Bioarchaeology of the Near East, 17:XX–XX (2023) Short fieldwork report

## Animal remains from Shishar Tepe, Iran, 2015

Naeimeh Sharifi<sup>1</sup>, Mohammad Ghamari Fatideh<sup>\*1</sup>, Behrokh Marzban Abbasabadi<sup>2</sup>, Mahdi Abedini Araghi<sup>3</sup>

Department of Archaeology, Faculty of Art and Architecture, University of Mazandaran, Daneshgah Blvd., 47416-13534, Babolsar, Mazandaran, Iran email: m.ghamari@umz.ac.ir (corresponding author)

<sup>2</sup> Department of Pathobiology, Faculty of Veterinary Medicine, Amol University of Special Modern Technologies, Abazar 35 Alley, Taleghani Blvd., 46156-64616, Amol, Mazandaran, Iran

<sup>3</sup> Cultural Heritage Site of the Historical Cave of Espahbod, Khorshid, Jam-e Jam Blvd., 48148-37433, Sari, Mazandaran, Iran

Shishar Tepe is an ancient settlement site located c. 10km south of the Caspian Sea in Miandorood County, Mazandaran, Iran (36°44'24"N, 53°09'07"E, 29masl) and 200 meters northwest of the village of Ghajar Kheil Khorendin (**Figure 1**). It covers an area approximately 190×183m, and rises up to 6 meters above the surrounding fields (**Figure 2**).

The site of Shishar Tepe was excavated in 2015 by Mahdi Abedini Araghi from the Mazandaran Cultural Heritage, Tourism and Handicrafts Office. During the excavation, a pottery kiln was uncovered as well as several domestic structures. The uppermost layers of the site were heavily destroyed by modern agricultural activities. Based on the pottery, the site was tentatively dated to the Iron Age II (c. 1050–800



Figure 1. Location of Shishar Tepe. Drawing by M. Ghamari.

BCE) with some evidence suggesting an earlier period, potentially the Iron Age I (c. 1250–1050 BCE) (Abedini & Sharifi 2015). Recent revision of pottery sequence, however, based on the stratigraphical excavations at Ghal e-Ben, suggest that Shishar Tepe may had been inhabited as early as the Late Bronze Age (Safari 2021).



Figure 2. View of Shishar Tepe from the south (Abedini & Sharifi, 2015).

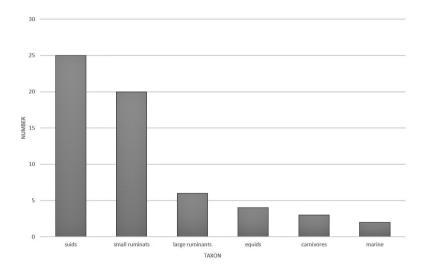


Figure 3. The number of identified specimens per animal taxa (NISP). Diagram by Naeimeh Sharifi.

Animal remains (e.g., bones, teeth and shell) were discovered in several domestic contexts at Shishar Tepe. After being initial cleaned at the site, the zooarchaeological remains were transported to the anatomy laboratory at the Faculty of Veterinary Medicine, Amol University of Special Modern Technologies in Amol, Iran. There they



Figure 4. Proximal radius of a cervid. Photograph by Naeimeh Sharifi.

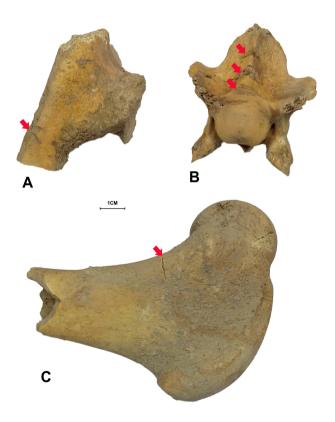


Figure 5. Cutmarks. A, C: distal end of the femur (large ruminant); B: cervical vertebra (small ruminant).

Photograph by Naeimeh Sharifi.

were weighed and their completeness and taxonomic identifications assessed by Sharifi and Marzban based on their morphological characteristics and comparisons with animal taxa using related zoological sources (e.g., France 2009; Sisson et al. 1975; Fernandez-Jalvo & Andrews 2016; Dyce et al. 2009). Due to the poor state of preservation, precise age-at-death estimation was not possible, and the assemblage was only divided into mature and immature individuals In addition, taphonomic factors such as burning, cut marks, bleaching and weathering were noted.

The total number of animal remains retrieved at Shishar Tepe is 113 including 67 mammal remains and two shells. Additionally, 17 specimens were anatomically identifiable but lacked taxonomic classification, while 27 fragments were unidentifiable. Age-at-death was assessed for 35 elements, of which 29 were classified as mature and 9 as immature.

Most elements represent suids and small ruminants, most likely ovicaprids (**Figure 3**), but there was also at least one proximal radius from a cervid (**Figure 4**). No burning was noted in the assemblage and any cut marks were observed on three specimens, including two femora and a cervical vertebra (**Figure 5**).

Since animal remains from Shishar Tepe were found in domestic contexts (and were disarticulated with most elements representing the axial skeleton), it is unlikely that the excavated area was used for butchering. Instead, the assemblage likely represents the typical waste accumulated through the consumption of animal parts transported from elsewhere.

## References

- Abedini M., Sharifi M. (2015), *A preliminary report of Shishar Tepe, Mian-do-rood*, The Archive of Cultural Heritage Organization of Mazandaran. (unpublished report, in Persian)
- Dyce K.M., Sack W.O., Wensing C.J.G. (2009), *Textbook of veterinary anatomy*, St. Louis: Elsevier Health Sciences.
- Fernandez-Jalvo Y., Andrews P. (2016), Atlas of taphonomic identifications: 1001+ images of fossil and recent mammal bone modification, Dordrecht: Springer.
- France D.L. (2009), *Human and nonhuman bone identification: A color atlas*, Boca Raton: CRC Press.
- Safari M. (2021), Chronology and study of regional and ex-regional interactions in northern parts of Central Alborz in Bronze Age according to the findings in Boz-Rood-Pei Tepe (Ghaleh Ben), Babol, Mazandaran, unpublished PhD dissertation, University of Mazandaran.
- Sisson S., Grossman J.D., Getty R. (1975), The anatomy of the domestic animals, 5<sup>th</sup> edition, Philadelphia: Saunders.