



PRESS RELEASE

6 July 2020

A treasure trove of fossil bones proves:

Extinct Great Auk was a regular wintering bird in the North Sea

Nearly 25,000 hours of fossil hunting on 15 beaches along the coast of The Netherlands by 30 citizen scientists yielded 91 bones of an extinct bird, the Great Auk (*Pinguinus impennis*) over the past five years. Bram Langeveld, curator of the Natural History Museum Rotterdam, made an inventory, documented the sites, measured the bones and had four specimens radiocarbon dated. This week, the results were published by the Netherlands Ornithologists' Union in their journal *Ardea*, yielding new insights into this flightless bird that went extinct in 1844. It shows that the Great Auk was not a rare occurrence in the southern North Sea, between The Netherlands and the United Kingdom, as previously thought, but rather a common or regular wintering bird, based on the new radiocarbon dates since at least 48,000 years ago till the Roman period.

No breeding

There is no historical evidence that suggests that Great Auks nested on the shores of either side of the southern North Sea, and these bones do not change that, according to Langeveld: "The flightless bird was very vulnerable to land predators and preferred to breed on isolated rocky islands, which were absent in the southern North Sea then just as they are today. However, being a shallow, sheltered sea that is rich in fish, it must have been a prime wintering area for Great Auks that bred near Iceland, or perhaps near Scotland. The same is true for its living relatives such as razorbills, guillemots and puffins."

From dredged sediments

The 59 upper wing bones, 10 lower wing bones, 16 shoulder bones, 4 vertebrae and some other skeletal remains were all collected on Dutch beaches that were nourished with sediments dredged from the North Sea. These sand nourishments protect against rising sea levels, but also provide palaeontologists with a unique glimpse of the flora and fauna, including woolly mammoths and early humans, that once lived on what is now the bottom of the North Sea. Langeveld remarks: "Without the dozens of citizen scientists fossil hunting on these beaches and providing access to their collections, we would never have known that the Great Auk was this common in the southern North Sea. They are vital in saving our palaeontological heritage."

Great Auks in the United Kingdom

Although the Great Auk has an abundant record in the United Kingdom, most of those bones were found on the Scottish coasts. Not a single English bone originates from near the southern

North Sea. The closest finds are a beak from a cave near Whitburn, NE England and a wing bone fragment from Boxgrove, S England. The abundance of Dutch finds suggests that it is only a matter of time until English fossil collectors find Great Auk bones in dredged sediments on nourished English beaches, such as Bacton in Norwich.

In the Natural History Museum Rotterdam, curator Bram Langeveld has put a fine series of Great Auk bones on display. Langeveld: "I hope exhibiting these bones will help people to recognise the remains of the extinct sea bird if they would come across them on nourished beaches and thus save them for science."

Reference: Langeveld, B.W. 2020. New finds, sites and radiocarbon dates of skeletal remains of the Great Auk *Pinguinus impennis* from The Netherlands. Ardea 108: 5–19. doi:10.5253/arde.v108i1.a10

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