



**Conference "Animal Life Histories"
17-19 March 2022, Basel, Switzerland**

Please note that all times are according to CET (Central European Time).

Abstracts of oral presentations

17th March 2022

SESSION: HUMANIMAL

10:40 – 11:20 Sabine Deschler-Erb: *Animal life histories: relevance, approaches, objectives*

Due to evolving social awareness, the "human-animal relationships" has become an increasingly prominent subject of public and academic discourse in recent decades. There has been a shift in research from the study of animal species as subordinates to humans to the study of non-human and human animals. This development is comparable to that of other disciplines such as gender or ethnic studies which aim to counteract the underrepresentation or misrepresentation of certain groups of people.

The archaeological and historical disciplines have made significant progress in recent years through an increased interdisciplinary approach and the inclusion of new methods such as aDNA and isotope analysis. Such new methods, in combination with traditional methods, supported archaeozoology in particular in moving the focus away from the economic importance of animal herds to the life and significance of individual animals. Therefore, data from archaeological and historical contexts are of special relevance for understanding the complex situation of animals in the contemporary world.

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11:20 - 12:00 Claudia Gerling: *Isotopic insights into human-animal relationships*

Stable carbon and nitrogen isotope analyses of archaeological human skeletal remains have become an important means to study ancient diets and subsistence strategies. With respect to animal remains, this method can also help reconstruct both their dietary habits and the animal husbandry practices employed. Together these provide important information about the relationship between animals and their owners in the past.

Drawing on research from the HumAnimAl project, this presentation outlines some aspects of human-animal relationships that can be addressed using stable isotope analyses in archaeology. Two case studies are presented in detail. Firstly, a study on dogs from the Roman site of Augusta Raurica, NW Switzerland, will be discussed, where small isotopic variations may indicate differences in feeding and related keeping practices. Secondly, an investigation into horses from Krefeld-Gellep, W Germany, and other sites in the Roman provinces along the River Rhine, will be presented, where variations in the isotopic compositions of bone collagen and tooth enamel indicate dietary differences relating to environmental conditions or specific cultural preferences, e.g. the potential use of special fodder for military or working animals.

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13:30 – 14:10 José Granado, Julian Susat, Monika Schernig-Mráz, Claudia Gerling, Angela Schlumbaum, Sabine Deschler-Erb, Ben Krause-Kyora: Mitochondrial Genetic Diversity in Dogs of Roman Switzerland

Based on historical and archaeozoological research the Roman people hold a multitude of different dog types. However, the genetics behind this remarkable diversity has been poorly addressed. In the present study, we performed ancient mitochondrial DNA analysis to gain insight into the genetic diversity of 28 dog individuals from the Roman colonial town of Augusta Raurica and the close-by military camp of Vindonissa (Switzerland). Remarkably, most of the dogs were disposed into two wells almost at the same time in the middle of the 3rd century AD, which allowed for analysis of an almost contemporaneous ancient dog population. Based on mitochondrial sequences four major haplogroups (A, B, C and D) are recognized in modern dogs. To determine haplogroup affiliation of the Roman dogs from Augusta Raurica and Vindonissa, short highly variable mitochondrial d-loop fragments (97 bp) were PCR-amplified and sequenced. Eight mitochondrial sequence variants (haplotypes) were obtained from 25 individuals displaying high genetic diversity. Dogs belonged to either haplogroup A (46%), B (8%), C (32%) or D (16%). Additionally, four full mitochondrial genomes were assembled from four dogs. This allowed for a more accurate phylogenetic assignment of these individuals into sub-haplogroups (A1 and C2) and recovered a further A haplotype. The results show a haplotype/haplogroup representation unprecedented from Roman and pre-Roman times (in Europe including Switzerland) and in contrast to today's dog breeds. The high diversity may indicate incorporation of foreign dogs into the local stock by people travelling into Augusta Raurica and Vindonissa from any part of the Roman Empire taking their dogs with them. The paper is part of a multidisciplinary study of Roman dogs involving morphology and isotopes to reveal dog husbandry and keeping in NW Switzerland.

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SESSION: THE ANIMAL AND ITS HUMAN BEING

14:10 – 14:50 László Bartosiewicz: A dog's life: Interpretations of dog burials

Few would argue that of all animals, dogs have developed the tightest bonds with humans during the history of civilization. Contradictions surrounding kynophagy and the dualistic perceptions of dogs in the historical/ethnographic record offer a broad range of interpretations for archaeozoologists. Regardless of their chronological affiliations, articulated dog skeletons discovered in structured deposits show individuals within their biological contexts. Their ageing and sexing are usually possible and even pathological histories can be reconstructed. How this high-resolution zoological information can contribute to a better understanding of dog-human relationships? This presentation is a concise review of examples illustrating the integration of multidisciplinary data on the lives of ancient dogs.

