Richard Thomas, AEA Chair

The AEA spring meeting (to be held at the University of Nottingham) will soon be upon us and the theme of the conference is one that is very close to my own research (and personal) interests: food. Patterns of food choice, preparation and consumption reflect upon multiple, often intersecting, aspects of individuals and communities in the past, including group identities, gender relations, religious/ritual practices and status differences: in this sense food is an active form of material culture. Environmental archaeologists are particularly well placed to explore these dimensions of past human society, because plant remains, animal bones and residues, are frequently the product of consumption behaviours. The aim of this conference is to explore some of these issues in relation to the long-distance movement of people, foods and ideas about food, which together result in the creation of ‘foodescapes’ (http://www.nottingham.ac.uk/archaeology/research/conferences/foodescapes/foodescapes.aspx).

In addition to the traditional conference presentations, this conference will witness the first AEA meeting at which Ignite-format presentations are delivered.

This is a relatively new format of presentation in which the speakers talk to the audience on a subject for a short period of time: in this case 20 automated slides in five minutes. I am very much looking forward to being ‘ignited’.

If you are unable to make the conference, then you can also follow progress through our social media outlets on Twitter (@envarch) and Facebook (https://www.facebook.com/pages/Association-for-Environmental-Archaeology/206667162689371). Social media is an increasingly important venue for promoting the activities of the Association and connecting members and non-members with disciplinary developments (Figure 1).

So please do join in the conversation surrounding the conference – perhaps if I do not see some of you there in person, I will meet you in a virtual space!
Last year a new ICAZ working group was created focusing on zooarchaeology in the Roman period. The initiative for this working group was taken by Silvia Valenzuela and Umberto Albarella, and they also organised the first meeting which took place at the University of Sheffield. The number of people attending the meeting shows the interest of zooarchaeologists for the Roman period: the conference attracted 52 participants from 13 countries (Argentina, Belgium, France, Germany, Greece, Italy, the Netherlands, Portugal, Spain, Switzerland, Turkey, the UK and the USA).

The meeting started on Thursday evening with a keynote lecture by Pam Crabtree on the late Roman/early Medieval transition. Using data from two sites in East Anglia, she showed that animal husbandry changed in all respects from the late Roman to the Anglo-Saxon period. This was explained by a move to a more extensive form of animal husbandry, as there were no longer towns and soldiers that had to be supplied with food. Pam also presented new data from an oasis in Egypt, highlighting the need for more zooarchaeological data for the eastern part of the Roman Empire.

The lecture was followed by a wine reception, with the origin of the wine reflecting the origin of the organisers. The theme of the meeting was “Husbandry in the Western Roman Empire: a zooarchaeological perspective”, and all papers on Friday closely followed this theme. Sabine Deschler-Erb kicked off with a paper on Roman Switzerland, and convinced us that both Roman and modern Switzerland have much more to offer than just cheese. While the focus was on animal husbandry and food production, some data on animals in ritual were also included. Simon Trixl presented results from a research project focusing on transalpine mobility and culture transfer, and talked more specifically about animal husbandry in the province of Rhaetia in the 1st century AD. My own paper focused on developments in animal exploitation and animal size in the civitas Batavorum. Fabienne Pigière discussed animal husbandry in three civitates: those of the Tungri, the Nervii and the Treveri. Using data mainly from small towns and villae, she was able to pinpoint several specialisations, for instance in wool production and breeding of large draft oxen. Unfortunately, Delphine Frémondeau and colleagues could not make it to the meeting, but Fabienne read their paper, which demonstrated that Roman developments in meat production and animal size in Gaul were in fact already initiated in the Late Iron
The coffee and lunch breaks offered plenty of time to talk to colleagues, and the catering was excellent, with a seemingly endless supply of food. After lunch, we moved to the south of France for Audrey Renaud’s paper on Nîmes, and a paper by Lidia Colominas and Carlos Fernández on *Hispania Tarraconensis*. We stayed in the Iberian Peninsula for two more papers. Pilar Iborra Eres talked about animal husbandry in Roman Valencia, and showed examples of ritual deposits with a clear selection of animal species, body part and side. Silvia Valenzuela and Cleia Detry finished this session with their talk on *Lusitania*. What is striking about this region is the high degree of diversity in species proportions, and increases in pig and red deer in the Roman period. The conference dinner was held at a local Italian restaurant. The success of the dinner can be related to the choice for a low-budget venue (and perhaps some extra funding?), which ensured that everyone was there, including the students who may not have been able to afford a more fancy location.

