## Fading Ageröd – Human encroachment, climate change and the deterioration on a Scandinavian Mesolithic key-site in despair

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## Abstract

Ancient organic remains are essential for the reconstruction of past human lifeways and environments but are only preserved under particular conditions. Recent findings indicate that such conditions are becoming rarer and that old archaeological sites, with previous good preservation, are losing their preservative qualities. To investigate this, we returned to the well-known Swedish Mesolithic site Ageröd I In May 2019. Here we will present the result of the re-excavation and the osteological analyses of the bone remains from the 1940s, 1970s and 2019 excavation campaigns of the site and show how we documented and quantified the changes in bone preservation and related them to variations in soil conditions and onsite topography. The results indicate that the bone material has suffered from accelerated deterioration during the last 75 years. In some areas, this has led to a destruction of the remains while other areas, while suffering badly, are still able to preserve archaeological bones. We conclude that while Ageröd can still be considered an important site, it has lost much of the properties that made it unique and if no actions are taken to secure its well-being it will soon lose the organic remains that before modern human encroachment and climate change had been pristinely preserved at the site for 9000 years. Finally, because nothing special, compared to most other archaeological sites, has happened to Ageröd during these last 75 years, our results also raise questions of the state of organic preservation in other areas and call for a broad examination of our most vulnerable hidden archaeological remains, i.e. the organic remains from Stone Age contexts.

Keywords: Organic degradation, Sweden

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