

# Association for Environmental Archaeology

AEA Newsletter 125

August 2014

## Inside this issue:

Chair's piece	p1
Human osteology course	p2
Finding the limit of the <i>limes</i>	p3
Conference report: Organic finds workshop	p4
A day in flaxland	p6
Conferences & Meetings	p8
Book Offer	p12
News from the Committee	p13
Conference Fund application form	p17

## Key dates on the Back Page

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### Chair's piece

#### Richard Thomas, AEA Chair

I am looking forward to our autumn conference at the University of Plymouth (7<sup>th</sup>-9<sup>th</sup> November) immensely. The theme "The Big Picture: Archaeology, Society and Environment Conference" will showcase new work in environmental archaeology that integrates different strands of archaeological/environmental data at multiple scales of analysis, from site-focussed studies to regional syntheses.

The growth of developer-funded (cultural resource management) and community archaeology, in particular, has resulted in the generation of a huge body of raw data, which may only be published in the form of 'grey literature' and lodged in, sometimes hard-to-access, public repositories. The long-term curation of paper, digital and material archives, and the accessibility of these resources poses a critical challenge to the archaeological community. Of course, this problem has been recognised for a long time and attempts at finding a solution have been made. In the UK, for example, the Archaeology Data Service hosts OASIS (Online AccesS to the Index of archaeological investigationS), seeks to provide "an online index to the mass of archaeological grey literature that has been produced as a result of the advent of large-scale developer funded fieldwork and a similar increase in fieldwork undertaken by volunteers" ([www.oasis.ac.uk](http://www.oasis.ac.uk)). Within environmental archaeology, initiatives to pull together corpora of data to benchmark the current state of knowledge and facilitate future research have also been attempted. Within my own field of research – zooarchaeology - there now exists a database of animal bone measurements for southern Britain (<http://archaeologydataservice.ac.uk/archives/view/abmap/>) and zooarchaeological syntheses for regions and nations ([http://archaeologydataservice.ac.uk/archives/view/animalbone\\_eh\\_2007](http://archaeologydataservice.ac.uk/archives/view/animalbone_eh_2007); [http://archaeologydataservice.ac.uk/archives/view/animalbone\\_eh\\_2009](http://archaeologydataservice.ac.uk/archives/view/animalbone_eh_2009); [http://archeologieinnderland.nl/bronnen-en-](http://archeologieinnderland.nl/bronnen-en-kaarten/boneinfo-archeozo%25C3%25B6logische-informatie-radar-botanische-macroresten/)

[kaarten/boneinfo-archeozo%25C3%25B6logische-informatie-radar-botanische-macroresten/](http://archeologieinnderland.nl/bronnen-en-kaarten/boneinfo-archeozo%25C3%25B6logische-informatie-radar-botanische-macroresten/)). The value of these resources in making the inaccessible accessible is overwhelming; however, focusing on individual specialisms runs the risk of fragmenting connected environment archaeological evidence.

A recent initiative that has caught my eye for taking a different approach is SEAD - the Strategic Environmental Archaeology Database (<http://www.sead.se/>). In their own words, SEAD is "a national research infrastructure for archaeology and an international standard database for environmental archaeology data ... that will allow researchers to study data on the interactions of past environments, climates and human impact, as well as study the implications of these for the present and future research agendas including cultural heritage, species and landscape conservation". This co-funded project, directed by Dr. Philip Buckland, is based at Umeå University and operates in partnership with Lund University, and more recently the Swedish National Heritage Board. The primary output of the project is a GIS-receptive database for environmental archaeology data (Figure 1), along with online and downloadable software for data entry, querying and retrieval. Captured within the system are archaeological/palaeoecological data including: pollen, insect, macrobotanical and dendrochronological records, geochemical samples, and geoarchaeological data from the analysis of ceramic thin sections. Each sample is supported by radiocarbon and/or calendar dates, metadata and bibliographic references. Contemporary ecological data (insects, pollen, plants) are also incorporated into the database to enable the connections between past and present environments and climate to be drawn. The system is expandable to other proxy data sources and multiple classification systems for ecological and climatic reference data. To date, SEAD contains 32, 405 samples.

The intellectual rewards of adopting the interdisciplinary, multi-proxy approach advocated by SEAD will, I am sure, be enormous and I look forward to watching this project develop with considerable anticipation. It is deeply

encouraging that there are many other initiatives currently seeking to synthesise multiple lines of biological remains with other kinds of archaeological evidence at different scales of analysis, to address crucial research questions. Within this newsletter we have a report from one such project - Finding the Limits of the Limes (<http://limeslimits.wordpress.com/>) - although other good examples include The Rural Settlement of Roman Britain (<http://www.reading.ac.uk/archaeology/research/roman-rural-settlement/>) and the Cultural and Scientific Perception of Human-Chicken Interactions (<http://www.scicultchickens.org/>) spring to mind.

All of these projects could not have been realised without the vast body of data generated by environmental archaeologists working on developer-funded projects. If we can solve the problem of curation and access, therefore, the promised rewards will be far-reaching. The conference in Plymouth will provide an excellent forum to discuss some of these challenges and learn about projects that have taken interdisciplinary, multi-scalar approaches, to cast new light on past human interactions. I look forward to meeting some of you there.

