ICAZ is pleased to announce the launch of a new Working Group: the Microvertebrate Working Group (MVWG). It has been proposed by Sara E. Rhodes and Angel Blanco-Lapaz, from the Institut für Naturwissenschaftliche Archäologie, Universität Tübingen. The group will be a forum for the exchange of data and information related to the study of insectivore, rodent, bat, reptile and amphibian remains from archaeological deposits and will be active in increasing communication between academics, professionals, and graduate students with research interests related to microvertebrates. More information is available at http://alexandriaarchive.org/icaz/workmicrovertebrate.

Contributed by Christine Lefèvre, ICAZ Secretary

After approval by the ICAZ International Committee, we are very pleased to welcome a new working group on microvertebrate remains.
ICAZ Executive Committee

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terry.oconnor@york.ac.uk

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About the Newsletter

ICAZ welcomes submissions to its biannual newsletter. E-mail submissions to the editor, Angela Trentacoste. The annual deadlines are April 15 for volume 1 and October 15 for volume 2. Past issues of the newsletter can be downloaded from the Publications section of the ICAZ Website http://www.alexandriaarchive.org/icaz.

Editor
Angela Trentacoste, UK (ICAZNewsletter@gmail.com)

Assistant Editor
Idoia Grau Sologestoa, UK (ICAZNewsletterAssistant@gmail.com)
Dear ICAZ Members,

Although it may be hard to believe, it's over 18 months since ICAZ met in San Rafael. Good conferences have a legacy, and ICAZ2014 lives on in our memories, in the happy photographs that brighten our laptops, and in the publications that are now appearing. Some conference sessions have chosen to appear as a single volume, whilst others have placed papers in appropriate journals. Either way, the conference has succeeded in delivering a new wave of research. As well as the published results, ICAZ2014 was an opportunity for colleagues to meet and to make new collaborations. If you developed a new research collaboration or project directly as a result of meeting colleagues at San Rafael, tell us about it. It would be good for ICAZ to document some of the less obvious outcomes of our conferences. And pictures that tell a good story are always welcome for the Newsletter.

Speaking of conferences, here in the UK, winter saw the annual meeting of the Theoretical Archaeology Group – TAG – a body dedicated to discussing the theoretical basis of our exploration of the human past. One of the 2015 sessions invited papers on the application of new analytical techniques to the field of environmental archaeology, specifically whether these new methods have led to greater fragmentation of the discipline. Has this happened in zooarchaeology? The last decade or so has seen a dramatic expansion of gadgets and techniques applied to old bones. Ancient DNA is the most obvious, with an extraordinary range of questions now opening up. Stable isotope analysis has been around for some time, but recent years have seen some great advances in interpretation, getting beyond the simple dietary models of a decade ago. For those of us raised on Vernier calipers, the field of geometric morphometrics (GMM) is really exciting, enabling much more sophisticated analysis of size and shape. Fans of GMM, incidentally, might like to hunt out works by the remarkable D’Arcy Wentworth Thompson (1860-1948), who tried to invent something like GMM long before either the techniques or the language to express them existed. Despite these developments, zooarchaeology seems not to be fragmenting in the way that concerns the TAG session. Maybe this is because our research is driven by questions and propositions about animals and people in the past, and the equipment and analytical techniques are just a means to that end, a way of getting information. So long as we keep animals at the centre of what we do, we will always have something to discuss with each other. As the 2014 Conference showed, it is not difficult to get a roomful of zooarchaeologists to talk!

Our website continues to grow and become more beautiful. One recent addition is the page ‘ICAZ Remembers’, a sad necessity where we can note the passing of colleagues and give links to published obituaries. At the time of writing, we have a short note regarding Juliet Clutton-Brock, one of the ‘found- ing generation’ of ICAZ, and a great support and inspiration to many of us who trained in zooarchaeology in the UK. Those of us who benefitted from Juliet’s rigorous encouragement, and Japanese colleagues who learned from the late Akira Matsui or Dutch colleagues who studied under Anneke Clason, will understand the importance of senior figures encouraging the next generation. The concept of ‘paying it forward’ is a bit of a cliché, but it is quite appropriate in academic circles as we repay the debt of gratitude that we owe to people such as Juliet and Antje by supporting and encouraging our younger colleagues. Juliet’s own reflection on her career appears in this Newsletter.

The last twelve months have seen huge areas of Indonesia burning, important sites in the Middle East being destroyed and people in many parts of the world suffering the consequences of military conflict and exile. Faced with all of that, it would be easy to think that academic study is of little real significance. However, the long story of people and other animals has carried on through worse (even) than the present situation. Our pursuit of that story is a way of acknowledging that even the most serious of global challenges will eventually resolve, and that the furtherance of knowledge will be a part of that continuity. Conferences play their part in this, too, bringing people together for social as well as academic exchanges. On that more positive note, I am looking forward to a walk in the woods, then some time on a cave excavation. Whether you are currently enjoying Spring or Fall, I hope that it brings you rest and enjoyment.

Sincerely,

Terry O’Connor
ICAZ President
Check out ICAZ’s New Membership Site!

Contributed by Sarah Kansa, ICAZ Vice President and Web Administrator

ICAZ has a new membership portal! Check it out by going to the following link and clicking on “renew password” (using the email address where you received this newsletter): http://alexandriarchive.org/icaz/membership-join

Once you’ve logged in, you may:
• check on your membership status
• renew your membership
• update your contact information and interests
• search for other ICAZ members and their interests

Please send feedback on the new site to: skansa@alexandriaarchive.org

Abbreviated Treasurer’s Report

Contributed by Pam Crabtree, ICAZ Treasurer

May 15, 2016

This is a short version of the Treasurer’s report, and a full version will appear in issue 2 of the 2016 Newsletter. The good news is that ICAZ is in excellent financial shape, and the new and revised website is up and running.

Here is a short list of our expenses since the 2014 meeting in Argentina:

<table>
<thead>
<tr>
<th>Expense</th>
<th>Paid to</th>
<th>Purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td>$1,760.50</td>
<td>Alex. Archive</td>
<td>Full web update</td>
</tr>
<tr>
<td>$2,000</td>
<td>Sarah Kansa</td>
<td>Web maintenance</td>
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<tr>
<td>$1,000</td>
<td>A. Trentacoste</td>
<td>Newsletter</td>
</tr>
<tr>
<td>$15</td>
<td>Sovereign Bank</td>
<td>Bank Fee</td>
</tr>
<tr>
<td>€680 by Paypal</td>
<td>Andreas Walter</td>
<td>Web Development</td>
</tr>
</tbody>
</table>

In addition, we received $1700 back from the organizers of the 2014 conference in Argentina. The money was given to me in cash at the 2015 SAA, and I deposited the money into our Sovereign account.

We have e-mailed all our members whose memberships have lapsed, and we are currently in the midst of a membership drive.

| Sovereign Bank | $37203.70 | $37203.70 |
| Natwest Euro   | €5088.56  | $5756.29  |
| Natwest USD    | $22,108.41| $22,108.41|
| Natwest Sterling| £4555.18  | $6539.81  |
| Total cash on hand: | $71608.21 |
Archaeomalacology Working Group
http://www.archaeomalacology.com/

Contributed by Daniella E. Bar-Yosef Mayer, Tel Aviv University (baryosef@post.tau.ac.il)

The most recent meeting of the AMWG was organised by Annalisa Christie and took place in Kirkwall, Orkney, UK, 5th – 9th April 2016 (it followed the meeting of the Association for Environmental Archaeology in the same location).

Themes included:
• Current research in archaeomalacology
• Socio-cultural value of shells
• Shells as raw material
• Archaeomalacological methodologies
• Taxonomy, classification and quantification
• Palaeo-environmental studies

Daniella Bar-Yosef from Tel Aviv University’s Steinhardt Museum of Natural History is the WG’s liaison to ICAZ. Please contact me (baryosef@post.tau.ac.il) if you would like to join the group. Kat Szabo from University of Wollongong, Australia, continues to serve as webmaster (http://www.archaeomalacology.com).

Please also visit our FB page (Archaeomalacology Working Group) and consider a contribution to our newsletter by writing to Annalisa (amwg.icaz@gmail.com).

Fish Remains Working Group
http://waihinga.ac.nz/foss/ICAZ/

Contributed by László Bartosiewicz (WG Liaison), Stockholm University (bartwicz@yahoo.com)

The 18th meeting of the Fish Remains Working Group took place in Lisbon between 28 September and 3 October. It was hosted by Sónia Gabriel and her dedicated team at the Archaeosciences Laboratory (LARC) of the Directorate General of Cultural Heritage and the Environmental Archaeology Research Group of the Research Centre in Biodiversity and Genetic Resources.

The title of the conference was “Fishing through time: Archaeoichthyology, Biodiversity, Ecology and Human Impact on Aquatic Environments” and the abstracts were published as volume 8 in the series Trabalhos do LARC, edited in the laboratory. The conference logo was the drawing of an Upper Paleolithic rock carving of a fish from the site of Penascosa 5, Côa Valley, Portugal (Figure 1).

The venue was the atmospheric old building of the Lisbon Geographical Society (founded in 1875) near the old city centre (Figure 2). In addition to the elegant, plush-seated lecture room of perfect size (Figure 3), the spacious dining area where coffee and buffet lunches were served provided an excellent social arena (Figure 4). Ideas tend to be profitably exchanged over delicious food and drinks - a key anthropological phenomenon not to be underestimated - and the conference again radiated the warm, informal atmosphere so characteristic of this oldest of the ICAZ working groups. This was not simply the impression of long-committed members. It was also noted by the numerous newcomers; several young scholars and some senior participants who took part in a FRWG meeting for the very first time.

This meeting mustered work from 120 participants and contributors in the form of 42 oral presentations and 16 posters. Only two of the presentations had to be cancelled: the program thus remained rich and tight. It consisted of the following relatively short (4-6 presentations long) thematic sessions:

1 – Taxonomy and Molecular Analysis
2 – Cost - Oceans Past Platform (OPP)
3 – Roman Fisheries, and Fish Products
4 – Fish, Ritual, Feasting, and Social Status
5 – Morphometry and Osteometry
The largest was Session 7, sub-divided into presentations by continent (1: South America and the Caribbean; 2: North America, Alaska and Asia; 3: Europe). Session 10 included poster presentations of diverse topics.

To the credit of Sónia and the scientific committee, this high resolution structure helped arrange the rich variety of topics into a sequence in which ideas seamlessly followed each other, making it extremely easy to carry on discussing new ideas for three long days in a row. It was unsurprising but very reassuring to see that the meeting was distinctly international both in terms of the participants (who represented 26 countries) and research carried out on five continents (Figure 5, top). While topics from Europe dominated and papers from Africa and Australia were underrepresented, the conference reflected the geographical diversity of our working group. The chronological distribution of presentations was far more even. Aside from “Holocene” summaries and a few miscellaneous papers with no emphasis on the time period, the meeting included comparable proportions of papers ranging from prehistoric to post-medieval times (Figure 5, bottom).

