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Human-environmental interaction possibilities at the Neanderthals' northern edge: focus on last interglacial and early last glacial

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Neanderthals are believed to have been adapted to cold climate conditions, nevertheless Neanderthal findings in the north and northeast European region are scarce, non-existing or at least speculative. In between periods of arctic and subarctic conditions, warm periods like the Eemian interglacial would have offered mild living conditions in present-day southern Scandinavia and have evidently allowed migration of prey species to the region. We therefore suggest that the apparent absence of Neanderthals in the geological record here is partly steered by poor conditions of conservation, lack of *in situ* archives and lack of focused investigation, rather than a limit of the Neanderthal habitat *per se*. In this paper we seek to identify potential hotspots for Neanderthal activity in the geological record. We do this by mapping the paleolandscape from all available data sources and by 3D paleolandscape modelling, to identify potential Neanderthal living sites such as lake beaches, seashores and floodplains, where there would be easy access to water, prey and open habitat. Among the possible candidate sites, we will investigate by means of coring, whether the shores from Eemian lakes offer good conditions for preservation of potential find layers, as they might have a low degree of disturbance and in rare cases can offer *in situ* burial and conservation of interglacial fossils, archaeological material and sedimentary climate archives.