

# Association for Environmental Archaeology

AEA Newsletter 123

February 2014

## Inside this issue:

The challenges of large environmental assemblages p2

The agricultural origins of urban civilization p3

Science in Scottish archaeology p5

New science facilities at Bournemouth University p5

Postgraduate thesis abstract p6

Conferences p7

News from the Committee p10

AEA Spring Conference booking form p11

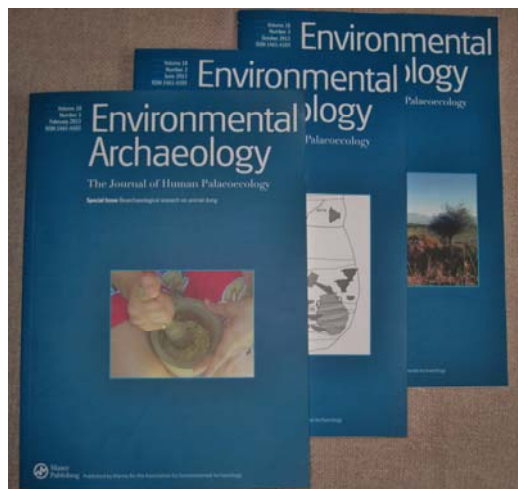
## Key dates on the Back Page

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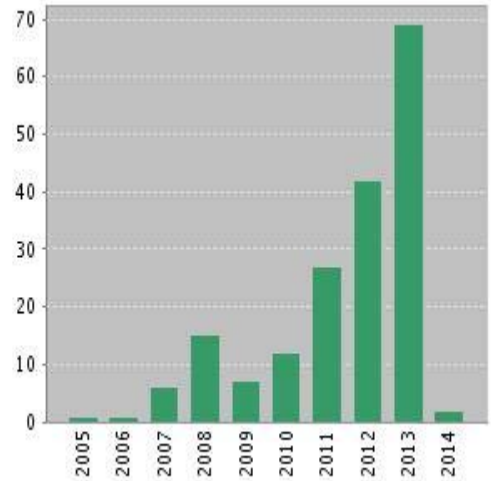
### Chair's piece

It gives me great pleasure to announce two exciting developments in the AEA: a new research funding scheme; and improvements in our publication service. At our Autumn conference in Plymouth later this year, we will launch the first call for applications to the Association for Environmental Archaeology Research Fund. Full application details will be provided in a forthcoming newsletter, but I can reveal that this will be an annual competition aimed at enabling members to fund primary research in environmental archaeology up to cost of £500.

Back in 1983 the Association launched the first journal dedicated to environmental archaeology – *Circaea*. Issued once a year, this journal included research articles, short reports and reviews (<http://envarch.net/circaea/>). In 1997 *Circaea* was superseded by *Environmental Archaeology: The Journal of Human Palaeoecology*. Initially this was produced as an annual volume, but since 2013 it has expanded to three issues per year. The expansion, internationalisation and growing scientific reputation of the journal is reflected in the increasing frequency of citations to journal articles in recent years (Figure 1).



**'Environmental Archaeology' Numbers 1 to 3, Volume 18, 2013**



**Figure 1 – number of citations to articles published in Environmental Archaeology each year.**

We are committed to expanding the journal further in the near future, to facilitate ISI recognition, while maintaining low membership rates, which have remained unchanged since 2004. We are also continually striving to improve the publication service for authors and I am pleased to announce some new developments in this area, recently implemented by the journal publishing team. The article submission process is now facilitated online through Editorial Manager, which not only simplifies submission, but also enables you to track the status of your article through the review and production process. We have also shortened publication times, by making articles available online in advance of the print copy and only 28 working days after acceptance, so your research can be made accessible to our international membership and institutional journal subscribers as quickly as possible. So if you have a research article, a review, or a short report, ready for submission please consider *Environmental Archaeology*.

Richard Thomas, AEA Chair

## The challenge of large environmental assemblages (or from cockroaches to conch shells)

The nature of the work carried out by MOLA is such that the environmental specialists must be able to rapidly adapt from carrying out numerous pieces of small scale work to reporting on large, urban assemblages and identifying 'exotic' species. Archaeobotanists, Anne Davis and Karen Stewart may be examining fruit stones and cereal bran from cesspits from medieval Cheapside one day and the next identifying (for the purposes of reconstruction) the wood used to build the gates of a farmhouse which was a key strategic post during the Battle of Waterloo. Zooarchaeologist Alan Pipe carried out dozens of assessments on material from sites across London and the south east and examined everything from exotic post-medieval molluscs (including a pink or queen conch (*Lobatus gigas*) from the Caribbean, and a trumpet triton (*Charonia tritonis*) from the Red Sea or Indo-Pacific) to a butchered red deer (*Cervus elaphus*) dated to AD160-200.

