A PLEA FOR SUSTAINABLE EDUCATION AND PRACTICE IN ARCHAEOZOLOGY IN TURKEY

By Canan Çakıralar, University of Groningen (c.cakirlar@rug.nl)

The earliest archaeozoological studies in Turkey date back to the 19th century, with Virchow’s study on the faunal remains from Schliemann’s excavations at Troy (1879). Today, archaeozoological data from Turkey is in high demand on the global high-profile research front. If you consider the incalculable amounts of animal remains brought to light in more than three hundred excavation projects that take place every year, the supply of data may appear to be ample and continuous. Several archaeozoologists and students, Turkish and foreign, spend numerous hours in labs and libraries studying some portion (I would guess less than 1%) of this invaluable material. Permanent positions are available at Turkish universities, on occasion for archaeozoologists. Several graduate students are currently working on their Master’s or PhD theses on some aspect of archaeozoology. Sessions on archaeozoology are emerging at the annual Archaeometry Symposia. Although this picture of archaeozoology in Turkey may look promising, I am of the opinion that archaeozoology in Turkey is composed of the singular, yet often tireless, efforts of individuals ad-hoc, and archaeozoology for Turkey is still in its infancy. Here I will explain some of the issues I find very problematic and explain why these issues need to be addressed with urgency. I will argue that Turkish archaeozoology is in immediate need for a policy plan that is laid out collectively by the growing and young body of local environmental archaeologists.

In parts of the world where archaeozoology is practiced and taught in close relationship to humanities schools, it is common knowledge that the subject is an immensely useful vehicle of anthropology (here in the American sense of the term). It is also becoming increasingly well known that archaeozoological information is useful in approaching archaeological (e.g. site formation processes), nature-historical (e.g. extinctions), and palaeoclimatic (e.g. habitat reconstructions) questions, as well as those about modern ecological relationships (providing baseline information for conservation biology). In addition, colleagues outside of archaeozoology are becoming increasingly aware that the discipline stands on its own feet, no longer borrowing methods from paleontology for example, but producing its own specific methodologies, be it osteological or statistical.

The lively and active nature of the field is attested by its steady and high representation in the world’s top archaeology journals (Butzer 2009). Moreover, there is a steady, statistically significant increase in papers dealing with archaeozoology in all

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Dear ICAZ Members,

Although I usually dwell extensively on the international aspects of ICAZ and the logistical challenges posed by our booming geographical diversity, or the welcome strengthening of an increasing number of working groups, I do not often discuss the demography of ICAZ.

The same way as the composition of this international organization is emphatically non-national when experienced from within, the contribution of women and men to our membership is soundly balanced and hardly ever needs to be discussed. In preparation to the 11th International Conference in Paris, 55% of the then registered 916 members were women, a ratio not significantly different from the expected 1:1 contribution by gender. Ratios vary between countries, especially where only a few archaeozoologists are active. Showing, however, the beneficial effect of large numbers, such differences tend to diminish in increasingly large communities and even extremes are balanced between countries represented by only small single-gender groups of specialists (Figure 1). In spite of smaller sample size the balanced gender composition is also reflected in the ICAZ International Committee (13 women:17 men) and is observed in the Executive Committee as much as the limited number of members allows it.

The age composition of ICAZ is far more difficult to appraise using simple membership statistics, as birth dates are not officially recorded. The “student” status of younger members surfaces at the time of conference organization when finances are sorted out.

Summary membership fee categories kindly provided by ICAZ Treasurer Pam Crabtree are a poor proxy of age: the 364 people currently entitled to the student/unwaged/retired membership fee category, include colleagues from reduced rate countries and non-reduced rate countries regardless of actual biological age. The Committee of Honor (specified by lifelong achievement rather than a minimum age limit) shows the tip of the iceberg of senior membership. Moreover, age proportions are understandably in a natural flux due to the advancement of time.

Apologies sent to the current International Committee meeting, however, are indicative of the “Baby Boomers” of ICAZ slowly taking over the role of old-timers. Following the gradual passing of colleagues in the highly respected “Great Generation”, whose members accomplished their university studies during or right after World War II, established modern archaeozoology in the form it is best known today and formed the respected core of scholars who founded ICAZ in 1971. Naturally life is continuous, it does not change by rigid generations. Any organization has a vested interest in maintaining this continuity.

Belonging to the age cohort whose members are sharing the experience of parting from their aging parents and contemplating life after retirement, I am especially anxious to make sure that an increasing number of younger colleagues worldwide will cultivate and enjoy the same spirit that we inherited from the founders of ICAZ. The world however, keeps changing. Much depends on the country we grew up

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and became socialized in as young scholars. My generation explored the world with its own political limitations or freedoms, hitch-hiking to and often excavating in places which were physically far less accessible than today. Communication was based on snail-mail, photographs were usually taken by professional staff rather than on mobile phones. These differences are neither good nor bad, but defined formative experiences in archaeozoology for many.

The Baby Boomers of ICAZ have inherited an experience of personal contact from the Great Generation that remains visible today and is certainly worth cultivating. Due to the often discussed global expansion of the organization, hi-tech solutions including video conferencing and other increasingly available facilities, as well as data sharing on the internet, will assume an indispensable role in cooperating scientifically and running the organization. These solutions will hopefully attract more and more young scholars, whose proportion will be increasing, before they will become middle aged and reach a ripe old age themselves. Open and efficient communication is a prerequisite of a successful organization. As compared to our positions in the 1970s–1980s, the general availability of decent jobs has radically decreased, and, aside from a few lucky exceptions, early career archaeozoologists/zooarchaeologists tend to have a hard time finding decent employment within our discipline.

Although economic crises vary in scale and proportion between countries, they are almost omnipresent. Cultural budgets tend to suffer, and archaeozoologists are often last hired and first fired in such trying situations. This overall trend has created a new breed of “nomadic” scholars among the most talented of the young (not only in archaeozoology). Multicultural and multilingual, they live from grant to grant, often having to change their country of residence depending on the capricious nature of funding. Tenure track positions sometimes, granted even without a PhD degree two-three decades ago, are long gone in many parts of the world. Other colleagues may struggle to actually establish local archaeozoology for the first time in their home countries.

Given these circumstances, personal trust and cross-generational solidarity will need to be combined with the technical facilities that have begun to aid world-wide communication in our field. ICAZ will not be able to create jobs. However, activities of the membership facilitated by our International Conferences and Working Group meetings, not to speak of tools of communication such as the Newsletter, the ICAZ home page, the Zooarch mailing list, Zoobook, and web pages by several working groups, already have the potential of actively involving ICAZ members who may not always have the means to attend meetings. ICAZ is also becoming a forum where such contacts can be developed into international projects, bridging occasional gaps in national budgets as we join forces around the world to work together. I see a great potential left in this type of cooperation, and ICAZ will be as strong as its members can use it to “foster cooperation” based on the patchwork of complementary skills and resources we represent as a global organization.

Sincerely,

László Bartosiewicz
ICAZ President

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**Umberto Albarella Resigns — New ICAZ Secretary Sought**

**Dear ICAZ members,**

Having served ICAZ as a secretary for six years, I found myself in the unexpected position of having to resign suddenly and with immediate effect just before the IC meeting in Istanbul, because of family problems. I have very much enjoyed the honour of representing ICAZ in this period, and I am very grateful for all the help and support I have been provided in my job. IC members have been wonderfully sympathetic at a difficult time for me and my family, thus embodying the very spirit of solidarity and mutual support that has been ICAZ’s mission throughout its existence. I will certainly carry on caring and working for ICAZ in the future, though in a different role, and I am looking forward to seeing many of you at the next conference in San Rafael, Argentina.

Umberto Albarella

The ICAZ Secretary provides key services to ICAZ in maintaining the membership rolls and overseeing ICAZ affairs in the broader sense. After helping guide ICAZ through an eventful period, our current Secretary Umberto Albarella has announced his intention to step down due to unforeseen personal circumstances (opposite). Help by Angela Trentacoste Newsletter Editor as pro forma Acting Secretary must be acknowledged here in promptly assisting the EC to ensure a smooth transition of this key position.

According to the ICAZ Statutes, the IC is entrusted with identifying and electing a new Secretary and hopes to accomplish this task before the end of the year. A detailed description of the duties and responsibilities of Secretary can be found in the ICAZ Statutes (5.4). Nominees for the ICAZ Secretary must be ICAZ members in good standing and should signify their willingness to take on this important, and time consuming, position in advance of their being added to the ballot. A candidate for this office needs solid institutional support.

