From the Bronze to Iron Age: Diachronic Faunal Investigations at Pecica Șanțul Mare, Romania

INTRODUCTION
Pecica Șanțul Mare is a large, fortified tell settlement located along the Maros River in Arad County, Romania (Fig. 1). Most of the occupation belongs to the Maros/Mureş Culture, which spans the Early-Middle Bronze Ages. It also has significant Iron Age (Dacian) and Medieval components. Pecica has been the focus of systematic excavations since 2005 (O’Shea et al., 2012). Over 20,000 animal bones have been examined, with a focus on changes in pastoral systems related to the emergence of regional hierarchies (Nicodemus 2012, 2013). New research combines analyses of animal husbandry and butchery practices to clarify social and technological changes occurring through the Bronze and Iron Ages.

CHRONOLOGY
To date, 500 years of Bronze Age settlement has been examined, falling into three major periods (Tab. 1, Fig. 2). During the Florescent Period, Pecica emerged as a regional center. This period is marked by expansion in settlement size, increased occupation density, large-scale metal production, and high frequencies of imported goods. At this time, we also see the construction of unique features, including a central platform and a series of ritual animal bone deposits. The Late Period marks the settlement’s collapse and eventual abandonment. Pecica was reoccupied during the Iron Age.

FLORESCENT PERIOD (MBA I)
- Husbandry systems reoriented towards meat production
- Limited evidence for primary butchery on-tell
- More specialized meat production and distribution systems, possible provisioning of on-tell populations
- Adoption of large-scale horse breeding; Phase 4 horses 30% of livestock (Fig. 5), highest frequency in Carpathian Basin
- Construction of ritualized bone deposits (Fig. 7), containing primarily prime-aged female horses; cutmarks demonstrate meat removal (Fig. 6).
- First evidence of chariotry at Pecica, models of 4-spoked wheels (Fig. 8).

CUT MARK STUDY
Cutmarks were grouped into four classes: gashes, nick, wedges, and slices (Lemke 2013) (Tab. 2, Fig. 3). The formal attributes of each cutmark class, as well as their distribution across different taxa, elements, and time periods were analyzed. Gashes and wedges are made with heavy duty tools (such as iron or bronze axes) and result during primary butchering/dismemberment activities. They are over-represented on high-medium utility elements. Slices and nicks, made with metal knives or stone blades, are the result of fine cutting (tendon/ligament detachment, filleting) and slices also are associated with skinning.

EARLY PERIOD (EBA)
- Animal management practices small-scale and risk-adverse
- Smaller-bodied livestock dominant, particularly sheep (Tab. 3, Fig. 4).
- Generalized husbandry systems, balancing production of meat and secondary products
- Frequent gash and wedge cutmarks indicate primary butchery on the central tell.

LATE PERIOD (MBA II)
- Similar husbandry practices for ovicaprids, pigs, and cattle
- Horse breeding drops significantly (5% of livestock); more horses maintained into old age (25% vs. 8%)
- Greater use of low-utility skeletal elements and low-ranked wild fauna
- Frequent slice cutmarks indicate continued consumption of horses and skinning of red deer and cattle

REFERENCES CITED

1. t=80.340, df=4, p<0.001
2. MBA I: gashes under-represented, wedges absent; MBA II: slices over-represented; Iron Age: gashes and wedges over-represented. t=80.020, df=3, p<0.001

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