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14:50 – 15:30 Richard Thomas, Holly Miller, John Hutchinson: A Jumbo tail: humans, elephants, and exhibitionism

On September 15, 1885, Jumbo, the most famous elephant in the world, died aged 24 after he was struck by a steam train. Jumbo had led an astonishing life: born in East Africa; captured by hunters at the age of two; transported to Germany; sold to a zoo in Paris; exchanged for other animals at London Zoo, where he lived for 17 years; and then shipped across the Atlantic after he was controversially sold to Barnum and Bailey's travelling circus. In America he was billed as the largest land animal in the



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world. But was this true? What was the impact of captivity on his body? While he was kept in London, he would fly into fits of rage at night time, destroying his enclosure, but what was causing this behaviour? And what really did kill Jumbo? He was certainly struck by a train, but was it really an accident? Suggestions circulated after his death that it may have been staged-managed by publicity-loving Barnum, because Jumbo was already dying of tuberculosis. There are also differing accounts of what happened when the train struck him: Barnum claiming he heroically saved a younger elephant from the oncoming train, meeting the locomotive head-on.

This paper presents the results of the zooarchaeological and isotopic analysis of the skeletal remains of Jumbo providing answers to some of these questions, showing how archaeology can reveal the stories of animals living in the past, and highlighting important lessons for the keeping of captive animals in the present and future.

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15:50 – 16:30 [Dorota Wojtczak: Animal Images in Prehistoric Art](#)

Today, decorated caves are part of a global phenomenon. They have been discovered on every continent except Antarctica. Surprisingly, given the disparate locations, all feature analogous decorations: handprints or stencils of human hands, human figures, animals, both carnivores and herbivores, but also the abstract. Not all appear in each of the adorned caves – some encompass just handprints or maybe megafauna.

We assume that the paintings were made by our distant ancestors. Interestingly, none of the known caves show humans creating art. It seems that in the Palaeolithic world, humans viewed themselves as a small part of an interrelated world and importance was placed on the animals around them, as most often Palaeolithic images illustrate, and only very rarely are humans portrayed. The large animals are painted on cave walls with an uncanny attention to facial and muscular details, but the depicted humans are faceless.

Studying the depictions of both humans and animals raises two important zoological questions: which species and what behaviours are they exhibiting? But cave art has also inspired more fundamental questions: what does it mean? Who was it for?

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18th March 2022

SESSION: SOCIO-CULTURAL DIFFERENCES IN ANCIENT HUMAN-ANIMAL RELATIONSHIPS. ANIMALS IN THE CLASSICAL WORLD (HISTORICAL AND ARCHAEOLOGICAL SOURCES)

09:00 – 09:40 Henriette Baron: A shift of perspective: Uncovering Human-Animal Relationships in Burials

Archaeology and archaeozoology rarely give us the opportunity to discover and explore individuals or even relationships between individuals. As a rule, the individual dissolves with his or her death, what remains in the bones and grave equipment are sparse clues to rough key data of a former identity - sex, age, perhaps a few activities. In cemeteries, a burial community is formed from these key data, sometimes from hundreds of closed finds, in which the individuals nevertheless remain mostly unrelated, alone.

When examining this burial community, patterns are sought, for instance in relation to mortality or the grave goods. Like ceramic vessels, knives or spindle whorls, animals and animal parts are traditionally treated as objects that were given to the dead. Their use during life (food, sometimes companion) is transferred to death, and their role as grave goods is usually defined solely by this function.

The fact that with an animal a second being enters the grave, which also brings with it a few rough key data of its living identity, often remains strangely unreflective. An animal also has a sex and an age at death, an animal also pursued specific activities - be it under the conditions and requirements of humans or within its own behaviour-specific scope. From the reinterpretation of animals as subjects, a new form of community of the dead emerges: two beings buried together can be related to each other through parameters other than the usual ones - those of their respective identities.

How can we use this relationship as a source of information? Can it tell us something about the buried person? Or the "culture" of the human burial community - beyond the purely utilitarian purposes of animals? How such an approach can succeed is demonstrated by the example of the chicken bone finds from the Avar burial ground at Csokorgasse in Vienna. A classic food accessory, an object of burial equipment, becomes a subject that - placed in relation to the buried - becomes meaningful.