The first four papers on Saturday continued the main theme of the meeting. Silvia Valenzuela presented zooarchaeological data from *Africa Proconsularis* and *Mauritania*. Her main conclusion was that there are significant differences between the two provinces, and that Roman Africa should not be seen as a whole. The next three papers all focused on Roman Britain. Umberto Albarella talked about central England, where developments include an increased variability in cattle and sheep types and an increased importance of cattle for crafts, such as tanning and bone working. Martyn Allen presented results from the ‘Rural Settlement in Roman Britain’ Project, which uses an integrative approach to agriculture. The rural data show an increase in the complexity of rural settlement over time, and clear differences between regions. Sue Stallibrass used information on animals and animal products from the Vindolanda tablets, and compared this with zooarchaeological data from Carlisle. This approach made it clear what we are missing, since pro-

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**Thierry Argant discussing evidence of meat consumption in Roman Lyon (France)**

Age.

The first slide of Chiara Corbino and Ornella Fonzo’s presentation on likely Roman ritual activities in the Chianti region (Italy)
Thierry Argant discussed the consumption of dog and horse in the Roman town of Lyon. Evidence for exotic animals in Rome was addressed in a paper by Jacopo De Grossi Mazzorin and Claudia Minniti. The last paper was by Chiara Asunti Corbine and Ornella Fonzo and presented results from animal remains from a 1st-century AD well in Italy. Although no Mithraeum was found here, some of the finds and the animal bones suggest the presence of a Mithras cult.

A number of excellent and informative posters were on display. Changes in livestock size are a recurring theme in Roman zooarchaeology, and Louisa Gidney’s poster on size variation within the Dexter breed due to nutrition and castration added a note of caution to the discussion. For those interested, there was the opportunity to visit the zooarchaeology lab. The conference ended with a business meeting, where the date (2017) and location (Basel) of the next meeting were revealed. A short discussion focused on possible themes for the next meeting. Angela Trentacoste designed two possible logos for the Working Group, which were presented at the business meeting. Finally, the organisers of the meeting talked about their plans to publish the proceedings of the meeting. During the meeting, it became clear that we share a lot of common ground in our research results, but that there is also a great degree of regional variation. The atmosphere of the first meeting of the ICAZ Roman Period Working Group was both friendly and inspiring. We all owe a big thank you to the organisers Silvia Valenzuela and Umberto Albarella for making this first meeting such a success.

Maaike Groot

Veronica Aniceti presenting her poster on animal exploitation in Roman Tuscany (France)

Victoria Moses presenting her poster on ritual activities in Archaic Rome
PALAIKASTRO
Urban – landscape interactions in Minoan Crete

The Bronze Age period in Crete, known as Minoan, has been the centre of intensive research since the late 19th century. Iconic palace sites, such as Knossos, Phaistos and Malia, have revealed a particularly rich archaeology and material culture and have been incorporated into the great narratives of the past. Despite, or perhaps because of, this wealth of spectacular architecture, pottery and artefacts, environmental archaeology has largely remained at the margins of Cretan research. Yet it is perishable material, food and drink, olive oil, wine and cereals, that have been employed in theoretical models to explain the emergence of palatial societies and/or the workings of political factions, elites and authorities (e.g. Renfrew 1972; Halstead and O’Shea 1982; Hamilakis 1999; Galaty et al. 2011).