Due to the urgency of this decision nominations of members in good standing that have been agreed to by the nominees should be sent directly to László Bartosiewicz by e-mail (bartwicz@yahoo.com) before 30 November 2012.
The election of national representatives and officers is one of the fundamental rights of ICAZ members. Participation in elections complements personal activity of members at various levels of international cooperation and allows members to influence general policies of the organization. The recent Istanbul meeting of the International Committee between the International Conferences in Paris (2010) and San Rafael (2014) is also a reminder that the end of the present membership cycle is approaching. ICAZ members are invited, and, in fact, strongly encouraged to participate in the elections due in 2014.

The ICAZ Statutes (http://www.alexandriaarchive.org/icaz/pdf/statutes.pdf) require that elections for the President, Vice-President, and the International Committee be concluded by the end of the International Conference in 2014. The timeline for these elections and the ways in which ICAZ members can contribute to the democratic process are detailed below. For the duties, responsibilities, and election procedures for all ICAZ officers, Executive Committee (EC) and International Committee (IC) positions please consult the current statutes where these roles are defined in detail.

President/Vice-President

The President and Vice-President serve four year terms that begin and end at the ICAZ General Meeting held at ICAZ International Conferences. Candidates for these offices must be ICAZ members in good standing and must be able to devote the time and energy needed to fulfil their offices. They should have sufficient institutional support for assuming these responsibilities, especially in the official recognition of the personal effort required by serving ICAZ at the highest level. A nominating committee is charged with composing an election ballot consisting of at least three qualified and willing candidates for these positions.

During the 2012 Istanbul IC meeting László Bartosiewicz (current President), Joaquin Arroyo Cabrales (Vice-President), and Pam Crabtree (Treasurer) volunteered to serve on the nominating committee on behalf of the IC. According to the statutes, two additional non-IC members of ICAZ in good standing are invited to join. László Bartosiewicz has agreed to coordinate the activities of this committee, and would welcome suggestions for possible candidates for these offices to be sent to him. In addition, individual members of ICAZ in good standing can put forward nominations for these positions, provided that the candidate has agreed to stand for election and that the nomination is endorsed by two additional individual members. The nomination must also be received at least 12 months (27 September, 2013) prior to the expiration of the term served by current the President/Vice-President. Names and correct e-mail addresses for candidates and the three members forwarding the nomination must be included in the accompanying documentation. Nominations from members should be sent directly to László Bartosiewicz by post or by e-mail:

Institute of Archaeological Sciences,  
Loránd Eötvös University  
Múzeum Krt. 4/B  
1088 Budapest, Hungary  
bartwicz@yahoo.com

The ballot for the election of the ICAZ President/Vice-President, consisting of the candidates identified by the nominating committee and those put forward by the membership, will be sent to all members by October 2013 at the latest. The voting must be concluded at least eight months (December 2013) before the end of the terms of the current President/Vice-President. Balloting follows the preference ranking system explained in Section 8.1.4 of the ICAZ Statutes. The candidate obtaining the highest number of first-preference votes will become President, and the candidate receiving the second highest first-preference votes will assume the role of Vice-President. Individuals elected to these positions will assume office at the General Meeting of the 2014 ICAZ International Conference in San Rafael, Argentina. This deadline will allow for an eight month transitional period between the old and new President/Vice-President.

Members of the International Committee

The ICAZ Statutes specify that the term of the International Committee (IC) expires at the General Meeting held at ICAZ International Conferences. The IC is an intermediary body consisting of 25 to 35 (currently 30) members elected by the membership of ICAZ to help and advise the EC and ICAZ officers in acting in the interest of ICAZ. Throughout the history of ICAZ, special efforts have been made to ensure that the organization properly represents its highly diverse international membership. By now the number of countries included in ICAZ far exceeds the number of IC members. However, the latter are not direct representatives of
their countries; rather they embody international expertise that can be of help in communicating interests of their broader region.

IC members are individual members in good standing who are expected to attend biennial IC meetings and to take an active role in running ICAZ. The members of the current IC (see full list at http://www.alexandriaarchive.org/icaz/international_committee.html) have an opportunity to stand for re-election. Additional nominations for the IC may be submitted by ICAZ members under the condition that the candidate has agreed to serve on the IC and that the nominee enjoys support by two additional ICAZ members. Nominations must be submitted at least 12 months (27 September, 2013) prior to the expiration of the term of the current IC. Should fewer than 35 individuals be nominated for IC membership, the current IC will nominate additional candidates. Following nominations, the ballot for the IC will be sent to all members along with the ballot for the offices of President/Vice-President. Members are asked to vote for no more than 30 individuals to serve on the IC. The 30 nominees who receive the most votes will form the IC. The underlying logic is, that as long as 30 candidates are elected, ICAZ has a margin above the minimum 25 IC members, thus allowing for up to five resignations from the IC without having to hold elections. More than 30 candidates guarantee even more flexibility in IC membership.

The International Council held its biennial meeting in Istanbul, Turkey from the 4th to 7th of October 2012. The event was organized by Canan Çakırlar in cooperation with her small team of devoted students and was hosted and generously supported by the Research Center for Anatolian Civilizations at Koç University. Twenty members of the Executive Committee and International Committee attended, thus far exceeding the quorum required for such meetings (twelve members) and offering a good international representation of our community. Formally, this was the regular IC meeting held half-time between two International Conferences, the largest events of our organization. The business meeting was combined with an academic conference dedicated to the memory of the late Angela von den Driesch, during which 17 lectures were delivered by IC members about their work to a full house of Turkish archaeologists and archaeology students invited to the event.

The twenty participants, including national representatives and officers of the ICAZ Executive Committee, discussed several issues of immediate importance. In addition to the reports of various officers concerning developments since the 2010 International Conference in Paris, the main focus of the business meeting was the upcoming 2014 International Conference in San Rafael, Argentina. The General Meeting at that conference will have the power to amend several points in the current statutes of ICAZ, which were discussed by members of the IC and will be circulated among the general membership in due time. By 2014 a new IC, EC, and president and vice-president (the second runner) will also need to be nominated. Relevant issues were discussed in detail and nominating committees established. Furthermore a task force was created to review the health and safety aspects of our profession. Last but not least, the establishment of yet another new working group, “Stable Isotopes in Zooarchaeology” has been discussed and officially recognized. The new working group will have an important interdisciplinary mission in reconciling and balancing old and new methods in archaeozoology. An informal but important item on the agenda was a celebration of Wietske Prummel upon her retirement, congratulating her on her lifelong contribution to our field.

In addition to administrative chores, IC Meetings usually also offer an opportunity to present work in a broad range of member countries in brief academic conferences. In Istanbul, Canan Çakırlar organized our papers around the general theme “World Archaeozoology Today”. The meeting was held on the 6th of October at the Koç Research Center for Anatolian Civilizations. Presentations were made in four sessions.

The first session, devoted to “Surviving as hunter-gatherers”, included four papers on early cultures that largely represented research in South America and the Iberian Peninsula. Researchers of early subsistence strategies encountered similar problems in these regions. Environmental impact on early human communities proved to be of key importance, given the characteristically extreme climates that determined the distributions of settlements and possible modes of exploiting wild fauna.

The second session, titled “Managing life in settlements: Environmental adaptations, ritual, and social complexity” ranged from Post-Pleistocene coastal adaptations in the Southeastern US to contemplating the wild vs. domestic status of Neolithic pigs in Cyprus and Central China. The roles of pig and other domesticates were also discussed in Bronze Age Turkey and in relation to societal complexity in the Bronze and Iron Ages of the southern Levant.

Following the logic of later period archaeozoological information being increasingly historical in nature, the third session focused on “Exploring frontiers, negotiating diversity”. Adaptations to marginal marine environments were studied using δN15 isotopes in domestic bovids from the Netherlands, and the origins of a Galician breed of sheep were explored in Iberia. Animal remains from a distant Phoenician trading post in Morocco, a Roman settlement deep in the Egyptian desert, and finds from the northern border of the Ottoman Empire in Hungary served as extreme examples of archaeozoological research in areas that once represented far-away frontier positions.

In the last session, the “State of archaeozoology in the world”
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and in Turkey” was discussed. It was this closing part of the afternoon that was dedicated to commemorating significant archaeozoological research in Turkey by Angela von den Driesch, and a “game plan” for future work on animal remains in the host country was outlined (presented on page 1 of this newsletter). This type of global development in our discipline will be increasingly dependent on the open source data publishing in archaeozoology presented in this session. In relation to these welcome trends, the example of recently growing interest in archaeozoology in Latin America was discussed.

It must be again emphasized how well attended the academic sessions were by our Turkish colleagues. The large audience not only proved good promotional work by the organizers at home, but also a genuine interest by archaeologists in the key roles animals once played in our cultures. Informal social cohesion and friendly discourse have always been a special strength of ICAZ. The meeting included an atmospheric fish dinner and a reception on the roof terrace of the Research Center for Anatolian Civilizations, where even a perfect sunset was arranged. More importantly, the reception provided IC members an opportunity to liaise with members of the local archaeological community after the academic meeting. The conference was concluded with an excursion to several of Istanbul’s world famous historic and archaeological sites.