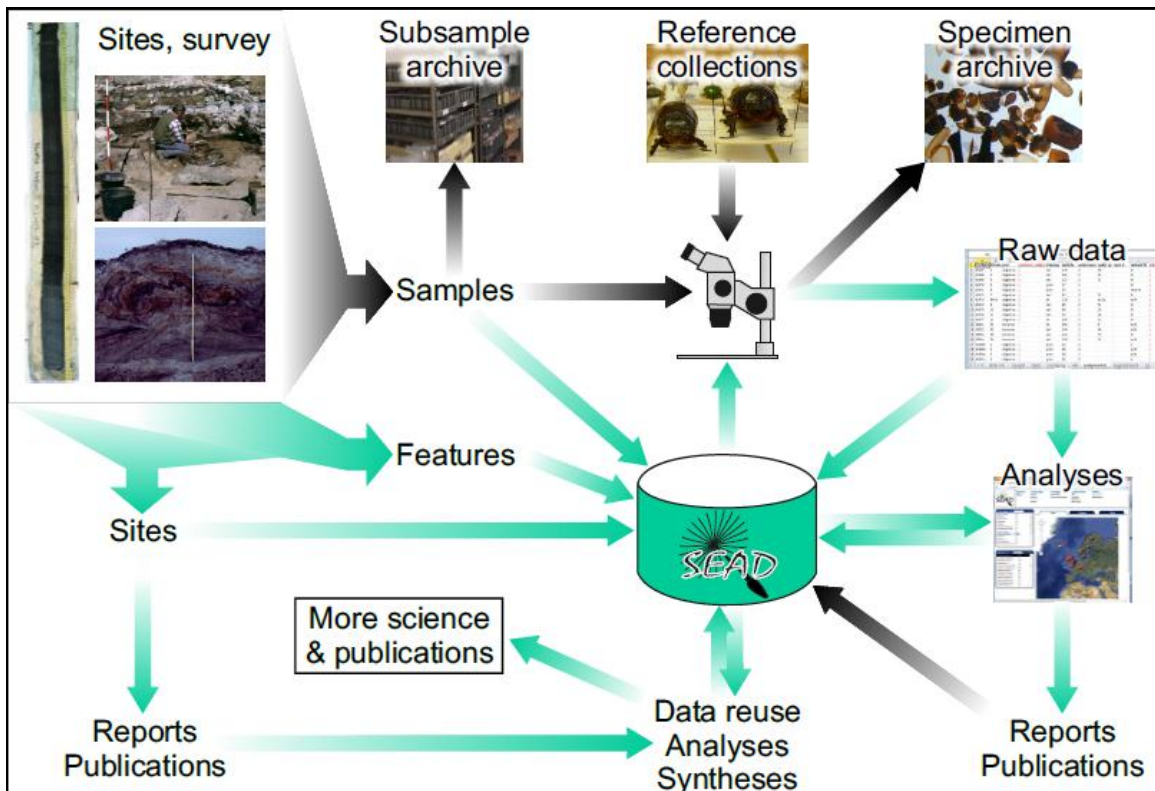


Figure 1: the SEAD data flow

## 5-Day Introduction to Human Osteology

12<sup>th</sup> – 16<sup>th</sup> January 2015

Oxford Brookes University, Oxford, UK

A five-day course suitable for those working in: archaeology, museums and other positions within the heritage industry; anyone wanting a taster course in human osteology at an intermediate level; prospective students at undergraduate or Masters level and anyone wishing to refresh their knowledge of human osteology and the interpretation of osteological material.

The course is taught through lectures, presentations and a

wide range of practical activities, giving participants the opportunity to apply and consolidate the information given.

The course will be taught by Dr. Lauren McIntyre of Elmet Archaeological Services and Isabelle Heyerdahl-King (doctoral candidate at the University of Sheffield). Lauren and Isabelle are trained osteoarchaeologists with a combined total of over 25 years practical and professional experience in both the field and the classroom.

Further information and booking:

<http://shop.brookes.ac.uk/browse/department.asp?compid=1&modid=2&deptid=24>

## Finding the limits of the *limes*

The arrival of the Roman army to the Rhine-Meuse delta in ca. 15BC brought significant changes to the Dutch *limes* region. A string of fortifications was erected on the south bank of the Rhine, local populations were encouraged to settle in the area and garrisons arrived. By ca. 45AD economic and demographic growth in the *limes* region had begun, becoming stronger after the creation of the province of *Germania Inferior*.

The garrisons required provisioning with food, fuel and animals for transport (among others), however it was assumed previously that the majority of provisions were imported (Willems 1986). A significant corpus of research (e.g. Groot 2008; Groot et al. 2009; Cavallo, Kooistra, and Dütting 2008; Kooistra 1996; van Dinter et al. 2014; Kooistra et al. 2013), employing the rich set of settlement evidence, archaeobotanical, zooarchaeological and palaeogeographic evidence that the Dutch *limes* zone provides, now points to the contrary.

There still exist uncertainties regarding the organization of the economy, the effects of the military presence, logistics and land-use. The NWO<sup>1</sup> - funded project, **Finding the limits of the *limes***, seeks to improve understanding of these issues. Focusing on modeling the economic and spatial relations between the Roman army and the local population, important research questions related to the interaction between crop husbandry, animal husbandry and wood management, and the development of settlement patterns and transport networks will be investigated.

The project is led by Dr. Philip Verhagen and conducted at the Faculty of Arts, VU University, Amsterdam. In March 2013, doctoral student Jamie Joyce began his research, focusing on the palaeoeconomy of the region, and in September 2013, the third member of the project team, doctoral student Mark Groenhuijzen, started research within the palaeogeographic axis of the project. The first year of the project has been spent collecting together a vast body of data from various sources. It is intended to combine the various strands of data into a database, with the interface being produced in collaboration with Dr. Matthias Lang<sup>2</sup>. Filling the database and assessing data quality is currently a key priority.

<sup>1</sup> [Netherlands Organisation for Scientific Research](#)

<sup>2</sup> [eScience Centre, University of Tübingen, Germany](#)

Another key priority of this year has been developing the models that will be used to produce scenarios that can best explain the observed archaeological and palaeo-environmental record. Simulations of animal husbandry have been produced in the agent-based modelling environment NetLogo (Wilensky 1999) to understand the effects of certain approaches to animal husbandry and develop scenarios of production and the quantities involved. During the second half of this year more models will be developed for other aspects of the palaeoeconomy, namely arable farming and woodland management. The simulated scenarios and their subsequent testing against the available archaeological evidence will then be used to elucidate the possible approaches in which the local agrarian population of the *limes* responded to the changes during the Roman period (15BC-275AD).