What I found particularly striking was the rich, interdisciplinary diversity of the presentations that could be summed up by three “i”-s: ichthyology from isotopes to imagery. As if fish bones in themselves were not interesting enough to talk about, elaborate and exciting details were provided on a number of associated topics from salt production through amphora typology and 18th-19th century artwork in North America (Figure 6), making the ensuing discussions all the more exciting. Functional parallels could be revealed be-
tween geographically distant areas and cooperation could be fostered between individuals and groups working side by side.

One new initiative of potential interest to archaeozoologists is the Oceans Past Platform (OPP), a research network sponsored by the European Cooperation in the field of Scientific and Technical Research (COST). The overall network is led from Trinity College Dublin (https://www.tcd.ie/history/opp), and a working group regarding the study of coastal settlements and fish bones is coordinated by James Barrett (Cambridge) and Lembi Lõugas (Tallinn). A short video introducing the aims of the group is online at https://www.youtube.com/watch?v=F-pL3qywegM. The OPP is intended to be an enabling platform, with funding in support of workshops and short-term research visits between participating European countries. Inquiries can be directed to James (jhb41@cam.ac.uk) and Lembi (lembilogs@tlu.ee).

Andrew Jones is working on a project titled Fishstory is an attempt to tell the public what we know about the way humans have interacted sustainably with populations of aquatic animals for millennia and is looking for information, images, and other help from ICAZ members.

Most serious impacts have occurred since the introduction of steam trawlers during the last few decades if the 19th century CE. Over the last 150 years we have seen serious declines in many populations of food fishes and other organisms as humans have harvested fish faster than they can reproduce and, at the same time, we have polluted or destroyed habitats for juvenile animals. Fishstory tells of this decline, but offers a hopeful message because fisheries scientists know what levels of exploitation are sustainable and environmental scientists understand how marine no take zones and other conservation measures can enable us to continue to live in harmony with healthy populations of wild animals.

Andrew Jones is also hoping to establish an international team of archaeologists, zoologists, historians and fisheries scientists to collaborate with molecular biologists to investigate Mediterranean fish populations. Already there are many samples of scales and bones from excavations in Pompeii, Herculaneum and a host of other sites which would benefit from innovative techniques now being used by archaeologists. For example, by using a combination of stable isotopes and aDNA, it is now clear that King Henry VIII was sourcing dried cod from three different fish populations in the 16th century CE. Proteomics has been used to distinguish bone fragments from different species of gadid and cyprinid fishes as well as identifying to species small fragments of avian shell recovered from archaeological sites. It is hoped that the project team will build a virtual reference collection using 3D laser scanning of selected bones of reliably identified food species. Small, medium and large individuals of each species will be sourced with the help of experienced fisheries biologists around the Mediterranean. The team will hold a series of project meetings, workshops and develop the next generation of archaeoichthyologists by recruiting a number of postgraduate bioarchaeologists to PhD programmes throughout Europe.

At the end of the abstract book prepared for the Lisbon conference, Sónia carefully compiled a table of basic data characterizing the development of the FRWG ever since its first meeting in Copenhagen in 1981. I analyzed these numbers in

![Figure 5: The representation of continents (top) and archaeological periods (bottom) by pooled oral and poster contributions presented at the 18th FRWG meeting (after Trabalhos do LARC 8).](https://commons.wikimedia.org/wiki/File:Schweinsfisch.jpg)

![Figure 6: Hogfish (Lachnolaimus maximus Walbaum, 1792) by Mark Catesby, 1725.](https://commons.wikimedia.org/wiki/File:Schweinsfisch.jpg)
order to offer a glimpse on the state of our organization. The generally increasing trend of attendance shows some oscillations, the three largest conferences attracting over 70 participants having recently been held in Europe. The numbers of participants show only a slight reduction during a period of four meetings between 1997 and 2003, when four conferences in a row took place outside Europe (Figure 7, top). However, the average number of participants at 13 meetings in Europe (mean=45.8, standard deviation=21.0) was not significantly different from those at the five conferences organized in other continents (mean = 49.2, standard deviation=10.6; P=0.740). Even if parameters in Europe are influenced by earlier, small FRWG meetings, I find this trend encouraging in terms of our shared effort to promote and maintain the global character of ICAZ. The number of presentations plotted as a function of attendance shows a somewhat regressive trend: more participants tend to be involved in preparing fewer presentations (Figure 7, bottom). Meetings held outside Europe fit smoothly within this main trend. The smaller number of posters displays a linear increase. Interestingly, no posters were presented at three conferences far away from Europe, although this could be a good way of somewhat balancing selective geographical representation.

The observation in Figure 4 that more participants prepare relatively fewer presentations was further studied in the case of the Lisbon meeting. Figure 8 shows the distribution of all contributions by the number of co-authors involved. Regardless of the physical absence of entire teams from the meeting, many contributions—especially those dealing with the most numerous Prehistoric and Medieval topics—show the involvement of numerous experts. This team work indicates methodological advancement as well as increasing interest on the part of excavating archaeologists. This positive trend became very clearly visible in the session discussing Roman fisheries and fish products.

To everyone’s satisfaction, the host institution offered to have the proceedings of this meeting published in the monographic series of the Directorate General of Cultural Heritage Trabalhos de Arqueologia. This is a very important gesture as an edited volume will help keeping the wealth of papers together. Authors will be informed of submission details in due time.

The next FRWG meeting was kindly invited by Barbara Wilkens and Gabriele Carenti to Sassari University on the island of Sardinia. Our next conference will thus have the honour to become the first ever ICAZ meeting organized in Italy, a country of respectable achievements in archaeozoology.

It would be unfair to even try to compare FRWG biennial conferences to one another in qualitative terms. They have been taking places at a great variety of venues, and the only constant elements linking them have been the high level of academic discourse and the often mentioned amiable, family-like style. Scholarly quality and positive attitudes work synergistically during these meeting as well as the two years separating them.
The Neotropical Zooarchaeology Working Group (NZWG), created in 2010, is focused on the particularities of human-animal interactions and the resulting record in the Neotropics - the biogeographic region ranging from southern North America to southern South America and adjacent islands - through time. Aimed at keeping researchers and students interested in these subjects in touch, it runs several activities.

Since our last report in ICAZ Newsletters, we have been editing a volume with some of the papers presented at the Second Academic Meeting of the NZWG, held within the ICAZ 12th International Conference in San Rafael, September 2014. The volume will be published by Springer in their Environmental Science and Paleobiology program.

We were glad to sponsor the III Encuentro Latinoamericano de Zooarqueología (III ELAZ), which was held in Aracaju-SE; Brazil, March 1-3, 2016. There on March 3 we held a workshop on zooarchaeology laboratories. We are also organizing the 3rd Academic Meeting of the NZWG in Montevideo, Uruguay, in 2017, under the coordination of Dr. Laura Beovide.

As proposed in San Rafael, the Red Latinoamericana de Laboratorios de Zooarqueología (REDLABZ) has been associated to the NZWG. As part of this new development, we are now undertaking a survey on osteological and other guides for Neotropical faunas. You are invited to participate! Please access it here: http://goo.gl/forms/eWH2BKMHvH - it will take only a couple of minutes.

Finally, NZWG Newsletters No. 6 and 7 were issued recently. The Newsletters and all the info on the Working Group can be found at the NZWG web page: www.alexandriaarchive.org/bonecommons/exhibits/show/nzwg.

We invite researchers and students interested in zooarchaeology in the Neotropics to join the NZWG. Become one of the more than 200 members! You just need to email us at nzwg.icaz@gmail.com. Please spread the word!

Contributed by Mariana Mondini, Museo de Antropología UNC-CONICET, Córdoba (mmondini@filo.uba.ar)

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ICAZ NZWG Coordinators, nzwg.icaz@gmail.com:

Pablo M. Fernández, NZWG Coordinator (CONICET-INAPL, Argentina, pfernand@retina.ar)

Mariana Mondini, NZWG Coordinator & Liaison (CONICET/UNC-UBA, Argentina, mmondini@filo.uba.ar)

A. Sebastián Muñoz, NZWG Coordinator & Liaison (CONICET-UNC, Argentina, sebas.munoz@gmail.com)

Elizabeth Ramos Roca, NZWG Coordinator (Universidad de los Andes, Colombia, eramosroca@uniandes.edu.co)

Contributed by Mariana Mondini, Museo de Antropología UNC-CONICET, Córdoba (mmondini@filo.uba.ar)

Contributed by Silvia Valenzuela (s.valenzuela@sheffield.ac.uk) and Umberto Albarella (u.albarella@sheffield.ac.uk), University of Sheffield

Following our meeting in Sheffield in November 2014, a selection of presented papers will be published as a monographic issue of the European Journal of Archaeology with the title: “Husbandry in the Western Roman Empire: a zooarchaeological perspective”. The volume will provide updated regional reviews of different provincias, and will bring together approaches and research questions that affect different geographic areas in the Western Roman Empire, analyzing parallel trends as well as differences between regions. The volume promises to provide a valuable framework of reference for future research in Roman archaeology.

In addition, members of the WG have been invited to contribute to the database of zooarchaeological references on the Roman Empire of the Oxford Roman Economy project (liaison: Angela Trentacoste; PI: Andrew Wilson). This bibliography is now available on-line: http://oxrep.classics.ox.ac.uk/bibliographies/zooarchaeology_bibliography/

If you know about regional reviews or you have a case study on faunal remains dating from the Roman period, please, send Angela the reference to be included in the list (angela.trentacoste@classics.ox.ac.uk).
Moreover, several RPWG members contributed to the internal workshop of the Bioarch network dealing with Late Antiquity and the Early Middle Ages (November 2015). The workshop took place in Brussels, with a focus on subsistence strategies in times of socio-economic changes at the transition from Antiquity to the Middle Ages in the Roman world (organisers: Fabienne Pigière, Elena Marinova, Bea De Cupere, Örni Ak- eret, Sabine Deschler-Erb, Marie-Pierre Ruas and Jean-Hervé Yvinec).

Last but not least, the organization of the next WG meeting in Basel is taking shape and will happen from the 2nd to the 4th February 2018 (note the date in your diaries!). More details will follow in forthcoming Newsletters.

Finally, if you want to be involved in the Working Group, please, drop an email either to Silvia or Umberto (s.valenzuela@sheffield.ac.uk / u.albarella@sheffield.ac.uk). The group in particular needs more people working in the Eastern Roman Empire so, if this is your area of expertise, please do consider joining us.