Table 1 ICAZ Financial Status

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Table 2 Expenses and income since last year for each account

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NSF Research Experiences in Fiji

Now accepting applications for the summer 2013 National Science Foundation Research Experiences for Undergraduates Fiji Program in Ethnoarchaeology. Please review the guidelines and requested application materials.

Due Date: February 15, 2013.
Contact Sharyn Jones for more information: sharynj@uab.edu
More information is available online: http://reu-fiji.com/REU-Fiji/Home.html
Over the past two years we’ve had the privilege of meeting over 120 people from commercial archaeological units and museums, as well as students and archaeology volunteers from across the world who have attended our three day Zooarchaeology Short Course here in Sheffield. We as a team have loved every minute of it, so in 2013 we are rolling out two new additions to our original Zooarchaeology Short Course. Through short lectures, discussions and hands-on practical workshops, these courses will provide practical experience of zooarchaeological methods.

We will be running Understanding Zooarchaeology I: A short course for archaeology and heritage professionals, students and enthusiasts from the 18th to 20th of March 2013. This will be the sixth presentation of this course, which is specifically designed for people with little or no previous experience in zooarchaeology. It is an ideal introduction to our field for archaeologists, museum curators, and other heritage professionals who come across animal bones and/or zooarchaeological reports in their professional capacity and want to understand more about this line of evidence. Students are also welcome, and our short course aims to provide a firm basis for further training and to built a knowledge base for future research.

From the 21st to 22nd of March, 2013 we will be running an advanced two-day short course, Understanding Zooarchaeology II, which will build on the content of our basic course. This new course will cover the identification of a wider range of species than our introductory short course and will provide participants with experience in recording and analyzing a real archaeological assemblage. Understanding Zooarchaeology II is suitable for anyone who has already attended our Understanding Zooarchaeology I course or who already has a basic knowledge of zooarchaeological methods.

But that’s not all! For the summer of 2013 we are planning a Marine Resources course that will run in conjunction with Understanding Zooarchaeology I. The Marine Resources course will train participants in the identification and analysis of some of the main types of archaeological remains associated with exploitation of marine environments in the past: fish bones, marine molluscs, marine birds, crustaceans, and marine mammals. The course also includes sessions on the application of isotopic and artefact studies in the recognition of marine resource use.

Keep an eye on our website for details about our new short courses, Understanding Zooarchaeology II and Marine Resources, as well as for information on Understand Zooarchaeology I and our teaching team: http://www.sheffield.ac.uk/archaeology/research/zooarchaeology-lab/short-course. Or you can e-mail us at: zooarch-shortcourse@sheffield.ac.uk.
Fieldwork on the second study of one of the world’s largest assemblages of worked bone was completed in August 2012. “The Tiesanlu Production Organization Project: Bone Working at the Great Settlement Shang”, Anyang, PRC” was funded by a Wenner-Gren International collaboration grant and co-directed by Roderick Campbell from New York University and Zhipeng Li and Yuling He from the Institute of Archaeology, Chinese Academy of Social Sciences (IA, CASS). The goals of the project were to gain a preliminary understanding of production organization and its changes over the 150 or so years of the site’s operation. Owing to the massive scale of the excavated site (270m in length x 10m width), and the assemblage (over 32 metric tons of animal bone), we had adopted a multi-scalar approach. A team of highly trained local assistants “surveyed” the entire assemblage, identifying to and dividing by taxa, counting MNE, and dividing, counting, and weighing worked and unworked fragments. The core members of the zooarchaeological team, Rod Campbell and Zhipeng Li, were guided by Professor Jing Yuan (IA, CASS) and assisted by two PhD students (Katherine Brunson, UCLA and Li Yue, Northwestern University, China) as part of the training component. The core team operated according to a stratified sampling strategy, expanding on and improving the methodology of the previous (Luce-ACLS funded) pilot project (see Antiquity 85 (2011):1279–1297). The fine-grained analysis conducted by the core team focused on linking production debris to specific types of artifacts with the goals of obtaining a relative (and if possible absolute) measure of quantification. It was posited that if the bone working organization was that of an integrated workshop, then we ought to see specialization of process or artifact type across the site. In all, (over a winter and summer season) we were able to sample a dozen contexts of different phases spread across the site, and now we will attempt to link our findings with the cruder total assemblage survey data, creating a series of synchronous GIS maps (done by collaborator Liu Jianguo) which will then be analyzed to shed light on production organization over time. Additionally, we conducted a preliminary analysis of potential bone working tools recovered from the site as well as replication experiments. During part of the summer season, we were fortunate to have the addition of two more students to our team: Jada Gao (formerly UCLA) and Christina Chang (UBC). In the short term, we have much work to do analyzing and publishing the results of this fieldwork, but going forward we hope to conduct more refined replication experiments to gain a better understanding of the skill and labor involved in the production of so many bone artifacts, to undertake a full study of the accompanying ceramic assemblage, and, finally, in collaboration with a larger team, to investigate the livestock economy of Anyang and the larger northern Chinese webs to which it was linked.

Patterns of Skeletal Pathology in Wild and Domestic Animals in the Past and Present


Past human societies had a profound impact on the health of domestic animals. Livestock herds in many places and times were both symbolically and economically valued, and if one or more animals got sick or lame, adequate intervention was required. Zooarchaeological research has become increasingly focussed upon identifying and classifying skeletal lesions, particularly those indicative of activity patterns (e.g. traction use). This focus has driven the development of recording methods to systematically capture data that facilitate the quantitative analysis of lesion frequency across space and through time. It has also encouraged the analysis of lesion presence and frequency in wild animals and known history populations of domestic animals to shed further light upon the aetiology and pathogenesis of pathologies observed in archaeological remains. The primary aim of this meeting is to build upon this theme by focussing attention on the identification of skeletal lesions in the archaeological record and their connections to specific behaviors and biological parameters. We also encourage archaeologists and veterinary pathologists to present studies of skeletal changes in known populations of wild and domestic animals that will further strengthen the possibility of identifying and understanding pathologies connected to the handling and care of animals.

If you are interested in presenting a paper or a poster on this theme, or on another aspect of animal palaeopathology, please submit a title and a 200–word abstract to Ylva Telldahl (ylva.telldahl@osl.su.se) and Richard Thomas (rmt12@le.ac.uk). Further information will be posted on the ICAZ Animal Palaeopathology Working Group website (http://www.apwg.supanet.com) in due course.

9th Annual Stanley J. Olsen Memorial Eagle Lake Zooarchaeology Conference

The 9th Annual Stanley J. Olsen Memorial Eagle Lake Zooarchaeology Conference will be held at Eagle Lake Field Station in northeastern California, USA. Zooarchaeology professionals and graduate students are invited to present 30–40 minute papers, followed by 10–20 minutes of questions and answers intended to create substantive, field-advancing dialogue. The conference will be held the weekend of July 19th–21st, 2013. This year’s theme is “Environmental Reconstruction: Perspectives from Zooarchaeology”. For additional information contact Deanna Grimstead (e-mail: dng@email.arizona.edu) or check out the conference website at http://www.csuchico.edu/~fbayham/zooarch.htm.
Cooperation on the Animal Remains from Xiaozhushan Shell Midden

Contributed by Jing Yuan (yuanjing@cass.org.cn), Anne Tresset (atresset@mnhn.fr), and Peng Lu (lpeng2007@yahoo.cn)

In the frame of a cooperation between the Beijing Archaeozoological Lab (dir. Prof. Jing Yuan) of the Institute of Archaeology of the Chinese Academy of Social Sciences (IACASS) and the Parisian research unit “Archéozoologie, Archéobotanique : sociétés, pratiques, environnements” (CNRS-MNHN, dir. Dr Jean-Denis Vigne), Dr. Anne Tresset (CNRS) visited the Chinese lab several times during the academic year 2011–2012. Her work as a visiting scholar has focused on the zooarchaeological analysis of the very large faunal assemblage from Xiaozhushan shell midden (Guanglu Island, Liaoning Province, P.R. of China) in collaboration with Dr. Peng Lu (IACASS). The site, dated to 6500–4000 B.P. was excavated under the direction of Dr. Xiaobing Jia and Dr. Yingxi Jin (both IACASS). Several thousands of mammalian remains were identified by Dr. Anne Tresset and Dr. Peng Lu, with the help of Dr. Zhipeng Li (IACASS), Dr Jie Chen (Shanghai Museum) and several PhD students of the Beijing team. Identified specimens include sika deer, roe deer and Chinese water deer, all three still present in north-east China (though the latter is very scarce), but not on Guanglu Island. Other taxa, such as dolphin, harbour seal, brown bear, raccoon, dog, and leopard were also identified. This assemblage delivers a very rich and vivid picture of the past biodiversity on this small island of the northern Yellow Sea, which only became an island during the early Holocene. It also constitutes a very interesting document on a Neolithic animal economy essentially based on hunting and gathering.