*Roman milestone on the limes road near Valkenburg, South Holland*

Work on the palaeogeographic aspect of the project has focused on a detailed reconstruction of the natural landscape. Such work has already been performed for the Old Rhine area west of Utrecht (van Dinter 2013). A variety of sources is used to extend this reconstruction to cover the remainder of the western Dutch *limes*, including geological, geomorphological, palaeogeographical and pedological maps, elevation models, and data from geological and archaeological research. For the more difficult eastern Dutch *limes*, a collaboration has been established with a project team from Faculty of Geosciences, Utrecht University wherein the strengths of geological

and archaeological research are combined in order to reconstruct the past landscape through the identification of buried soil horizons. Such a reconstruction can then be used as a basis for further analysis in the project. The next task is to perform an analysis of the cultural landscape using this dataset, particularly the settlement patterns and the functioning of the transport network.

In April, Dr. Philip Verhagen presented a paper at the CAA conference in Paris on the key problems of data quality with a focus on the Dutch national archaeological database ARCHIS.<sup>3</sup> In June this year, the project team organized a two day workshop inviting researchers in various fields to

<sup>3</sup> ["The archaeological distribution map: where are the emperor's clothes?." Presented at CAA2014, Paris, 22-25 April 2014](#)



present their research and its applications to the *limes* region, as well as provide the project team with expert advice. In September this year, all three project members will be presenting their theoretical and methodological approaches to the project at the LAC in Rome.

The project maintains a blog (<http://limeslimits.wordpress.com>), which is updated with the project's progress and events involving the project team.

### **Jamie Joyce & Mark Groenhuijzen**

**Cavallo, C., L. I. Kooistra, and M. K. Dütting.** 2008. "Food Supply to the Roman Army in the Rhine Delta in the First Century AD." In *Feeding the Roman Army: The Archaeology of Production and Supply in the North-West Roman Provinces.*, edited by S. Stallibrass and R. Thomas, 69–82. Oxford: Oxford.

**Groot, M.** 2008. *Animals in Ritual and Economy in a Roman Frontier Community: Excavations in Tiel-Passewaaij*. Vol. 12. Amsterdam: Amsterdam University Press.

**Groot, M., S. Heeren, L. I. Kooistra, and W. K. Vos.** 2009. "Surplus Production for the Market? The Agrarian Economy in the Non-Villa Landscapes of Germania Inferior." *Journal of Roman Archaeology* 22 (1): 231–52.

**Kooistra, L. I.** 1996. *Borderland Farming. Possibilities and Limitations of Farming in the Roman Period and Early Middle Ages between the Rhine and Meuse*. Assen: Van Gorcum.

**Kooistra, L. I., M. van Dinter, M. K. Dütting, P. van Rijn, and C. Cavallo.** 2013. "Could the Local Population of the Lower Rhine Delta Supply the Roman Army? Part 1: The Archaeological and Historical Framework." *Journal of Archaeology in the Low Countries* 4: 5–23.



*Reconstructed castellum at Archaeologisch Park Matilo near Roomburg, Leiden*

**Van Dinter, M.** 2013. "The Roman Limes in the Netherlands: How a Delta Landscape Determined the Location of the Military Structures." *Netherlands Journal of Geosciences* 92: 11–32.

**Van Dinter, M., L. I. Kooistra, M. K. Dütting, P. van Rijn, and C. Cavallo.** 2014. "Could the Local Population of the Lower Rhine Delta Supply the Roman Army?: Part 2: Modelling the Carrying Capacity Using Archaeological, Palaeo-Ecological and Geomorphological Data." *Journal of Archaeology in the Low Countries* 5 (1): 5–50.

**Wilensky, U.** 1999. "NetLogo". Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. <http://ccl.northwestern.edu/netlogo/>.

**Willems, W.J.H.** 1986. "Romans and Batavians A Regional Study in the Dutch Eastern River Area". University of Amsterdam. <https://openaccess.leidenuniv.nl/handle/1887/11881>.

## **Dealing with organic finds**

### **A workshop hosted by the IfA Finds Group with the Association for Environmental Archaeology**

On 28 May, 22 people representing a broad range of skills and expertise from various environmental archaeology backgrounds met at the Department of Archaeology and Ancient History, University of Leicester to participate in a workshop focused on the study of organic finds. This workshop was hosted by the Institute for Archaeologists Finds Group with

the Association for Environmental Archaeology (AEA).

The primary aim of the workshop was to provide information and share experiences regarding best practice when dealing with organic finds. This was achieved through a combination of oral presentations/lectures and hands-on learning opportunities direct from sector experts. The workshop focused on archaeological leather, wood, dating organic remains and the identification of archaeological bone, antler and ivory.

Richard Thomas, Senior Lecturer in Archaeology at the University of Leicester and Chair of the AEA opened the workshop, which was followed by three oral presentations. The first presentation was entitled 'Making the right choice:

*Treatment options for archaeological leather and recording'* by Angela Middleton, Archaeological Conservator at English Heritage.

The production of leather and its survival in different environments was outlined, in addition to the different methods of treating and conserving waterlogged archaeological leather. An overview was given of *The Leather Drying Trial*<sup>1</sup> which was accompanied by an exercise whereby the workshop participants were provided with multiple leather pieces to study and decide which particular treatment technique had been applied. This was followed by a brief introduction to the different methods of recording archaeological wood and the outline of a case study focused on the excavation, analysis and treatment of an 18th-century chain pump from a protected shipwreck.

