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Bulbas of wild and domestic animals at the Predynastic site of cemetery of El-Kamal (upper Egypt).
The Predynastic cemetery of El-Kamal is located in the southern part of Egypt, near the town of Byba. The cemetery, which covers an area of about 2 square kilometers, contains over 500 tombs, most of which date back to the Predynastic period. The tombs are mainly rectangular in shape and contain burials of individuals of both sexes, including children, adults, and elderly individuals. The burials are accompanied by a variety of grave goods, including pottery, stone tools, and animal bones.

POSTER:

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Boulders of Boulders, Faunal Remains of a Roman Age Site (9th–7th c. BC), Northwestern Iran.
The site of Qal’eh in the city of Khouzestan (western Iran) was excavated in 1999 and 2004. Excavations of the site revealed architectural structures that are comparable to contemporary sites in the area. During the excavation in 2003, a pit area discovered with faunal and archeological material, the faunal site (21.5 kg) was discovered. The material found includes bones of domestic animals such as cattle, sheep, and goats. The bones are well preserved and provide a detailed understanding of the diet of the inhabitants of Qal’eh.

The following topics are discussed in this paper: 1) the relative proportion of species in the collection and the probable contribution of each to the ancient diet or sacrifice; 2) interpretation of seasonal economic use of animals based on age effects; 3) history of recovered faunal parts as an indication of butchering procedures; 4) stratigraphy and comparison with fauna from the nearby site of Sandan-e-Bozeman.

Leblebi OMAR
Kyoto University, Japan.

Animal Exploitation at Tell Badari (Jadis, NE Syria) During the Early Bronze Age.
The tell excavation which has been conducted at Tell Badari since the late 1980’s until the early 90’s, revealed an early Bronze Age town in the Hauran Valley near the Syrjan, Syria, region.

This town is one of the largest among the group of settlements located in the valley area, and was continuously inhabited throughout the early Bronze age until the Iron Age. The excavations of the settlement in the transition period between the late Hellenistic and early Roman periods revealed a major role in determining the economic activities of the site.

Examining the bone materials from different levels, and the dwelling structures, would provide us with an insight on the different roles and domestic resources exploitation in the late Hellenistic period. At the same time, we aim to study the effects of the environmental conditions on the local diet, the economic and cultural aspects of the daily life. The study of the subsistence base which depended substantially on the foraging strategies, would help us to enhance our understanding of the socio-technological changes which occurred towards the last stages of the early Roman period and ended the occupation at the site.
Reconstructing hunting and farming practices in the Pre-Pottery Neolithic Upper Euphrates region, using stable isotopes in human and animal bone, structure, and carbonate.

About 330 individuals, human and animal bones of various vertebrate species from three Anatolian sites dating to the Heartland transition in the area have been analyzed in terms of stable carbon and oxygen isotope signatures. The data complete the regional paleo-climatic picture of early PPN Gölçek phase, early PPN Kavaklı Çat, and the PPN Gökçeşme, which are location sites precisely in each other. Human remains per site as possible was included into the smokery, permitting for a chronological evolution of the data. The data were used within a broader timetable to reconstruct the evolution of landscape use by humans and farming groups. The results show the complexity of the fundamental changes in human subsistence strategies in the Hafita Desert and even indicate landscape degradation soon after agriculture became the mainstay of the economy.

Jennifer J. PRO and Fam CANBEE
New York University, U.S.A.

Archaeological Evidence for Pastoralism in the Early Transcaucasian Culture

Mobile pastoralism is a communities viewed as a fundamental aspect of the Early Transcaucasian Culture (ETC), which emerged in central Asia and the southern Caucasus about 3000 BCE and spread rapidly throughout the broad area during the following millennia. At least two, the connection between mobile pastoralism and the decline of ETC populations was taken from their distinct social and territorial forms, how non-ethnographic paradigms are used. Economic and social change in the ETC, and the ETC itself. They are also used to compare hunting economies across the region. Research indicates that settled agriculture was not only the economic base of some ETC communities, where transhumantists adopted faunal diversification strategies, such as herd size, social structure, and faunal diversification. While not only relying on the role of mobile pastoralism in the ETC, the archaeological evidence thus far suggests that sign-post pastoralism was the dominant subsistence pattern at certain ETC times.