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09:40 – 10:20 Sue Stallibrass: Who or what are you? Fluid perceptions of livestock and their transitions from life to death

Many parts of Iron Age (later 1st millennium BCE) Europe became subsumed within the expanding Roman Empire. This was accompanied by an increase in urban settlements and/or military installations in some areas that in the Iron Age had been predominantly or overwhelmingly rural. This necessitated or encouraged the production of agricultural surpluses by the rural population, to supply the town dwellers and military personnel. Did the rural population, the town dwellers and the incoming military personnel all view animals in the same way? This paper briefly considers some aspects of conceptual relationships between people and other animals, including commodification and objectification, that might be relevant to this period. It then looks at butchery evidence for the treatment of domestic livestock remains at Iron Age and Roman period sites in two regions of the Roman Empire: Britain and South East Europe, to investigate the potential of this type of evidence to reflect people's past attitudes



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towards domestic livestock. It focuses on ‘routine rubbish deposits’ where the remains of most domestic livestock are found, rather than on the much rarer burials of individual animals. A key distinction is drawn between a rural farming household where an individual animal is bred, raised, slaughtered, butchered, processed and eaten, and an urban or military situation where previously unknown livestock from a range of sources are supplied as commodities for swift dispatch and dispersal. This is very much a preliminary, investigative pilot study but, if successful, could be adapted for many other situations where there is a contrast between producer-consumers and non-producing consumers, or an influx of people with different cultural norms and beliefs.

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10:40 – 11:20 Heidelinde Autengruber-Thüry: „Ich bin kein Melitäer!“ – Beobachtungen zu Hunderassen und zur Hundezucht in der Antike

Es ist häufig zu beobachten, dass Archäologen und andere Altertumswissenschaftler den Wunsch verspüren, heutige Hunderassen mit antiken Rassen zu vergleichen. Dabei wird übersehen, dass es eine Zuchtcontinuität von der Antike bis in die heutige Zeit gar nicht geben kann, obwohl uns dies in der neueren Literatur häufig suggeriert wird. Ein großes Problem stellt dabei auch die ungeprüfte Übernahme älterer Forschungsmeinungen und Interpretationen dar. Zwar haben Ferdinand Orth (Artikel „Hund“ in der RE, 1913) und Otto Keller (Die antike Tierwelt, 1909) sehr verdienstvoll unzählige Quellen zum Themengebiet Hund zusammengestellt, jedoch haben sie diese zum Teil falsch interpretiert. Diese falschen Schlussfolgerungen ziehen sich nun seit dem frühen 20. Jahrhundert durch die gesamte, den Hund in der Antike betreffende, Fachliteratur. So wird zum Beispiel das Aussehen eines Hundes auf der „Berliner Amphora“ mit dem des in der Antike häufig erwähnten Melitäers in Verbindung gebracht, obwohl die literarischen Überlieferungen über dessen Aussehen nicht mit der Darstellung auf der Amphora übereinstimmen. Auch das auf der Amphora geschriebene – und deutlich zu sehende – „M E A I T A I E“ (richtig 1852 von Leopold Schmidt publiziert) wurde in Folge (zum Beispiel von Otto Jahn, 1854) als „Μελιταῖε“ gelesen. Mehrmals wurde versucht, diesen Fehler aufzuzeigen – so zuletzt Rudolf Wachter 2001 –, doch wird diese Korrektur von der Fachwelt nicht wahrgenommen. Zu sehr gewünscht scheint es zu sein, das Aussehen einer antiken Hunderasse durch ein Bild belegt zu haben, als dass man sich von dieser falschen Vorstellung verabschieden möchte. Dieser Vortrag soll mit einigen ausgewählten Beispielen auf solche Fallstricke aufmerksam machen und dazu anregen, bei der Interpretation der Beschreibung von neu gefundenen Hundeskelettresten diese nicht einfach einer heutigen Hunderasse zuzuordnen.

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11:20 -12:00 Idoia Grau Sologestoa: Food taboos in medieval Iberia: zooarchaeology of socio-cultural differences

Ideas about what is a good animal, what constitutes a bad or a transgressing animal, and why some of them are deemed suitable to be eaten and some do not have determined the lives of humans and non-human animals alike. Food taboos are indeed a key factor for understanding human-animal relationships and ways of socio-cultural and religious self-definition, but have surprisingly occupied little space in archaeological research so far.

The medieval Iberian Peninsula was a melting pot of different socio-cultural and religious groups. Their research and their visibility through the zooarchaeological record are topics that have received increasing attention over the last few years. In this presentation, we will review the available zooarchaeological evidence, focusing on the visibility of dietary habits of Christian, Jewish and Muslim communities.