The second presentation by Jim Spriggs, Conservation Consultant in York was entitled *Wood remains – Information, Preservation and Management*. This presentation focused entirely on the analysis of archaeological wood and the different types of information that can be extracted from the study of wood remains. Specific areas covered included the consideration of wood remains in pre-excavation project plans and the provision of services and advice/guidance associated with its excavation, recording and storage. A number of different wood remains were provided for the participants to handle and study. One example displayed how tooth marks left by a beaver could to the untrained eye be mistaken for anthropogenic tool marks.



**Figure 1**

The last presentation of the morning entitled *Dating Organic Remains* was given by Zoe Outram, Science Advisor for English Heritage (Figure 1). This provided an introduction to

those scientific dating techniques that can be applied to the study of organic remains and how they work. The presentation concentrated on two specific techniques: Radiocarbon dating and Dendrochronology. Guidance concerning sampling, how much to sample and the suitability of certain organic remains for sampling was offered with emphasis placed upon the suitability of each technique in relation to the research questions being asked.

The afternoon session was presented by Sonia O'Connor, Post-doctoral Research Fellow at the University of Bradford and was entitled *Animal matters: identifying archaeological bone, antler and ivory*. This laboratory based session comprised a combination of lectures and hands-on practical activities focused on the identification of various animal hard tissue examples (bone, ivory and antler). Each participant had access to a microscope and the opportunity to study a wide variety of materials (in many different shapes and forms, ranging from raw materials, for example, tusks and bone fragments through to finished artefacts ranging from cutlery handles to finely made figurines). This helped participants to put into practice information provided in the lectures regarding visual identification techniques and the macroscopic and microscopic features and characteristics that aid identification and the distinguishing of different material types. It also emphasised potential problems associated with the change in characteristics of materials associated with decay and processing/working and how to cope with these issues.

Overall the workshop was very well received with excellent feedback; the participants from a range of backgrounds found the day interesting and informative and expressed their desire for similar workshops to be organised. The IfA Finds Group hopes to collaborate further with the AEA in the future and would like to thank both the AEA and the University of Leicester for their support in the running and organisation of this event.

For more information on joining the IfA Finds Group please contact Jen [jen.wooding@archaeologists.net](mailto:jen.wooding@archaeologists.net) Membership costs £10.00 per year for non- IfA members and entitles members to reduced cost admission at future Finds Group led events. For more information on joining the IfA, where membership of all special interest groups is free, please email Lianne [lianne.birney@archaeologists.net](mailto:lianne.birney@archaeologists.net) or visit <http://www.archaeologists.net/join/individual>

### **Jen Parker Wooding**

Membership Services Coordinator  
Institute for Archaeologists

<sup>1</sup>Karsten, A, Graham, K 2011, *Leather drying trial. A comparative study to evaluate different treatment and drying techniques for wet, archaeological leather*. Research Department Report 70-2011. Portsmouth: English Heritage



## A Day in Flaxland

The Environmental Department at Oxford Archaeology, joined by Wendy Carruthers, recently spent a beautiful early summer's day in 'Flaxland.' Flaxland, located just outside Cirencester, is the project of Simon and Ann Cooper, who have developed their fascination with this traditional oil- and fibre-crop into a thriving cottage industry. The couple undertake the cultivation, processing and crafting of flax into linen, and have opened the doors of their Cotswolds farmhouse to give the public the chance to try their hand at these ancient skills. Our visit came about after Kath Hunter, one of our archaeobotanists, discovered Flaxland online whilst researching traditional flax manufacture to ascertain how the various processes might be represented in the archaeobotanical record. The Coopers were very accommodating when we explained our interest and customised a day-long workshop which particularly drew on the historical aspects of the flax industry.

We began right at the beginning of the process, with a visit to Simon's field of young flax shoots. Simon explained that in



*Simon Cooper laying out water retted flax to dry*

areas of large-scale flax production, such as in areas of France, modern machinery has been developed specifically for the harvesting of flax; however, Simon harvested (and weeded) his crop entirely by hand, by pulling the crop roots and all from the ground. We then had the memorable experience of seeing part of the previous year's harvest mid-water retting. The indescribable smell was a firm reminder that those involved in the flax industry may not have made the most desirable neighbours! The Coopers undertake both water and dew retting, with the former ultimately producing a finer quality linen. As they further explained, the exact methods selected for harvesting, retting and processing each crop would have been a compromise between quality and quantity: early harvesting of an unripe crop, water retting and intensive 'hackling' of the fibres would produce very fine linen but also a high proportion of waste material, whilst waiting for the seeds to fully develop would produce a valuable secondary crop in the form of oil but result in a coarser

fibre.

It was then time for us to have a go. Simon has designed and built his own bespoke tools for the processing of the retted



*Ann Cooper with a bundle of flax*

and dried flax stems into fibre, and we were taken through each of them in turn.

First, the tops of the stems were 'rippled' by passing them through a coarse iron comb to remove the seed heads. Next came 'breaking', literally breaking the stems beneath a heavy oak lever to physically separate the fibre from the rest of the plant. The third step, 'scutching', used a specially designed paddle to beat these detached elements away from the fibre.



*Breaking the rippled flax*





**Scutching**

After a very enjoyable picnic lunch in the garden, we got back to work. Our next job was to turn this coarse fibre into a



**Hackling**

product fine enough to be spun via the aforementioned process of 'hackling'.

This proved to be one of the most time consuming parts of our day, and consisted simply of passing small quantities of the fibre through increasingly fine combs until a fine, even mass of fibre was produced. One of the most surprising things we discovered – and most relevant in terms of what we might be seeing in the archaeobotanical record – was the vast amount of waste material produced at each stage. The Coopers calculated that the non-fibre element of the plant removed during scutching, known as 'shive', could account for as much as 40% of the harvest. However, not all of the by-products would have been discarded – the coarser fibres removed during hackling, known as 'tow', could have been spun into thick ropes and nets. We took the opportunity to gather up samples of the material generated at each stage to bolster our comparative reference collection back at OA.