However, undoubtedly the biggest challenge facing MOLA's environmental specialists at present is the analysis of the vast quantities of well-preserved faunal and floral remains from excavations on the site of Bloomberg Place (the erstwhile 'Pompeii of the north'). Several hundred boxes of animal bone from over 800 samples have been recovered from the excavation of this key site in Roman London, located in the lower Walbrook valley and the site of the Temple of Mithras during the 3rd century.

Before excavation commenced, it was acknowledged that there was the potential for excellent preservation of bone and other organic materials (as well as metal finds) but that the potential for interpretation of those classes of material which are not intrinsically datable would be limited by the highly mixed nature of the dumps of material within the river channel and potentially also by material which had been imported from elsewhere in the city to consolidate the area for building. In order to address this, a sampling strategy for the animal bone was designed which would focus resources at the material likely to provide the highest interpretative potential.

In brief, this involved the excavation of a slot through the entire channel sequence (several metres deep) which was 100% sampled. This was also tied in with geoarchaeological sampling strategy to ensure the character of the sequence

could be established fully. Contexts which were equivalent to those within the slot were then subsampled according to an agreed discard policy so that only bone which would provide further information was retained for analysis. All other bone and environmental sampling was carried out according to standard protocols. As with any novel system, there have been some logistical issues to implementation as the work continued (both on site and off) and MOLA, together with Dr James Morris and students from UCLAN, will be carrying out a critical review of the strategy once work is completed.



Boxes of bone from the Temple of Mithras site

Recording of the animal bone from the 'slot' deposit is now well under way, with recovery of a distinctive assemblage of primary processing waste, very largely composed of adult cattle head and foot elements together with the extreme ends of the major meat-bearing limb long bones, but with almost no recovery of horn cores or of the prime carcase areas themselves. This clearly contrasts with the 'split and smashed' cattle long bone butchery seen at St Swithin's House, Walbrook (WAO06) (across the road) and indicates that, despite their proximity, waste at these sites derived from two specific and separate processes. Marine and migratory fish including herring, mackerel, salmonid and eels, domestic fowl, sheep, pig, horse and dog are present but in small numbers but wild species appear to be largely absent with only single fragments of grey partridge *Perdix perdix* and wild duck.

Meanwhile, highlights from the vast quantities of, often extremely well-preserved, waterlogged samples include a sample containing both pine nuts (from the stone pine, *Pinus pinea*) and black pepper (*Piper nigrum*). Pepper is relatively rare in Roman samples and would have been transported to this country from India. The environmental samples are also producing large quantities of bran and straw which may be evidence of stabling waste.

The excellent preservation conditions have also provided us with rare organic artefacts such as a little basket which may have formed part of the cover for a wine bottle, and which appears to have been made from clematis (*Clematis* sp.) and strips of softwood (*Pinus* sp.), whilst another basket from the site was fashioned from yew. It had been assumed that most of the spindles at the site would be made of box (*Buxus sempervirens*) but in fact the majority have been made of

elder (*Sambucus* sp.), though box is certainly common, and while the majority of the c 400 wax writing tablets have been of the expected silver fir (*Abies alba*), there have been exceptions, with some of other softwoods such as larch (*Larix* sp.) and even a hardwood example of maple (*Acer* sp.).

A sample of insect puparia have been provisionally identified as cockroach oothecae. Though Britain does have native cockroaches, these oothecae appear to be too large to belong to one of these and so are likely to be an imported species. The sample they were found in was taken from the wall lining of a circular structure that is thought to have been an oven. As the likely cockroach taxa cannot survive in the British climate, this would have been a sensible spot for a cockroach to lay its eggs, next to a ready food supply and steady warmth!

Initial assessment of the Bloomberg Place assemblage will continue well into 2014 and with numerous other large projects in the pipeline, the challenges will continue for the MOLA environmental team.