Stable Isotopes Working Group  
http://sizwg.wordpress.com

Contributed by Suzanne Pilaar Birch, University of Georgia (sepbirch@uga.edu)

The inaugural meeting of the Stable Isotopes in Zooarchaeology Working Group, with the theme “Data Management and New Directions”, took place at the University of Georgia, in Athens, GA, USA, 3-5 March 2016. There have been several advances in research since the founding meeting in Cambridge in 2012, and the working group itself has grown to over 100 members. About 35 people attended the meeting in March. The majority of participants were from the US and Canada, but we also had colleagues from Europe and Australia in attendance.

The first day of the meeting was comprised of talks on topics ranging from applications of stable isotopes from faunal remains as indicators of migration, climate, landscape variability, and marine systems to sclerochronology and sampling methods. On day two, the morning session focused on the functioning of the Neotoma database (neotomadb.org) and the new stable isotope data repository structure within it.
afternoon, participants toured the UGA Archaeology Lab, the Georgia Museum of Natural History Zooarchaeology Lab, and the Center for Applied Isotope Studies, followed by a reception at the museum. The third day of the meeting returned to talks, this time considering some of the issues and challenges in applying stable isotope analysis to zooarchaeological questions, particularly those of a more anthropological nature. A final discussion session covered plans for publication, the future of data sharing and monitoring, and potential venues for future meetings. Further updates on SIZWG activities, the meeting program and proceedings publication, and the launch of the stable isotope database in Neotoma can be found on our new comprehensive website at zooarchisotopes.com or by joining the mailing list. We look forward to seeing everyone again at the ICAZ general meeting in 2018!

Contributed by Ana B. Marín-Arroyo, Universidad de Cantabria (anabelen.marin@unican.es)

Since it was created in the Fall 2009, the TWG has already organized 3 meetings and published its proceedings in peer-review journals such as International Journal of Osteoarchaeology in 2012 (v.22:5), Quaternary International in 2014 (vol.330) and Archaeological and Anthropological Sciences (in press - expected in 2016). In October, the first call to the 4th meeting has been sent to all the members of the group and colleagues. Jean-Philip Brugal and Christiane Denys will be the organizers of this new event dedicated to Andrew Hill that will be held in Paris, 7-9th, September 2016 at the Grande Galerie de l’Evolution (Muséum National d'Histoire Naturelle). Recently, a webpage has been created to update about the news, projects and publications of the group. You can see more in: https://taphonomyworkinggroup.wordpress.com.

Please contact the Coordinator and Liaison if you are interested in becoming a member of the TWG: Ana B. Marín-Arroyo anabelen.marin@unican.es.

Contributed by Alice M. Choyke, Aquincum Museum/Central European University (choyke@ceu.hu)

The next meeting of the Worked Bone Research group will take place in Romania, between Monday 23rd May and Saturday 28th May, 2016. The meeting will be hosted by Alexandru Ioan Cuza University of Iasi in partnership with the Institute of Archaeology in Iasi and the Moldova National Museum Complex. So far, 25 people have signaled that they intend to attend. The preliminary program includes three days of oral and poster presentations, an initial excursion to prehistoric sites situated in northeastern Romania, as well as a final excursion to Chişinău in the Republic of Moldavia, including visits to museums and a workshop, organized under the aegis of Ion Creanga State Pedagogical University. The short workshop within the context of the meeting represents an innovation for this group. The subject of the workshop concerns possible soaking, chemical and heat preparation of bone and antler prior to working. Dr. Eva David will guide the discussion. Dr. Luminita Bejenaru (lumib@uaic.ro), who is organizing this meeting, plans to publish the Proceedings of the 11th Worked Bone Research Group (WBRG) Meeting of the International Council for Archaeozoology (ICAZ) in a peer-reviewed volume.

Dr. Selena Vitezović, who organized the last meeting (the 10th) in Belgrade, Serbia, will submit the manuscript for the peer-reviewed proceedings volume at the end of this year. It contains over 30 papers covering periods from the Mesolithic through the post-medieval periods. The volume will be published by the Institute of Archaeology in Belgrade. We are all looking forward to what is sure to be a fantastic volume given the quality of the papers that were presented at the meeting itself.

Finally, the proceedings of the 9th Worked Bone Research Group meeting in Zhengzhou China in 2013 were published in late 2014. The bi-lingual Chinese-English language volume is entitled Zooarchaeology Volume 2, and it was edited by the Henan Provincial Institute of Cultural Relics and Archaeology. The publisher is Cultural Relics Press, Beijing. As usual, the 11 papers present a nice mix of site materials; these range from Asia into Europe and from the Mesolithic through the Roman periods. Excitingly, five of the papers deal explicitly with fascinating prehistoric Chinese worked osseous materials, which until this volume have been vastly under-represented in the scholarly literature.
More news on the academic programme and logistics of ICAZ 2018 International Meeting will be released in the coming months. In this issue, however, we are able to highlight the fantastic history and archaeology of the region. With this rich cultural heritage, ICAZ 2018 is sure to offer a wealth excursion opportunities!

Contributed by Evangelia Pişkin and Ezgi Sevimli, Middle East Technical University (METU)

King Midas can be considered as the king of mishaps and poor judgement. Myth has it that he was granted a wish by Dionysus, and what did he wish for? “I want everything I touch to turn into gold”. Known as the “Midas touch”, it sounded like a good thing at first, until he realized that there were many things he needed to touch that he wouldn’t want to be made of gold - for example, his food or his beloved daughter. Later, when he was called upon to judge between the music of Apollo, the god, and that of Pan, he again made a poor choice and choose Pan. Apollo was furious at his judgement and decided that Midas needed a better hearing apparatus, so Apollo gave him a pair of ass’s ears.

That is what the myths say; however, these may have been rumors spread by Midas’s enemies. His subjects more likely had a much better opinion of him, if we were to judge from the tumulus that was said to contain his remains (although recent research has shown it to be the grave of an earlier king). Another royal burial can be seen about 90 km away from Ankara. Exceptionally good conditions of preservation saved even the wood used to build the burial chamber (Fig. 1), the tables set out for the funeral banquet, and a plethora of burial gifts. Organic residues inside the plates and cups used were shown to contain a stew of lentil and lamb and a punch made of wine, beer, and mead.

The tumulus is located a few hundred meters away from Gordion, the capital of ancient Phrygia. According to another myth, the city was founded by Gordias, Midas’s father whilst Ancyra (Ankara) itself was founded by Midas. This is where Alexander the Great drew his sword and sliced in two the “Gordion knot”. The knot was connecting Gordias’s ox-cart to a pole in the middle of the city, and the oracle had prophesied that whoever could undo the knot would become the...
ruler of Asia. Years of excavation by the University of Pennsylvania Museum have revealed the city’s monumental gates, a palace, workshops, and domestic quarters (Fig. 2). Around the city there is an extensive necropolis with about a hundred tumuli where the aristocracy of this Iron Age society lie buried. The largest tumulus is about 53 m height. The city was also the subject of a zooarchaeological study by Zeder and Arter (1994).2

And this is not the only impressive sight in the region related to the Phrygians. Some 100 km away from Gordion, lies the “Midas city”, a beautiful, breath-taking place on an elevated rock outcrop strewn with cultic sculptures, aniconic idols, rock-cut structures, stepped monuments, tombs, and a huge rock-cut façade called the “Midas monument” (Fig. 3). It bears inscriptions, including the name of Midas and the word “matar”, which is taken to mean Kybele, the Iron Age successor of the ancient “mother goddess”.3

Between Gordion and Midas city lies the ancient city of Pessinus where the cult of the Kybele is said to have been practised. Large scale excavations there have revealed a theatre (Fig. 4) and temple, a colonnaded square, and many domestic contexts.4

Another great city of Phrygia is Kerkenes Dağ, about 200 km from Ankara.5 It is the largest pre-Hellenistic city in Central
Turkey, and its walls enclose 2.5 km² of inhabited space.

Geoffrey Summers, a former professor at Settlement Archaeology at METU, was director of the largest remote sensing study in Turkey - a project that aimed to fully map the city without destructive excavation. The scale and inventiveness of it gained Summers a MBE for services to British archaeological research in Turkey and a Rolex Award for Enterprise. Limited excavation revealed traces of the palace, parts of the monumental defence walls, and the impressive gates to the city (Fig. 5). The animal bones were studied by E. Pişkin at METU, and their reports will be part of two volumes (in press) presenting the site. The most curious bone find can be seen in Figure 6. Finally, at Kerkenes, an ivory plaque was unearthed showing in beautiful detail goat and sheep and a fallow deer (Fig. 7).

To be continued………….. ■

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1 You can see a reconstruction of the burial in the Museum of Anatolian Civilisations in Ankara. The Museum of Anatolian Civilisations hosts a large number of some of the most important finds in Turkey from the Palaeolithic to Ottoman times. The building itself is of early Ottoman date (15th AD). It was built by Mahmut Pasha, one of the ministers of Mehmet II the Conqueror. The museum was elected as the “European Museum of the Year” in 1997. To see more, at the museum’s website http://www.anadolumedeni-eterimuzesi.gov.tr/ click on “Mûze Hakkında”, then “Sanal Gezinti”. A page will open and then you click on Sanal Gezinti için tıklayınız” and you have the option of seeing all in and around the museum. Every red dot on the map takes you to a short video tour from that viewpoint. The burial reconstruction is under the section “Frigler”. Reports on the finds and food residue analysis of the Royal burial at Gordion can be found on the website of Penn museum http://www.upenn.edu/pennnews/current/node/1057 and http://www.penn.museum/sites/midas/intro.shtml


4 http://www.archaeology.ugent.be/pessinous/node/1

5 http://www.kerkenes.metu.edu.tr/kerk1

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Figure 6. Part of the most interesting bone from Kerkenes!

Figure 7. Ivory plaque from Kerkenes.
Thanks not least to the work of the late Anneke T. Clason, founding member of ICAZ, the University of Groningen in the Netherlands has long been a home for important meetings of our organization. She hosted the 2nd International Conference of ICAZ in 1974. The 3rd Fish Remains Working Group meeting also took place here 30 years ago in 1985. The junior co-organizer of that conference, the “real” fish person, was Dick Brinkhuizen. (Since then, two Working Group meetings of ASWA and one of the BWG were also held here.)

The lively and warm-hearted community of local archaeozoologists recently came up with the idea to honour Dick and the four decades he has spent researching fish remains from archaeological sites (Fig. 1). An author of significant scholarly publications and a well-known academic “scavenger” of rare species at the sizeable Groningen fish market, Dick has been a solid point of orientation in archaeoichthyology. Some 50 colleagues, friends and family gathered in the first floor lecture room of the ultramodern reception pavilion of the University Museum (Fig. 2), where the small international symposium took place on 11 November 2015.

