ABSTRACT SUBMISSION

Investigating the regional complexities of agricultural production and settlement resilience through the 4.2 ka BP event in Central Anatolia, Trkiye.

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Abstract

The Mid-Late Holocene transition is often associated with the 4.2 ka BP event and is understood as a period of severe multi-centennial drought and rapid climate oscillation. Significant agricultural decline, coupled with settlement and socio-political contractions are noted across the urban, and often imperial centres of Eurasia. Comparatively little attention has been given to the alternate trajectories of communities outside these regions and their management of agricultural production. The K?z?l?rmak Basin of Central Anatolia, Trkiye contains multiple settlements that archaeologically demonstrate the societal turbulence of this period, however, uniquely for the broader region there is evidence for resettlement and later urbanisation. How these communities managed their environments, and utilised local and exotic plant materials throughout the 4.2 ka event and subsequently, has remained unclear. This research utilises plant macrofossils to investigate the agricultural and environmental interactions at the Early Bronze Age (c. 2500-2000 BC) and Middle Bronze Age (c. 2000-1500 BC) sites of Kaman-Kalehk, Bklkale, and Yass?hk. Preliminary results show a significant diversity of plant exotica at a time when traditional trade routes were disrupted, and abundant surplus crop storage with an agricultural system at Kaman-Kalehk dominated by water demanding bread wheat and the intermittent reliance on buffer crops. The Mid-Late Holocene transition is often associated with the 4.2 ka BP event and is understood as a period of severe multi-centennial drought and rapid climate oscillation. Significant agricultural decline, coupled with settlement and socio-political contractions are noted across the urban, and often imperial centres of Eurasia. Comparatively little attention has been given to the alternate trajectories of communities outside these regions and their management of agricultural production. The K?z?l?rmak Basin of Central Anatolia, Trkiye contains multiple settlements that archaeologically demonstrate the societal turbulence of this period, however, uniquely for the broader region there is evidence for resettlement and later urbanisation. How these communities managed their environments, and utilised local and exotic plant materials throughout the 4.2 ka event and subsequently, has remained unclear. This research utilises plant macrofossils to investigate the agricultural and environmental interactions at the Early Bronze Age (c. 2500-2000 BC) and Middle Bronze Age (c. 2000-1500 BC) sites of Kaman-Kalehk, Bklkale, and Yass?hk. Preliminary results show a significant diversity of plant exotica at a time when traditional trade routes were disrupted, and abundant surplus crop storage with an agricultural system at Kaman-Kalehk dominated by water demanding bread wheat and the intermittent reliance on buffer crops. The Mid-Late Holocene transition is often associated with the 4.2 ka BP event and is understood as a period of severe multi-centennial drought and rapid climate oscillation. Significant agricultural decline, coupled with settlement and socio-political contractions are noted across the urban, and often imperial centres of Eurasia. Comparatively little attention has been given to the alternate trajectories of communities outside these regions and their management of agricultural production. The K?z?l?rmak Basin of Central Anatolia, Trkiye contains multiple settlements that archaeologically demonstrate the societal turbulence of this period, however, uniquely for the broader region there is evidence for resettlement and later urbanisation. How these communities managed their environments, and utilised local and exotic plant materials throughout the 4.2 ka event and subsequently, has remained unclear. This research utilises plant macrofossils to investigate the agricultural and environmental interactions at the Early Bronze Age (c. 2500-2000 BC) and Middle Bronze Age (c. 2000-1500 BC) sites of Kaman-Kalehk, Bklkale, and Yass?hk. Preliminary results show a significant diversity of plant exotica at a time when traditional trade routes were disrupted, and abundant surplus crop storage with an agricultural system at Kaman-Kalehk

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Keywords

4.2 ka BP event, Agriculture, Resilience, Early Bronze Age, Central Anatolia

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