*Insect puparia provisionally identified as cockroach oothecae*

**Natasha Powers, Head of Osteology and Research Coordinator, Museum of London Archaeology (MOLA)**

## The Agricultural Origins of Urban Civilization

The emergence of the first urban centres in SW Asia, the Aegean and Europe presents a conundrum: after thousands of years of domesticated crop production and animal husbandry based in small-scale villages, what changes occurred to allow sufficient surpluses to feed cities? What role did crops and livestock play in the diet in emerging urban centres? What mechanisms were used to produce and appropriate food for the city?

These are some of the questions being addressed by the Agricultural Origins of Urban Civilization (“AGRICURB”), a



*Collecting modern plant samples in Turkey*

European Research Council-funded project led by Dr Amy Bogaard at the University of Oxford. By combining archaeobotanical evidence with geochemical and ecological data, we aim to identify where crops were being grown in the landscape, and what strategies were being used to produce them. We can then use this information in conjunction with isotopic analysis of faunal and human remains to reconstruct a food web for each site. This five-year project involves collaborators from across Europe, the Middle East and North Africa, including both scientific experts and archaeological specialists. Our geographic overview is broad, but focused on Neolithic-to-Bronze-Age sites in three study regions: Anatolia and northern Mesopotamia; the Aegean; and south-west Germany.

Our hypotheses build on previous research demonstrating not only the link between crop  $\delta d^{15}N$  and manure (Bogaard et al 2007; Fraser et al. 2011), and between  $\delta^{13}C$  and water availability (Araus et al. 1997, Ferrio et al. 2005, Wallace et al. 2013), but crucially that the isotope ratios measured in charred archaeobotanical remains can be consistently related back to the isotope ratios of the once-living plant (Fraser et al. 2013). These data will allow us to distinguish between intensive (high labour input, high yield, small area) and extensive (low labour input, low yield, large area) crop production strategies. In addition to this, we are looking into whether strontium in the archaeological grains will reflect the geological substrate on which they grew, allowing us to identify whether crops were grown locally or came from further afield. Our first case studies have also shown that

isotopic analysis of crop remains, combined with the broader isotopic ecology from analysis faunal and human remains, reveal fascinating, more nuanced behavioural patterns. For example, analysis of late Chalcolithic Tell Brak, Syria by Dr Amy Styring (Oxford), showed that the environments in which herbivores were grazed changed significantly over the course of the late Chalcolithic and that cereal crops were a major component of human diet throughout this period. (British Association of Near Eastern Archaeologists Conference, Reading, January 2014). Stable isotope ratios from a Middle-Late Neolithic site in southern Greece, Kouphovono, showed that throughout the Neolithic occupation of the site, the farmers distinguished between different types of cereals (free-threshing wheat and hulled barley) and consistently grew them at varying levels of intensity, likely cultivating the wheat exclusively for human consumption (Vaiglova et al., 2014).

During the first year of the project, two Oxford-based postdoctoral research assistants (Dr Erika Nitsch and Dr Amy Styring) have been refining our analytical tools. We have identified the range of temperatures and times to which crops can be charred and still be “optimally preserved”, both physically and chemically. We are currently testing which cleaning method can be used to remove contaminating strontium from grains while retaining the original content.

During the summer of 2013, we carried out a survey of weeds growing in cereal fields in the region of Haute Provence, France, in collaboration with local farmers using traditional methods. The purpose was to record the functional ecological attributes of weeds growing in the extensive, low-input crop production system typical of this region. Such data can then be used to link ancient weed species found in association with crops in archaeological contexts to their original growing conditions (e.g., Bogaard 2004). In Provence we’ve combined information from functional plant ecology (work by Dr John Hodgson, assisted by Oxford doctoral student Laura Green) with isotopic analysis of crops to understand what patterns of human behavior can be revealed in the archaeological record.

With the first of five years nearly complete, we look forward to continuing the laboratory analysis at our 18 case study sites from Anatolia/Syria, the Aegean and SW Germany. Publications of our first year’s work are currently in preparation, as are plans to carry out further functional ecology weed surveys in Morocco in spring 2014.

**Erika Nitsch**

## Acknowledgements

We acknowledge the support of the European Research Council (PI: A. Bogaard). Analytical facilities in Oxford have been provided in collaboration with the Research Laboratory for Archaeology and the History of Art, and the Department of Earth Sciences. The full list collaborators on the AG-RICURB project can be found at [www.agricurb.com](http://www.agricurb.com).

