



BONE VOYAGE

Spatiotemporal Occurrence and Prehistoric Exploitation of Small Odontocetes in the Holocene Baltic Sea

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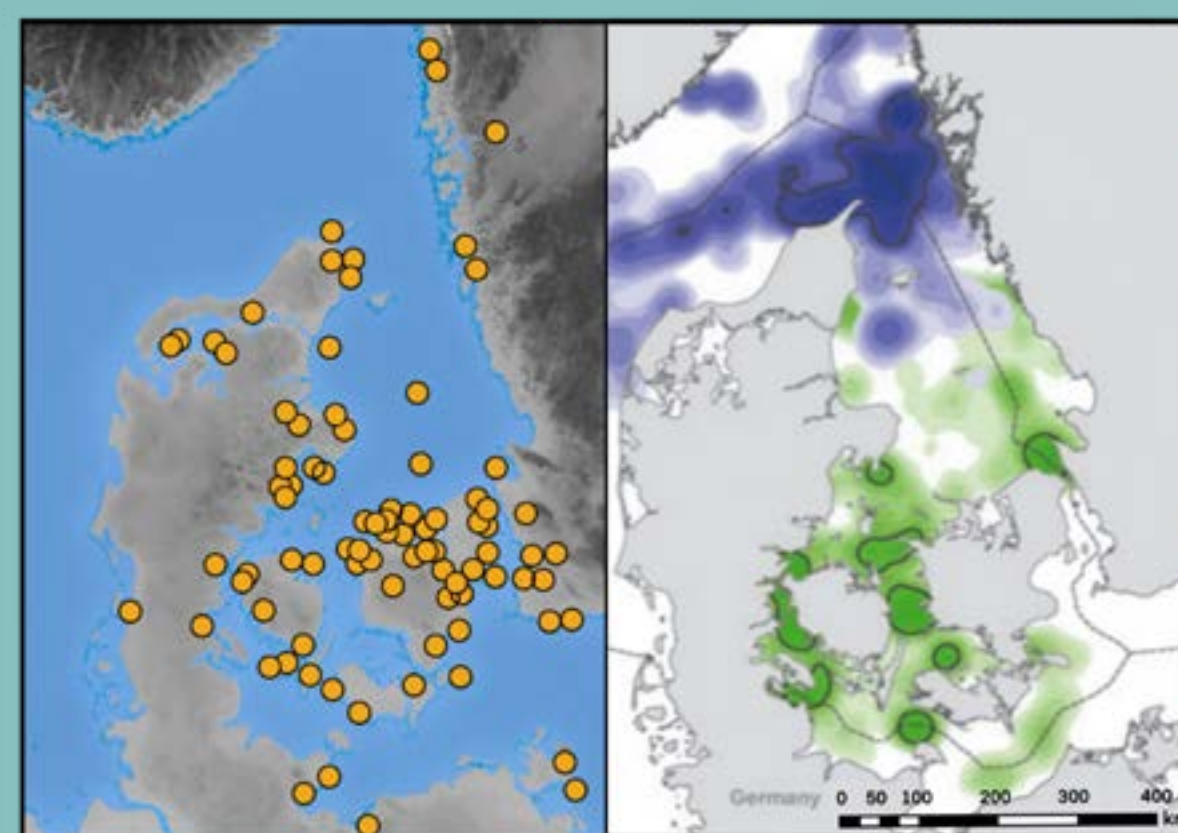
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Effect of Human Exploitation on Small Odontocetes

- Completing a **full record** of small odontocete bones (subfossils) recovered from archaeological sites in the Baltic region
- Analysing over 1400 odontocete remains (NISP) from 175 archaeological sites from the Mesolithic until the Middle Ages
 - Harbour porpoises (*Phocoena phocoena*) have been exploited as early as 9000 years BP and comprise 77 % of all the finds
 - White-beaked dolphin (*Lagenorhynchus albirostris*), common dolphin (*Delphinus delphis*) and bottlenose dolphins' (*Tursiops truncatus*) occurrence in the subfossil record peak in the warm Ertebølle and Neolithic periods

