veneto region bears evidence of one of the last Neanderthals in Italy. This small canine tooth belonged to a child between 11 and 12 that had lived in that area around 48,000 years ago. This is the most recent Neanderthal finding in Northern Italy.

The study uncovering this tooth was carried out by a group of researchers from the Universities of Bologna and Ferrara, who have recently published a paper in the *Journal of Human Evolution*. "This work stems from the synergy between different disciplines and specializations," says Matteo Romandini, lead author of this study and researcher at the University of Bologna. "High-resolution prehistoric field-archaeology allowed us to find the tooth, then we employed virtual approaches to the analyses of its shape, genome, taphonomy and of its radiometric profile. Following this process, we could identify this tooth as belonging to a child that was one of the last Neanderthals in Italy."

The <u>genetic analysis</u> reveals that the owner of the tooth found in Veneto was a relative, on their mother's side, of Neanderthals that had lived in Belgium. This makes this site in Veneto a key-area for comprehending the gradual extinction of Neanderthals in Europe.

"This small tooth is extremely important," according to Stefano Benazzi, professor at the University of Bologna and research coordinator. "This is even more relevant if we consider that, when this child who lived in Veneto lost their tooth, Homo Sapiens communities were already present a thousand kilometers away in Bulgaria."





An upper canine milk-tooth that belonged to a Neanderthal child, aged 11 or 12, that lived between 48,000 and 45,000 years ago. Credit: *Journal of Human Evolution* 

Researchers analyzed the tooth by employing highly innovative virtual methods. "The techniques we employed to analyze the tooth led to the following discovery: this is an upper canine milk tooth that belonged to a Neanderthal child, aged 11 or 12, that lived between 48,000 and 45,000 years ago," report Gregorio Oxilia and Eugenio Bortolini, who are co-authors of the study and researchers at the University of Bologna. "According to this dating, this little milk tooth is the most recent finding of the Neanderthal period in Northern Italy and one of the latest in the entire peninsula."

The findings retrieved from the Riparo del Broion are still being analyzed. However, preliminary results show that this site had been used for a long period of time as there are signs of hunting activities and butchering of large prays. "The manufacturing of tools, mainly made of



flint, shows Neanderthals' great adaptability and their systematic and specialized exploitation of the raw materials available in this area," adds Marco Peresanti, a professor of the University of Ferrara who contributed to the study.

**More information:** Matteo Romandini et al, A late Neanderthal tooth from northeastern Italy, *Journal of Human Evolution* (2020). DOI: 10.1016/j.jhevol.2020.102867

Provided by Università di Bologna

Citation: A 48,000-year-old tooth that belonged to one of the last Neanderthals in Northern Italy (2020, September 17) retrieved 3 May 2024 from <u>https://phys.org/news/2020-09-year-old-tooth-neanderthals-northern-italy.html</u>

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.