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SESSION: ETHICS IN HUMAN-ANIMAL RELATIONSHIPS

13:30 – 14:10 Markus Wild: The Dignity of Animals of Old Age

In recent years research in nonhuman animal personality has increased dramatically and encompasses a vast range of species, traits, and methods (Vonk et al. 2017). However, looking at (say) agonistic behaviour in pigs and their relationship within different age groups (Stukenborg et al 2012) or effects of age, rank and neophobia on social learning in horses (Kruger et al 2014), the age classes one is able to compare almost never includes animals of old age (and senescence), because almost no animals in agriculture do reach seniority. It has been thought that the same holds under natural conditions, however, recent studies suggest that old age (and senescence) in the wild is more common than expected (Cooper & Krook 2018; Sanghvi et al. 2021). Moreover, human personalities are far from being fixed around the age of 30, there seems to be lifelong fluidity and malleability until old age. There is, thus, both a serious gap and a serious misconception in our knowledge and image of old animals. From a philosophical point of view, old age is often seen as an important aspect of vulnerability (Bozzaro et al 2018) and a topic for philosophical reflection since antiquity (Baars 2012). However, while the ageing of people and even of things is a constant topic in philosophy and other disciplines, aging animals are virtually non-existent in the literature. An exception are welfare issues with aged animals in zoos (Krebs et al 2018). Starting from aged animals in zoos and sanctuaries I will analyze some historical examples of aged animals (e.g. Homer, Kant, primatology) in order to develop a notion of the dignity of animals of old age.

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14:10 – 14:50 Friederike Zenker: The importance of one. why is the perception of animal singularity morally relevant?

Contemporary perspectives on multispecies societies recognize nonhuman animals in their importance as individuals, not species or bearers of functions (e. g. in an ecosystem) alone. In one version of this view, animals are considered as singular, irreplaceable subjects in specific contexts and relationships. While the singularity view plays a pivotal role in the field of Animal Studies, it is easily confused with other ideas of individuality. This paper suggests strengthening the concept of animal singularity as a relevant corrective for specific cases of epistemic injustice that occur due to vague or reductive ideas



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about animal individuality. In contrast to a merely biological concept, four criteria distinguish singular animal views: irreplaceability, subjectivity, situatedness, and relationality.

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15:10 – 15:50 Eric Tourigny: Burials, gravestones, cremations and taxidermy – animal life histories from archaeological and material culture records

Domestic pets are difficult to identify in the archaeological record. Sufficient evidence rarely survives to provide a clear idea of the individual relationship dynamics between animals and people. This paper will demonstrate how archaeological remains and material culture deposits can be used to tell the life stories of individual animals in the late nineteenth and early twentieth centuries. In doing so, it offers valuable and alternative archaeological methodologies for the reconstruction of individual animals' life histories.

Individual animals' histories are 'written' in their bones. Osteobiographical approaches to the study of dog skeletons will be applied to bring forth the lived experiences of individual animals. This will be complimented by an exploration of the material culture of animal death. Commemorative practices such as gravestone construction, cremation and taxidermy can be examined to build a picture of individual life histories and explore longer-term changes in human-animal relationships. Results illustrate the value of reconstructing individual life stories to better understand changing attitudes towards animals over time.

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19th March 2022

SESSION: THE METHODOLOGY, CULTURAL HISTORY, AND FICTIONALIZATION OF ANIMAL LIFE HISTORIES

09:05 – 09:45 Martin Allemann, Monika Schernig Mráz: Too much monkey business? The surprising discovery of a monkey skeleton in a late 14th century cesspit in Basel

A rescue excavation in the moat of Basel’s medieval inner city walls unearthed the remains of a semicircular latrine tower attached to the city wall. It was probably built shortly after the 1356 earthquake, as a 1358 deed mentions it having been built recently, and it seems to have been used by the inhabitants of the adjacent houses inside to the city wall. Unsurprisingly, it mainly contained excrement and domestic refuse: abundant animal bones (food residue) and pottery typical of the late 14th / early 15th century. Rather more surprisingly, beneath this material the almost complete skeleton of a young adult male macaque emerged from the cesspit. The study of this skeleton reveals how this expensive exotic pet suffered from inhumane treatment, disease and occasional violence, yet contemporary literary and pictorial evidence suggests that this was not unusual or considered particularly cruel at the time. Neither was the unflattering ‘burial’ or disposal in a cesspit which seems to have been common for other pets as well. A quick first glance at the land register for the adjacent buildings suggests the owners of the monkey might have been clerics, coinciding with some contemporary writers specifically mentioning them as suitable owners of animals considered morally questionable, such as monkeys, while also criticizing priests for being more interested in their luxury pets than in their spiritual duties. However, other owners cannot be excluded. The monkey lived and died at a time when the perception of exotic pets slowly started changing from display of wealth and power to humanistic curiosity and eventually, later on, to early science: Some 200 years later, Basel physician and anatomist Thomas Platter dissected a monkey to compare its skeleton to a human one, and later ostentatiously offered it to the university.