Hungate Project, York

Contributed by Clare Rainsford, York Archaeological Trust, York, UK (crainsford@yorkat.co.uk)

Five years of excavation by York Archaeological Trust in the Hungate neighbourhood have yielded one of the largest animal bone assemblages yet recovered from York, a place already famous for its excellent preservation of biological remains. The majority of the remains derive from inter-cutting Anglo-Scandinavian and medieval pit deposits, but bones have also been recovered from a range of contexts, including Roman graves, medieval and post-medieval buildings, and post-medieval horticultural soils. The current project, which began last year, aims to provide an overview of the faunal material, with particular focus on taphonomic and contextual analysis in order to address problems of residuality. In directing focus towards assemblages with the best dating integrity, this will help identify assemblages which are of the highest priority for long-term retention. The project will also produce a database and full photographic archive, enabling the material to be used to best effect by future researchers. Bone from Hungate has thus far contributed to the Dama International research project, hosted by the University of Nottingham, and has formed part of a number of student projects at the University of York. Analysis of the post-1550 assemblage was completed this summer, and integration of zooarchaeological, historical, and finds data has contributed significant insights into conditions and lifestyles in the Hungate neighbourhood. Evidence is present for on-site rearing and consumption of pigs, chickens, and rabbits; while the paucity of evidence for scavenging rats across the site as a whole, coupled with concentrations of rodent bones in deserted or derelict buildings, may indicate pest-control in the area. Dietary practices and the keeping of pets are also among the themes which have arisen from the analysis. Assessment of the Roman and early medieval assemblages is currently ongoing, and many more insights and surprises are anticipated.

Conferences (cont.)

ASWA HAIFA 2013

11th International Archaeozoology of Southwestern Asia and Adjacent Areas Meeting Haifa, Israel, June 23–28, 2013

We invite scholars conducting research on any aspect of human–animal relationships among ancient societies in Southwest Asia and adjacent areas to submit proposals for organized sessions, individual papers, and roundtable discussions.

A central theme of ASWA 2013 is “Bones and Identity”, a subject that reflects a current and growing interest in the use of animal remains as proxies for reconstructing social and cultural diversity among hierarchically complex societies. Papers on other topics relating to the broader field of archaeozoology in Southwest Asia and adjacent areas are also welcome. In order to increase the audience of ASWA the meeting will be broadcast online.

The deadline for the submission of all proposals is January 10th, 2013. Individual paper and session proposals should be sent to aswa.haifa@gmail.com. Individual paper proposals should include a title, list of authors (with affiliations), and an abstract not exceeding 250 words. Session proposals should include information on the session theme and on each individual paper and should not exceed 750 words.

We invite participants without institutional travel support to notify us by e-mail of their intentions to come no later than November 30th, 2012. Please include your full name, e-mail address, institution and department affiliation, the abstract of the proposed paper, and a current CV (all in one attached document in Word format). Late requests will not be accepted. Please visit the ASWA 2013 meeting website for further information and the tentative program: http://aswa.haifa.ac.il/index.php?lang=en

This comparative study of three large Middle Saxon faunal assemblages from eastern England reviews the animal bone remains from the Middle Saxon estate centres of Brandon in western Suffolk and Wicken Bonhunt in north-western Essex, and also those from a number of Middle Saxon sites within the town of Ipswich. At that time Ipswich served as an emporium or ‘wic’, a center of craft production and regional and international trade. All three sites produced large faunal assemblages that were analyzed using standard archaeozoological methods. Individual bones were identified to species and body part; the bones were examined for traces of butchery and pathology; ages at death were determined on the basis of dental eruption and wear and epiphyseal fusion of the long bones; and measurements were recorded when possible.

Species ratios, mortality profiles and osteometric data suggest that the inhabitants of Brandon were engaged in specialized wool production. Unlike most other Anglo-Saxon sites, the Middle Saxon features at Wicken Bonhunt produced large numbers of pig bones. The residents of the site may have been engaged in large-scale pork production, and the limited evidence from the late 6th-to-7th century features at the site suggest that specialized pork production may have begun at the site in the later part of the Early Saxon period. Brandon and Wicken Bonhunt also produced rich assemblages of wild birds, including water birds and waders. The Middle Saxon sites from Ipswich yielded a much less diverse bird assemblage. The inhabitants of Ipswich appear to have been provisioned with beef and mutton from the surrounding countryside, but the ageing data indicate that some pigs may have been raised within the town itself. The results are compared to the faunal assemblages that have been recovered from other Early and Middle Saxon sites in eastern England.


How does the practice of archaeology benefit from faunal analysis? Michael Glassow and Terry Joslin’s Exploring Methods of Faunal Analysis: Insights from California Archaeology addresses this question. Contributors to this volume demonstrate how faunal remains can be used to elucidate subsistence, settlement, technological systems, economic exchange, social organization, adaptation to variability in resource distribution and abundance, and the impacts of historic land use. The sheer prevalence of faunal remains in California archaeological sites means that most archaeologists working in the state inevitably must give these resources their close attention — and yet methodological challenges remain. The chapters in this thoughtfully edited volume tackle these challenges, providing strategies for identifying and mitigating sample bias and recommending quantitative techniques borrowed from a variety of disciplines. The volume also presents examples that illustrate the use of faunal data to test hypotheses derived from microeconomic theory, the applicability of bone and shell chemistry to faunal analysis, and the relevance of faunal data to addressing issues in biology.


Results from new analyses of eleven newly excavated animal bone assemblages from settlements in four regions in Stone Age Denmark (Vendsyssel, the Limfjord area, East Central Jutland and Northern Zealand) are presented and discussed together with reviews of previously studied bone assemblages. Most of the settlements date from the Ertebølle culture (5400–3950 BC), but some include the preceding late Kongemose culture as well. Others extend into the Neolithic Funnel Beaker Culture. The study focuses on the exploitation of marine and terrestrial animal resources and early animal husbandry. Special attention is given to indicators of seasonality on the settlements, as well as indicators of the surrounding habitat, derived from the animal bones. The inclusion of three cultural periods provides an opportunity to analyze temporal change in the exploitation of animals, e.g., the introduction of domestic animals at the transition to the Neolithic (Funnel Beaker Culture). Highlights among new results include the registration of exotic species, specializations in fishing and hunting at the
level of regions and individual settlements, temporal size change of red deer, extinction of species in Vendsyssel as a consequence of island formation, and indications of local domestication of swine in Jutland. The book is available for 400 kr (Danish) through the Royal Danish Academy of Sciences and Letters (H.C. Andersens Boulevard 35, 1553 Copenhagen V, Denmark). Please contact publ@royalacademy.dk.


This review surveys the Neolithic and Early Bronze Age bone assemblages from c. 200 sites in southern Britain, summarizing and synthesizing the data. Chapter 2 discusses the domestic animals: cattle, pig, sheep, goat, dog and horse. The focus is on animal husbandry, in particular traction and the milking of cows. Chapter 3 discusses the wild animals and the reasons why they might have been hunted or caught. Chapter 4 is concerned with how animals were butchered, cooked and consumed and examines the evidence for feasting. Chapter 5 looks at possible and deliberately placed deposits of skulls, skeletons, bones in articulation, and individual elements, and the possible motives which governed bone deposition at different times and in different places. Chapter 6 considers the extent to which micro-vertebrates and larger mammals reflect changes in vegetation and environment on a local and a wider scale. The implications of the findings for the economic and social life of the people living in southern Britain from the Early Neolithic to the end of the Early Bronze Age are discussed by period in Chapter 7.

New Books (cont.)

ICAZ Working Group Reports

ARCHAEOMALACOLOGY WORKING GROUP
http://www.archaeomalacology.com/

Contributed by Daniella E. Bar-Yosef Mayer (WG Liaison), Department of Maritime Civilizations, University of Haifa, Israel (bar-yosef@research.haifa.ac.il)

The Archaeomalacology Working Group (AMWG) has now reached a ‘critical mass’ of over 100 members worldwide. The Working Group was founded in 2002 and meets every other year, alternating between a session within the ICAZ conference and independent meetings. It recently met for the third time in an independent meeting, from 19th to 23rd June 2012 in Cairns, Australia. The conference was co-organized by Kat Szabo and Sean Ulm and was attended by over 20 delegates from 8 countries. The presentations reflected the diversity of archaeomalacological research and covered a range of thematic topics – from qualitative analysis and experimental archaeology to advanced scientific methods and quantitative analysis. The papers demonstrated the global coverage of the group, documenting research from five regions including the Pacific, Europe, Asia, Africa, and South America – a fact that bodes well for the future development of the group.