The scientific programme included a short welcome by Jørn Zeiler and Wietske Prummel and continued with 20 minute lectures on fascinating fish mummies (Wim van Neer), Danubian sturgeon (László Bartosiewicz) and Roman Period fisheries in the Netherlands (Monica Dütting). Two of Dick’s other passions were also discussed in the programme: the Neanderthal world (Marcel Niekus) and birding in Galapagos (Dušan Brinkhuizen). The name of the last speaker may look
III Encuentro Latinoamericano de Zooarqueología

Contributed by Albérico Nogueira de Queiroz, Universidade Federal de Sergipe-UFS and Sebastián Muñoz, IDACOR-CONICET/Universidad Nacional de Córdoba

The III Latin American Meeting of Zooarchaeology (ELAZ) was held from March 1st to 3rd, 2016 in the city of Aracaju, Sergipe State, Brazil. The three-day meeting brought together researchers and students from Argentina, Brazil, Chile, Ecuador, Mexico, Peru and Uruguay, who shared results and research questions on human animal interactions in the American continent as well as related methodological issues. The event had 129 registrations with representatives from 12 American countries: Argentina (25), Bolivia (1), Brazil (78), Canada (1), Chile (7), Colombia (2), Ecuador (2), Mexico (5), Panama (1), Peru (3), United States (1), Uruguay (3).

The opening lecture, by Dr. Isabel Cartajena, was on submerged archaeofaunal records in different settings. It was followed by a variety of oral and poster presentations that included vertebrate and invertebrate archaeofaunas from a broad array of places and chronologies. The next meeting will take place in Río Gallegos city (Argentina) next November 2018.

The Organizing and Academic/Scientific Committees were constituted by: Dr. Albérico Nogueira de Queiroz, Dr. Olivia Alexandre de Carvalho, MSc. Jaciara Andrade Silva, PhD Student (Universidade Federal de Sergipe, Departamento de Arqueologia, Laboratório de Bioarqueologia, Brazil), Dr. Suely G. Amâncio Martinelli (Universidade Federal de Sergipe, Departamento de Arqueologia, Laboratório de Arqueologia da Paisagem e Identidade Cultural, Brazil), Dr. Cristiana de Cerqueira Silva Santana (Universidade do Estado da Bahia, Campus VII, Laboratório de Arqueologia e de Paleontologia, Brazil), Dr. Rosa Cristina Corrêa Luz de Souza (Universidade Federal Fluminense, Instituto de Biologia, Depto. de Biologia Marinha, Laboratório de Genética Marinha e Evolução, Brazil), Dr. Caroline Borges (Muséum National d’Histoire Naturelle, UMR Archéozoologie et Archéobotanique, France/Universidade Federal de Pelotas, Departamento de Antropologia e Arqueologia, Brazil), Dr. Andrés Sebastián Muñoz, Dr. Nora
Mariana Mondini (Universidad Nacional de Córdoba, CONICET-Museo de Antropología, Laboratório de Zooarqueología y Tafonomía de Zonas Áridas, Argentina), Dr. Pablo Marcelo Fernández (Universidad de Buenos Aires, CONICET-Instituto Nacional de Antropología y Pensamiento Latinoamericano, Argentina), Dr. Isabel Cruz (Universidad Nacional de la Patagonia Austral, Argentina), Dr. Guillermo Luis Mengoni Goñalons (Universidad de Buenos Aires, Facultad de Filosofía y Letras, Instituto de Arqueología, CONICET, Argentina), Dra. María Isabel Cartajena (Universidad de Chile, Facultad de Ciencias Sociales, Departamento de Antropología, Chile), MSc. Boris David Santander Pizarro, PhD Student (Departamento de Antropología, Universidad Alberto Hurtado, Chile), Dra. Elizabeth Ramos Roca (Departamento de Antropología, Universidad de Los Andes, Colombia), Dra. Amelia Sánchez Mosquera (Consultora en Patrimonio Cultural, Ecuador), Dr. Joaquín Arroyo-Cabrales (Instituto Nacional de Antropología y Historia, Subdirección de Laboratorios y Apoyo Académico, Laboratorio de Arqueozooología, México), Dr. Eduardo Corona-M. (Instituto Nacional de Antropología y Historia, Centro INAH Morelos, México), Dra. Laura Beovide (Museo Nacional de Antropología, PIAAD, DICYT, MEC, Uruguay).

Organization: LABIARQ/DARQ/UFS, OCT-EVENTOS.

Institutional Support: ICAZ, NZWG/ICAZ, LaZTA, CAJUFS, PARANÂ-BUC.

Financial Support: CAPES, BETA ANALYTIC, ARCHAEO Bones.

The III ELAZ website and Facebook page are available online: http://www.octeventos.com/elaz/ and https://www.facebook.com/IIIELAZ

End of the III ELAZ (March 03rd, 2016)
Postgraduate Zooarchaeology Forum 2017

Contributed by Mikolaj Lisowski (mikolaj.lisowski@gmail.com)

After five successful conferences, the sixth Postgraduate Zooarchaeology Forum (PZAF) will be held in Toruń, Poland, 23rd-25th March 2017. PZAF is a supportive environment for postgraduate students and early career professionals to present their research and to meet people with similar research interests. Founded in 2009 by Richard Madgwick and first held in Cardiff in 2009, further PZAF events have been hosted in Paris in 2010, Sheffield in 2012, London in 2014, and Tarragona in 2015.

PZAF2017 will be an informal conference allowing attendees to gain presentation experience and network with fellow zooarchaeology researchers before larger conferences such as ICAZ.

We welcome submissions relevant to zooarchaeology from all stages of research (preliminary to completed) and all chronological and geographical locations. Whilst oral and poster presentations will be limited to postgraduate students and early career professionals, we encourage the wider academic and professional community to attend to maximise cross-fertilisation of knowledge.

The deadline for abstract submission is 1st October 2016.

All the information is available at our website: http://pzaf2017.wordpress.com/. For any enquiries, please e-mail pzaf2017@gmail.com.

6th Animal Palaeopathology Working Group Meeting | 26-29 May 2016
Budapest, Hungary

Contributed by Erika Gál (gal_erika@yahoo.com)


The preliminary program includes three days of meetings, paper and poster presentations, a visit to the Faculty of Veterinary Science in Budapest, and an excursion to Szentendre and/or Visegrád along the Danube.

For information on the APWG, visit: https://animalpalaeopathologywg.wordpress.com
The Laboratory for Bioarchaeology was established in 2008, on the initiative of professor Dr Vesna Dimitrijević, the head of archaeozoological studies, and professor Dr Sofija Stefanović, the head of physical anthropology studies at the Department of Archaeology, Faculty of Philosophy, University of Belgrade. The Laboratory was conceived as a teaching and research unit of the Department of Archaeology, integrating lectures and research. Ongoing research includes macroscopic and microscopic analyses of human and animal remains from archaeological sites and collaborations with various institutions equipped for DNA, stable isotope and lipid analysis. Future plans of the Laboratory also include the establishment of archaeobotanical studies and research.

The Laboratory organizes teaching and practical classes in the fields of archaeozoology and physical anthropology at BA, MA and PhD levels. Recent and ongoing PhD projects cover a wide range of topics related to various time periods and cultural contexts. Archaeozoological PhD projects span from the study of Palaeolithic hunter-gatherer subsistence strategies and taphonomic processes affecting faunal assemblages from cave deposits, fishing in the Mesolithic-Neolithic Danube Gorges, the differences in subsistence strategies in the Early and Late Neolithic periods in Serbia, the strategies of exploitation of domestic animals and the exploitation of “secondary products” from the Neolithic to the Iron Age in Serbia, the usage of animals in spectacles, animal burials and the presence of introduced species in the Balkan Roman provinces, and palaeopathology and the changes in animal husbandry and diet from the Late Antiquity to the Early Middle Ages in the Balkans. Recent and ongoing physical anthropology PhD projects include the study of tooth pathology and para-masticatory use of teeth, demography, mobility and diet during the Mesolithic-Neolithic transition in the Danube Gorges, and nutrition, health status, and musculo-skeletal stress markers in the Mesolithic-Neolithic Danube Gorges and the Early Neolithic in the Central Balkans.

The Laboratory has initiated and taken part in a number of local and international projects. The project Bioarchaeology of Ancient Europe: Humans, Animals and Plants in Prehistory of Serbia, lead by professor Dr Sofija Stefanović and funded by the Ministry of Education, Science and Technological Development of the Republic of Serbia employs three senior staff.

continued on page 20
members, two research associates and three PhD students. The FP7 project BEAN (Bridging the European and Anatolian Neolithic: Demography, migration, and lifestyle at the advent of civilisation) (http://beanproject.eu/) is an EU-funded project (Marie Curie Actions, Framework Programme 7) involving Johannes Gutenberg University Mainz, University of Belgrade, University of Geneva, University College London, CNRS, Istanbul University, Democritus University of Thrace, OREA - Institut für Orientalische und Europäische Archäologie, Ege University, Trinity College Dublin, Destatis, GATC Biotech AG, OTI Holding, Springer Publishing; it aims to provide state-of-the-art training of early-stage researchers in the scientific disciplines of prehistoric archaeology, physical anthropology, palaeogenomics, computer simulations and modelling. The PREFERT project (Prehistoric Fertility: length of lactation during Mesolithic and Neolithic of South-Eastern Europe (9500-5500 BC) is a bilateral Franco-Serbian project, co-funded by the Ministry of Education, Science and Technological Development of Republic of Serbia and The National Center for Scientific Research (CNRS), France; it is aimed at initiating a long-term collaboration between different groups of researchers based in University of Belgrade, University of Bordeaux and Aix-Marseille University, focusing their efforts on the central question of prehistoric fertility. In 2014, the European Research Council (ERC) has approved and recommended for funding the project of the Laboratory for Bioarchaeology - BIRTH: Births, mothers and babies: prehistoric fertility in the Balkans between 10,000-5000 BC, with professor Dr Sofija Stefanović as the principal investigator. Within the project, the Laboratory for Bioarchaeology team will investigate the changes in human biology and culture which might have had positive effects on fertility increase in prehistory.

In addition to various scientific projects and collaborations, the Laboratory researchers are enthusiastic about creating and taking part in projects related to the wider community. They have organized a number of workshops in which archaeology is utilized as a tool for developing scientific literacy among schoolchildren, as well as a number of exhibitions aimed at promoting bioarchaeological research to the public. The latest exhibition, Bioarchaeology of the Danube Gorges, includes the latest results of the analysis of human, animal and plant remains from the Mesolithic-Neolithic sites in the Danube Gorges (Iron Gates), which have previously been known to the general public primarily for their specific architectural features and sculpted boulders.