In response to this need for a tighter incorporation of primary, bio-archaeological data to address some of the burning questions of Minoan archaeology, the new excavations at the Bronze Age site of Palaikastro placed environmental archaeology at the core of this research initiative. This 5-year project, ‘PALAP’ (Palace and Landscape at Palaikastro), began in 2012 and is led by Prof. Carl Knappett (University of Toronto, Canada), Dr Nicoletta Momigliano (University of Bristol, UK) and Dr Alexandra Livarda (University of Nottingham, UK). As a result Palaikastro became the first site in Crete, and one of the few in the Aegean, following the example set at sites such as Paliambela Kolindros in northern Greece, where environmental archaeology became incorporated into the project’s research questions from its inception. It is also the first site in Crete where a systematic soil sampling strategy has been employed in order to collect bio-archaeological material from every excavated unit (see Livarda and Kotzamanis 2014), allowing a fine-grained level of analysis. The environmental team has three strands, all of which are closely working together for the integration of their results: biochemical, palaeoenvironment, and landscape archaeology (Box 1: end of article).

Palaikastro is a large Bronze Age Minoan town covering well over 40 hectares and lying a few hundred metres away from the sea. It is situated in the far east of Crete, about 25 km north of Zakros and 8 km south of the endemic palm (Phoenix theophrasti) forest of Vai. Palaikastro was first excavated from 1902 to 1906 by Bosanquet, followed by another two phases of excavation (1962-3 by Sackett and Popham and 1986-2003 by Sackett, Driessen and MacGillivray). These investigations revealed important information, shedding light on aspects of life in this rather atypical Minoan settlement: despite its extended size, it seems to have lacked any central ‘palatial’ building. It was organised in substantial town blocks or neighbourhoods that were in use from the Early Bronze Age through to the later stages of the Late Bronze Age, spanning a period of about 1500 years.

Despite the many years of research several questions remained unanswered, particularly in regards to the relationship of the town with its territory. How did the town manage its resources and how did its inhabitants interact with their environment? How sustainable was the use of the surrounding landscape? What was the impact of urban nucleation on the Mediterranean landscape? How did the cultural landscape in East Crete develop? What was the role of this town within the broader socio-economic arena of the Bronze Age habitation of the island? These are just some of the questions that the current team is addressing.

The first three seasons of excavations have unearthed a new town block with evidence of a range of activities, while the landscape, coring and bio-archaeological work have already demonstrated the great potential in providing new insights into the socio-economic organisation of this Bronze Age town. An extensive radiocarbon dating programme is currently planned in order to create a high-resolution chronological framework for the contextualisation of the environmental data, and cores with up to 8m in depth have been obtained from the town’s territory, yielding evidence of good pollen preservation (Fig. 1). The combined results of the landscape, palynological, anthropological and geoarchaeological investigation have started delineating the environmental context and the interactions of people with their territory, with the preliminary observations suggesting significant erosion phases that would have required appropriate resource management. At the same time, the on-site recovery of bio-archaeological remains (Fig. 2) show that a wide variety of typical plants and animals of Bronze Crete were utilised, alongside fish and a large variety of marine molluscs indigenous to the seas around Crete that come from diverse coastal environments, both from shallow and deeper water zones. Overall, a complex management of the sea and land-

Fig.1: Santiago Riera cleaning a palynological core (Picture by M.Andonova)
scape is emerging, both of which seem to have been acting as complementary agents in the life of the town.

The landscape research (Fig. 3) has been key in delineating the economy of the area. At least five Minoan farmsteads have been identified in the town’s territory all of which share similar characteristics in terms of configuration and location. They are associated with terraces, which are related with check dams for moisture and sediment retention (consistent with those found in other areas of eastern Crete) and are surrounded by perimeter walls, most likely for their protection from animals. Enclosures and other features associated with pastoral activities have been identified in the vicinity of the outer areas of these walls. The next stage of research will incorporate these findings with the on- and off-site palaeoenvironmental results in order to understand the agricultural husbandry and farming methods to ultimately reconstruct the intensity and scale of these activities and identify their degree of integration.

