

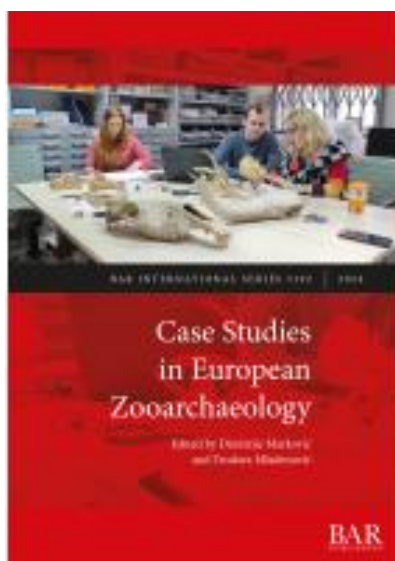
Book Review

Marković, D., Mladenović, T. (eds.) 2024. *Case studies in European Zooarchaeology*. BAR International Series 3192. Oxford: BAR Publishing. 142 pages. ISBN 9781407361918. £40.00

According to the Editor's Note, the book is intended to provide "additional support for smaller case studies that are increasingly difficult to publish today." As large-scale and expensive analyses are ever more featured in international publications, the book follows a seldom-seen path in zooarchaeological research, mostly highlighting smaller, more traditional approaches to zooarchaeology and human-animal relations. The majority of the chapters result from the 9th Postgraduate Zooarchaeology Forum that took place online in 2021 due to the COVID-19 pandemic. The papers contribute to opening lines of research at the geographical, chronological, or thematic level. Human-animal relations are explored from the Magdalenian to the Medieval periods, and from Spain to Bulgaria. Drawing on diverse datasets, they primarily focus on site-specific analysis and regional comparisons, from biogeochemical and technological studies to discussions of subsistence and symbolic behavior.

Cerezo-Fernández and colleagues present the technological analysis of four unpublished "bevelled tools" recovered in the Magdalenian levels of Tito Bustillo Cave (Spain). Experimental studies involved the removal of the brow tine and the modification into a bevelled tool, enabling the description of two different operational sequences with similar morphological results, but whose technical production sequence is different from the archaeological specimens. Future functional analysis will help characterize these lightly modified but important tools.

Tomac evaluates animal exploitation at two middle to late Neolithic sites from eastern Croatia, Kremenjača and Topole, while comparing the results at the supra-regional level. Taxonomy and anatomy composition, kill-off patterns, and taphonomy allow for discussion of food processing and consumption, and animal husbandry, with a focus on cattle, which were the most prevalent. Prillo and colleagues assess animal exploitation in the Middle Neolithic of Piano dei Cardoni, located on the small volcanic island of Ustica. Among others, the assemblage is dominated by caprines and other mammals, birds, and mollusks. Regional comparison, including insular and continental Sicilian sites, demonstrates differing strategies from the Mesolithic to the Bronze Age due to ecological, socio-cultural, and ritual factors. Messina and colleagues apply biogeochemistry to the Mas Castellar de Pontós (Spain) Iron Age rural settlement. Sequential oxygen isotope analysis of sheep tooth enamel from a small sample is done to acquire life-history data on birth seasonality, duration of the lambing period, and sheep lambing deseasoning. Distinct demographic management strategies, with natural and "out-of-season" births, show an important human manipulation, probably related to intensive secondary product exploitation or an increase in herd size.



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Savić offers an iconographic study of crocodile motifs. Scenes showing crocodiles, generally considered a symbol of Egypt, are depicted on the Nile together with other zoomorphic, anthropomorphic, and floral motifs in fitting environments, with hunting, fighting, and erotic scenes. Both spatial and temporal criteria were applied to look at the Nile crocodile representation anomalies (also related to the skill of the artist) and their significance in Egyptian, Roman, and Christian cultures. Pazos and colleagues address the faunal record from the Hispano-Roman *villae* of Almenara de Adaja-Puras (Spain). Cattle and caprines dominate the assemblage, with mostly adults followed by sub-adult individuals. Besides common fauna analysis, the authors delve into understudied butchery practices, and the data is integrated to reconstruct meat processing and different species exploitation strategies. Marković and Petković consider the inclusion of animals in Roman human cremation burials from the Davidovac-Gradište necropolis (Serbia). They identify a prevalence of pig and chicken, followed by caprines and cattle, suggesting that some remains originated from the sedimentary matrix, while others relate to the funerary ceremony (feasting and post-cremation food offerings). The buried individuals' sex or age does not relate to specific body parts or species.

With Mladenović and Bondžulić, we discuss Late Antiquity and Early Byzantine exploitation of equids and camels in Serbia. Abundance, anatomic profiles, demographics, pathologies, and butchery practices are considered according to chronology and settlement type. Equids and camels are deemed beasts of burden, albeit with different uses and chronological specificities. Older individuals' consumption appears to have been occasional and related to the difficult times resulting from ongoing battles. The Site 7 (Bulgaria) Late Medieval occupation included four pits that yielded eggshells and other faunal remains: cattle, dog, sheep, goat, pig, horse, duck, fish, and mussel. Similar pits with animal bones and eggs are unknown in Bulgaria. Vasileva and Vladova discuss this data together with the features and associated materials, suggesting a ritualized function rather than simple food-refuse disposal. Mladenović and Vranić analyze the Middle Ages in Serbia. Written, iconographic, archaeological, and zooarchaeological data from different types of settlements allow for discussing hunting and its varying roles. The authors address socio-cultural, economic, and subsistence factors, and how these relate to species, techniques, and types of hunting. Historical and zooarchaeological records are not in accordance, possibly due to the latter's information bias, such as the number of assemblages, sample size, and recovery technique.

Overall, the different contributions have a balanced editorial space, are well-written, and are accompanied by informative tables and figures. They focus on understudied human-animal relations topics in the different regions with varying degrees of research "maturity". The authors openly acknowledge sampling constraints, data limitations, and unresolved questions, while also outlining future research directions. Despite some chronological and geographical gaps, the book succeeds in its aim of highlighting "smaller case" studies on European archaeology. This is a valuable scholarly contribution and of interest to readers of this newsletter, from students to specialists looking at zooarchaeological and cross-disciplinary studies on human-animal relations.

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