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09:45 – 10:25 Lena Rohrbach: Closeness and distance: Intersectional entanglements and human-animal-relationships in Medieval Iceland

This paper will discuss the conceptual relevance of human-animal-relationships in the medieval Icelandic textual tradition. Unique to the medieval tradition, the Icelandic sagas feature a high number of mentions of interactions with animals in everyday contexts. At the same time, medieval Icelandic literature exhibits a great variety of metaphorical and symbolical representations and renderings of men as animals, some of them clearly indebted to continental scholastic conventions, while others exclusive to the Icelandic material. Both types reveal that the Icelandic society and positions of individual members in this society are integrally conceptualized by means of people’s relationship – in terms of closeness or distance – to different kinds of animals. This conceptualization can fruitfully be approached by means of intersectional theory to shed light on central categories within Icelandic society and their relationship to the peculiar togetherness of men and animals on the rough island in the middle of the Atlantic.

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10:45 – 11:25 Mieke Roscher: *Creating the zoo animal self: Jumbo, Winnie, Knautschke and the idea of the bourgeois individual*

The menagerie of the absolute monarch did not know animals as individuals. Sure, they were numbered and curated, but they were hardly ever given names. Just as the sovereign did not accept to be just *primus inter pares*, but moved beyond the realm of the common man, animals served solely as part of a tapestry, illustrating the might of the ruler. It was exactly the submission of nameless natural being that helped to create the godlike position of the prince. This power, of course, would specifically entail the naming of the beasts, but, more often than not, the rulers chose not to. Individual animals portrayed in visual representations, especially paintings, that were held in the Menageries of Versailles, Schönbrunn or Kassel do exist but they remain anonymous. This changed with the establishment of zoological gardens that can rightfully be regarded as a specific product of a new bourgeois society. The new elites were characterized by a rigid individualism that was the product not of any manifest destiny but hard work, special traits, and, of course, the idea of liberal freedoms. These traits then were applied to the inner and the outer world to be studied and enhanced. This was, in a way, also true for animals that the exploration craze of the 18th and 19th century brought to European shores.

In my presentation, I want to map out how the changing idea of the individual that came with bourgeois thinking was applied to zoo animals and how, in turn, the naming of (specific) animals provided a basis for their fame. Elephants like Jumbo, bears like Winnie, and Hippos like Knautschke, of course, first and foremost served as advertisements for the zoo. But, as I want to argue, they also came to represent the transitional phase of thinking about animals that gave way to studies in comparative psychology and, further down the line, animal welfare science. Furthermore, the zoo animal self was a liminal figure, as these zoo animal's fame was tied to a specific understanding of the zoo as a bourgeois institution. How in what way the postmodern zoo has diverged from this idea will be asked in the discussion.

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11:25 – 12:05 *Éric Baratay: Comment écrire des biographies animales?*

Les individus animaux sont considérés de nos jours comme le meilleur échelon d'observation pour appréhender et apprécier toutes leurs capacités, mettre en valeur leur rôle d'acteur dans la relation avec les humains ou plus généralement entre des individus ou des groupes d'espèces différentes. D'abord inventée par la littérature à partir du XVIII^e siècle, la notion de biographies animales a été quelque peu reprise par les éthologues à partir de Jane Goodall et Dian Fossey. Elle doit l'être aujourd'hui par toutes les disciplines qui s'intéressent aux animaux réels, pas uniquement ceux pensés, construits par les humains. Nous montrerons comment construire ces biographies, avec quelles sources historiques, selon quelles méthodes, avec quels problèmes à surmonter, quelles écritures, quels résultats.

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Abstracts of posters

17th March 2022 – 16:30-17:00

Simone Häberle, Marguerita Schäfer, Raúl Soteras, Héctor Martínez-Grau, Irka Hajdas, Stephanie Jacomet, Brigitte Röder, Jörg Schibler, Samuel van Willigen, Ferrán Antolín: A challenging “relationship”?: Early farmers and pre- and post-harvest pests from the Middle Neolithic site of Les Bagnoles (L’Isle-sur-la-Sorgue, Vaucluse, France)

An invertebrate and small mammal assemblage has been recovered and analyzed from waterlogged deposits in three wells at the open-air site of Les Bagnoles, SE-France. The site is located in the south of the Vaucluse department, about 16 km east-south-east of Avignon and 2.5 km south-west of L’Isle-sur-la-Sorgue. The fillings of the wells consist of several type of finds (lithics, ceramics, animal bones, botanical and invertebrate remains), dating between 4250 and 3700 cal BC, representing the Middle Neolithic phase I (Well 250) and II (Well 990 and 994). The small mammal and invertebrate remains were retrieved from soil samples by wet sieving, using sieves with mesh sizes of 8 mm, 4 mm, 1 mm.