The sea was also an important resource for the town. Among other functions, it was the source of shells for the production of dyes. A very large number of *Hexaplex trunculus* (purple shells) have been recovered from specific contexts in the new town block, the fragmented state of which suggests purple-dye manufacture. This finding is significant not only because it is consistent with the results of previous excavations at Palaikastro (Reese 1987), but mainly because it is one of the few examples of large domestic deposits with purple-dye production waste in the whole Aegean (Ruscillo 2006; Veropoulidou et al. 2008; Apostolakou et al. 2012; Brogan et al. 2012).

In order to better understand prehistoric purple dye production we set up an experiment during the 2014 season using fresh purple molluscs (Fig. 4). The experiment was designed by Dr Rena Veropoulidou and was conducted in collaboration with Dr Alexandra Livarda and Miss Catherine Neale, whose undergraduate dissertation at the University of Nottingham forms part of this project, as well as with the keen support...
and help of several members of the project. Purple shells were collected from Palaikastro and the nearby town of Siteia and they were crushed to extract the molluscs for the production of the dye. Stone tools were used for crushing the shells, and these were kept for micro-wear analysis. Two recipes were devised for the production of dye and different fabrics were used in the experiment. The liquid produced during the dyeing procedure was kept in a jar for chemical analysis. Every step of the procedure was recorded and photographed, and the results are currently under study.

In summer 2015 we will carry out the last excavation season at Palaikastro, which will be followed by study seasons and more laboratory analyses. This further work will enable us to weave together fresh narratives concerning the story of the rise and the final demise of this important seaside town in Bronze Age Crete.

Alexandra Livarda, Hector Orengo and Rena Veropoulidou

Acknowledgements

The PALAP project is funded by the Social Sciences and Humanities Research Council of Canada (SSHRC), The Institute for Aegean Prehistory (INSTAP), the British School at Athens, and the Universities of Bristol (UK), Nottingham (UK), Toronto (Canada) and Leuven (Belgium).

Bibliography


AEA SPRING CONFERENCE

Saturday 28th March 2015

University of Nottingham, UK

Crossing boundaries: the creation of Foodscapes

Organisers: Alexandra Livarda, Hector A. Orengo, Naomi Sykes and Hannah O'Regan

Theme summary

Long-distance trade of plant- and animal-based foods is tightly linked to the movement of products, people and ideas, colonial expansion and imperial power, exploration and discovery, and the creolisation of local tastes. Transported landscapes, transported species, globalisation and changing cuisine and tastes are some of the effects of connectivity webs, influencing food practices from production to consumption and notions of local to global, while managing the physical environment to project social identities.

This conference aims to explore new tools and novel approaches for tracking the movement of food and ideas across space and time, from the emergence of agriculture and farming to the Columbian exchange and industrialisation. Within the theme of ‘crossing boundaries’ the conference endeavours to bring together studies using a range of methods, from genetics and stable isotope analyses, material culture and bioarchaeological evidence, to GIS and environmental modelling, to ultimately investigate the socio-cultural parameters underpinning food and land practices ‘on the move’ and their impacts on economies, societies and perceptions.

Programme

9.30 Registration and coffee

10.30 Introduction & Opening Lecture

Hector A. Orengo (University of Sheffield, UK) Foodscapes, transported landscapes and cultural landscapes. A view from Roman Hispania.

11.30 Rena Veropoulidou (Museum of Byzantine Culture, Thessaloniki, Greek Ministry of Culture and Sports, Greece) and Nancy Krahtopoulou (Karditsa Ephorate of Antiquities, Greek Ministry of Culture and Sports, Greece) Changing landscapes, constant tastes: land and time crossings in Pieria, northern Greece

11.50 Rena Veropoulidou (Museum of Byzantine Culture, Thessaloniki, Greek Ministry of Culture and Sports, Greece) Eating cockles, inhabiting worlds of estuaries in Central Macedonia, Greece, during the Neolithic, Bronze and Iron Age.

12.10 Hannah O'Regan (University of Nottingham, UK) Finding food and resources: exploring hominin land use using modern land cover.