Francois POFIN
Musee national d'histoire naturelle / CNRS, UMR 5197 - Paris, France.

Notes de mer et chevreuil et chamois de lait

Scott RUFOLO
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New insights into the “Second Urban Revolution” of Northern Mesopotamia from five Early Bronze Age Facial Assemblages of the Khurbta Khals, Syria

Generalized regarding as the hallmark of the world’s first cities, ancient Mesopotamia has long been studied in terms of the emergence of urban life and state formation. Historically, researchers have focused on the Levantine cities of northern Mesopotamia. Although does excavated to include consideration of event in northern Mesopotamia as archaeological work in northeastern Syria and surrounding areas has revealed a more complex socio-economic trajectory than more complex, urban-centered models of interaction. These developments occurred over the time of the southern cities, composing what has been termed the “Second Urban Revolution.” Employing refined data from Early Bronze Age sites of the Syrian jar, this paper will examine the function of pastoralism, production in the establishment of the core economic and political structures that developed in Mesopotamia’s earliest large-scale, urban civilizations.

Anna RUSELL
Faculty of Archaeology, Leiden University, The Netherlands

Changing patterns of animal exploitation and the 8.2 ka B.P. climate event: preliminary findings from the faunal remains of Tell Sabi Abyad, Syria, 7500 – 5900 B.C.

The so-called climate change of 8.2 ka B.P. has caught the attention of natural scientists who see the climate event as a model for future climate changes. The archaeological implications of this event however remain widely unspecified and the period of distinct change has been widely overshadowed. In this paper, the interpretation of Tell Sabi Abyad is located in the upper Euphrates valley of northeastern Syria, approximately 80 kilometers from the Tigris flood basin, and is one of the few sites that has occupation layers spanning this climatic event. Previous research at Tell Sabi Abyad indicates substantial cultural change around 8.2 ka B.P. with strong evidence for a fundamental social transformation of society at this time, including changes in the organization of the economy, architecture, social organization, and material culture. The current research presented here is a part of a PhD research project which hopes to shed further light on this phenomenon, with particular attention paid to changes in economy and shifts from a primarily sedentary, agricultural to a more diversified, pastoral form of subsistence. The preliminary findings of this research will be presented.
Nerissa Russell (1) and Kathryn Twiss (2)

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Digesting the Data: Dogs as Sapropelic Agents at Neolithic Catalhoyuk, Turkey

Dogs have long been shown to be a significant sapropelic factor wherever they are present. Often this is approached in terms of density–mediated attrition, with dogs as a key differential agent, here we focus on the effect of the diet, on both preserving, and on the faunal distribution, the mastication remains from Neolithic Catalhoyuk, where digestion effects a substantial proportion of some skeletal elements (e.g., phalanges, phalanges), and not others. In this nature, dog feces generally form secondary deposits, within the barrier original plate of deposits, whereby multiple mastication and the diet–domesticus cats, will is visible by taphonomic data.

Archaeobiological and contextual data from this region is included below (e.g., morphological and taphonomic analysis, and longevity patterns, post-mortem representation, show significant effects on the dogs' body, belonging to the pre-Phoenician period (7000–3000 BC), some of which could be related to the process domestication (Sahin, 1997: 2001). Moreover, this change in the habitat, characteristics, and the natural environment, may depend on the relationship between human groups and changes on the ethological and biological patterns from wild to domestic animals (Sahin, 2005). Thus, following this pattern, one of these changes is related to the natural environment, or to the relationship between humans and animals. This is a clear example of the process of domestication. Without enough knowledge on the base, it's difficult to understand the dynamic and rhythm of the process, as well as the social magnitudes of it. In the case of both elements, in the natural environment, on the diets received from anthropological levels with presence of domestic cats (Phoenician) and archeological levels with only the wild species (Phoenician), 31% and 19% values were obtained from domestic animals on three lower levels of older dates. Results were recovered in a sequential order from each other, overlapping the different elements. In this way, we are able to understand the relationship between humans and animals. Differences between them are reduced. The process of domestication is a clear example of the dynamic and rhythm of the process.