The website of the Laboratory is available at http://bioarchlab.org/, including its Facebook page https://www.facebook.com/bioarchlab and Youtube channel https://www.youtube.com/channel/UCgPcLhUsgCs-T7Ut79Lm_XQ.
The Center for Archaeological Science at the University of Georgia was founded in 1983, spurred by the dedication of a few individuals—notably from a number of different departments—to the advancement and application of science in archaeological research. In the last few years, the Center has grown rapidly with the addition of new faculty and laboratory members. In addition to an undergraduate Society for Archaeological Science, the Center has introduced an interdisciplinary undergraduate certificate in Archaeological Science, one of the few such programs offered in the United States, and a Master’s program is currently in development. A number of laboratories across the university are members of the Center, notably the Zooarchaeology Laboratory, housed at the Georgia Museum of Natural History and directed by Dr. Elizabeth Reitz, and the Quaternary Isotope Paleoecology Laboratory, based at the Center for Applied Isotope Studies and directed by Dr. Suzanne Pilaar Birch. Together, these laboratories act as a dynamic resource for students and researchers interested in a number of research topics.

The Zooarchaeology laboratory specializes in the identification of vertebrate remains from archaeological sites, but also carries out processing and identification of invertebrate, paleontological, and ecological samples. Our comparative skeletal collection numbers over 5,000 vertebrate and invertebrate specimens with an emphasis on the southeastern United States, adjacent waters, and the Caribbean. Established in 1977 through a Heritage Preservation Grant from the Georgia Department of Natural Resources (GDNR) to support archaeological research, service, and training, over 280 archaeological faunal assemblages from the southeastern United States, Caribbean, Peru, and Ecuador have been studied since its foundation. An Introduction to Zooarchaeology course is offered on an annual basis, and is complemented by a series of other classes that incorporate zooarchaeological techniques and concepts.

Both historic and prehistoric materials are studied with most analysis conducted within the context of examining adaptations to coastal and aquatic settings. Lab members are particularly active in projects studying coastal adaptations of Spanish and Native American populations. This research examines such questions as differences in rural/urban subsistence strategies, Native American contributions to European subsistence strategies, and the use by Native Americans of terrestrial or marine resources. Anthropology and biology are combined in studies of allometric relationships, incremental growth in deer, fishes, and mollusks, DNA analysis of Georgia deer, isotopic analysis of mollusc valves and otoliths, feeding behavior of a number of rodent and carnivore species, and change in deer size through time currently being conducted using the comparative collection.

Study of these faunal assemblages is funded by contracts with archaeologists from national and international institutions. Students are encouraged to participate in service activities, with contract funds used to support them. In addi-
tion to providing archaeological service, the lab also assists field biologists of Georgia Department of Natural Resources, the U.S. Forest Service, the University of Georgia's Daniel B. Warnell School of Forestry and Natural Resources, the Odum School of Ecology, and other agencies in non-archaeological identifications. Over 680 theses, scholarly papers, journal articles, book chapters, other publications, and reports have been authored by laboratory students, staff, and faculty.

The new Quaternary Isotope Paleoecology Laboratory is based at the Center for Applied Isotopes Studies (CAIS), one of the largest and fastest growing facilities worldwide for the analysis of light and heavy stable isotopes. The lab functions primarily as a preparatory space for the processing of shells, teeth, bone and exoskeletons for the extraction of carbonate, bone collagen and bioapatite, keratin, and chitin. Equipment for drilling and sample preparation includes portable dental drills, centrifuges, ultrasonicator, freeze-driers, fume hood, and an ESI MicroMill for high-resolution sampling of incremental structures. CAIS maintains instrumentation including three Isotope Ratio Mass Spectrometers: a Finnigan MAT 251 IRMS, Finnigan MAT 252 IRMS, and a Finnigan MAT Delta Plus XL IRMS for the analysis of light stable isotopes of carbon, nitrogen, and oxygen as well as an inductively coupled plasma mass spectrometer (ICP-MS) for the analysis of strontium and other heavy isotopes.

Current research in the lab combines the isotopic analysis of biological materials with questions regarding paleoecology, paleoclimate, paleobiology, and archaeology. This includes research topics that use multiproxy methods of reconstructing paleoclimate and paleoenvironment, that seek to identify mobility and migration in the archaeological record, that complete paleodiary analyses, and that assess human-environment interactions on a broad scale. Lab members include PhD, Master’s and undergraduate students who are carrying out research based in Southwest Asia and Eastern Europe as well as North and Central America.

About the Authors
Dr. Elizabeth J. Reitz has served as an officer, board member, or committee member for the Society for Historical Archaeology, the Society for American Archaeology, Southeastern Archaeological Conference, the Society of Ethnobiology, and ICAZ. She is currently editor of Southeastern Archaeology and has authored, coauthored, or edited nine books and 180 other publications, in addition to 134 reports and 161 professional papers. She is a Fellow in the American Association for the Advancement of Science and the American Academy of Arts and Sciences, as well as a member of the ICAZ Committee of Honor.

Dr. Suzanne E. Pilaar Birch recently joined the University of Georgia with a joint appointment in the Department of Anthropology and the Department of Geography and is currently recruiting students interested in combining zooarchaeology and stable isotope analysis in their research. Within ICAZ, she is the coordinator of the Stable Isotopes in Zooarchaeology Working Group, a standing member of the International Committee, and a member of the Scientific Committee for the 2018 meeting in Ankara.

Recent Publications


The Department of Anthropology at the University of Maryland, well-known for its strengths in historical archaeology, has committed to zooarchaeological research in recent years by welcoming Drs George Hambrecht and Barnet Pavao-Zuckerman to the faculty and supporting the creation of a new zooarchaeology laboratory for teaching and research.

The Zooarchaeology Laboratory is currently accumulating a robust reference collection primarily focused on native and introduced taxa from eastern North America. We also gratefully received an extensive library and faunal collection through a donation from the personal collection of Dr. John Speth (Emeritus, University of Michigan). In addition, the laboratory has expanded research potential through generous access to the Archaeobiology Collections of the Smithsonian’s National Museum of Natural History.

The laboratory currently supports one PhD student (Kevin Gibbons) and two MAA students (Scott Oliver and Sarah Noe) in addition to hosting a new course for undergraduate and graduate students in zooarchaeology and taphonomy. Together, the faculty and graduate students in the laboratory have ongoing research projects focused on James Madison’s Montpelier, medieval and early modern Iceland, Spanish missions in the colonial American Southwest, and various initiatives with the National Park Service. The University of Maryland Zooarchaeology Lab has also hosted two annual research coordination workshops as a contributing member of the Global Human Ecodynamics Alliance and is initiating a paleogenetics research project on Icelandic faunal material with support from Recombinetics, Inc. and the U.S. Department of Agriculture.

Taken together, the University of Maryland Zooarchaeology Lab in College Park is now the largest center for zooarchaeological research at a university in the metropolitan Washington, D.C. region. When coupled with our Department of Anthropology’s strong foci in historical archaeology, ecological and environmental anthropology, and cultural heritage, as well as our connections to federal cultural resource agencies, the laboratory is well-positioned to support a variety of zooarchaeological research interests from an expanding number of graduate and undergraduate students. For more information, please follow us on Facebook at www.facebook.com/umd-zooarchaeology.
The “Archaeozoology, Archaeobotany: Societies, Practices and Environments” laboratory actively participated in the Fête de la Science that was held at the Paris National Museum of Natural History on Saturday 10th and Sunday 11th October. During this weekend, over six hundred people visited the various workshops that were set up and animated by some 25 members of the lab: researchers, doctoral students, engineers, managers, etc.

In a tent set up in front of the Comparative Anatomy building, kids, armed with trowels and brushes, could dig in a series of sandboxes and expose archaeological bones, charcoals, and macrobotanical remains.
In the comparative room of the building, various examples of archaeozoological materials and comparative specimens were displayed. Members of the lab explained how to identify faunal and botanical remains, the process of sieving and sorting, the technique of radiocarbon dating, the manufacture of bone artefacts, etc.

New Short Courses at the University of Sheffield

Contributed by Angela Maccarinelli and Lenny Salvagno, University of Sheffield

The Department of Archaeology, University of Sheffield is organising new short courses that will take place in September 2016.

The Understanding Zooarchaeology I short course will run for the eleventh time. Animal bones and teeth are among the most common remains found on archaeological sites, and this three-day course will provide participants with an understanding of the basic methods that zooarchaeologists use to understand animal bone evidence.

This introductory course will be followed by a new course, Human and Animal Remains: A comparative approach, run for the first time this year. This course will focus on a comparison between human and other animal bones from archaeological context. By using both macroscopic and microscopic analyses, along with an insight into biomolecular investigations, the course will illustrate some basic tools used in distinguishing human remains from those of other animals. Different methodologies and research approaches that characterise the different disciplines of human osteoarchaeology, zooarchaeology and forensic science will be discussed.

Both Understanding Zooarchaeology I and Human and Animal Remains: A Comparative Approach courses are directed to students, professionals and enthusiasts and do not require any previous knowledge of the discipline. The teaching in both courses will be delivered through short lectures, hands-on practical activities, and case studies.

Details

Cost:
£180/£120 (student/unwaged) each course
£220/£330 (student/unwaged) for both courses

For further information visit our website (http://www.shef.ac.uk/archaeology/research/zooarchaeology-lab/short-course)

You can contact us at: zooarch-shortcourse@sheffield.ac.uk
In 1963, Cyril Ambros and I began discussing the possibility of creating an international organization for all archaeozoologists. But, because we were not in leading positions in our institute at the time, this plan had no immediate chance of realization. In 1966 in Prague we spoke with Professor Olga Necrasov, but again she saw no real chance for it. Below are some photos from that era. Only when we were in Budapest in 1971 could we discuss this idea with a larger circle. Photos from that congress will follow in my next note, and others more after that.

This photo shows the late Sandor Bökönyi (Hungary) together with me (Hanns-Hermann Müller) in 1961, when I was on a study trip in Budapest (at that time I was a young man of 30!).

During the symposion on the history of domestic animals in Kiel in 1961 we had an excursion to Schleswig, where I took photos of:

Frederic E. Zeuner (Great Britain)

Magnus Degerboel (Denmark)
During the International Congress on Pre- and Protohistory in Prague in 1966, I took photos of:

Otto-Friedrich Gandert (Germany) with Sergiu Haimovici (Romania)

Sergiu Haimovici with Cyril Ambros (Czechoslovakia) and Olga Necrasov (Romania).