The final part of our day, conducted over tea and cakes, was for each of us to try drop spinning. Ann showed us the careful



*Comparing the distinctive smell of water-retted flax (left) with dew-retted flax (right)*

way in which to lay out the fibres and arrange them on a distaff. We then discovered just how difficult spinning really is! It would certainly have been a skill which would have required much time and patience in order to produce an even yarn.

Our day was completed with a demonstration from Simon of his spinning wheel, and an opportunity to take advantage of the pair's vast knowledge of the flax industry with a few more questions. We left full of knowledge and an excitement to give it another try, debating whether we could sneak in a water-retting tank behind the Processing Shed back in Oxford. Most of all, I think I can speak for all of us when I say we just had a really fun day!

**Julia Meen**

Find out more at [www.flaxland.co.uk](http://www.flaxland.co.uk)

**AEA AUTUMN CONFERENCE NOVEMBER 2014*****The Big Picture: Archaeology, Society and Environment*****The University of Plymouth, UK 7-9th November 2014**

This is a brief update on the AEA Annual Symposium in November.

We are delighted to announce that we have scheduled 27 oral contributions and 20 posters; additionally, we have two key-note speakers, Prof Steve Shennan (Institute of Archaeology, UCL) and Dr Amy Bogaard (University of Oxford).

We have a wide-ranging set of papers and anticipate, therefore, that it will be a very busy and stimulating few days.

Registration will open between 14:00-15:00 on Friday 7<sup>th</sup> November, followed by several presentations and a keynote talk. This event will be followed by a wine reception in the evening. We have a full programme of talks on Saturday 8<sup>th</sup> November, including our second keynote, followed by the Conference Dinner that evening, at the National Marine Aquarium. The conference will finish at lunchtime on Sunday, following a morning session of talks.

A full programme will be circulated within the next week, once we have confirmed with speakers. Details of the draft programme will also be posted on the conference website: <http://tinyurl.com/PU-AEA2014>.

Registration for the conference is available online at <http://tinyurl.com/AEA2014-registration> and should be completed by October 6<sup>th</sup>.

**Organisers: Ralph Fyfe, Nicki Whitehouse and Neil Roberts.**

**9TH INTERNATIONAL MEETING FOR PHYTOLITH RESEARCH****“TOWARD INTEGRATIVE PHYTOLITH RESEARCH”****Brussels, 10-12 September 2014****Under the auspices of the International Phytolith Society (<http://9impr.ulb.ac.be/>)**



**ICAZ 2014****22 to 27 September, 2014****San Rafael, Argentina****[icaz2014argentina.com](http://icaz2014argentina.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 prehistoric land use'*

For further information see

<https://www.eaa2014istanbul.org>**RADIOCARBON AND DIET: AQUATIC FOOD RESOURCES AND RESERVOIR EFFECTS*****Kiel, Germany, 24th - 26th September 2014***

Themes include:

- Human exploitation of aquatic food resources
- Methods to detect an aquatic diet (e.g. isotope analysis)
- Radiocarbon reservoir effects in human and archaeological materials (e.g. ceramics)
- Alternative methodological approaches to dietary reservoir effects (e.g. radiocarbon dating of single compounds)
- Environmental variability of aquatic radiocarbon reservoir effects
- Special cases of non-dietary radiocarbon reservoir effects

Further details can be found at the meeting's website: <http://www.rre-conference.uni-kiel.de/>**Royal Archaeological Institute Conference*****Science in Archaeology, 17 - 20 October 2014***

The Conference will be held in association with the University of Bradford at the Norcroft Centre, University of Bradford. It will review the contributions that science has made to archaeological studies over the past 40 years and some of the directions in which it is now progressing.

The fee for two days attendance is £98 (includes tea/coffee, lunch, wine reception and abstracts) with an optional guided visit to Ilkley Moor for £20 on Monday 20 October.

Full programme details are to be found at

<http://www.royalarchinst.org/conferences>; [www.royalarchinst.org](http://www.royalarchinst.org).

Enquiries to [admin@royalarchinst.org](mailto:admin@royalarchinst.org)

## International Congress of Ethnobotany (ICEB) 2014

Córdoba (Spain) 17 to 21 November

The organizing Committee has the pleasure to announce the VIth International Congress of Ethnobotany to be held in Córdoba (Spain) the 17th – 21st November 2014. The ICEB 2014 will provide two singular opportunities and messages:

\* Family farming, urban and suburban vegetable gardens, and agrobiodiversity exchange through farmers networks. The UN has declared 2014 as the International Year of Family Farming.

\* Cooking and traditional food habits as a source of knowledge for agricultural innovation and tool in the fight against hunger and health deficit in the world. Córdoba (Spain) will be Iberoamerican Capital of Gastronomic Culture 2014.

This event is organized by the IMGEMA Royal Botanic Garden of Córdoba, with the collaboration of the University of Córdoba, the Andalusian Government Department of Environment and the Provincial Government of Cordoba.

We want to invite researchers, public entities, technicians, students and people interested in Ethnobotany to participate in the Congress. It will be a meeting point to share experiences and results, and to analyze the great value of traditional knowledge as cultural heritage and tool for the economical and social development of peoples.

Contact address: [www.etnobotanica2014.com](http://www.etnobotanica2014.com) [secretaria@etnobotanica2014.com](mailto:secretaria@etnobotanica2014.com)

## 1st Meeting ICAZ Roman Period Working Group:

*Husbandry in the Western Roman Empire: a zooarchaeological perspective*

20th-22nd November 2014, Sheffield (UK)

Husbandry reflects cultural and economic choices related to human societies. In Iron Age Western Europe - Including North Africa - there is a diversity of complex urban societies that develop from *circa* 800BC and are integrated in the Roman Empire. How were different local cultures affected by the conquest?

