

New species of extinct walrus-like mammal discovered in the North Atlantic

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Credit: Jaime Bran.

A new discovery by a team of paleontologists, led by Dr. Mathieu Boisville (University of Tsukuba, Japan), has uncovered a new species of the extinct genus *Ontocetus* from the Lower Pleistocene deposits in the North Atlantic. This species, named *Ontocetus posti*, displays surprising similarities in feeding adaptations to the modern walrus (*Odobenus rosmarus*), highlighting an intriguing case of convergent evolution. The

research is published in the journal *PeerJ*.

The fossils of *Ontocetus posti* were discovered in Norwich, United Kingdom, and Antwerp, Belgium. These remains were initially thought to belong to another species, *Ontocetus emmonsi*; however, detailed analysis of the mandibles revealed a unique combination of features that distinguish it as a [new species](#).

These features include the presence of four post-canine teeth, a larger lower canine, and a fused and short mandibular symphysis. Such anatomical characteristics suggest that *Ontocetus posti* was quite well adapted to suction-feeding, somewhat similar to its modern relative, the walrus.

Originating from the North Pacific Ocean, the *Ontocetus* genus spread to the Atlantic during the Mio-Pliocene transition. This migration was probably facilitated by the Central American Seaway, a crucial oceanic passage before the closure of the Isthmus of Panama.

The resulting global cooling starting during the Late Pliocene significantly impacted [marine life](#), contributing to the extinction of *Ontocetus posti* during the Early Pleistocene and allowing the cold-adapted *Odobenus rosmarus* to emerge and eventually dominate.

The discovery sheds light on the evolutionary history of walruses, emphasizing how [environmental changes](#) have shaped the adaptations and survival of marine mammals. The convergence of feeding adaptations between *Ontocetus posti* and the modern walrus illustrates the dynamic evolutionary processes that occur across different eras and environments.

More information: Boisville M, Charat N, Kohno N., New species of *Ontocetus* (Pinnipedia: Odobenidae) from the Lower Pleistocene of the

North Atlantic shows similar feeding adaptation independent to the extant walrus (*Odobenus rosmarus*) *PeerJ* (2024). DOI: [10.7717/peerj.17666](https://doi.org/10.7717/peerj.17666)

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