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Field survey in Provence

## Science in Scottish archaeology: realising the vision

The Science Panel of the Scottish Archaeological Research Framework (ScARF) set out an exciting vision for science in Scottish archaeology. The ambition is for archaeological science in Scotland to be a world-leader, achieved through partnership and collaboration, and building on existing strengths and expertise. The vision outlines the need to increase scientific research capacity in Scotland, create a network of specialists willing to work together, and hold workshops addressing 'hot-spot' areas of archaeological science. We are now working collaboratively on steps towards realising this vision.

The co-Chairs of the ScARF Science Panel (Dr Richard Jones & Dr Karen Milek of Glasgow and Aberdeen Universities respectively) are working with the Society of Antiquaries of Scotland (who led the ScARF initiative) and Historic Scotland on ways to develop the network of archaeological specialists. The first phase is the creation of a Directory of Archaeological Scientists which is currently being developed by Landward Research Ltd. This will provide a virtual network of archaeological scientists and aims to improve communication between scientists and field practitioners, resulting in better integration of scientific techniques. The online portal, to be hosted on the ScARF website, will comprise a directory of scientists able to work on Scottish materials (identifying their areas of specialist expertise) and resources for potential use by archaeological scientists working on Scottish ma-

terials. Members of the Association for Environmental Archaeology with research interests in Scotland are encouraged to contact Landward Research Ltd - [enquiries@landward.eu](mailto:enquiries@landward.eu). The project is overseen by an Advisory Board, comprising specialists from different archaeological science areas across Scotland, many of whom contributed to the Science Panel report.

Other activity is focusing on aspects of archaeological science in need of further attention, often in terms of profile-raising or addressing skills gaps. Dr Richard Jones, for example, recently organised a workshop on lithics research, focusing on science-based techniques and methodologies. The event, arranged around talks, demonstrations and discussion groups, was attended by archaeologists and scientists from commercial units, universities and museums. It had the aims of encouraging more science-based analysis of lithic artefacts, telling us more about how they were used and where they were sourced. The workshop also looked at the role of experimental work and methodological issues such as recovery and sampling. A second workshop, potentially in Autumn 2014, will probably look at an aspect of Environmental Science.

Creating the directory and hosting targeted workshops are the first steps in helping us, as a sector, identify what resources are required to ensure Scottish archaeological science achieves the rich potential set out through ScARF.

**Rebecca Jones, Richard Jones, Karen Milek & Jeff Sanders**  
(*Historic Scotland, Glasgow University, Aberdeen University & Society of Antiquaries of Scotland*)

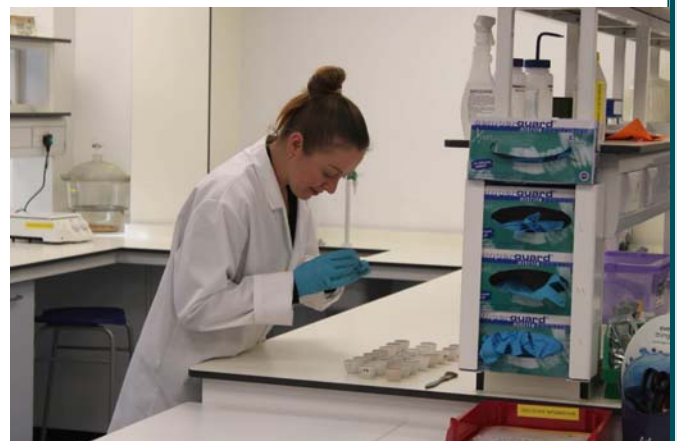
## New science facilities at Bournemouth University

Bournemouth University, Archaeology group are excited by the recent £1 million refurbishment of their laboratories which was completed in January 2014. These offer dedicated research facilities with high specification equipment.

This is a huge boost to the research and teaching in environmental archaeology that is currently being conducted at the university and offers a range of analyses that were not possible prior to the refurbishment. It may have been a difficult nine months while the refurbishment was being undertaken but it was well worth the wait!

The 12 newly refurbished laboratories include:

- Microscopy and Analysis Suite including Scanning Electron Microscope and 3D image facilities.
- Analytical Laboratory for Chemical Characterisation Analysis, with a wide range of techniques available such as chromatographic and spectroscopic analysis (GC-MS, HPLC, Uv/Vis, FTIR, GFAAS, ICP).