The investigation serves to shed light on the role of the insect and rodent pests in Neolithic time and delves into the strategies adopted at this Middle Neolithic settlement Les Bagnoles relative to changes in crop cultivation, crop choice, farming and storage practices in response to pest infestation.

The study reveals the grain weevil as a definite storage pest, also wood mice, seed beetle and corn ground beetle were present at the Middle Neolithic settlement. The grain weevil formed part of the fill of all three wells, hence can be dated to the Middle Neolithic I and II. Wood mice also seem to appear from the Middle Neolithic II as at least potential storage pest. The same can be said of both pre-harvest seed and corn ground beetles.

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Camille Lamarque: identification and classification of small dog morphotypes in Central Eastern Gaul: status and function in question

The toy dogs are one of the most significant canine morphological types appearing and disseminating in Gaul under the Julio-Claudian Era. Roman written sources provide information about them: toy dogs are pleasant lapdogs from partisans and « table’s stomach » from detractors. Poorly described, they are often limited to the unique breed of « Melitae », made popular by historiography. However, the archaeozoological data in Central Eastern Gaul bring to light a morphological diversity that is being confirmed by regional iconography. This morphological and phenotypic diversity deserves a meticulous description according to actual cynotechnical nomenclature. The resumption of the available classification from the ancient morphotypes is intended to address the status of toy dogs in Gaul.

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Liz Quinlan: The Puppy in the Pit: Osteobiography of an 18th-century dog at the Three Cranes Tavern in Charlestown, MA, USA

The Boston, Massachusetts ‘Big Dig’ construction project (1982-2007), provided opportunities for archaeological exploration throughout historical Boston-area neighborhoods, including Charlestown. One of the resulting excavations investigated an 18th-century structure, eventually identified as the



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site of the former Three Cranes Tavern. An otherwise unremarkable pit dug below a 18th-century foundation addition to the Tavern contained bones originally identified as a cat skeleton, and this bone assemblage has been included in various literary and scholarly works, covering everything from the Big Dig and Boston’s archaeological history, to studies of folklore, magic, and ritual concealment. However, this specimen is the victim of both perimortem blunt force trauma and mistaken identity-- instead of a cat, it is a juvenile dog. While a cat skeleton functions as additional proof for widespread cat-involved ritual concealment in North America, its corrected identification prompts further questions about possible cultural significance and depositional scenarios. This poster presents the excavation context where the Three Cranes Tavern Dog was found, its initial identification, osteological evidence for its reclassification, and the shift in cultural meaning this may indicate. In addition to presenting the published results, this poster aims to prompt a discussion of potential future work, such as stable isotope and comprehensive paleopathological analysis. The broader study of this dog from an osteobiographical and social zooarchaeological perspective provides a useful addition to the growing body of scholarship focused on the socio-cultural role of dogs in historic North American contexts.

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[Rebekka Eckelmann, Tuija Kirkinen, Karin Hemmann, Kristiina Mannermaa: Biography of a horse from a 19th century site in Southern Finland](#)

Research on historical animal burials has concentrated on modern pet cemeteries, with a focus on investigating ideas of human-animal relationships, the afterlife and remembrance. In contrast, remains of farmed animals are often seen as waste, whose disposal is guided by hygiene instructions. During the project “Interdisciplinary research strategies of biological cultural heritage – surveying, archiving, analyzing and sharing historical DNA from Finnhorses” we investigated horse carcass treatment in rural communities during the 19th century in Sannais, Southern Finland. To this purpose, excavations were undertaken in 2020 and 2021 in the forested vicinity of a manor known to have housed tens of horses at the turn of the 20th century.

Many of the horse remains lay exposed or were only slightly covered by sand. In this paper we present the life history of one of those horses, which was excavated almost completely and investigated through a multi-proxy approach, including osteology, paleopathology and genetics. Although the horse was buried, the skeleton was not encountered in anatomical order but with disjointed elements. It is unclear whether this reflects the original deposition arrangement or stands as a result of the decomposition process. The context of the burial in combination with severe pathological markers on the skeleton make this individual highly interesting to our understanding of everyday horse husbandry in rural Late Modern Finland.