In other recent activities, the proceedings of the day-long Archaeomalacology session which was organized by Katherine Szabo, Vesna Dimitrijevic, Catherine Dupont, Sándor Gulyás, Nathalie Serrand, and Luis Gómez Gastélum at the ICAZ meeting in Paris 2010 are at an advanced stage of editing and will be published by BAR. Zhanna Antipushina and Annalisa Christie were chosen as the new group co-coordinators, while Kat Szabo will continue to serve as webmaster (http://www.archaeomalacology.com) and Daniella Bar-Yosef as liaison to ICAZ. The group now also has a page on Facebook (called Archaeomalacology Working Group). We look forward to the next Archaeomalacology session planned for ICAZ 2014 to be co-organized by Zhanna Antipushina and Annalisa Christie.

ARCHAEOZOLOGY AND GENETICS WORKING GROUP
http://www.archaeomalacology.com/

Contributed by Jean-Denis Vigne (WG Liaison), Laboratoire Anatomie Comparée, Muséum National d’Histoire Naturelle, Paris (vigne@mnhn.fr). Includes contributions from A. Schlumbaum and K. Dobney.

The Archaeozoology and Genetics (A&G) ICAZ working group was founded at Durham (UK), during the 7th ICAZ meeting (August 2002), by J.-D. Vigne, M. Zeder, and D. Bradley. It held its four first meetings in Paris (2004), Cambridge (2005), Tallinn (2008), and Paris (2010). The Working Group aims to promote exchange and collaboration between archaeozoologists and (palaeo)geneticists. The fourth scientific meeting was held on the 4th to 6th of June 2012, in Basel, at the Old University, ably organized by Angela Schlumbaum, Jörg Schibler and Julia Elsner of the IPAS (Institute of Prehistory and Archaeological Science) of the University of Basel.

Attendance of the 2008 meeting in Tallinn was reduced relative to previous meetings, and, more worryingly, it was mostly composed of geneticists, with very poor participation by osteoarchaeologists. In order to re-stimulate the later, the WG decided to organize the next meeting in the frame of the 11th ICAZ conference in Paris, in the form of a special session. This strategy was successful, since the attendance at the Paris session was very high, and the Basel meeting was more similar to those held originally in Paris (2004) and Cambridge (2005), with 60 scientists, from 16 countries, and a well balanced proportion of geneticists and osteoarchaeologists present. Young PhD students were numerous, as well as a good number of scientists who had never participated in the WG before.

After a short introduction by the organizers and the coordinator of the A&GWG, and a stimulating introductory presentation by D. Y. Yang and C. Speller (Vancouver-Caglary), who promoted Continued on page 12

International Council for Archaeozoology
Continued from page 11

the value of collaboration between the disciplines, there followed 25 excellent oral presentations, complemented by 8 posters. There was also good time for questions and discussions after each paper and session. The presentations were organized in four sections: Domestication and related issues (8 talks), Expansions and migrations (6), Diversity (6), and Miscellaneous (5). Young researchers, geneticists, and archaeozoologists successfully chaired the sessions.

The first session (Domestication) was characterized by a large diversity of taxa (pig, cattle, sheep, dog, chicken, turkey), regions (North America, Arctic, Europe, SE Asia) and periods. B. Krause-Kyora and A. Nebel (Kiel) demonstrated that the domestication of local European wild boars started as early as the Early LBK, and discussed the presence of early pigs in the Ertebølle. A. Evin and coll. (mainly Aberdeen-Paris-Durham) presented extensive morphometric and ancient mtDNA data for a long duration in the Eastern Mediterranean, showing how the lineages of pigs which were previously domesticated in Europe were re-introduced to the Near East during the Bronze Age, and finally replaced the local Near eastern domestic pigs. A. Scheu and coll. (Mainz-Paris-Berlin) gave an extensive overview of the aDNA data for European early domestic boids, including original data from the Balkans, analyzed the haplotype diversity in connection with the unequal speed of diffusion through the continent, and emphasized the recent results regarding the estimation of the number of females contributing to modern cattle lineages. L. Girdland Flink, G. Larson and coll. (Durham-Uppsala-Munich), based on modern and ancient DNA data, connected with the color of the legs to decipher the history of the domestic chickens in Europe. C. Speller and coll. (Calgary-Mexico City) analyzed mitochondrial aDNA in turkeys and concluded that there were likely two independent centers of domestication in North America. S. Brown and coll. (California Univ.) analyzed the genetic diversity of 24 North American Arctic dogs. M. Ollivier and coll. (Lyons-Paris-Rennes-Bucharest) presented aDNA results about coat color of dogs which allowed them to formulate hypotheses on the diffusion of these populations throughout Eurasia. L. Ø. Brandt (Copenhagen) investigated the development of wool in Danish prehistoric sheep with both genetic and oesteological techniques. The poster presented by A. Evin and coll. (Paris-Aberdeen) about the differentiation between wild and domestic pigs through the molar size and shape was also connected to this session.

Following the tradition of this ICAZ WG, two presentations involved botanical research. They were grouped into the second session (Expansion, migration) and presented very exciting, extensive, and original synthesis about the genetics of the modern tetraploid wheats of the Mediterranean (H. Oliviera and coll.; Cambridge UK – Harvard) and about the phylogeography of the edible African bananas (L. Vrydaghs and coll. – Brussels) based on phytoliths and DNA analyses. They were complemented by a poster presenting the work of a major ERC funded project on food globalization in prehistory, focusing upon the origins of cereals (D. Lister and coll. – Cambridge, UK). With the exception of a poster about the origins of the Roman cattle in the Iberian peninsula using osteometric and molecular analyses (L. Colominas et coll. – Barcelona-Basel), the other presentations in this session were all focused on the dispersal of domesticates (pigs and chickens, again) and commensals (rats and gekkos) in SE Asia and Oceania. O. Lebrasseur (Durham-Aberdeen) analyzed the mtDNA diversity of modern chickens from the Philippines to the remote Santa Cruz Islands in the scope of the dispersal of the Lapita societies into Oceania. A. Linderholm and coll. (Durham-Aberdeen-Paris) revisited the “Out of Taiwan” hypothesis linked to the Austronesian dispersal of pigs based on combined dental morphology and genetic signatures. A. Trinks and coll. (Durham-Aberdeen) also explored the migration patterns of human dispersal in SE Asia and the Indian Ocean through the genetics of the small common gecko, Hemidactylus frenatus. A. Hulme-Beam and coll. (Aberdeen-Paris-Durham) presented impressive mtDNA and geometric morphometric data on the Polynesian rat (Rattus exulans), which also appears to retain a detailed signature of Oceanic colonization linked with Polynesians.

The fourth session (Diversity) dealt with cattle, dogs, sheep, goats, and equids, mostly in the Near East and Europe. C. Ginja and coll. (Lisbon-Lyon-Uppsala) presented preliminary data about the paleogenetics and morphometric diversity of Chalcolithic Iberian boids, which confirm that aurochs belong to the P haplogroup, evidence of a diversity of T3 and T1 haplogroups in the Iberian Peninsula, as well as the presence of T1 in Morocco since at least Roman times. A.E. Pires and coll. (Lisbon-Lyon) gave original archaeozoological and genetic data about Portuguese Mesolithic and Chalcolithic dogs. J. Elsner and coll. (Basel) revealed a large genetic diversity in Early Upper Palaeolithic horses from Switzerland, based on a large and original dataset of well preserved mtDNA, including data from waterlogged sites. This presentation was complemented by a poster presented by J. Granado and coll. (Basel-Bern) about genotyping ancient horses using Illumina systems, and by another poster by J. Lira and coll. (Madrid) on the genetic diversity of the Iberian asses. E. Rannamäe and coll.

Participants at the 5th Scientific Meeting of the Archaeozoology and Genetics Working Group in Basel, Switzerland

Working Group Reports (cont.)
and M. Niemi, J. Kantanen, and coll. (Tartu-Helsinki-Tallinn) investigated the morphological and genetic diversity of modern sheep in Estonia and Finland, respectively, and showed the peculiarity of endangered local heritage breeds. A. Bennett and coll. (Paris-Munich) brought substantial original information about the limits of the osteological discrimination of Equus hemionus and E. hydruntinus, and presented a large panel of aDNA data which allows them to update the phylogenetical relationships between the different groups of Asiatic wild ass, and to show that the equids of the 3rd millennium elite burials at Umm el-Marra (Syria) were actually hybrids of females of E. asinus and males of E. hemionus syriacus (the earliest known evidence for animal hybridization). In addition, a poster by S. Hughes and coll. (Lyon-Paris-Grenoble) presented the genetic diversity of the medieval Corsican goats and meaning of this variation in terms of herding practices.