12.30 Lunch and posters

13.30 5-minute Ignite session

A. Llorenç Picornell Gelabert (University of the Balearic Islands, Spain) Colonial foodscapes in Equatorial Africa: food performances among the Benga of the Corisco Island (Equatorial Guinea)

B. Rob Jarman (Centre for Environmental Change and Quaternary Research University of Gloucestershire, Cheltenham, UK), Frank M. Chambers (Centre for Environmental Change and Quaternary Research University of Gloucestershire, Cheltenham, UK), Julia Webb (Centre for Environmental Change and Quaternary Research University of Gloucestershire, Cheltenham, UK), Karen Russell (K Russell Consulting, UK) Sweet chestnut Castanea sativa in Britain: when and whence did it arrive?

C. Alice Berger (Institute of Archaeology, University College London, UK) “You are what You Eat” – Food and Cultural Identity in Tel Bet Yerah
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<tr>
<th>Time</th>
<th>Speaker &amp; Institution</th>
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<tbody>
<tr>
<td>14.30</td>
<td>Ruth Pelling (English Heritage, UK)</td>
<td>Food, fashion and global economics: The place of plants in the Roman and Late Antique Saharan trade networks</td>
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<td>14.50</td>
<td>Don O’Meara (Durham University, UK)</td>
<td>Pooscapes to Foodscapes: the archaeobotany of urban cultural change in medieval Northern England</td>
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<td>15.10</td>
<td>Coffee break &amp; posters</td>
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<td>15.40</td>
<td>Julie-Anne Bouchard-Perron (University of Nottingham, UK)</td>
<td>Social networks of colonialism Archaeobotanical perspectives from Quebec City (Canada)</td>
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<td>16.00</td>
<td>Maeve L’Estrange (Trinity College Dublin, Ireland)</td>
<td>How British cookbooks influenced Irish home cooking in the 1950s</td>
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<td>16.20</td>
<td>Discussion &amp; Close</td>
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**OPTIONAL DINNER at 19.00 (Victoria pub, Beeston)**

**POSTERS**

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<th>Poster Title</th>
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<tr>
<td>Lee G. Broderick (University of York, UK)</td>
<td>Breaking Down Boundaries: The Zooarchaeology of Medieval Memes</td>
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<tr>
<td>Mohammad Amin Mirghaderi (University of Tehran, Iran)</td>
<td>Environmental Effects in Settlements Distribution of Middle and Late Bronze Age in SW Mahidasht Plain, W Central Zagros</td>
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<td>Rob Jarman (Centre for Environmental Change and Quaternary Research University of Gloucestershire, Cheltenham, UK), Frank M. Chambers (Centre for Environmental Change and Quaternary Research University of Gloucestershire, Cheltenham, UK), Julia Webb (Centre for Environmental Change and Quaternary Research University of Gloucestershire, Cheltenham, UK), Karen Russell (K Russell Consulting, UK)</td>
<td>Sweet chestnut Castanea sativa in Britain: searching for ancient ‘chestnut-scapes’.</td>
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<td>Jaume Oliver (Autonomous University of Barcelona, Spain) and Arnau Garcia (Catalan Institute of Classical Archaeology, Tarragona, Spain)</td>
<td>From foodscapes to concretescapes (through crisiscapes): the irrigated systems of la Garriga (Barcelona), 12th - 21st C.</td>
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<td>Maria-Jesus Ortega (Catalan Institute of Classical Archaeology, Tarragona, Spain), Josep-Maria Palet (Catalan Institute of Classical Archaeology, Tarragona, Spain) and Hector A. Orego (University of Sheffield, UK)</td>
<td>From foodscape to cultural landscape: the changing productive landscapes of Valencia</td>
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**More information about the conference is available at:**

http://www.nottingham.ac.uk/archaeology/research/conferences/foodscapes/foodscapes.aspx

Or you can contact us on: aea-foodscapes@nottingham.ac.uk
Greek diet, health, and medicine in the Roman world: Integration and analysis of the archaeological and literary material

September 9-11, 2015
University of Exeter, Devon, UK

An international conference organised and funded through the Leventis Initiative on the Impact of Greek Culture.

