

Premium campground with lake view – pingo remnants as preferred Mesolithic settlement sites?

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Pingo remnants are typical but not always easily visible landscape features in northwestern Germany and the Netherlands. Some of them are still small lakes but present-day land-use mostly disguises the existence of formerly water-filled depressions. In addition the circular wall structures have often been leveled by agricultural activities in modern times. However, according to estimates several hundreds pingo remnants bearing witness to Weichselian periglacial conditions can still be found in East Frisia and in the area between the rivers Elbe and Weser. Preliminary paleoecological investigations have shown that the majority of them were water-filled until Neolithic times making them a potential campground of preference for the Mesolithic population. In addition to wind shelter behind wall structures or dunes, Mesolithic hunter-gatherer communities could have used here both aquatic and terrestrial food resources. We investigated three of these pingo remnants in northwestern Germany using a multi-proxy approach combining an iterative archaeological site analysis with sediment core studies including geochemical and biological proxies. Our results show that Mesolithic artifacts are often concentrated close to open water bodies. The sediment cores obtained cover the time span from the late Palaeolithic to modern times. Excellent preservation conditions and a moderate sedimentation rate during the Mesolithic enables environmental change to be reconstructed.