C. Ambros, S. Haimovici, O. Necrasov and Hanns-Hermann Müller (Germany).

Antje Clason (Netherlands) with Horst Requate (Germany)
In 1958, when I began work at the Institute of Archaeology in London as a postgraduate with training in zoology and geology, most English archaeologists could see little point in worrying about the remains of the common domestic animals and their history. The exception was my supervisor, Frederick Zeuner who was one of the last of the great polymaths in the natural sciences, and who had been trained in the pre-war German school of strict attention to detail in all undertakings. In 1962, I got my Ph.D on the identification of the animal remains from three sites in India, Jordan, and Greece, and in 1963 Zeuner died, just after the publication of his book, *A History of Domesticated Animals*, which was the foundation of my life’s work. By the time of the Third International Congress of Museums of Agriculture, held in Budapest in 1971, I had been working on the identification of animal remains, including those from Kathleen Kenyon’s excavations at Jericho, for more than twelve years. I had been anxious about going to this meeting – it was my first trip to a communist country of whose language I didn’t understand one word, but also the Section on the history of animal domestication was mostly to be held in German, of which I also understood shamingly little. However, as it turned out, the meeting had great significance for me and for the study of animal remains from archaeological sites. Not only did I make lifelong friends there, but, also, crucial discussions were held on the founding of an international society for the scientific study of animal remains from archaeological sites. There were many people at this meeting who subsequently had a great impact on the subject of archaeozoology, and I should like to mention two of these who became my special friends and who have sadly since died. The first was Sándor Bökönyi who had been one of the organizers of the conference, but who was not at it because he was unfortunately called away for a political meeting. The second was Mary Littauer, who was a world expert on ancient horse harness in the Near East; the image of Mary driving a horse and carriage at full speed over the Hortobágy, where we had been taken on an excursion, will remain with me for ever, and she too became a great friend. There followed in Groningen in 1974, the first international conference on archaeozoology, organized by Anneke Clason, who was the sole organiser and also editor of the proceedings. By this time, Anneke had already emerged as a leader of the ever-expanding group of researchers in this new science, whose society was to be launched in 1976 as the International Council for Archaeozoology, which was the foundation of my life’s work. By the time of the Third International Congress of Museums of Agriculture, held in Budapest in 1971, I had been working on the identification of animal remains, including those from Kathleen Kenyon’s excavations at Jericho, for more than twelve years. I had been anxious about going to this meeting – it was my first trip to a communist country of whose language I didn’t understand one word, but also the Section on the history of animal domestication was mostly to be held in German, of which I also understood shamingly little. However, as it turned out, the meeting had great significance for me and for the study of animal remains from archaeological sites. Not only did I make lifelong friends there, but, also, crucial discussions were held on the founding of an international society for the scientific study of animal remains from archaeological sites. There were many people at this meeting who subsequently had a great impact on the subject of archaeozoology, and I should like to mention two of these who became my special friends and who have sadly since died. The first was Sándor Bökönyi who had been one of the organizers of the conference, but who was not at it because he was unfortunately called away for a political meeting. The second was Mary Littauer, who was a world expert on ancient horse harness in the Near East; the image of Mary driving a horse and carriage at full speed over the Hortobágy, where we had been taken on an excursion, will remain with me for ever, and she too became a great friend. There followed in Groningen in 1974, the first international conference on archaeozoology, organized by Anneke Clason, who was the sole organiser and also editor of the proceedings. By this time, Anneke had already emerged as a leader of the ever-expanding group of researchers in this new science, whose society was to be launched in 1976 as the International Council for Archaeozoology.
In March 2015, a new research project started at the German Maritime Museum in Bremerhaven entitled "Between North Sea and North Atlantic: interdisciplinary studies towards the Hanse". The project received a grant by the Lebniz-Gemeinschaft in 2014 and is concerned with the trade of Hanseatic merchants with Iceland, the Shetlands and the Faeroes between the 15th and 17th centuries. The research group consists of four researchers, in particular these are archaeologist Natascha Mehler, head of the working group, marine archaeologist Mike Belasus, historian Bart Holterman and archaeozoologist Hans Christian Küchelmann.

The Hanseatic trade with the North Atlantic Islands was only a minor portion of the Hanseatic trade volume in general. From the islands point of view, however, the trade was of great economic, cultural, political, ecological and social importance. And while a large amount of historical research has been undertaken on other Hanseatic documents and locations, the amount of investigations in Hanseatic trade with Iceland, Shetland and the Faeroes is limited although a substantial amount of historical sources still exist at the archives in Bremen, Hamburg, Oldenburg, Shetland, Iceland and Copenhagen. The project intends to tackle the topic from different archaeological and historical perspectives using historical documents, the archaeological record, ship wrecks and faunal remains as sources. It is thus not an entirely archaeozoological project, but since the most numerous and economically most important good in the Hanseatic North Atlantic trade was stockfish, it has a lot of fishy ingredients and the core of the archaeozoological part of the study will be largely about fish, particularly Gadidae species, integrating archaeozoological, archaeological and historical data. In a cooperation with the Alfred-Wegener-Institut Bremerhaven and the Institute of Clinical Molecular Biology (IKMB) Kiel the research group will try to link the historical and archaeozoological data to actually relevant questions in ichthyology, ecology, fishery biology and environmental conservation research. The application for the current Hanseatic trade project was developed out of the conference "Hanseatic Trade in the North Atlantic" held in May 2013 in Avaldsnes, Norway. The publication of the conference proceedings is pending (Mehler & Gardiner in press).

It is a strange coincidence that currently four projects exist in different countries, which are concerned with research on cod (Gadus morhua). In particular thee are the projects “Medieval Origins of Commercial Sea Fishing” of James Barret et al. in Cambridge (see ICAZ Newsletter 7(2), 5), “Cod Story” of Guðbjörg Ólafsdóttir and Ragnar Edvardsson in Iceland and “The Fish Revolution 1450-1700” of Poul Holm in Dublin. In November the Hanseatic trade project organized its first workshop in Bremerhaven and aside of this a meeting took place with members of all four projects in which possibilities

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Remains of large cod from the medieval site Bremen 253.

Account book (Schuldbuch) of the Bremen merchant Claus Monnickhussen, who bought cod from local fishers at Kummerwage, Iceland in 1557 and 1558.
for exchange and cooperations have been discussed. We hope that we will be able to merge efforts for the benefits of all projects, generating a substantial step forward in the research of the interaction between cod and humans, hopefully not only in historic terms but also in the light of promoting sustainable (cod) fisheries.

Reference

Websites
- https://fishandships.dsm.museum
- https://www.facebook.com/northseanorwegiansea

Sewing Salmon Spines at Nunalleq

By Madonna Moss, University of Oregon

Since we stopped excavating on Thursday, August 13, I have spent much of my time over the last 2 days sewing half-macerated salmon spines. During our time here at Nunalleq (see Nunalleq.wordpress.com), my University of Aberdeen colleague Edouard Masson-Maclean has been building a large collection of salmon carcasses representing various species of Oncorhynchus and Salvelinus to try to see if he can develop a new geometric-morphometric method that can be used to distinguish salmon species. Some readers will recall our optimism with the Huber et al. (2011) method, but our findings in Moss, Judd, and Kemp (2014) raised some questions about the accuracy of the method. You will have to watch for Edouard’s blog entry (hopefully coming soon) on the Nunalleq blog to find out more about the method.

In the meantime, Edouard has collected c. 20 individuals each of king, silver, red, and pink salmon and Dolly Varden and rainbow trout. That’s a lot of fish! The method involves working with the vertebrae, the most common element found archaeologically. Edouard wants to track the measurements of each vertebra (by number) so the individual vertebrae must be preserved in anatomical order — and salmon have more than 60 vertebrae each! So when the spines are partly macerated, but still articulated, you pull the spinal column out of the bucket in which it is soaking, and disarticulate the vertebrae in order (as shown in the photo above) and then sew them together. I’ve been starting from the tail, and using a steel sewing needle. It’s a bit messy (and smelly) because there’s still cartilage between the vertebrae and the notocord itself is amazingly strong… I often have to dig it out with my needle. I haven’t hand-sewn anything for multiple hours for many years… it is tiring work for the fingers.

Intensive sewing like this gives me a new found appreciation for the seamstresses and skin-boat sewers at Nunalleq… they spent many hours sewing caribou hide, walrus and sealskins, birdskins, etc. Their stitches had to be perfect to sew waterproof clothing and the skins covering the kayaks and umiaqs. What a job! I didn’t have a thimble, but was able to use the corner of the table as an anvil of sorts to press my needle through. I also relied a lot on my teeth to pull the needle through, as seamstresses have been doing for thousands, or even tens of thousands of years.

So this is what a sewn spine looks like. Not the most glamorous job, but zooarchaeologists have a penchant for odd jobs.
The spine here will be returned to a bucket for more maceration and then rinsed over the screen one more time before we pack it and all the others up for Aberdeen. It’s unfortunate that the fish won’t be fully clean before shipping, but alas we have been too busy excavating! I was able to sew 13 spines yesterday and another 20 (or was it 21?) in a 9-hour day today. But there are more to do.

So why did I go to Nunalleq? It’s because of the herring project…. The Archaeology of Herring: Reconstructing the Past to Redeem the Future that I’ve been working on for several years.…

Most of my time here I’ve been excavating to understand the context of the site. We use 1/2 inch screens in the field, which are too coarse to recover herring bones. But the main problem is that the botanical remains in each screen-load are so dense, with this fantastic preservation, that we cannot see herring bones. The only way to recover herring bones is from fine-screened samples. My colleague Paul Ledger (also University of Aberdeen) offered to help me out on Day 1, by sharing samples he has taken for his paleoethnobotanical and paleoecological work. Paul has samples of 1 mm mesh that I will be able to sort for herring bones! In fact, Paul has already sorted out small fish vertebrae, so I am very excited to see some of his samples. This is all part of my effort to acquire archaeological herring bone samples from western Alaska. I don’t know for sure that herring will be there, but I am hopeful to find some herring. Stay tuned!

Sewing Salmon Spines at Nunalleq originally appeared on Madonna Moss’s blog (http://blogs.uoregon.edu/mmoss/) and has been reproduced with permission.

Freshwater Mussel Shells Sought for Research Project

by Evan Peacock, Mississippi State University

I am an archaeomalacologist at Mississippi State University. I am working with a geochemist on developing a new method for measuring human environmental impacts using isotopic signatures in freshwater mussel shells. To test our hypotheses, we need shells in relatively good condition from particular archaeological contexts; specifically, from deposits that accumulated in cases where it can reasonably be assumed that extensive and intensive human impacts took place (e.g., at some large prehistoric center such as an Indus Valley urban site) AND shells from the same, or some nearby, locus that either pre-date or post-date the period when impact was more likely (pre-dating being better). The gap in time between the intensive, population-heavy sample and the other sample does not matter, nor does the geographic location. Ideally, a “before and during” set of samples from a situation where really massive human impact took place would be ideal.