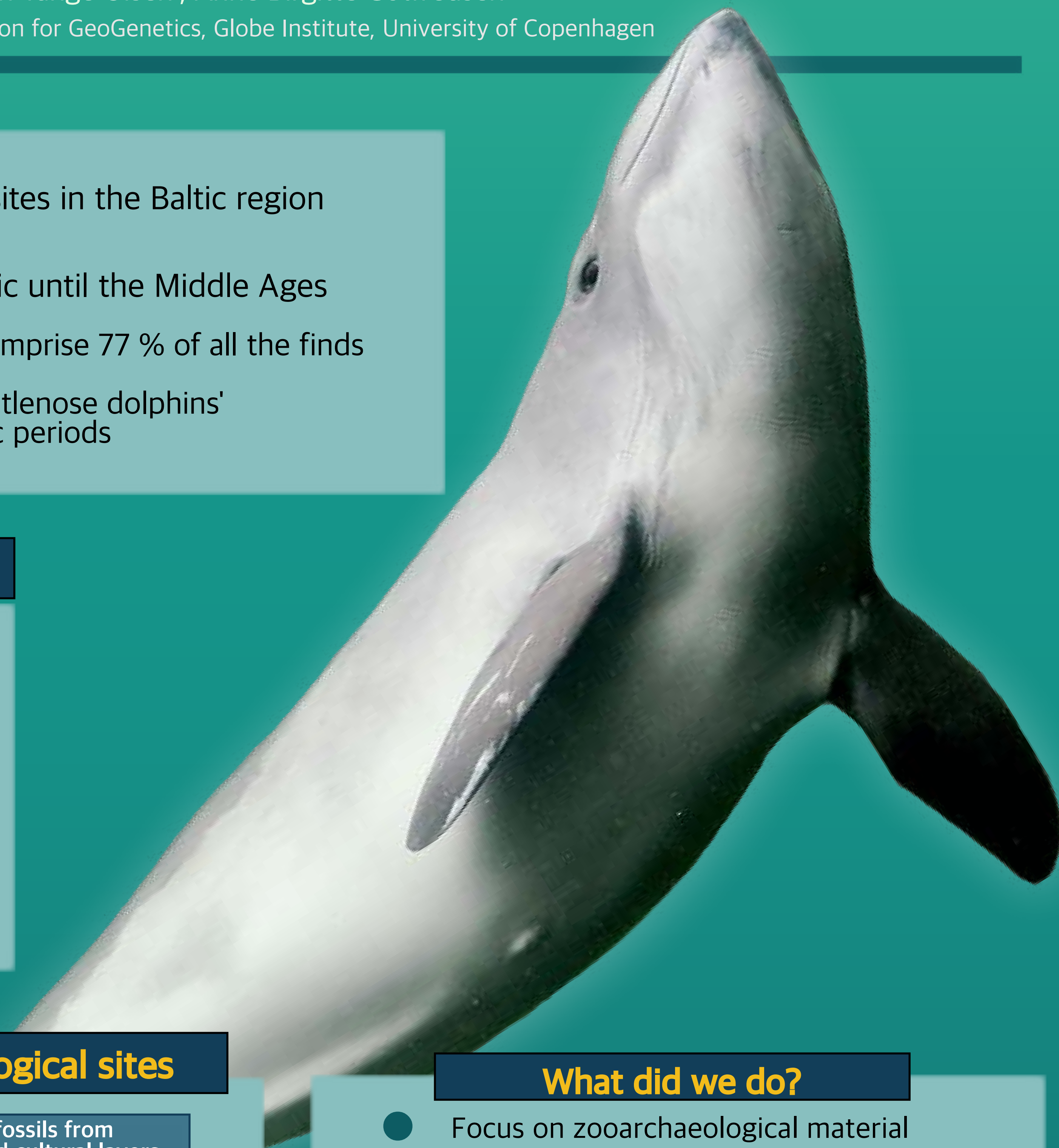
Thousand year-old area fidelity for the harbour porpoise?