The last session (Miscellaneous) opened large and diversified perspectives. J.T.D. Owen and coll. (Durham-Aberdeen-Paris) investigated the phylogeny of suids of the Old World, and emphasized and discussed the discrepancies between the molecular and morphological evidence, exploring ancestral traits and morphological convergence in different lineages as well. U. Strand Vidarsdóttir and coll. (Durham-Aberdeen-Paris) compared the ontogenetic morphological change in European wild boar and domestic pigs, based on a geo-morphometric description of the skull, and concluded that the differences are not mainly due to pedomorphy, but that they result from both genetic of epigenetic prenatal structural differences and differences in the ontogenic trajectory. R. Barnett and coll. (Durham) presented an impressive historical and genetic dataset about the diversity of lions and their geographical restriction during the last centuries and decades. J. Soubrier, A. Cooper and coll. (Adelaide) investigated the genomic diversity of European and American bison, and in doing so have identified a new species of bison in Eurasia and clarified the biogeographical evolution of the bison in Europe since the Eemian. Exploring commensal microbes trapped in the dental calculus of humans and animals, C. Adler, K. Dobney, and coll. (Adelaide-Aberdeen-Mainz) opened large perspectives on the history of oral pathologies, and concluded that the European farming communities had higher oral microbe diversity compared to modern populations, and that the frequency of caries-forming bacteria is potentially a result of the Industrial Revolution. Finally, the poster by A. Krüttli and coll. (Zurich) recalled that archaeozoology and genetics together are addressing big historical and anthropological questions such as the beginning of milk exploitation in Europe.

This conference was not only marked by a good participation of both archaeozoologists and geneticists and a very high level of quality of talks, posters and exchanges, but by its wonderful organization. As we already suspected during the meeting of the WG in Paris in 2010, even if mtDNA is still the dominant tool currently used by archaeogeneticists, it is now being quickly overtaken by new “next generation” techniques. It is good to see that this extraordinary development of molecular techniques does not widen the gap between archaeo(zoo)logists and geneticists. Conversely, it appears to be strengthening their collaborations, both by increasing and diversifying the number of common scientific issues, and by stimulating the emergence of young scientists who are specializing in this domain of interactions. However, the rich discussions during the meeting also revealed that the latter do not necessarily yet posses a sufficient critical approach towards the key archaeological issues and data, and that archaeologists are not geneticists. This makes this working group more useful than ever.

Another important evolution is the increasing use of combined (complementary) techniques and approaches – specifically those of (paleo)genetics and morphometrics, leading to much more refined and informative results. As is visible in the summary above, this is namely due to the recent development of geometric morphometrics applied to archaeozoology, an emergent technique which should be widely supported and promoted by ICAZ. In the final discussion, it was agreed that this marriage of genetics and morphometrics should be formally driven forward as a future key component of the Archaeozoology and Genetics Working Group. As seen in the various presentations from the recent Basel meeting, much of the work in these areas is revealing how complementary these techniques are, both of them exploring similar questions about genotypic and phenotypic expression. Often, the population level distinctions revealed by DNA analyses are mirrored by GM analyses. This correspondence allows the result of one technique to be used as a proxy for the other in the event that both sets cannot be retrieved from the same specimen. Secondly, the GM data will likely possess signatures of both deeper evolutionary divergence, hybridization and the impact of e.g. domestication. Testing these issues at two different levels of biological organization will therefore ensure that significantly more robust conclusions may be drawn from such datasets.

Finally, following discussions and a direct vote during the Basel meeting, the next meeting of the working group will now take place in Lisbon during the winter 2014, and will be organized by Catarina Ginja, Cleia Detry, and Ana Elisabete Pires.

BIRD WORKING GROUP

http://www.aicaz.org/icaz/workbird.htm

Contributed by Luminita Bejenaru (WG Liaison), Facultatea de Biologie, Universitatea Alexandru Ioan Cuza, Iaşi, Romania (lumib@uaic.ro)

The 7th Bird Working Group Meeting took place in Iaşi, Romania, at the "Alexandru Ioan Cuza" University on August 27th–September 1st. The conference hosted near upon 30 participants representing 16 countries (Argentina, Austria, Croatia, Denmark, France, Hungary, Italy, Japan, Netherlands, Poland, Romania, Russia, Spain, Switzerland, United Kingdom, United States of... Continued on page 14
Continued from page 13

America). The conference was organized by Luminita Bejenaru, Simina Stanc, Constantin Ion, and Vasile Cotiuga, with the help given by the students Monica Groza, Andreea Vornicu and Lucian Fasola. The conference began with the “Welcome words” addresses from the university staff, with a “Looking back at previous ICAZ Bird Working Group meetings” given by Z. Bochenski and E. Gal, and a general presentation about The Birds of Moldova Region (Romania) by a group of young ornithologists (C. Ion, E. Baltag, L. Sîca, and L. Fasola). The presentations given during the 7th Bird Working Group Meeting, including 14 oral communications and 10 posters, were focused upon themes such as birds as food, bird hunting, birds and symbolism, taphonomy, and methodology. The oral communications were as follows (in order of their presentations):

- Human–bird relationships during the late Holocene in the Beagle Channel region (southern South America) by A.M. Tivoli
- A bird in the hand is worth two in the bush: a temporal and geographic investigation of fishing in the Scottish islands via data collation and new analyses by J. Best
- The role of birds in subsistence and culture at Viking Age sites, Denmark by A.B. Gottfredsen
- Bird remains from the 5th–15th century AD archaeological sites of the Volga–Kama region (Russia) by D. Galimova, I. Askeyev, and O. Askeyev
- Diverse assemblages, diverse origins: the taphonomy of bird remains from coastal sites by D. Serjeantson
- Avian skeletal part representation: a case study from Offing 2, a hunter-gatherer-fish site in the Strait of Magellan (Chile) by C. Lefevre and V. Laroulandie
- Taphonomic study of Japanese quail (Coturnix japonica) bone disarticulation resulting from the burial and feeding behavior of the American burying beetle (Nicrophorus americanus) by F.J. Dirrigl Jr. and L. Perrotti
- Is the analysis of lead concentration in archaeological goose bone a reliable indicator of domestic bird? by M. Eda, Y. Kodama, E. Ishimaru, and M. Yoneda
- Making eggshell visible in the archaeological record by J. Stewart
- Le rôle des oiseaux dans le centre urbain de Shahr-i Sokhta (Sistan, Iran) au cours du 3ème millénaire avant JC by M. Gala and A. Tagliazocco
- Birds for the elite? Fowling in the coastal area of the northern Netherlands (Roman period and Early Middle Ages) by J. Zeiler
- Use of Avian Resources by the Forgotten Slaves of Tromelin Island (Indian Ocean) (by V. Laroulandie and C. Lefevre
- Bird bone remains from the Sanctuary of Jupiter Heliopolitanus in Carnuntum–Mühläcker (Austria) by E. Gal
- Depictions of birds in the Cucuteni-Tripolye civilization by D. Monah and L. Bejenaru.

Active and interesting discussions after each communication were led by the session chairs: Erika Gal, Jorn Zeiler, Dale Serjeantson, Christine Lefevre, and Frank J Dirrigl Jr. The session was ended with general discussion and with the proposal for the next meeting (University of Texas-Pan American, Edinburg, USA), offered by Frank J. Dirrigl Jr.

In the session of poster presentations, the authors introduced us to the following subjects:

- Avifauna of south Istria (Croatia) during Late Glacial by O.S. Ankica and B. Dejana
- Tools made of chicken (Gallus gallus domesticus) tibiotarsus from the Early Islamic period at al-Adhar (Syria) by Jacqueline Studer
- Few do not mean less quality: information inferred by wild birds in Camino de las Yeseras (Madrid, Spain) by L. Llorente, C. Liesau, A. Morales, A. Daza, and R. Applefield
- Avian zooarchaeology of medieval Poland by D. Makowiecki, T. Tomek, and Z.M. Bochenski
- New artefacts made of bird bones discovered in Romania by C. Beldiman and D.M. Sztancs
- Impact of prehistoric and historic communities on wild birds in Dobrudja area: archaeozoological data by S. Stanc, E. Gal and L. Bejenaru
- Bird bone remains from the 11th–12th century settlement of Piatra Frecești (Dobruja, Romania) by E. Gal and S.M. Stanc
- Interdisciplinary Perspectives on Domestic Fowl by N. Sykes, M. Malby and D. Serjeantson
- Birds from a New Late Holocene Site in the Northwestern Altai, Siberia by N. Volkova and N. Zelenkov
- A sceptre of stone representing a bird, found at Popricani (Iasi County, Romania) by N. Ursulescu and V. Cotiuga.

