



## **Environmental impact of early Sadlermiut settlements at Native Point (Southampton Island, Nunavut, Canada) before the Little Ice Age**

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Several Thule forager groups settled successfully in the Hudson Bay region of the Canadian Arctic starting at ca. AD 1050. First evidence of settlements at Native Point on Southampton Island dates prior to AD 1400 by Sadlermiuts. The village consisted of numerous sod and winter houses which framed a small shallow freshwater body (ca. 20,000 m<sup>2</sup>). Numerous butchered carcasses of mainly walrus, seal, bowhead whales and caribou remained in the pond and further decayed in the water.

Here, we present first results from three short sediment cores taken from the bottom of the settlement pond. Sedimentological, geochemical and micropaleontological analyses show an abrupt change at ca. AD 1500 from pristine aquatic environments to eutrophic conditions. Variation in  $\delta^{15}\text{N}$  and  $\delta^{13}\text{C}$  of the organic matter suggest that this shift is related to the first butchering activity of Sadlermiuts in the area.