How do economic and social changes reflect on husbandry strategies and food consumption practices? Can we find any common elements that affected the Roman period as a whole, or was the geographic and cultural diversity so great that each region tells its own independent story?

This first meeting is articulated on a geographical basis, in order to get a general perspective of the changes (and continuities) in husbandry in Western Europe, which are related to settlement within the Roman Empire.

Registration to the first meeting of the Roman Period Working Group is now open: [http://onlineshop.shef.ac.uk/browse/extra\\_info.asp?compid=1&modid=2&deptid=5&catid=7&prodid=265](http://onlineshop.shef.ac.uk/browse/extra_info.asp?compid=1&modid=2&deptid=5&catid=7&prodid=265)

Abstracts (250 words maximum) can be sent to [romanwg@sheffield.ac.uk](mailto:romanwg@sheffield.ac.uk) prior to the **15th September 2014**. Both oral presentations and posters are welcome.

Organizing committee: Umberto Albarella and Silvia Valenzuela (University of Sheffield)

Further information: <http://alexandriaarchive.org/bonecommons/exhibits/show/rpwg>



**PRESERVING ARCHAEOLOGICAL REMAINS IN SITU [5TH PARIS SYMPOSIUM]****April 12 - 18 2015 Kreuzlingen Switzerland**

The Conference will present and discuss the latest knowledge, focusing on long term studies of degradation and monitoring of archaeological sites preserved in situ in urban, rural and marine environments. The multidisciplinary nature of the previous PARIS conferences, brings together scientists, heritage managers and policy makers

Conference themes:

- 1 Preserving the archaeology of the Lake Constance area
- 2 Past mitigation: Successes and failures
- 3 Preservation in a changing climate and in extreme environments
- 4 Degradation processes and rates of degradation
- 5 First things first: Priorities for preservation
- 6 (Monitoring) + Mitigation

For more information and registration:

[www.paris5.tg.ch](http://www.paris5.tg.ch)

E-mail [paris5@tg.ch](mailto:paris5@tg.ch)

Contact:

Amt für Archäologie des Kantons Thurgau  
Schlossmühlestrasse 15a, CH - 8510 Frauenfeld  
Tel +41 52 724 15 70, Fax +41 52 724 15 75

**CONSUMING LANDSCAPES**

Session at the Society for American Archaeology (SAA) 80th Annual Meeting,  
San Francisco, California, April 15-19, 2015.

Landscape and foodways studies in archaeology and beyond have increasingly touched on social questions, but the former have mostly expanded our understanding of the management of past environments, while the latter have focused on discourses of social identity.

This session aims to combine these two, often separate, perspectives to investigate how foodways and landscape are, and were, entangled. 'Consuming Landscapes' refers to the multiple ways in which historical trajectories of food, especially their relationship with particular geographies are used, called upon and restructured in a social discourse.

We welcome contributions across disciplines that investigate how people perceive and engage with their landscapes in different periods and places as revealed by the production, movement, consumption and/or disposal of food.

Contacts:

Julie-Anne Bouchard-Peron, Leslie Bode and Alexandra Livarda (University of Nottingham).

[leslie.bode@nottingham.ac.uk](mailto:leslie.bode@nottingham.ac.uk)  
[www.saa.org/annualmeeting/](http://www.saa.org/annualmeeting/)

## *SAA conference, San Francisco, April 2015*

### **Session: "Anthropic activity markers: Archaeology and Ethnoarchaeology"**

We invite people interested in presenting their work in this session to send us an email with your details, proposed title and a brief description of your work. Deadline August 30th, submission of abstract and registration September 11th.

Carla [carla.lancelotti@upf.edu](mailto:carla.lancelotti@upf.edu) ; Alessandra [alepecci@gmail.com](mailto:alepecci@gmail.com) ; Deboo [deboradeboo@imf.scic.es](mailto:deboradeboo@imf.scic.es)

## **Conference on the Environmental Archaeology of European Cities**

*Royal Belgian Institute of Natural Sciences, Brussels, Belgium*

*May 27-29, 2015*

**More information on :** <http://www.naturalsciences.be/>

### **Organising committee**

This workshop is organized by the Brussels Capital Region, the Royal Belgian Institute of Natural Sciences, the Université Libre de Bruxelles and the Katholieke Universiteit Leuven. The conference is also supported by the European Research Network BIOARCH and the Association of Environmental Archaeology.

Contact address

[ceaec@naturalsciences.be](mailto:ceaec@naturalsciences.be)

Yannick Devos and Elena Marinova

## **Book offer from Sidestone Press**

*\*Animals in Saxon and Scandinavian England. Backbones of Economy and Society\**

By Matilda Holmes | Forthcoming summer 2014

ISBN: 9789088902666

We are currently offering a discount on pre-orders for printed copies. Upon publication however the book will also be made available in our free online e-library (<http://www.sidestone.com/library/>). Here our books can be browsed/read for free.

Karsten Wentink, Sidestone Press

[www.sidestone.com](http://www.sidestone.com); [k.wentink@sidestone.nl](mailto:k.wentink@sidestone.nl)



## 2014 AEA CONFERENCE FUND

We are delighted to announce the availability of the AEA Conference Fund to members of the AEA (of at least six months standing) to assist attendance at the Plymouth conference. Priority will be given to those with limited alternative sources of funding (particularly postgraduate students and those in the private sector) and those presenting papers or posters. Applications from students must be accompanied by a letter of support from their supervisor. An application form is provided at the end of this Newsletter.