Social activities during the conference started with a welcome cocktail which took place Monday evening in the Gaudeamus Restaurant. Tuesday we visited the Museum of “Alexandru Ioan Cuza” University and the Botanical Garden, and the day was concluded with a festive traditional dinner. Wednesday, in the mid-conference excursion, we visited ornithological and historical sites situated in North-Eastern Romania (Iași and Botosani counties). We were very happy to be with Dale Serjeantson on her anniversary day and to wish her a warm “Happy New Years!” The post-conference excursion to Danube Delta, in the last two days, was an excellent opportunity to see, navigating between channels and lakes, so many birds.

We wish to acknowledge all of the people who helped to organize this conference: the authorities and personnel from “Alexandru Ioan Cuza” University of Iași, Fundatia ALUMNI, Platforma ARHEOINVEST. We thank all of the participants for their support, enthusiasm, and understanding.

FISH REMAINS WORKING GROUP

http://www.cs.otago.ac.nz/research/foss/ICAZ/icaz.htm

Contributed by László Bartosiewicz (WG Liaison), Department of Archaeometry, Institute of Archaeological Sciences, Loránd Eötvös University, Hungary (bartwicz@yahoo.com)

The proceedings of the 16th Scientific Meeting of the ICAZ Fish Remains Working Group in Israel will be published in Archaeofauna. Peer review of the manuscripts is currently underway.

As was decided at the 2011 meeting in Israel, our community will hold its 17th Scientific Meeting at the Institute of History, University of Tallinn (Estonia), between 16–21 September 2013. The first announcement of this conference made by the organizer, Lembi Lõugas, appears in this Newsletter issue and on the Ichthyarchaeozoology ZooBook list. Further details will be regularly published on the recently established conference home page: http://www.arhkeskus.ai.ee/?id=10717 and other forums.

Canan Çakırlar of the Groningen Institute of Archaeology is
administering a Facebook page within the framework of a project titled “Confronting the ‘myth of the bitter sea’: pre-historic exploitation of the eastern Mediterranean seascape” which investigates ancient fisheries in the region. The project is currently funded by the 2012 Mia J. Tegner Award of the Marine Conservation Institute. The home page is open to the wider public (including those not members of Facebook) at http://www.facebook.com/ancientfisheries/info?ref=stream. This forum is aimed at enhancing communication between archaeologists, archaeozoologists, and conservation biologists, telling them about our aims, methods, and related news about ancient fisheries particularly in the eastern Mediterranean. This is a one-year project, but there is a hope to continue this research through contributions from a broad range of experts, naturally including members of our own community, the ICAZ Fish Remains Working Group who have a lot to offer to this type of research.

The Neotropical Zooarchaeology Working Group (NZWG) was held at the Universidad de Chile, Santiago de Chile, on June 1st, 2012, along with the II Encuentro Latinoamericano de Zooarqueología (II ELAZ, a meeting sponsored by the NZWG). The NZWG meeting was organized by the Working Group coordinators and Isabel Cartajena as the local organizer. It was conceived as a workshop focused on the subject: Towards a Neotropical Zooarchaeology. Ten papers were presented by authors from Argentina, Brazil, Chile, Colombia, Cuba, France, Mexico, Peru, and Uruguay. Joaquín Arroyo-Cabrales and Eduardo Corona-M. opened the conference, and the discussants at the closing session were Albérico Nogueira de Queiroz and Guillermo Mengoni Goñalons. The proceedings will be submitted to a special issue of the journal Etnobiología.

More than 40 participants attended the meeting, including professionals and students. The workshop format helped create a forum of friendly exchange, consistent with the Working Group’s aims of developing ways of integration, cooperation, and collaboration among colleagues from different countries interested in the zooarchaeology of Neotropical regions. Significant steps were taken in that direction at Santiago, with remarkable enthusiasm, cordiality, and camaraderie. They will no doubt be continued in the next meeting of the Working Group, to be held within the 12th ICAZ International Conference in San Rafael (Mendoza, Argentina) in 2014.

The Neotropical Zooarchaeology Bibliographic Database, available at: http://www.alexandriaarchive.org/bonecommons/items/show/1773, keeps growing. In addition, a Database of Os teometric Data of South American Camelids has been proposed at the Santiago meeting. Three NZWG Newsletters have been issued since the creation of the Working Group in 2010. These and all the info on the NZWG can be found at the Working Group web page: http://www.alexandriaarchive.org/bonecommons/exhibits/show/nzwg (maintained with the assistance of Sarah Whitcher Kansa).

The NZWG now has some 115 members, and it keeps growing! To become a member and receive the Newsletters, you just need to e-mail the coordinators. Please spread the word!

**STABLE ISOTOPES IN ZOOARCHEOLOGY WORKING GROUP**

Contributed by Suzanne Pilaar Birch (WG Liaison), Department of Archaeology and Anthropology, University of Cambridge, UK (sp518@cam.ac.uk)

A new working group, Stable Isotopes in Zooarchaeology, was formed this summer and recently approved at the IC meeting in Istanbul. The formation of the group was spurred by the success of the one-day conference “Integrating Zooarchaeology and Stable Isotope Analyses,” held the 21st of June, 2012 at the University of Cambridge. The proceedings of this conference will be published as a special issue, “Zooarchaeology and Stable Isotope Analyses,” in the journal Archaeological and Anthropological Sciences (Springer, March 2013). The working group itself will aim to bridge an existing gap in scientific archaeology between these two approaches which can and should be used to investigate similar questions about the past, but are rarely truly well integrated within research projects. There is often a problematic assumption that because stable isotope analyses are carried out on bones, the two are automatically integrated. The working group will work towards resolving this issue by discussing ways to better combine the two within research planning and design, methodology, and application. It will provide a valuable platform for communication amongst those who consider themselves zooarchaeologists, stable isotope analysts, or both. The group already has over 35 members and those who are interested can sign up for the mailing list by e-mailing zooarchisotopes@jiscmail.ac.uk.

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**TAPHONOMY WORKING GROUP**

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The ICAZ Taphonomy Working Group (TWG) was created in autumn 2009 to encourage dissemination, collaboration, and interdisciplinary work in taphonomic research. The 2nd ICAZ TWG meeting took place at the University of Santander from the 12th–14th September. The meeting was also streamed live over the internet by a local TV station. The event was organized by Ana B. Marín-Arroyo and Marta Moreno-García and attracted more than 80 attendees to Santander.

The meeting was devoted to six main topics:

- The application of taphonomic analyses to archaeozoological data
- The importance of taphonomy in the interpretation of archaeological faunal assemblages
- Combining different taphonomic approaches to document post-depositional and formation processes
- Providing new perspectives on recording biological agents of bone modification
- The study of the spatial distribution and skeletal part frequencies of vertebrate faunal remains
- Analyzing butchering practices from a taphonomic perspective.

In sum, 24 talks and 16 posters were discussed. These ranged in age from when dinosaurs ruled the earth through to the remotest Palaeolithic sites and up to more recent medieval age; topics covered ranged from neotaphonomy to modern day observations of animal behavior. The poster session allowed those presenting to give a short introduction to their poster and then answer questions in more detail. This allowed each poster to be dealt with in detail and stimulated further debate and discussion. The final day was devoted to a special workshop, where researchers presented case studies during a short presentation and then provided material to handle and generate discussion amongst attendees. The workshops were varied and included specific problems such as identifying burnt bones and a blind test of diagnostic features of digested bones.

The ICAZ TWG is one of the youngest of the Working Groups, but it has attracted researchers from a variety of archaeological periods and related disciplines. This Working Group has the potential to establish a forum for researchers to discuss issues related to their own work, but also to draw upon results from other studies that may be far removed in both time and space. This group can provide new focus and impetus for taphonomic studies in archaeozoology.

The presentations and posters highlighted various aspects of recent taphonomic research and provided details for future directions within this sub-discipline. Several presentations highlighted the complexity of modern animal behaviors as taphonomic agents (e.g. different carnivore taxa or insects) and brought into focus the potentials and problems of using this type of investigation when analyzing archaeological material. The meeting illustrated the increased importance of experimentation to replicate and understand the taphonomic processes responsible for certain bone modifications, e.g., bone coloration and striations. Frequently this requires not only the study of the bone but also the embedding milieu, e.g., soil chemistry, sediment composition, and palaeoenvironment. Against this background “microtaphonomic” features of fossil bones become more and more important, such as bone modifications caused by bacteria.