Paper abstracts due: March 27, 2015

Please email abstract submissions to the conveners: Erica Rowan (e.rowan@exeter.ac.uk) and Daniel King (D.King@exeter.ac.uk).

CALL FOR PAPERS for the Food and Drink session at the LIMES (Roman frontiers) congress

Ingoldstadt, Germany 14\textsuperscript{th}-20\textsuperscript{th} Sept 2015

If you are interested in contributing a paper or a poster to the Food & Drink session, please contact Sue.Stallibrass@english-heritage.org.uk and also the organising committee info@limes2015.org

Titles and brief abstracts of papers need to be submitted by 31\textsuperscript{st} March.

For posters, the deadline is 10\textsuperscript{th} August and there is helpful information on the Congress website at http://www.limes2015.org/congress/poster-submission/

Session organisers:
Dr Sue Stallibrass Sue.Stallibrass@english-heritage.org.uk
Prof. Tom Parker parker@ncsu.edu

8th International Workshop of African Archaeobotany

Modena, Italy, University of Modena and Reggio Emilia

23-26 June 2015

The IWAA8 is dedicated to the memory of Ahmed G.Fahmy

Details on abstract submission, conference fees, venue and meeting timetable are on the conference website:

http://www.palinopaleobot.unimore.it/site/home/8th-international-workshop-for-african-archaeobotany-iwaa.html
21st Annual Meeting of the European Association of Archaeologists

University of Glasgow,

2-5 September 2015

http://eaaglasgow2015.com/

Sessions include:

- Climate change and heritage management: measuring and monitoring the impacts of future climate and environmental change on the historic environment and cultural resources
  Conveners: Andy Howard, David Knight, Thomas Raab, Sjoerd Kluiving, Ben Gearey

- AR1: The filthy reality of everyday life? Reflections on dirt from prehistory to the present
  Conveners: Eileen Reilly, Gary King, Roos van Oosten

- Exploring new trends and lost (?) tracks in landscape archaeology
  Conveners: Thomas Meier, Jan Kolen, Sjoerd Kluiving

- Scientific techniques to examine human interaction with woodlands
  Conveners: Lorna O’Donnell, Scott Timpany

- SA24: What have isotopes done for archaeology lately?
  Conveners: Ricardo Fernandes, Klervia Jaouen

- Consumption preferences and agricultural choices: an economic approach to identity in archaeobotany
  Conveners: J.Wiethold, T.Kerig, Jutta Lechterbeck

- SA12: Integrated approaches to spatial analysis in domestic and inhabited contexts
  Conveners: Hayley McParland, Carla Lancelotti, Robyn Inglis, Francesco Carrer

- Interpreting the archaeological record
  Conveners: Tanja Romankiewicz, Daniela Hofemann, Roz Gillis

- SA5: Climate and society in the ancient Near East
  Conveners: Pascal Flohr, Bulent Arikan, Dominik Fleitmann

- Don’t put your eggs in one basket: multi-disciplinary approaches to the study of poultry exploitation in Europe
  Convener: Julia Best
News from the Committee

Membership is very strong this year and we have a number of new members. Thank you for being so prompt with subs payments, it has made the membership secretary’s work much easier! Those who have paid after *Environmental Archaeology* vol 20.1 was issued, will receive this with the dispatch of volume 20.2. You are reminded that it is your responsibility to ensure that your contact details are up to date, please contact the Ruth Pelling, Membership Secretary, if you need to make any amendments. Please also note that Ruth’s business email address is changing to ruth.pelling@HistoricEngland.org.uk from April 1st 2015.
http://www.envarch.net

Key Dates

AEA Spring Conference 2015
Saturday 28th March, University of Nottingham
‘Crossing boundaries: the creation of Foodscapes’

Notes from the Newsletter Editors

Please note that thesis submission forms can be found on the website which gives AEA members an opportunity to publish abstracts of their postgraduate thesis.

We are always keen to receive newsletter content, especially from our non-UK members. To submit an article, please email word documents and images to:

newsletter@envarch.net

Wendy Carruthers, Vanessa Straker & Daniella Vos