Methods: The work had been carried out as part of the Neolithic Research Project (Research Grant 2010-05). The authors would like to thank the Neolithic Research Project and The National Science Foundation for their support. This work has been partially supported by The National Science Foundation under Grants 0802082 and 0802083. The authors would also like to thank Dr. Nancy Stender for her help in the preparation of the manuscript.
Shivak SHEIKH (1), Aroosa SARDARI (2) and Matin MALIKHOUR (3)
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New archaeological investigation in Fars (Iran): faunal remains of types Mehl Al, a Middle-Late Chalcolithic site.

In the framework of joint construction projects in Iran the presence of Fars region archaeology was surveyed and Mehl Al was chosen for excavation. This is one of the rare sites of the region which is typical of the Levantine phase. This site is from the period between 3rd and 1st millennium B.C. Eight trenches were excavated and within 1432 square bone fragments of the collected assemblage have been dated. During the pre-modern and modern period the area has been used as residential place for their seasonal pastures. Fossilisation is also important in the past since Sheep and Goat have an important role in the economy of the site. The kill-off pattern shows different exploitation of sheep and goat. After the Caspius, the most abundant domesticated species and its contribution to the diet seems to be more important to Caspius. Nodules the domestication, a variety of hunted animals have been identified in the tombs of Mehl Al. Wolf, Don (Canis dingo), Wild boar (Sus scrofa), Brown bear (Ursus arctos), Lion (Felis leo) and several Panthera species are among the wild mammals identified in the burials of Mehl Al. These are representative of the area and were utilised to manage (Uoos famines). The faunal reflect a vicus phenomenon and also the exploitation of different ecological niches. After a season of mesore evolution the site sink under the weight of the dam, however after a hot summer and drought the site reappeared and a new excavation is currently underway of the site.

Jessica PROSVERO
Institution

Wild faunal remains of Teos Höyük

This paper discusses the exploitation of wild animals from the Iron Age I-II (1500-900 BC) at Teos Höyük in western Anatolia. Until recently, zooarchaeological research of the site has centered on domestic livestock, and the nature of the hunting economy of the site. In contrast, wild animal remains (less than 8% of the ETC faunal assemblage) have received relatively little attention, and their presence in the assemblage is not yet clearly understood. This study provides a systematic analysis of the wild remains from the site, including species identification, seasons availability, representative impact, human modification, and zooarchaeological context. Findings from this investigation complement the zooarchaeological evidence from domestic livestock in the assemblage, which suggests that the site inhabitants were primarily settled agrarian pastoralists, whose main concern was minimising subsistence risk and uncertainty.

Margarethe UERPMANN & Hans-Peter UERPMANN
Eberhard-Karls-Universität Tübingen, Germany.

Muxwel in the problems of domestication.

Muxwel is one of the few archaeological sites in SE Arabia where animal remains are preserved in larger quantities. It is a small fortified town on the Iron Age I II period situated in the outskirts of Baton City. Of some 80,000 identified animal bones almost half come from fowl. Among the 16,500 bones of domesticates there are more than 780 bones of domesticates, in terms of find numbers only sheep and goat are more frequent. According to bone weights domesticates are second in importance after sheep. Caspius amount is one third of the same species in terms of numbers and to only 5% in terms of weight. They are the only other domesticates of any importance for Muxwel’s subsistence. Assuming that domesticates were not only kept for meat, but also for labour and milk, they were probably the most important living resource for the inhabitants of the town.

There is no commonly accepted evidence for the occurrence of the domestic aniels prior to the Iron Age I. Thus, the observation of the economic importance of the animals at Muxwel raises interesting questions with regard to the origins of the domestication and its early history. The wild domestication, known from several Iron Age II sites in SE Arabia, is also represented at Muxwel together with a number of other wild animals.
Jean-Denis VIGNE (1), Isabelle CARRERE (2) and Jean GUILLANE (3)

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Evolution of the sheep and goat during the early preceramic Neolithic of Shihaimen (3000-2700 BC).

Shihaimen (Poyang, Jiangxi Province, China) is an open field site inhabited by early preceramic neolithic people between 4000-3500 and 7000-6000 BC. The first sites of the Neolithic period in China, these sites have provided an improved and refined chronology of the occupations. This new chronology framework permitted the completion of the first archaeological analysis, which has added numerical data to that of the preliminary studies (Vigne et al., 2005).