Successful applicants will be required to provide a statement of expenditure and activities undertaken within 3 months after the event has taken place in order to receive reimbursement. Moreover, successful applicants will be requested to provide a report on the conference for the AEA Newsletter or website.

The deadline for applications is *30th September 2014*. Any queries should be directed to the AEA Conference Officer: Sarah Viner-Daniels ([s.viner@sheffield.ac.uk](mailto:s.viner@sheffield.ac.uk)).

## 2014 POSTER PRIZE

The AEA will be offering a £75 prize to the best student poster at the Plymouth conference.

## MEMBERSHIP AWARDS

Nominations are requested for our Membership Awards following donations from an honorary life member and an individual member.

### Award 1 – Individual Award

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.

### Award 2 – Organisational/Institutional Award

One hard copy of the AEA Journal for a period **equivalent to three concurrent calendar years** to be placed in an institutional library/organisation, which will benefit students studying environmental archaeology. No country is excluded. For administration purposes, a single individual within the organisation will be required to be nominated as a designated recipient of the award, but they need not be a current member of the AEA (e.g. Curator of Archaeology, at the nominated organisation). Organizations (and designated individual) should be nominated by a person who has been a member of the AEA for at least 12 months standing.

### Conditions of award

In return for membership, the AEA would require the recipient of either award 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/their organisation (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). In the case of this organisational/institutional award, the designated recipient need not necessarily be the sole author.

### How to make a nomination

Candidates for each award should be nominated by a person who has been a member of the AEA for at least 12 months standing. Nominations should be in the form of a letter (1 page maximum) stating:

- 1) name of nominated individual or organisation/library;
- 2) affiliation of the nominee, if applicable (individual award only);
- 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).

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> November 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 AGM AND ELECTIONS 2014

The Annual General Meeting will be held during the autumn meeting in Plymouth 7-9 November 2014.

(<http://envarch.net/the-big-picture-archaeology-society-and-environment-conference-2014/>)

1. Report on the committee's activities and John Evans Prize Result
2. Treasurer's report including summary of the Association's accounts
3. Election of new committee members
4. Any other business

## AEA MANAGING COMMITTEE ELECTIONS 2014

The AGM marks the completion of terms of office for five elected committee members: Dr Robin Bendrey, Dr Emily Forster, Dr Preston Miracle, Dr Fay Worley (Secretary) and Jade Whitlam (Student Representative). Elections will be held to fill these vacated positions at the AGM. **Biographies of nominated candidates can be found below** and will be circulated at the AGM. Nominations are welcome up to the time of the AGM and descriptions of the roles were circulated in the last Newsletter.

Current Committee details can be found at on the website (<http://envarch.net/committee/>), along with the AEA constitution (<http://envarch.net/the-aea/constitution/>).

### How to stand for election

New candidates can come forward at anytime up until the

start of the AGM, although if candidates are proposed in good time, their statements can be circulated to AEA members. Candidates must be AEA members in good standing and supported by two further AEA members (to propose and second them). Contact a member of the committee if you would like to stand. Contact details can be found on our website (<http://envarch.net/committee/>). As the current Secretary is a candidate for election, committee member Don O'Meara will be coordinating the election this year (email [donomeara@gmail.com](mailto:donomeara@gmail.com)).

### How to vote in the election

Every AEA member is entitled one vote in the election. Members can vote in person at the AGM, or by proxy. To vote by proxy, you must provide a signed or emailed statement appointing your proxy to a member of the committee before the AGM. This year emailed proxy votes are being collated by committee member Don O'Meara. Your proxy will be given your voting slip in addition to their own. Your proxy can be any other member of the Association who is attending the AGM, including members of the committee. If you need help to find a proxy, please contact Don on [do-nomeara@gmail.com](mailto:donomeara@gmail.com) (for postal address see <http://envarch.net/committee/>).

## CANDIDATES STANDING FOR ELECTION

### As Secretary (a four year term)

#### Dr Fay Worley

*Nominated by J Huntley, Seconded by R Thomas*

I was elected to the AEA Managing Committee in 2008, and have served as Secretary for the last four years. I enjoy the role and have developed strong working relationships and a broad knowledge of the Association. Now that I have learned the ropes, I'd like to consolidate this knowledge with a second term as Secretary.

When not undertaking secretarial duties for the AEA I am a zooarchaeologist for English Heritage, based in Portsmouth (UK), a role I have held since 2006. My work involves some practical zooarchaeological analyses and some fieldwork, but also tasks designed to promote best practice and support environmental archaeology in England, such as administration of the Professional Zooarchaeology Group (PZG). A recent achievement is co-authoring *Animal Bones and Archaeology: Guidelines for Best Practice*, which is currently in the final layout stage and should be published by the time of the AGM.

Prior to my current role, I worked as an animal bone specialist for Oxford Archaeology and undertook a PhD in Zooarchaeology at the University of Bradford. As an undergraduate I also completed 6 month work placements at Birmingham University Field Archaeology Unit and Kent County Council, Heritage Conservation Group. I therefore have an appreciation for the nature of commercial, research and

curatorial archaeology in the UK, which I hope allows me to better appreciate the needs of the AEA's diverse membership.

### As Ordinary Member (three positions available, each a four year term)

#### Dr Rob Batchelor (Senior Projects Manager, Quest (Quaternary Scientific), University of Reading)

*Nominated by R Bendrey, Seconded by N Branch*

I obtained both my undergraduate degree in Geography and Geology (2003), and PhD – 'Middle Holocene environmental changes and the history of yew woodland (*Taxus baccata* L.) in the Lower Thames Valley' (2009) from Royal Holloway, University of London. I have over eight years experience working in the commercial enterprise sector and university environment; between 2006 and 2008 I worked as an environmental archaeologist (particularly palynology) at *ArchaeoScape*, Royal Holloway, and since then as environmental archaeologist and projects manager at Quaternary Scientific, University of Reading.

