

Abstract

The archaeological site of Lepenski Vir is widely known after its remarkable stone art sculptures that represent a unique and unprecedented case of Holocene hunter-gatherer creativity. These artworks were found largely associated with equally unique trapezoidal limestone building floors around their centrally located rectangular stone-lined hearths. A debate has raged since the discovery of the site about the chronological place of various discovered features. While over years different views from that of the excavator about the stratigraphy and chronology of the site have been put forward, some major disagreements about the chronological position of the features that make this site a key point of reference in European Prehistory persist. Despite challenges of re-analyzing the site's stratigraphy from the original excavation records, taphonomic problems, and issues of reservoir offsets when providing radiocarbon measurements on human and dog bones, our targeted AMS (Accelerator Mass Spectrometry) dating of various contexts from this site with the application of Bayesian statistical modelling allows us to propose with confidence a new and sound chronological framework and provide formal estimates for several key developments represented in the archaeological record of Lepenski Vir that help us in understanding the transition of last foragers to first farmers in southeast Europe as a whole.