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[Daniel Malaxa, Alexandru Bărbat, Antoniu Marc, Simina Stanc, Luminița Bejenaru: Exploiting strategies of the animal resources used in some prehistoric communities from the Mureș Valley \(Romania\)](#)

The studied zooarchaeological samples are from the multicultural sites of *Șoimuș-Teleghi* (Early and Late Neolithic, Middle Bronze Age and Late Bronze Age), *Șoimuș-Lângă* (Middle Bronze Age and Late Bronze Age, phase I), *Uroi-Sighet* (Middle Bronze Age) and *Vețel-Luncă* (Late Bronze Age). The domestic mammal species identified in the studied samples are *Bos taurus*, *Ovis aries*, *Capra hircus*, *Sus domesticus*, *Canis familiaris*, *Equus caballus*, and *Equus asinus*. The last two species are missing from Neolithic samples. The identified wild species were: *Cervus elaphus*, *Sus scrofa*, *Capreolus capreolus*, *Lepus europaeus*, *Canis lupus*, *Bos primigenius*, *Castor fiber*, *Ursus arctos*, *Meles meles*, *Vulpes vulpes*, *Lynx lynx*, *Mustela putorius*. To these species are added *Equus ferus* and *Equus*



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hydruntinus, identified only in the Neolithic. According to the slaughter ages, in most of the studied settlements, cattle and sheep/goat were exploited for the secondary products and the domestic pig was exploited for primary products. The inhabitants of the studied settlements preferred to hunt, in general, wild animals that have reached at a mature age. The palaeoenvironment of the studied settlements was predominantly of forest with a rich hydrographic network, but also with areas of skirt and open field, especially in the Neolithic period.

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18th March 2022 – 15:50-16:30

Katherine M. Moore: Collective and Individual Life Histories in Prehistoric Panama: Dogs From Sitio Conté

A late prehistoric chief in Coclé on the Pacific coast of Panama, was one of the most important people buried in a large cemetery. He and the retainers buried with him were adorned with elaborately beaded garments and jewelry along with objects of gold, bone, stone, and shell. The life histories of the dogs is revealed in the hundreds of teeth that were made into beads for such jewelry. While all the dogs had adult teeth, their ages varied from older puppies to a few older individuals. A relatively high proportion of the dogs had experienced severe stress or infection during enamel formation (from 4-6 months). The appearance of the teeth is most consistent with modern dogs who have suffered from distemper, though physical and malnutrition could also have been factors. A population of at least 75 dogs is represented in this one interment.

Little life history data exists for either the humans or their animals in the Coclé cemetery because of extremely poor bone preservation. As a result, the dogs are stand-ins for both the lives of the dogs and the people who might have cared for them. Zooarchaeological data does not suggest that the dogs were used for food, instead, dogs must reflect a social relationship involving feeding, care, and exploitation of the dogs in hunting and conflict. The impact of humans on their only domestic animal demonstrates the power and influence of this relationship and suggests other aspects of human agency in this environment.

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Theo Kassebaum: Multispecies Care and Livestock Management at Iron Age Abel Beth Maacah

This project couples anthropological theories of care with a methodological investigation into pathologic profiles at the Levantine Iron Age (ca. 1200 - 900 BCE) site of Tel Abel Beth Maacah, aiming to produce a replicable way to approach animals, specifically livestock, within their multispecies social networks. This methodology presents a way to ‘think with’ animals by considering how care was expressed and received through skeletal markers of stress and disease. Specifically, the teeth, metapodials, phalanges, and astragali of livestock—cattle, sheep, and goats—will be recorded for pathology data collection. Livestock is differentially engaged in complex, repeated, practices of care—through foddering, milking, and draught work, among others—that vary with age, sex, species, and production system. Local social networks can be addressed through changing inter- and intra-species relationships, considering the embodiment of the animal in conjunction with the context of faunal deposition and use-space. Differences in age profiles and/or pathology severity across contexts could represent a selection for healthier or younger animals to be situated in the cultic (or industrial or domestic) space. This could indicate that the living animals were associated with different contexts, with care differentially expressed based on the intended deposit. Through the lens of care, the



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universalization of animals’ treatment and exploitation while alive can be disrupted, moving beyond questions of specialization and consumption. Diverging from pathologies as ‘the abnormal’, this project centers pathologies in a discourse of animals’ active participation in structuring human-animal relationships.

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[Clarissa Uttley: An Exploration of the History and Ethics of the Exploitation of Working Animals](#)

Throughout human history, non-human animals have been employed in numerous fields benefitting humans. This poster will present a sampling of the multitude of working animals across species, work settings, and historical contexts. Ethical and animal-centric considerations will be presented.

Working animals vary based on geographic region and type of work required including agriculture, travel and tourism, trade, and recreation activities. Some examples of working animals include equines, bovines, suids, canines, felines, camelids, falco, rodentia, etc. Non-human animals have been used to clear land, locate food sources, transport tourists to hotels, transport other animals, provide travel experiences, carry supplies, and protect humans, herds, and crops.

Many working animals are used in pairs or teams. Are there specific animal-centric considerations made when establishing working teams? How are the individual animals needs considered in the establishment of the teams, if at all? Are the individual animals needs considered in the amount of work performed or how often the work is expected to be conducted?

Historically, what types of advocacy have been in place for animals working in transportation or recreation activities and how has that advocacy changed over human generations? How has the inclusion of animals in the various subfields of tourism changed and where does it go from here?

