

ABSTRACT SUBMISSION

Early Fuel Technicity and Management at the Eastern Fertile Crescent

<u>ZHENG K. 1*</u>

¹ University of Reading, Reading, United Kingdom

*Corresponding author

Abstract

In the context of the ongoing global challenge of climate change, countries like Iraq are particularly vulnerable to current and future stresses on natural resources and the loss of biodiversity. As environmental conditions continue to shift, understanding the historical interactions between human societies and their ecosystems becomes increasingly important. This poster presents some of the preliminary results of an integrated microscopic study conducted at the Early Neolithic site of Bestansur (7660–7000 BCE), located in Iraqi Kurdistan. The site has yielded evidence of multiple fire installations with a variety of structural forms through intensive excavations. These installations provide valuable insights into the technological and ecological practices of early human communities in the region.

To better understand the choices made by these ancient people regarding fuel use and the associated fire installation construction techniques, this study employs a range of cutting-edge analytical methods, including phytolith analysis, dung spherulite examination, and micromorphology. These microscopic analyses offer critical data on plant and animal resources, providing a window into the environmental conditions and resource management strategies of the time. Additionally, the research integrates other transdisciplinary analyses to offer a more comprehensive view of natural resource management during the Early Neolithic period.

Keywords

Fuel technicity, Resource management, Microscopic analysis, Neolithic transformation, Sustainability

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