A cranium of a mammoth calf (*Mammuthus primigenius* (BLUMENBACH, 1799)) from the Eurogully, North Sea

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Mammoth calf

During a special fishing expedition in search of Pleistocene mammal remains, a fragmented skull of a woolly mammoth calf was dredged up. The trip took place April 22, 2011 on the fishing vessel OD 7 in the Eurogully, the North Sea, The Netherlands (coordinates 52° 00' 51.40'' latitude; 3° 55' 19.50'' longitude') (Van der Plicht et al., 2012). Research has shown that these remains belonged to a calf which was only one and a half years old at the time of death. These matching skeleton elements suggest that the mammoth remains were not transported very far from the discovery site.

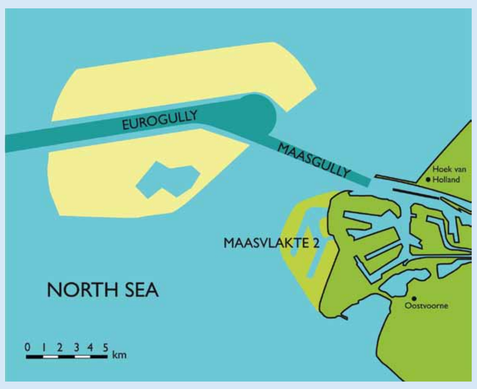
The maxilla and the right frontal were collected during the fifth trawl of this fishing trip (Van der Plicht et al., 2011, Mol & Post, 2010), while the next trawl produced the right tusk and the left frontal as well as the mandible, broken in two parts, amongst other remains. Both trawls yielded a total of 14 skull parts and fragments, while no fragments at all were found in the previous and subsequent trawls at the same location. After cleaning and preservation, ten fragments could be assembled into a coherent reconstruction. Unfortunately, because of missing pieces, four fragments of the braincase could not be placed in the reconstruction. The reconstructed skull is stored in the collection of Klaas Post in Urk, The Netherlands and catalogued as NO 4513.

Geological Age

All hitherto known 14C dates of mammoth fossils from the Eurogully Area and the adjacent North Sea area are between 33,800 + / - 1200 and > 45 ka BP (n = 15); (Mol et al , 2008). Given its condition, it seems likely that this skull would also be dated within these limits.

In situ location?

Like this cranium, many other findings from the Eurogully are very well preserved, like craniums of mammoths, bison, rhinoceroses and other megafaunal elements. There are many reports from fishermen about assemblages of perfectly articulated bones coming up in the nets. Articulated skeletons and the pristine undamaged state of thousands of mammoth bones indicate that these fossils were all *in situ* before they were dredged up. It suggests that there are numerous articulated skeletons (or parts thereof) in the layers below the sea floor in the Eurogully. This makes the Eurogully one of the most important and richest deposits of mammoth fossils in the world!



The Eurogully, off the coast of The Netherlands.

Damaged cranium of a mammoth calf, Eurogully, North Sea. (antero-lateral view). Collection Klaas Post, Urk, NO 4513.

NO: Noordzee (North Sea)

Mandible, with left dp3, belonging to the cranium (postero-dorsal view).

The same mandible, with left dp3, (left lateral view).

References

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