- The prehistoric populations have kept their range ever since settling in the Baltic Sea

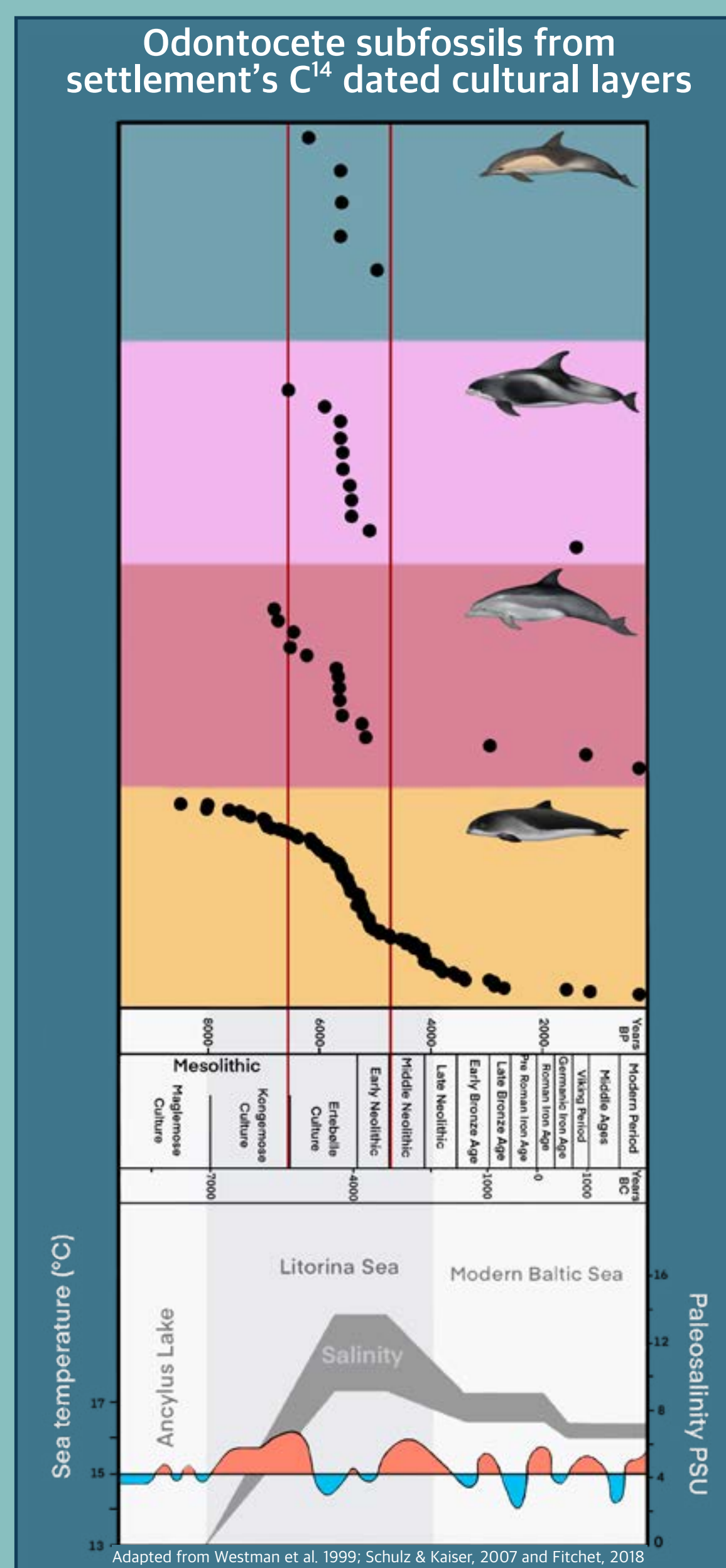
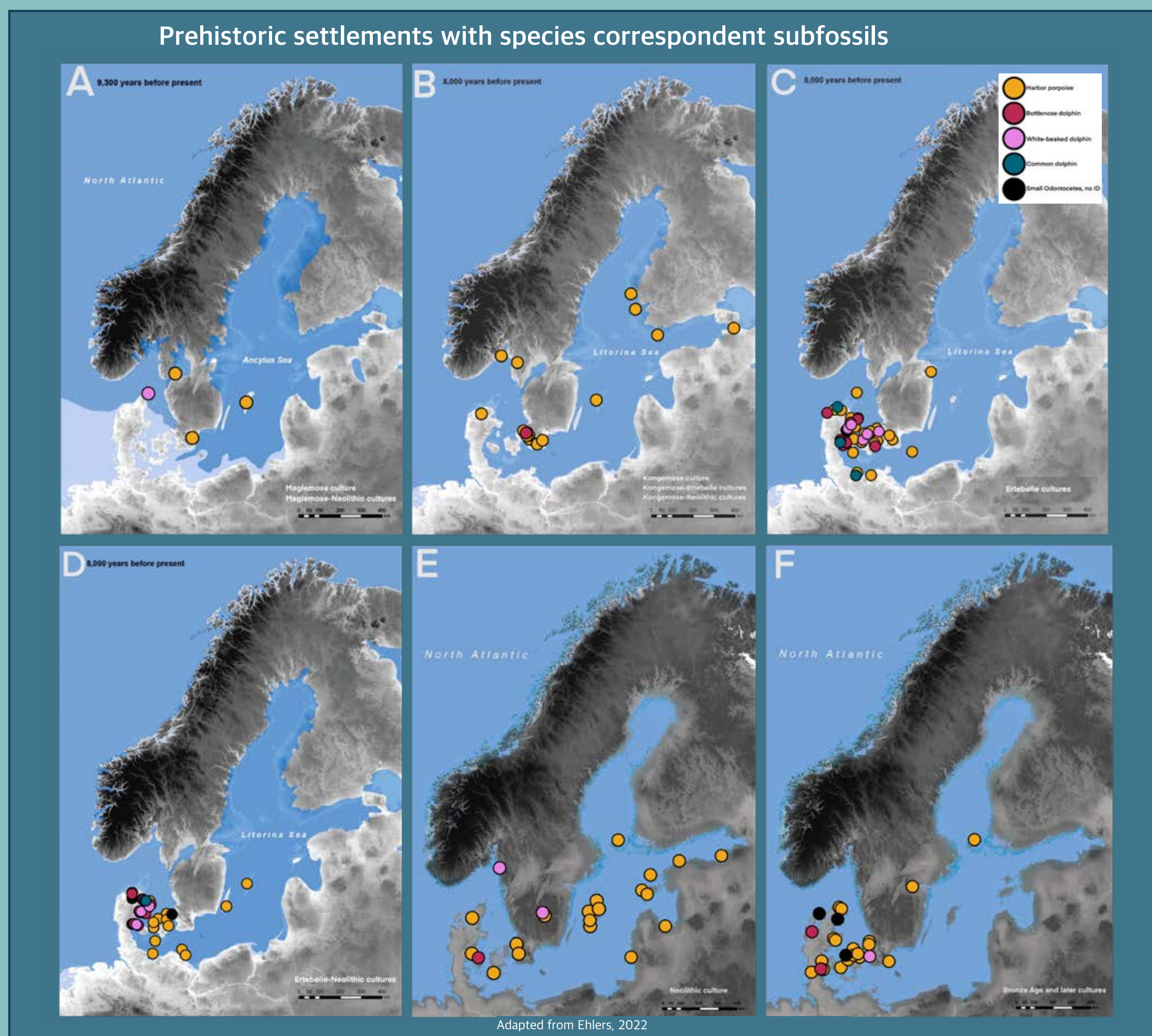