Here we will present the results obtained for sheep and goat. Goat is certainly as early as the beginning of the occupation of the site, in the form of remains which were significantly smaller than in later domesticates (Capra aegagrus) from southwestern Asia. The evidence, including teeth and ages of death, indicates that goat populations lived in the wild and were subjected to hunting throughout the prehistoric period, i.e. until 7000-6000 BC. Conversely, sheep appear only after the end of the early phases, in the form of domesticated animals (soldier form and adult size) that were intensively reared for milk and meat. Sheep significantly decreased in size towards the end of the early phases. Subsequently, at the turn of the mid 4th millennium BCE (initial phase), several strands of evidence indicate that the local goat herd has been domesticated and that they were produced for milk. At the same time, much larger sheep were introduced to the site and kept for meat, and then for meat and milk.

These results give a good illustration of how a process of domestication (goat) and of the early wet-technical economic complementarities of sheep and goat during the 4th millennium BCE.

References:

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Thèmes abordés : Asie du Pacifique


La vie de Gaïd et Famara (Royaume de Bandara), bâtie par la maison archéologique française depuis 1977, a fourni une grande quantité de nécropole de poisson. Les stagiaires, qui ont élu domicile l’Anatolien (Bâle de l’âge de glace) ont pu bénéficier d’une équipe d’étude et d’une connaissance continue de l’occupation du site. Au-delà de la mise en évidence du processus de dépollution et de la partie économique des sociétés d’alimentation, des relations commerciales avec les voisins voisins et les régions géopolitiques proches (jusqu’à faire partie intégrante du réseau de renforcement), la postrécémissaire de lentille, septième phase, a été l’objet d’études approfondies. La vie de Gaïd et Famara, qui se situe dans la région de l’Antiquité à l’époque islamique.

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Bile Equal: Part 2: Seeing the Dead

Further research on the 26–osteological finds in an early burial complex at Umm el-Aman, Northern Syria, dating to the late 6th–9th centuries, will strengthen their identification as equal hybrids. I will present these new data, as well as an initial program to preserve the entire deceased collection via electronic 3D apps.

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A New Species in the Orient: The waterbuffalo (Bubalus arnee) in Western Asia and Northern Africa

Despite the host that waterbuffalo as a species is commonly associated with the Orient, there is a geological and archaeological proof of Palaearctic and Mesolithic western movements of waterbuffaloes deeply into the Palaearctic zoogeographic region. The paper presents archeological evidence for a Holocene existence of wild waterbuffaloes from the Anatolian peninsula to Northern Africa, and investigates the role of this species in ancient cults.

Muhamed AL ZAWAIR
Ministry of Tourism and Antiquities, Palestine

The Fauji Remains from Mari-Nicola, a Byzantine & Islamic site, Beil Jala - Palestine.

Mari Nicola sits located in the center of Beil Jala city 2 km North West of Bethlehem. 235 m above sea level, in Palestine. The animal bone assemblage from Mari Nicola site represents two highonomic groups: ‘food consumption ritual’ as well as the ‘artistic group’. Animal bone assemblage as a result of the supply of need for the inhabitants. It was achieved by utilizing both domestic as well as wild animals. It was primarily provided by the domestic animals (ex: livestock, pigs, and cattle), while wild animals, gazelles did not represent a significant contribution to the diet of the inhabitants. Sheep and goat dominated food animals.

Gazelle represented by certain specimen fragments, armid the metapodial bones, that found having saving bones, were making wear, with their ends, the proximal & distal ends used. Other animals also found, have seen medals on their elements, like sheep/goat, peafowl, and donkey.

Due to the presence of fayshen church remains nearby, Mari Nicola, the presence of some workshop there could give a religious function. The strong camel bone has strongly recommended imported as raw material for manufacturing religious tools like beads and wall-needs. Other animal bones, damage, could sometimes lead to a lower effect.

Two Irish tools objects found on-site, and only fragments of unfinished tool and the tool making ways like the joints. The evidence Mari Nicola during Byzantine and Early Islamic period was a specialized workshop center for bone hardwares, manufacturing and exporting finished bone objects.