



Changing Animal Herding Strategies in the 4th – 3rd millennia BCE in the Upper Orontes Valley: Preliminary Isotopic Data ($\delta^{18}\text{O}$, $\delta^{13}\text{C}$, $^{87}\text{Sr}/^{86}\text{Sr}$) from Tell Nebi Mend

Lynn Welton | Durham University

Graham Philip | Durham University

Archaeology of Syria

Thursday, November 19, 2020

The role of pastoral mobility in the rise of urban societies and large, integrated supra-regional economies in western Syria during the Chalcolithic and Early Bronze Ages is of significant scholarly interest. During this period, state-level political systems developed and, in the late 3rd millennium, there was a massive expansion of urban settlement into the arid Syrian steppe. Links have recently been proposed between this expansion and growing elite exploitation of the economic opportunities provided by pastoralism, resulting in the development of a vast new livestock-based economy that represented a fundamental shift in socio-political networks, economic resilience and risk management strategies. Although material culture and texts provide clear indications about the vital significance of the wool industry in these major socio-economic changes, multi-element isotopic analysis of animal enamel provides a reliable means of directly testing these hypotheses, and of examining changes in animal management and herding strategies during the 4th–3rd millennia BCE. This paper will present the preliminary results of isotopic analysis ($\delta^{18}\text{O}$, $\delta^{13}\text{C}$, $^{87}\text{Sr}/^{86}\text{Sr}$) of faunal remains from the site of Tell Nebi Mend in the Upper Orontes Valley in western Syria and evaluate what the data reveals about changes in herding practices in the centuries that mark the emergence and subsequent flourish of early urban centers. It will also draw upon comparative data from the same time period from the Jordan Valley to the south for interpretive purposes.