Of mammoths and other monsters: historic approaches to the submerged Palaeolithic Rachel Bynoe^{1,*}, Justin Dix² & Fraser Sturt¹

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Recent research on Doggerland—the drowned North Sea basin—has focused on the end of the story, the last few millennia before the final inundation. Much older deposits do survive, however, and are documented by collections of Palaeolithic artefacts and fauna recovered by fishing fleets operating from Dutch and British ports during the nineteenth and early twentieth centuries. Analysis of the British collections allows them to be assigned to specific areas of seabed and to specific stages of the Pleistocene climatic sequence. The results provide evidence of more complex and fragmentary undersea landscapes than can be detected using geophysical approaches alone, and indicate target areas for future work.

Keywords: North Sea, United Kingdom, Palaeolithic, submerged landscape, faunal analysis, museum collections

Locations and brief descriptions of the main datasets

Great Yarmouth grew rapidly in the 1840s and 1850s, most significantly in 1854 under the influence of Samuel Hewett, the owner of a large trawling fleet originally based further south in Barking. The Great Yarmouth fleets remained north of the Leman and Ower Banks but never north of 55°N (Figure 4b in main article). This dataset has been collected from the Norwich Castle Museum (NCM), with the substantial 'Owles' collection—assigned to this dataset—based at the Natural History Museum (NHM), London.

Lowestoft, although technically a larger trawling town, developed differently from Great Yarmouth. With the Dogger Bank grounds tied up by the north-eastern and Great Yarmouth fleets, the Lowestoft trawlers began to exploit the grounds to the east of East Anglia "from the Gabbards and Galloper down south, up to the Leman and Ower in the north, and out eastwards to the Brown Ridges" (Figure 4c in main article) (Butcher 1980: 14; Robinson 1996: 66). This dataset is spread between the NHM and the NCM and includes the 'off Norfolk' and 'off Suffolk' specimens as well as those from the 'Brown Bank'.

Smaller datasets have been collated from areas closer to the shore. Several of these are made up of only one or two specimens (Figure 6 in main article), but two are far more substantial and are mentioned specifically:

The **Happisburgh** dataset, as discussed in the text, provides a far more discrete area of seabed (the Oyster Bed). This collection is housed mainly at the NHM but with four specimens at the NCM and one at Colchester Museums' Service (CMS).

The **Tendring** dataset is located almost entirely at CMS and includes all areas of seabed off this terrestrial location. For example, these are referred to as Clacton, the Wallet, Walton on the Naze and Wrabness. These are included in the smaller, closer to shore locations due to their collection—almost entirely—by Mr. Brand. This local trawlerman has described exploiting the seabed within this localised area only and not further offshore, as was common with the historic Lowestoft and Great Yarmouth fleets.

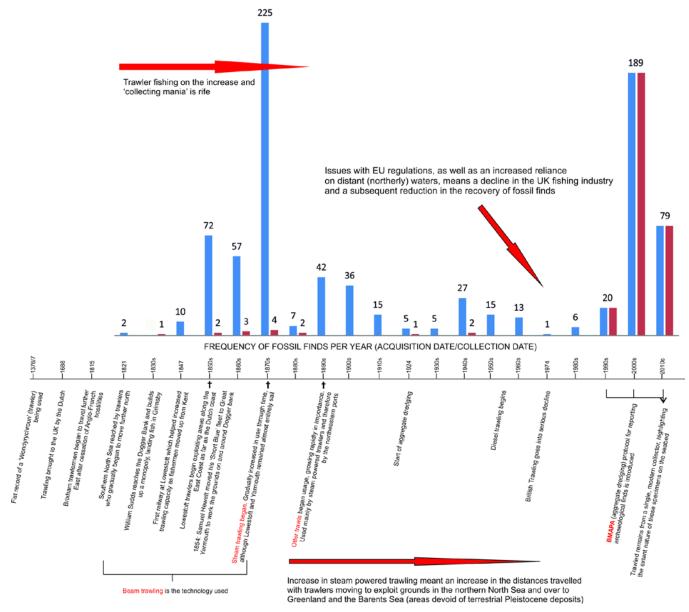


Figure S1. Timeline of the development of trawling in the North Sea against the frequency of specimens recovered, from the first recorded specimen through to present (all of the modern material [1970s onwards] being collected either through BMAPA or a single collector), demonstrating the continued abundance of this resource on the seabed. Red columns show the frequency of fossils by collection year (where known), with blue showing the same information by museums acquisition year.