If anyone could help in providing such samples, I would be extremely grateful, and of course would welcome participation as a co-author on any resulting publications. If you think you have samples that fit the bill, I can be contacted at peacock@anthro.msstate.edu. Thanks beforehand to anyone who can provide assistance.
Open Zooarchaeology Prize | 3D Scanning and Ancient Horse Use

By William Taylor, University of New Mexico

William Taylor is a Ph.D. student at the University of New Mexico, working on his dissertation research studying horse herding and transport in Bronze Age Mongolia. Topics addressed by his studies include evaluating Bronze Age herd management practices using equine demographic profiles, and developing a precise chronology for early horse use in the Eastern Steppe. Additionally, Mr. Taylor uses 3D scanning to study the cranial remains of wild and domestic horses, and characterize the effects of transport and bridling on the equine skull. In 2014, William received support from ICAZ, in the form of the Stine Rossel Award and the Open Zooarchaeology Prize. Using these funds, he was able to attend the 2014 conference in San Rafael, and purchase new 3D scanning software for his summer 2015 fieldwork in northern Mongolia. This software has greatly improved the quality and efficiency of his data collection, and helps to preserve Mongolia’s fragile archaeozoological heritage by producing quality 3D models that can be shared as a digital PDF. William's research has been supported by the NSF and the National Geographic Young Explorer’s Program, and he will spend the 2016 academic year studying in Mongolia as a Fulbright scholar. In addition to using 3D scans for his own research, he hopes to develop an open-access, online 3D database for Mongolian zooarchaeological remains. A summary of William’s talk in San Rafael and an example of the 3D models used in his research can be seen on BoneCommons, at: http://www.alexandriaarchive.org/bonecommons/items/show/1975.

Foundation of a Bioarchaeological Society in Austria

Contributed by Herbert Böhm, Vienna Institute for Archaeological Science

A group of young scientists (working in archaeozoology, archaeobotany, and physical anthropology) have recently founded the “Bioarchäologische Gesellschaft Österreichs (Bioarchaeological Society of Austria)”. The association covers the above-mentioned disciplines, as well as other fields of bioarchaeological research, in order to strengthen their position within the scientific archaeological community, and to build up a solid interest group for their concerns. Beside these core issues, the association aims to improve communication within the bioarchaeological community in Austria, as well as foster exchange with the archaeological and historical sciences and also with a broader public. Another objective is to establish a generally accepted framework for good scientific practice, for the care of bioarchaeological remains and for the remuneration of bioarchaeological work, especially for freelancers. Promotion of students and young scientists will be an additional topic of concern.

These goals will be achieved by setting up a comprehensive website, which should serve as central communication platform, and by the organisation of various activities, to inform about the methods and potentials of bioarchaeological research.

The association intends to cooperate with other European societies of similar purpose as a long-term objective.

For further information, please contact the association via: info@bag.or.at or visit our website: www.bag.or.at.
The ICAZ publications list is now online!

You can view and download the latest zooarchaeology references in our Zotero library: https://www.zotero.org/groups/icaz. The complete list of publications submitted to recent Newsletters is also visible on the ICAZ website: http://alexandriaarchive.org/icaz/publications-zooarch.

This year, over one hundred new publications were submitted by ICAZ members. We have chosen to highlight a few works on a particular theme: the identification of animal remains. These publications provide a brief sample of the important and very diverse research on this topic.


This book describes and illustrates the postcranial skeletal remains of most southern African mammals. Most are drawn life size, thus the book is a useful and unique aid in identifying skeletal remains. Some pathological bones, bird, reptile, amphibian and fish bones as well as a few molluscs are also illustrated.


Forensic cases of skeletal or partially decomposed remains are frequently identified as nonhuman by forensic anthropologists or pathologists working in medical examiner or similar settings. Knowledge regarding which nonhuman species are turned in at the highest frequencies in a given region therefore will be useful for training forensic practitioners in nonhuman bone identification and lead to faster case resolution.


In this paper, novel methods have been devised to determine the identity of anuran ilia and urostyle bones. A method is also suggested for taking the effect of growth on different parts of the same bone into account, thereby making bones of various sizes more comparable.


Plus two new books announced in this issues! More details on page 34.
Animal bones in Australian archaeology: A field guide to common native and introduced species
by Melanie Fillios and Natalie Blake
2015 Sydney, Sydney University Press
ISBN 9781743324332 / paperback and digital download

Zooarchaeology is a powerful way of reconstructing the lives of past societies. Through the analysis of animal bones found on a site, zooarchaeologists can uncover important information on the economy, trade, industry, diet, and other fascinating facts about the people who lived there. Animal Bones in Australian Archaeology is an introductory bone identification manual written for archaeologists working in Australia. This field guide includes 16 species commonly encountered in both Indigenous and historical sites. Using diagrams and flow charts, it walks the reader step-by-step through the bone identification process. Combining practical and academic knowledge, the manual also provides an introductory insight into zooarchaeological methodology and the importance of zooarchaeological research in understanding human behaviour through time.

The book is freely available for download on open access through Sydney University Press: https://sup-estore.sydney.edu.au/jspcart/cart/Product.jsp?nID=1011&nCategoryID=1

Atlas Osteológico del Guanaco (Lama guanicoe)
by Victor Sierpe G.
2015 Punta Arenas, Chile, University of Magallanes
ISBN: 9789567189663 / Spanish / $19.000 Chilean pesos ($27 US)

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For more information visit www.umag.cl/biblioteca/publicaciones.php or please contact victor.sierpe@umag.cl
Obituary | Akira Matsu

Contributed by Hitomi Hongo, Graduate University for Advanced Studies (SOKENDAI), Japan

Akira Matsu (1952—2015)

Professor Akira Matsui passed away at his home in Nara on June 9, 2015, after a 9 months struggle against liver cancer. He had just turned 63 in May.

Akira was born in Osaka, Japan in 1952. He studied archaeology at Tohoku University, where he became interested in prehistoric subsistence, in particular faunal remains from Jomon shell-middens. In 1977 when he was in the MA program, Akira took one and half year leave of absence to go to the US, because a systematic training in zooarchaeology was not available in Japan at that time. He studied at University of Nebraska and also visited England and Denmark, where he was inspired by the growing fields of environmental archaeology in the US and Europe. This experience defined Akira’s research direction for the rest of his life.

In 1982, he was hired by Nara National Cultural Properties Research Institute, where he founded the Environmental Archaeology Unit in 2003 and also served as the head of the Center for Archaeological Operations from 2009 until his retirement in 2013. He promoted international academic exchange for zooarchaeologists by inviting many colleagues from all over the world for a conference or for a tour of archaeological sites in Japan. He also led a number of collaborative projects with archaeologists in Korea, China, Europe and North America. He had been a core member of the Japanese Zoo-archaeology Society, a working group started in 1993 that turned into a formal academic society in 2013.

Although Akira’s research focused on Jomon shell-middens and wetland sites, his interest extended to a broad range of topics beyond zooarchaeology, from hunter-gatherer subsistence to manufacturing of bone tools and tanning of hide in historical period, from prehistory to the 19th century. He started a cutting-edge multidisciplinary research on domestication of pigs in East Asia, involving isotope analysis and genetic studies, from the late 1990s. He always maintained good communication with archaeologists, historians, cultural anthropologists, as well as researchers in various fields of natural sciences, and integrated the knowledge from a wide range of academic fields in his interpretation of animal bone remains from archaeological sites. With his friendly attitude and love for fieldwork, he always acted as a bridge between researchers with various academic backgrounds and nationalities. For many years, zooarchaeology in Japan had focused on faunal remains from Jomon shell middens, but Akira’s work helped archaeologists realize that faunal remains from historic sites could also generate valuable information. Besides a large number of scientific publications, he also wrote many newspaper columns and books, made the word “environmental archaeology” widely known to the general public. The most well known example of his research was the “toilet archaeology” where his interdisciplinary project team recovered parasite eggs from the soil of a so-called “ritual structure” of a Yayoi Period site and shed light on health and diet in prehistory. The study of parasite eggs in the soil of Coppergate in York, England was the incentive for Akira’s toilet archaeology. As a visiting researcher at Dr. Juliet Clutton-Brock’s lab in the Natural History Museum in 1989, Akira had an opportunity to visit Coppergate with Dr. Andrew Jones, and was impressed by the possibility in environmental archaeology and began to look for similar features at archaeological sites after his return to Japan. Thus he was always interested and open-minded for an innovative research in archaeology.

He received the Hamada Seiryo Award in 2011 for his contribution to Japanese archaeology in establishing the field of environmental archaeology, in particular zooarchaeology, and in promoting internationalization. This prize is intended for outstanding archaeologists, proving that Akira’s work was highly recognized by “traditional” archaeologists as well, and it was a tremendous encouragement to the young zooarchaeologists in Japan.

Akira taught environmental archaeology as a visiting professor at the Graduate School of Human and Environmental Studies,
Kyoto University. He trained many zooarchaeologists of the next generation through this program. Based on his own experience in the US as a young student, he always encouraged his students to be aware of the trends in global academic communities and to participate in international conferences. A relatively large number of Japanese participants at recent ICAZ conferences were partly the result of Akira’s support and encouragement for young scholars.

After the retirement from Nara National Cultural Properties Research Institute in 2012, freed from heavy administrative duties, he dedicated all his energy to research again. He initiated a new collaboration program with the Institute of Archaeology of Zhejiang Province, China, for the research of Tianluoshan, an early Neolithic site where he begun to work in 2006. He also continued cultural anthropological fieldwork in Laos from 2009 where he investigated domestication process of wild chickens.

Akira began to participate in ICAZ conferences in the 1990s and served on the International Committee from 2002 to 2006. He was very much looking forward to go to San Rafael in 2014, but he had to cancel the trip at the last moment because a cancer was found during a medical check-up. His wife placed a guidebook of Argentina, which he had bought in the spring, in the casket. His untimely death was a big loss for archaeology in Japan as well as in the entire East Asia.