- Wet microscopy and petroscopy laboratory, housing petrographic equipment and high and low microscopy for fauna, flora, artefacts and sediments identification.
- Sample Preparation Laboratory with a range of techniques for sediment, soil and marine sample sorting.
- Dedicated undergraduate and Postgraduate Project Research Laboratories with a wide range of techniques available and staffed by dedicated research demonstrators.

The refurbishment coincides well with two new AHRC funded projects in environmental archaeology that Bournemouth University was recently awarded both of which also began in January 2014: *the Cultural and Scientific Perceptions of Human-Chicken interactions Project* and the *INEA Project (Identifying activity areas in Neolithic sites through ethnographic analysis of phytoliths and geochemical residues)*. Both projects have associated Ph.D. students and Post Doctoral Research Assistants who will

be making good use of these new laboratory facilities!



*Dr Emma Jenkins*

### Postgraduate Thesis Abstract

As a new addition to our regular articles we include our first Abstract of a recently completed postgraduate thesis by an AEA member. We are grateful to Dr Forthergill for starting the ball rolling and would like to encourage other AEA members to follow suit. PhD, MRes or MPhil thesis abstracts would be welcome, and these can be submitted using the form provided on the website, or by sending them to [newsletter@envarch.net](mailto:newsletter@envarch.net)

**Name:** Dr B. "Tyr" Fothergill

**Thesis Title:** **The Bird of the Next Dawn: the husbandry, translocation and transformation of the turkey**

I completed my doctoral studies on the subject of animal-human relationships and husbandry practices at the University of Leicester in 2012. In my PhD, I used archaeological and textual evidence to chart the disease and social history of the turkey (*Meleagris gallopavo*) over a period of a thousand years; this shed new light on the translocation of the species to Europe and how it was husbanded, perceived and portrayed historically. Central to these interpretations were the description and differential diagnosis of pathologies in turkey skeletal elements and investigation of proportions of disease and injury at multiple scales across assemblages. These data were interwoven with historical and ethnographic records to present a holistic narrative of the species and provide insight into the lives of their keepers.

In terms of results, the zooarchaeological data from the American Southwest attested to variation in the purposes for which turkeys were kept and differences in their living conditions. Localised trauma suggested that live domestic turkeys were plucked, perhaps repeatedly, at some sites in the American Southwest. Metrical data demonstrated temporal variation in the size and proportions of domestic turkey across assemblages and differing population dynamics, including male-female ratios and percentage of juveniles. Other evi-

dence indicated that the turkey was not consistently perceived only as a protein product and may have simultaneously occupied several strata of meaning.

On the other side of the Atlantic, Avian tibial dyschondroplasia was differentially diagnosed in turkey bones from the Royal London Hospital (Fothergill et al. 2012); this provides firm skeletal evidence for 'improvement' of the species by the 19<sup>th</sup> century. The lesions presented by post-medieval European turkeys (and their measurements) differed from North American turkeys in ways which stemmed directly from changes in human-turkey relationships and turkey husbandry methods. These practices were shaped by changing human perceptions of the turkey, which in turn were influenced by elements of Enlightenment philosophy (Fothergill forthcoming). This research demonstrated the successful application of animal palaeopathology combined with historical research and explored the connections between changing attitudes to animals, their health and animal-human relationships in the post-medieval period.

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## ***AEA and Conchological Society Joint Spring Conference***



Association for  
Environmental  
Archaeology



Conchological Society  
of Great Britain & Ire-  
land

### ~ MOLLUSCS IN ARCHAEOLOGY ~

*Neil Chalmers Seminar Room, Natural History Museum, London, Saturday 26<sup>th</sup> April 2014*

*Registration from 10am; meeting 10:20am - c. 5pm*

The subject of 'Molluscs in Archaeology' has not been dealt with collectively for probably 3-4 decades. This meeting addresses that and embraces a wide range of aspects of molluscs in archaeology. The meeting is held in Natural History Museum, London where lectures will be in the Neil Chambers Lecture Theatre and exhibits, displays and stereo-binocular microscopes will be available in the Angela Marmont Centre.

The aim is not to present information from individual sites per se (just because it's a good data set), but to use information from archaeological contexts to show case a particular theme, interpretation, idea or concept.

Lectures will be 20-25 minutes long with questions. There are normal lecture theatre facilities.