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[Dolores Carmen Morales-Muñiz, Arturo Morales-Muñiz: Gift of the Mamelukes: Animal presents as vectors of exotic faunal introductions during the Spanish Middle Ages](#)

Animal translocations in Medieval Spain appear to be recurrent phenomena fostered by a combination of factors. Amongst these, the geographical location of the Iberian Peninsula and the series of invasions that this region suffered after the collapse of the Roman Empire constitute relevant drivers. The diversity of animals introduced into Iberia during the medieval millennium, as well as the reasons and evidence of such events, are manifold and for the most part defectively known. In this presentation we comment on a gift that the Mameluke sultan *Baybars al Bunduqdari* (Alandexaver) made to the Castilian king Alfonso X “the Wise”, consisting of a Nile crocodile, an elephant, a giraffe and a yet to be determined species of zebra, that arrived at Seville in 1261. Although the written sources hint that these animals died soon after arrival, their influence reached to the literary records known as the *Cantigas* where, paradoxically, they and other African animals such as the ostrich, are depicted as examples of the ecumenism set around the figure of the Virgin Mary. From a biological perspective, these animals stress the fact that presents among dignitaries during Medieval times may lie behind the presence of other presumably non-indigenous Iberian faunas as would be the case the Barbary ape, another iconic species though for reasons disconnected of religion... or perhaps not?

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Agnieszka Potocka: How are the moral foundations and perception of animal mind related to the instrumental violence against animals?

This poster presents the results of our study which investigated, according to the Moral Foundations Theory by Haidt and Graham, whether the moral foundations of care and authority are associated with instrumental violence against animals. Moreover, we tested the function of perception of animal mind in the context of this phenomenon. To this end, participants from Poland (N = 504) completed paper-based questionnaires to measure care, authority, perception of pet, pest and farm animals mind, and instrumental violence against animals. The results show that when moral foundation of authority is an important criterion in moral judgment, people accept individual and collective instrumental violence, and they participate in it by using animals for their own purpose as food, source of financial income or hedonistic pleasure. In contrast, when moral foundation of care is an important criterion for moral judgment, people tend to avoid violence against animals. Additionally, perception of animal mind, as capacities to feel pain, hunger, fear as well as emotions, is a mechanism activated during this moral judgment to change the moral patient status of animals. People do it to avoid feeling of dissonance, responsibility of immoral acts or negative social feedback. Thus, availability of moral foundations of care and authority in society is important for animal welfare during farm husbandry, pet breeding, transport, training, and treatment.

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Humberto Verissimo: Animal breeding and improvement in the Algarve: 4th century BC to 18th century

During the archaeological work carried out in 2001, in the historic center of Faro, it was possible to collect a vast number of faunal remains of terrestrial vertebrates, the oldest dating back to the 4th century BC. The taxonomic variation verified showed a predominance of goats and cattle, species which are very vulnerable to improvement actions on the part of human societies.

Starting from this point, the present work intends to demonstrate some of the strategies adopted by the human societies in the past in this geographic area, in order to obtain a maximization of resources, whether they are meat or secondary resources (milk, wool, among others).

One of the most striking aspects in the collected sample is precisely the variation in the withers height along time. This variation may result from breeding strategies through crossing the best specimens within the autochthonous breeds, or through crossing with breeds coming from abroad. This last hypothesis becomes more plausible due to the fact that the most marked variations occur in moments of cultural transition.

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19th March 2022 – 09:00-09:05

Camellia Biswas: Historical hierarchies amongst the Sundarban animals

The poster identifies a nexus of social-cultural-environmental hierarchy that exists in Sundarbans' multi-species engagements. It showcases three levels of human-animal interactions that have existed since time immemorial. Each relation showcases the dominance-repression effect that has affected the recognition of animals in the regions' oral histories and archaeological evidence.



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It begins with the most well-known 'human-tiger interaction' that has been gaining global attention for its strained/conflict relation. Another contest is seen between humans -snakes. However, it has been overshadowed due to its "commonness" and "lack of recognition" over tigers. These relations have evidence from the past in the local practices of Sundarbans' folklore, myths, and Jatran (folk theatre). The Bonbibir Johurnama have elements of stewardship on how the forest is a shared space between humans and tigers, and each should obey the rules to accommodate and appreciate the other. If not, the conflict shall arise.

Similarly, there are myths of venomous snakes annotating similar priorities in the landscape. The tale of Maa Manasa is weaved to acknowledge the significance of snakes such that the balance of nature is sustained. Lastly, there is a relationship between humans and cattle, especially pigs with the lowest rank in the cultural and species hierarchy. Pig consumption has been perceived as barbaric and often considered as local vermin.

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