Obituary | Hans Reichstein

Contributed by Dirk Heinrich, formerly of Kiel University and the Archaeological State Museum Schleswig-Holstein, Schleswig

Hans Reichstein (1930–2015)

With sadness I have to announce that Dr. Hans Reichstein passed away on April 26, 2015, at his home in Flintbek, near Kiel, after a long illness. Born in Silesia in the town formerly known as Trachenberg in 1930, he had to leave his home in 1945 together with his family as a consequence of the Second World War. After his studies – particularly zoology – in Weimar and Berlin he received a doctor’s degree at the Humboldt University of Berlin in 1960. The title of his dissertation ‘Untersuchungen zum Wachstum und zum Fortpflanzungspotential der Feldmaus, Microtus arvalis (Pallas 1778): Ein Beitrag zur vergleichenden Biologie und Ökologie kleiner Nager’ [Studies on the growth and the reproductive potential of the vole, Microtus arvalis (Pallas 1778): A contribution to comparative biology and ecology of small rodents] describes the focus of his research in the beginning of his career: a diversity of ecological investigations in small mammals, which he carried out at the Museum für Naturkunde in Berlin and later at the Biologische Zentralanstalt für Land- und Forstwirtschaft, Department Kleinmachnow, in the former German Democratic Republic. Shortly after his emigration to the West together with his wife in 1961 (just before the Berlin Wall was built), he was employed at the Institute for Domestication Research (Institut für Haustierkunde) of Kiel University, where he initially continued his research on small mammals. As curator, a function which he received shortly after, he was also responsible for the extensive collections of mainly mammal skeletons, including domesticates, and also birds.

Thus the path towards archaeozoology was to a certain extent presaged for him, and in the mid-60s and early 70s the first archaeozoological articles were published, that treated not only small mammals (e.g. Zum Vorkommen der Nordischen Wühlmaus, Microtus oeconomus (Pallas 1776) in historischer Zeit in Schleswig-Holstein (Norddeutschland). Zeitschr. Säugetierkd.
35, 1970, 147-159) but also larger ones (e.g. Zur Variabilität frühmittelalterlicher Geweihe des Rothirsches, *Cervus elaphus* L. *Zeitschr. Säugetierkd.* 31, 1966, 356-366). After he was asked to analyse the comprehensive bone material from the Germanic village of Feddersen Wierde, situated at the North Sea coast of Lower Saxony, he definitely turned towards archaeozoology. From this starting point onwards he was one of the founders of the Archaeozoological Working Group (Archäologisch-Zoolgische Arbeitsgruppe, AZA) at Gottorf Castle in Schleswig, where he established the local laboratories with reference collections for mammals and birds and also developed the framework for the practice of archaeozoological work. This was supported by methodological contributions. But his work is immortalized not only in publications of theoretical nature, but especially in many faunal analyses, in which questions of faunal history are involved as well. Besides the monograph concerning the bone material from Feddersen Wierde, that was already mentioned, he carried out several investigations on animal remains from different locations and time periods with a special focus on that from Haithabu, the famous Viking Age emporium. For Schleswig-Holstein special reference is also given to the many investigations of bone materials from Lübeck and one from the west coast settlement of Elisenhof, sites of supraregional importance, too. All in all Hans Reichstein has published more than 150 archaeozoology-related papers.

During the decades leading up to his retirement in 1994 he – besides teaching and training students – supervised a large number of degree exam candidates and thus he has been a patron of our special field, archaeozoology. Also noteworthy are the large number of keywords in the context of zoology and archaeozoology, that he treated for the Encyclopaedia of Germanic Archaeology (Reallexikon der Germanischen Altertumskunde, RGA). As an esteemed scientist and colleague, Hans Reichstein was long ago elected as member of the ICAZ Committee of Honor. In accordance with his interdisciplinary skills he was a Corresponding Member of the German Archaeological Institute (Deutsches Archäologisches Institut, DAI).

We will keep Dr. Reichstein’s fond memory and rich academic heritage.
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<tr>
<th>Date</th>
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<td>JANUARY 11-14, 2016</td>
<td>8th ICAZ Bird Working Group Meeting at the University of Texas-Rio Grande Valley in Edinburg, USA.</td>
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<td>APRIL 1-3, 2016</td>
<td>Association for Environmental Archaeology (AEA) conference at the University of the Highlands and Islands in Kirkwall, Orkney, Scotland.</td>
<td>• <a href="mailto:Ingrid.Mainland@orkney.uhi.ac.uk">Ingrid.Mainland@orkney.uhi.ac.uk</a> • <a href="http://www.uhi.ac.uk/en/archaeology-institute/events/association-for-environmental-archaeology-conference-2016">http://www.uhi.ac.uk/en/archaeology-institute/events/association-for-environmental-archaeology-conference-2016</a></td>
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<td>Archaeomalacology Working Group (APWG) Meeting at the University of the Highlands and Islands, Kirkwall, Orkney, Scotland.</td>
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<td>APRIL 3, 2016</td>
<td>Professional Zooarchaeology Group (PZG) Spring meeting at the University of the Highlands and Islands, Kirkwall, Orkney, Scotland.</td>
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<td>APRIL 6-10, 2016</td>
<td>The Changing Role of Stable Isotope Analyses for Understanding Human-Animal Relations and Shellmidden Microarchaeology unraveled sessions at the 81st meeting of the Society for American Archaeology (SAA) in Orlando, Florida, USA.</td>
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<td>MAY 16, 2016</td>
<td>Workshop on Building a UK Zooarchaeological Reference Resource at the University of York, UK.</td>
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<td>MAY 23-28, 2016</td>
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<td>MAY 26-29, 2016</td>
<td>Meeting of the Animal Palaeopathology Working Group (APWG) in Budapest, Hungary.</td>
<td>• <a href="mailto:gal_erika@yahoo.com">gal_erika@yahoo.com</a> • animapalaeopathologywg.wordpress.com</td>
</tr>
<tr>
<td>JUNE 1-3, 2016</td>
<td>1st International Symposium on Animals in Ancient Egypt (ISAAE) in Lyon, France.</td>
<td>• <a href="mailto:isaae2016@sciencesconf.org">isaae2016@sciencesconf.org</a></td>
</tr>
<tr>
<td>JUNE 6-11, 2016</td>
<td>Objetos sobre materias duras de origen animal en la Protohistoria y el Mundo Antiguo and Small Fragmented Faunal Remains in Focus sessions at the 9th Jornadas de Jóvenes en Investigación Arqueológica (JIA 2016) in Santander, Spain.</td>
<td>• <a href="mailto:marta.blasco.martiri@gmail.com">marta.blasco.martiri@gmail.com</a> • jia2016santander.unican.es/wp-content/uploads/2016/02/Sesion-S4_ES_EN3.pdf</td>
</tr>
<tr>
<td>JUNE 26 - JULY 2, 2016</td>
<td>Multi-Analytical Approaches to African Archaeozoology session at the 23rd Biannual Meeting of the Society of Africanist Archaeologists (SAFA) in Toulouse, France.</td>
<td>• <a href="mailto:kristina.g.douglass@GMAIL.COM">kristina.g.douglass@GMAIL.COM</a> • safa-2016.science/en</td>
</tr>
<tr>
<td>JULY 3-7, 2016</td>
<td>The Animal Turn in Medieval Health Studies and Animals as Food sessions at the International Medieval Congress (IMC) at the University of Leeds, UK.</td>
<td>• <a href="mailto:hy12s2h@LEEDS.AC.UK">hy12s2h@LEEDS.AC.UK</a> • <a href="mailto:Choyke@ceu.hu">Choyke@ceu.hu</a> • <a href="http://www.leeds.ac.uk/arts/info/125137/international_medi">http://www.leeds.ac.uk/arts/info/125137/international_medi</a> eval_congress</td>
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<tr>
<td>AUGUST 28 - SEPTEMBER 2, 2016</td>
<td>Bones and Society – Integrating zooarchaeology and social archaeology session at the 8th International Conference of the World Archaeological Congress (WAC) in Kyoto, Japan.</td>
<td>• <a href="mailto:cgates70@YAHOO.FR">cgates70@YAHOO.FR</a> • <a href="mailto:Choyke@ceu.hu">Choyke@ceu.hu</a> • <a href="http://wac8.org/">http://wac8.org/</a></td>
</tr>
<tr>
<td>AUGUST 31 - SEPTEMBER 4, 2016</td>
<td>Exploitation strategies [...] hunter-gatherers and 1st farmers, Animal and human relationships around the Baltic, and</td>
<td></td>
</tr>
</tbody>
</table>
Methods in arch. fish bone analysis sessions at the 22nd annual meeting of the European Association of Archaeologists (EAA) in Vilnius, Lithuania.

- monicamargarit@yahoo.com
- tuija.kirkinen@HELSINKI.FI

SEPTEMBER 7-9, 2016
General to Specific Quaternary Taphonomy - 4th meeting of the ICAZ Taphonomy Working Group (TWG) in Paris, France.

- Brugal@MMSH.UNIV-AIX.FR
- https://taphonomyworkinggroup.wordpress.com/news

SEPTEMBER 12-16, 2016
Understanding Zooarchaeology and Human and Animal Remains: A Comparative Approach short courses at Sheffield University, UK.

- zooarch-shortcourse@sheffield.ac.uk
- www.shef.ac.uk/archaeology/research/zooarchaeology-lab/short-course

OCTOBER 3-7, 2016
IV Congreso Nacional de Zooarqueología Argentina (CNZA) in Ushuaia, Tierra del Fuego, Argentina.

- 4crzozaarqueologia@gmail.com
- http://4crza.wordpress.com/

OCTOBER 6-8, 2016
Cherchez la (petite) bête: l’animal au haut Moyen Âge session at the conference of the Association Française d’Archéologie Mérovingienne (AFAM) in Saint-Dizier (Haute-Marne), France.

- olivier.putelat@PAIR-ARCHEOLOGIE.FR
- afamsaintdizier2016@gmail.com
- http://www.afamassociation.fr/

OCTOBER 10-14, 2016
11th meeting of the Gesellschaft für Archäozoologie und Prähistorische Anthropologie (GAPA) in Brandenburg, Germany.

- vorstand@gapa-kn.de
- http://www.gapa-kn.de/

2017

MARCH 23-25, 2017
The Postgraduate Zooarchaeology Forum (PZAF 2017) in Torun, Poland.

- mlisowski1@SHEFFIELD.AC.UK
- pzaf2017.wordpress.com

APRIL 26-29, 2017
EZI2017 & 5RCAPI – Iberian Zooarchaeology Meeting on Zooarchaeology and archaeomalacology of materials from Portugal and Spain, in association with the 5th Iberian Peninsula Archaeomalacology Scientific Meeting at the Universidade do Algarve, Faro, Portugal.

- ezi2017faro@gmail.com
- http://ezi2017faro.wix.com/ezi2017en (English)

MAY 31 - JUNE 6, 2017
Aquatic Animals and Monsters of the Northern Seas colloquium in Cerisy-la-Salle, Normandy, France.

- thierry.buquet@unicaen.fr
- ichtya2017.sciencesconf.org

2018

FEBRUARY 2-4, 2018
ICAZ Roman Period Working Group meeting on Animals in funeral and ritual contexts in Basel, Switzerland.

- sabine.deschler@unibas.ch