*Programme:* **Matt Law** (Cardiff University) & **Nigel Thew** (Switzerland): Archaeological Site Formation Processes and Environmental Change Neolithic to and the Norse Period in the Machair of the Outer Hebrides

**Tom Walker** (Reading University): Sand at Gwithian, Cornwall; palaeoenvironment, molluscs and archaeology

**Emma Tetlow, Richard Cuttler, Liam Delaney & Faisal Abdulla Al-Naimi** (Qatar): Neolithic Occupation and palaeoenvironmental reconstruction in the State of Qatar

**Janet Ridout-Sharpe:** (Conchological Society): A la mode: shell jewellery across the Epipalaeolithic/Neolithic transition in northern Syria

**Mike Allen** (Conchological Society): Scale, snails and resolution: land-use reconstructing and re-evaluating the history of the chalklands

**Bri Eastabrook** (recent graduate Plymouth University): Ancient Forests in Malta: fact or fiction? A land snail analysis

**Victoria Taylor & Martin Bell** (Reading University): A land mollusc midden at Tavoralt, Morocco

**Greg Campbell:** Shell-hash to shell-size: reconstructing original shell size from fragmentary archaeological remains (the common *Mytilus edulis* L., as an example)

**Liz Somerville** (Sussex University): Tales told by oysters

**Ricardo Fernades & Alexander Dreves** (Kiel): Radiocarbon and isotopic analysis of bivalves in archaeology

*Deadline for registration: 11th April. N.B. NO REGISTRATION PERMITTED ON THE DAY*

*A Booking Form is provided at the end of this Newsletter.*

A full set of abstracts will be available on the website. Details of meeting venues will be sent to you on registration, along with abstracts, other information, and food outlets in the museum.

Tea and coffee will be provided in the morning and afternoon breaks. The museum has restaurants and cafes ... and if you bring packed lunches there is a picnic area the Lower Ground Floor near the main entrance, and limited room in the Angela Marmont Centre.

Mike Allen— *President: of the Conchological Society of Great Britain and Ireland*

**BOTANICAL ONTOLOGIES: A CROSS-DISCIPLINARY FORUM ON HUMAN-PLANT RELATIONSHIPS***May 16-17, 2014**Radcliffe Humanities Building, Oxford*For further information contact [botanical.ontologies@gmail.com](mailto:botanical.ontologies@gmail.com)

See our twitter feed (@Bot\_Ontologies)

**PZAF 2014****Postgraduate Zooarchaeology Forum***Institute of Archaeology, University College  
London, 20th-21st June 2014.*Full information can be found on our  
webpage:  
[pzaf2014.wordpress.com](http://pzaf2014.wordpress.com)**European Association of Archaeologists****EAA 2014**

Istanbul

10th -14th September

*Session: 'The Bioarchaeology of Ritual  
and Religion'**Session: 'Environmental archaeology and  
archaeology: Divided we stand (still)?'**Session: 'Subsistence strategies in  
change: the integration of environmental  
and archaeological evidence on prehis-  
toric land use'*

For further information see

<https://www.eaa2014istanbul.org>**EUROPEAN GEOSCIENCES UNION 2014****Vienna, Austria, 27th April—2nd May****Sessions:***GM4.2 Geoarchaeology within global environ-  
mental change**SSS3.3 The role of soil records within landscape  
archaeology**SSS3.2 The role of paleopedology in recon-  
structing landscape evolution**HS1.2 Co-evolution of water systems and societies*

For further information see

<http://www.egu2014.eu/>**CALL FOR SESSIONS****XIX INQUA Congress****Nagoya, Japan****27th July—2nd August 2015**Deadline for submissions : *31st March  
2014*

For further information see

<http://inqua2015.jp/>



### INTERNATIONAL WORKSHOP ON ARCHAEOLOGICAL SOIL MICRO- MORPHOLOGY 2014

*26-29th May 2014*  
Amersfoort, The Netherlands

See the website for further information  
[www.cultureelerfgoed.nl/en/  
micromorphology](http://www.cultureelerfgoed.nl/en/micromorphology).

### ICAZ 2014

*CALL FOR PAPERS*  
ZOOARCAEOLOGY OF  
PASTORALISM

*Argentina, September 2014*

Deadline for submissions *March 31st 2014*

For more information contact Lee G. Bro-  
derick (University of York,  
[lee@zooarchaeology.co.uk](mailto:lee@zooarchaeology.co.uk)) and Robin  
Bendrey (University of Reading,  
[r.bendrey@reading.ac.uk](mailto:r.bendrey@reading.ac.uk)).