Adapted from Sveegaard et al., 2011 and Ehlers, 2022

- The distribution of harbour porpoise subfossils corresponds with contemporary satellite tracking and acoustic monitoring data (Sveegaard et al. 2011 a,b)



Spatiotemporal Occurrence of Dolphins and Harbour Porpoises at archaeological sites

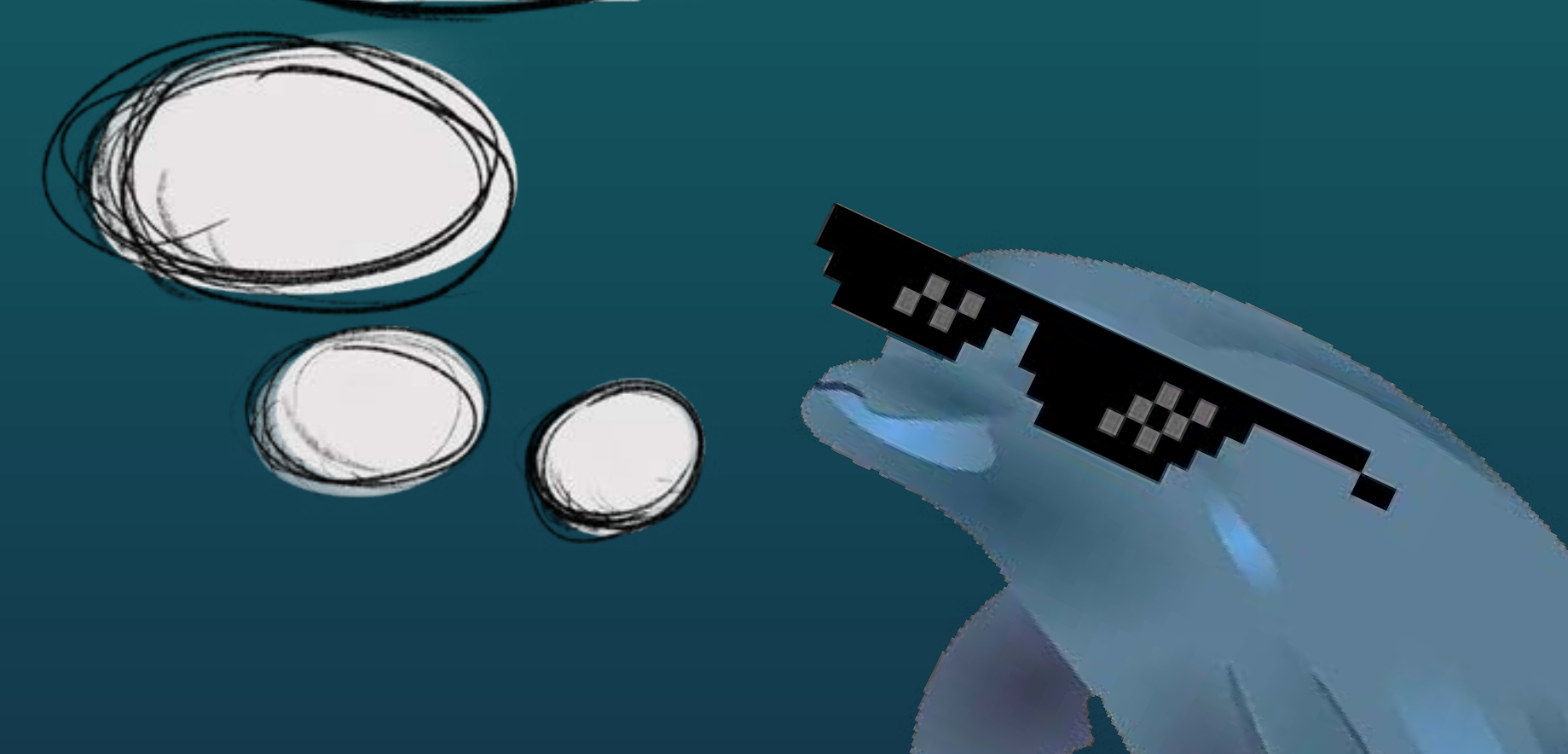


What did we do?

- Focus on zooarchaeological material
- Deep dive into the Quaternary archives and Systematic and Settlement bone collections at the Zoological Museum of Copenhagen
- Extensive literature search

So what can we do now?
 Can we track the genetic signature from the recent Belt Sea Harbour Porpoises back to Ertebølle-Neolithic?
 → Sequencing DNA and aDNA from Harbour Porpoises from the Belt Seas

Why is it important?
Conservation!



References:
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 3. Schulz-Kornas, Ellen & Kaiser, Thomas. (2007). Feeding strategy of the Urus Bos primigenius BOJANUS, 1827 from the Holocene of Denmark. CFS Courier Forschungsinstitut Senckenberg. 259. 155-164.
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Wanna know more?
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