The overall agreement from the meeting was that more attention needs to be paid to all the concomitant processes in operation alongside studied taphonomic signatures to fully understand the variability of specific taphonomic agents and processes. During questions and discussions for each session the issue of contextual information was frequently raised. The genesis of fossil assemblages can only be fully reconstructed when we understand the beddinh milieu of the bones; the more knowledge we have of the site formation and ecology the more detailed our understanding of the processes involved in accumulation and modification of a given faunal assemblage will be. The presentations clearly demonstrated the gap in taphonomic data between recent systematic excavations compared to studies of faunal material that lack additional contextual data. This even applies to neotaphonomic studies in present day environments.

With the meeting in Santander, Ana and Marta have furthered this new working group within the ICAZ community and built on its origins in Paris 2010. We would like to take this opportunity to thank all the organizers and attendees for such a good conference and to ask for suggestions on the location and institution for the next meeting! People and institutions willing should contact Ana (anabelen.marin@unican.es).

**WORKED BONE RESEARCH GROUP**

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The Worked Bone Research Group (WBRG) continues to hold regular two-year meetings. In the past there have been WBRG oriented meetings at the ICAZ general meetings in Mexico and Paris. These meetings have been or will soon be published in the same spirit as the four proceedings already in print. The proceedings of the 2009 meeting in Wroclaw, Poland have been published and are available online as well. The eighth and most recent meeting of the WBRG was in Salzburg, Austria in August–September 2011. It was organized by Felix Lang who hosted 36 participants, 25 papers, and 10 poster presentations. The meeting was supported logistically and financially by the University of Salzburg, the Austrian ministry for Science and Research, Stadt and Land Salzburg, and Beta Analytic Ltd.

The ninth meeting of WBRG will be convened by the Henan Administration of Cultural Heritage and the Henan Provincial Institute of Cultural Relics and Archaeology in Zhengzhou City, Henan province, China from April 14th (arrival) to 20th (departure), 2013. This will be the first meeting of the Worked Bone Research Group to be held outside of Europe! The meeting will be organized by Dr. Ma Xiaolin (Deputy Director, Henan Administration of Cultural Heritage, malatrobe@yahoo.com.cn).

In order to be able to organize the meeting and apply for support money we need to participants to register by January 31st,
2013. The deadline for submitting a title and abstract (no longer than 250 words) is March 1st, 2013. The abstract format should include your name, institution and country, and e-mail.

Over the three days of presentations there is room for around 40 presentations of 20 minutes each with 5 minutes discussion. Excursions in Henan province will take place over two days and include two to three World Cultural Heritage sites, museums, and archaeological sites.

The 10th meeting after Zhengzhou will take place in Belgrad, Serbia. It will be organized in August–September 2014. Selena Vitozović is undertaking the organization of the meeting.

Most Recent Proceedings


WBRG webpage

The WBRG website continues to take form and is now supported by IPNA (Integrative Prähistorische und Naturwissenschaftliche Archäologie) of the University of Basel and TRACES (Travaux et Recherches Archéologiques sur les Cultures, les Espaces et les Sociétés, UMR 5608, University of Toulouse Le Mirail). I would like to strongly encourage other labs interested in supporting the study of worked bone to follow the good example of these two laboratories and agree to provide funds to help keep this valuable web tool up and running. The website continues to grow and thrive under the mentorship of Hans Christian Küchelmann (webmaster, info@knochenarbeit.de). The typology section is now edited and maintained by Selena Vitozović.

Archaeozoology for Turkey (cont.)

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peer-reviewed archaeology journals (Marriner 2009).

Returning to the relevance of the archaeozoology of Turkey, we may also let the numbers speak: of the 30 scientists in the representative body of ICAZ in the IC, which represents 18 different countries, 33% have conducted or are still conducting scientific research in or about Turkey, some since the late 1960’s. By 1992, the information gathered was sufficiently interesting for Eşref Deniz, an enthusiastic medical doctor who can be called the first Turkish archaeozoologist, to publish a Turkish article entitled “Anatolian archaeobiology in light of finds from the last 30 years” in the proceedings of the archaeometery symposium (Deniz 1992). Twenty years have passed since this last review of archaeological research in Turkey. The tragic and sudden death of Berrin Kuşatman, a homegrown archaeozoologist, shortly after the completion of her PhD at the University of London (Kuşatman 1992) was probably the most unfortunate event that slowed the progress of archaeozoology for Turkey.

Moving beyond these specific developments and problems, archaeozoology survived, but – keeping in mind that we can speak of a sixty year history of archaeozoology in the country – I would like to put forward four main observations about the state of archaeozoology practice and education in Turkey:

1. Archaeologists and cultural heritage specialists do not seem to be fully convinced of the necessity to integrate and implement archaeobiological methods, approaches, and concepts.
2. Archaeological literature is only partially successful in integrating and synthesizing multidisciplinary data, including that from archaeozoology.
3. Interaction and collaboration between excavators, material culture archaeologists and archaeozoologists remains weak.
4. University curricula remain inadequate to fulfill the needs of archaeology students for their future careers.

The similarity between these observations and those raised by Butzer in his 1975 article “The ecological approach to archaeology: are we really trying?” is no coincidence. Butzer is like a classic: somebody has already written down your thoughts in a different land in a different era. That is alarming.

One way of seeing the set of problems is from the ethical point of view. Back to basics: why do archaeology? Because it is an important source for cultural and natural heritage. It is not a resource; it is disintegrating as Turkish economy grows and massive construction projects proceed fiercely in the absence of strong heritage laws. Why do science? To produce and disseminate knowledge. In a world where the education and practice of environmental archaeology are not the exception but the standard, it is an ethical requirement to adjust archaeology curricula so that all students receive adequate training in the methods and theories of environmental archaeology.

When problems of archaeological practice and education in Turkey are debated (e.g. Erdur and Duru 2003; Özdoğan 2008), ‘subdisciplines’ and ‘specializations’ rarely come into question. This situation makes it clear that a change from within is necessary before moving on to convince policy makers that Turkish archaeology, archaeologists, and archaeology students can no longer afford to have archaeozoology in particular, and environmental archaeology in general, as an afterthought. A policy plan that would lead to such a change should be devised collectively at a local platform that must be formed immediately. A bilingual (Turkish and English) version of this paper was presented at the scientific meeting of the ICAZ IC in Istanbul, on October 6th, 2012.


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**Archaeology of Farming and Husbandry in Early Medieval Ages** conference in Vitoria-Gasteiz, Spain.
contact: gipypac@gmail.com
http://sites.google.com/site/farmingandhusbandry

**The role of archaeozoological research on the interpretation of early peopling of Americas** session at the 6th International Conference on Early Man on Americas in Pereira-Armenia-Manizales, Colombia.
contact: eramosroca@uniandes.edu.co

contact: horard@univ-tours.fr

**Trapping in hunter-gatherer prehistoric Europe** session at the 34th annual conference of the Theoretical Archaeology Group (TAG) in Liverpool, UK.
contact: raymond.nilson@postgrad.manchester.ac.uk
http://www.liv.ac.uk/sace/livetag/index.htm

**UPCOMING IN 2013**

**International Conference on Foodways and Heritage** at the Chinese University of Hong Kong.
contact: jiting.luo@gmail.com
http://www.knochenarbeit.de/allgemeine_dokumente/HK_Foodways_Heritage.pdf

**Animals in the urban environment AD 1500–1900** session at the conference of the Society for Historical Archaeology (SHA) at the University of Leicester, United Kingdom.
contact: rgordon24@gmail.com
http://www.sha.org/meetings/annual_meetings.cfin

**Cultural biogeography of plants and animals – The archaeology of exotica** session at the 7th World Archaeological Congress in Amman, Jordan.
contact: naomi.sykes@nottingham.ac.uk and richard.madgwick@nottingham.ac.uk
http://wac7.worldarchaeologicalcongress.org

**The Bioarchaeology of Ancient Egypt** conference at the American University in Cairo, Egypt.
contact: salimaikram@gmail.com
http://conf.aucegypt.edu/BAE2013

**Ploughing Ahead – Technological, socio-economic and environmental developments in Old World ploughing** colloquium at the University of Oxford, United Kingdom.
contact: ploughing.ahead@gmail.com
farmingunearthed.wordpress.com/ploughing

**Not just for show: The archaeology of beads, beadwork, and personal ornaments, Ancient DNA and zoooarchaeology, and Both meat and meaning** sessions at the 78th Annual Meeting of the Society for American Archaeology (SAA) in Honolulu, Hawaii, USA.
contact: choyke@ceu.hu • cmdarwent@ucdavis.edu
http://www.saa.org