ICREA International Conference on

### SMALL-SCALE SOCIETIES AND ENVIRONMENTAL TRANSFORMATIONS: CO- EVOLUTIONARY DYNAMICS

*Barcelona*

*17th-18th December 2014*

See <http://www.s3et.net>

### *AEA 2011 AUTUMN CONFERENCE, AMSTERDAM, VOLUME NOW OUT!!!*

#### **BARELY SURVIVING OR MORE THAN ENOUGH?**

Edited by Maaikje Groot, Daphne Lentjes & Jorn Zeiler

ISBN: 978-90-8890-199-7

Number of pages: 280

Language: English

Price: € 34,95 (Incl. VAT, excl. Shipping)

Sidestone Press / [www.sidestone.com](http://www.sidestone.com)

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**NEWS FROM THE COMMITTEE (Fay Worley, Secretary)**

The AEA Managing Committee met in February and have several new initiatives we are working on for this year, alongside our regular activities. Planning for the spring and autumn meetings is well underway, the website will soon see additional new content and functionality and the journal promises some interesting forthcoming issues. We are also happy to report that subscription fees have not been increased this year and will be retained at their current level until at least the end of 2015.

In addition to our Newsletters and website ([www.envarch.net](http://www.envarch.net)), we invite members to stay up to date with AEA events and the Committee's activities by following our Twitter account <https://twitter.com/Envarch>, Facebook page and jiscmail discussion list.

We hope to see you at the spring meeting in London

**MEMBERSHIP RENEWALS (Ruth Pelling, Membership Secretary; [membership@envarch.net](mailto:membership@envarch.net))**

Thank you to all the members who have already paid their subscriptions for this year. Your continued support for the AEA is, as always, much appreciated.

Members are reminded that subscriptions are due in January of each year. A number of payments for 2014 are still outstanding and I will be sending reminders shortly. The first issue of the journal for this year (volume 18.1) was dispatched in early February. There were a number of payments that have arrived subsequently or for which I was awaiting confirmation from the bank (for IBAN payments) and those members will be receiving their copy of 18.1 in the next few weeks. For all other members who pay late your copy of 18.1 will be dispatched once 18.2 is released later in the year.

Subscription payments are easiest made through the website using WorldPay (<http://envarch.net/register/>). Subscriptions remain unchanged at £38 waged, £28 students/unwaged. Payment through WorldPay in other currencies is calculated at the current exchange rate (about €46.3 / 63.4 US\$ for paid members or € 34 / 46.7 US\$ for students/unwaged, at time of writing). Payment can also be sent by sterling cheque, made payable to the Association of Environmental Archaeology or by IBAN (subscription fixed at €50 waged/€37 unwaged/student for IBAN payment). Full details are on the website (<http://envarch.net/>)

We hope over the next few months to create an online database to allow members to check their own payment status. Details to follow.

**MEMBERSHIP AWARD****Nominations Please!**

We are again requesting nominations for our Individual Membership Award following donations from an honorary life member and an individual member. This award offers **one Individual 'Full' AEA Membership** to an environmental archaeologist who has demonstrated commitment to the discipline, but whose personal circumstances have not enabled them to either join the organisation or to remain as a member.

No country or level of career development is excluded. **Membership will run currently for 3 years** and requires NO financial outlay by the individual. Individuals should be nominated by a person who has been a member of the AEA for at least 12 months standing.

In return for membership, the AEA would require the recipient to act as a local correspondent and submit two (maximum 1000 word) articles to the Newsletter each year focused around any aspect of environmental archaeology relevant to them (e.g. recent developments in environmental archaeology in a particular country/region, a recent excavation revealing environmental evidence, or a research report on their studies/work).

We invite nominations in the form of a maximum 1 page letter stating: 1) name of nominee; 2) affiliation of the nominee, if applicable; 3) relationship of the nominator to the nominee and period known; 4) brief statement to support the nominee (i.e. why they should be the recipient).

**How to make a nomination**

Nominations should be sent, preferably by email, to the AEA Chair (Dr Richard Thomas; [rmt12@leicester.ac.uk](mailto:rmt12@leicester.ac.uk)). The closing date for applications is the **30<sup>th</sup> April 2014** and a decision regarding the reward will be reached at the following committee meeting. All queries and correspondence should be directed to Dr Thomas.

## AEA and Conchological Society joint Spring Meeting

### ~ MOLLUSCS IN ARCHAEOLOGY ~

*Neil Chalmers Seminar Room, Natural History Museum, London, Saturday 26<sup>th</sup> April 2014*

*Registration from 10am; meeting 10:20am - c. 5pm*

**Registration Form— please note first come first served ... this will book up!**

*Deadline for registration, 11<sup>th</sup> April – pre-booking is imperative as space is limited to 60, and all delegates require a meeting badge as seminar rooms open out in to public space in the museum.*

**You cannot pay on the day as the Museum will not allow money transfer on its premises**

Natural History Museum, Cromwell Road, London, SW7 5BD (nearest tube station South Kensington)

Lectures in the Neil Chalmers Seminar Room, with displays and microscopes in the Angela Marmont Centre.

**The registration cost covers: information pack, programme, displays, exhibits, tea & coffee.**

**Lunch: bring your own / use one of the several cafes; there may be queues - these can be busy**

*Please return forms & cheques to: Mike Allen; Tel 07828 103454; Email: [president@conchsoc.org](mailto:president@conchsoc.org)*

*Dr Mike Allen, AEA Spring Meeting, Redroof, Green Road, Codford, Wiltshire, BA12 0NW*

#### Displays / Exhibits

I wish to bring a display, or molluscs or exhibit and would like to book a space in the Angela Marmont Centre (we cannot guarantee you a space unless you book in advance. Deadline for display 5<sup>th</sup> April)

Name: .....

Type of Display / Exhibit / Specimens.....

I will need: desk space / stereo-binocular microscope / other (please specify) .....

Posters: Bring own board/stiff card to lean against walls and cases. There are no poster display boards.

#### Booking - Deadline for registration, 11<sup>th</sup> April

I wish to book ..... places for the *Molluscs in Archaeology Seminar*

Name(s) (Please list names of all delegates – to appear on your badge) .....

I am a Postgraduate Student / Early Career Professional / Other. If other please specify:

Institution / Organisation / Company: .....

Address: .....

.....Post Code .....

Tel.: ..... Email: .....

I am a member of the AEA / Conchological Society (Please ring or delete as appropriate)

AEA & Conchological Society Members: ..... Waged (@ £10) ..... Student / Unwaged (@ £5)

Non-Members: ..... Waged (@ £15): ..... Student / Unwaged (@ £10)

I enclose a cheque made payable to the Conchological Society of GB & I for £ .....,OR have made an internet bank transfer to Conchological Society of GB and I, with NatWest bank, sort code 01-30-99 a/c no. 06523846 (use your name and 'NHM' as the reference), OR via Paypal adding £1 to cover our charges via <http://www.conchsoc.org/node/5477> and use your name and 'NHM' in the Note/comment box as a reference.



[http://  
www.envarch.net](http://www.envarch.net)

## *The AEA*

*The AEA promotes the advancement of the study of human interaction with the environment in the past through archaeology and related disciplines.*

*We hold annual conferences and other meetings, produce a quarterly newsletter for members, and publish our conference monographs, as well as our journal – **Environmental Archaeology: The journal of human palaeoecology.***

## *Key Dates*

### **AEA Spring Conference**

**Molluscs in Archaeology - Saturday 26th April 2014.** Neil Chalmers room, Natural History Museum, London, UK.

**Display deadline 5th April. Registration deadline 11th April**

(see page 7 for further details).

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### **AEA Seminars**

**Dorian Fuller** (UCL): 'Comparing pathways to agriculture: Current evidence on crop domestication rates and contexts from across Asia'  
Dublin **27 Feb 2014 - 17:00**

**Rena Veropoulidou** (Museum of Byzantine Culture, Thessaloniki, Greece): 'Purple dye in the Aegean: an archaeomalacological approach' **Nottingham 26 Mar 2014 - 17:00**

**John Lowe** (Royal Holloway): 'Climate Confusion: Lessons & Pitfalls in the Study of Climates Past' **1st May 2014 17.00, University of Oxford, Institute of Archaeology**

## **Notes from the Newsletter Editors**

Please note the call for nominations for the Individual Membership Award on page 10 (**30th April deadline**). We remind members that the AEA bibliography compiled by James Greig is now on the AEA website. You can also find a thesis submission form 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 & Jade Whitlam