During my time at both *ArchaeoScape* and Quaternary Scientific I have been involved in a large number of projects for different clients (including government organisations, universities, developers, consultants and archaeological contractors), involving a wide range of analytical techniques and specialist collaborators across different cultural periods both in the UK and abroad. I am also involved in educational work at undergraduate and postgraduate level.

My research interests and that of our commercial enterprise activities, focus on the reconstruction of former landscapes and vegetation history, particularly in wetland environments. Much of this work has been concentrated in the Lower Thames Valley, London, where the long-term goal is to compile a high-resolution spatial and temporal model of evolving floodplain and dryland landscape considering the often complex relationships between topography, climate, vegetation change (with specific emphasis on yew, elm and lime woodland), hydrological change and human activity. This ongoing research and enterprise programme is being achieved by adopting a multi-proxy approach integrating sedimentary, geochronological, palaeobotanical, palaeozoological and geochemical techniques on sequences taken from the floodplain, combined with archaeological evidence from both the wetland and dryland.

The AEA has an important role to play in raising the profile of environmental archaeology. I feel I could make a contribution, working at the interface between the commercial enterprise and research sectors and would value the opportunity to serve on the committee, helping to promote the AEA's international reputation.



**Danielle de Carle (Freelance)**

*Nominated by E Forster, Seconded by H Russ*

After gaining a BA archaeology from Bristol back in 2006, I was lucky enough to spend a series of seasons working as a Finds and Environmental Archaeologist for English Heritage, this confirmed my interest in all things enviro, encouraging me to go on to study the subject further leading to the MSc in Palaeoeconomy at Sheffield. Now having successfully completed doctoral study in aspects of British Archaeobotany and Anthracology for the South Cadbury Environs Project, while also keeping up freelance projects outside of the UK and even a fundraising job at the National Railway Museum, I am finding that many and most of the post and jobs I am looking towards are not strictly environmental archaeology. This makes the Association through the journal, conferences and email lists essential for me to keep up with my interests in Environmental Archaeology. I am increasingly aware how important AEA is, giving access to up-to-date research and information, to others in a similar position. I would very much like to try and represent this and other views on the committee especially the need to increase and share awareness beyond the specialisms into wider archaeological forums, whatever the other roles my future might bring.

**Dr Jo McKenzie (Hon. Research Fellow, University of Bradford)**

*Nominated by F Worley, Seconded by J Cussans*

I gained a BA Joint Honours in Archaeology and Classics at the University of Nottingham (1994), after which I spent several years as a field archaeologist, mainly based in London. My interest in environmental archaeology was stimulated through my Archaeological Sciences MA at the University of Bradford (2000), after which I travelled north to the Department of Environmental Science at the University of Stirling and a PhD in geoarchaeology, focusing on physical, chemical and micromorphological assessment of cultural soils. After this, I worked from the University as a geoarchaeological specialist for both the commercial (chiefly GUARD) and research archaeological sectors, with involvement in a diverse range of projects, such as the *Papar Project* (Scotland), *The Viking Unst Project* (Shetland), the *Landscapes Circum Landnam Project* (Faeroe Islands), *The Anuradhapura Hinterland Project* (Sri Lanka) and the investigations at the First World War site of Fromelles (France).

In 2008, I made a return to cultural archaeology, and spent four years as Project Manager and postdoctoral researcher for the Broxmouth Project, a Historic Scotland-funded project based at the University of Bradford. The project undertook a complete post-excavation reassessment of the 1977-78 excavations at the Iron Age hillfort of Broxmouth, East Lothian. The results were recently published as a Society of Antiquaries of Scotland Monograph (Armit, I and McKenzie, J. (2013) *An Inherited Place: Broxmouth Hillfort and the South-East Scottish Iron Age*).

An exciting part of my role as Broxmouth Project Manager was the co-ordination and management of the wide-ranging team of external specialists, several of them environmental archaeologists, who contributed to the project. As an independent specialist and academic myself, seeing the process from the 'other side' of Project Manager inspired an interest in the post-excavation process, and the ways in which project archaeologists can get the best – or not! – from the skill-set of their specialist team. In April this year I organised and co-presented a workshop at the IfA conference on this topic (*'A sample of what's on offer – getting the most out of archaeological science'*). If elected, I would be particularly interested in contributing to similar outreach activities from within AEA, and promoting increased understanding of the huge potential of environmental archaeology to contribute to both excavation and post-excavation process – much of which I believe can still be poorly understood.

The end of the Broxmouth Project coincided with the birth of my second baby at the beginning of 2013, and since then I have been self-employed as a geoarchaeological specialist with an Honorary Research Fellowship at the University of Bradford, although now based in Swansea, South Wales. This has meant a timely return to several projects which I have been involved with since my time at Stirling, such as Dun Eistean, (Isle of Lewis), and High Pasture Cave and Fiskavaig Rockshelter (Isle of Skye). I'm also working on the micromorphological analysis of material from Applecross Broch (Wester Ross) and Mine Howe (Orkney), and have spent the last two summers as a visiting specialist at the Ness of Brodgar excavations (Orkney), undertaking micromorphological sampling of hearths and floor surfaces within Neolithic structures.

I am a member of the Institute for Archaeologists (MIFA), a Fellow of the Society of Antiquaries of Scotland (FSA Scot) and a member of the Prehistoric Society and the Council for British Archaeology. I have been a member of AEA since 2005, and would welcome the opportunity to make a personal contribution to the society which most closely represents my interests and experience as an archaeologist.

**Dr Suzi Richer (Worcestershire Archive and Archaeology Service)**

*Nominated by R Thomas, Seconded by A Howard*

I have a BSc (Hons) in Archaeology from the University of York (2003), an MSc in Environmental Archaeology and Palaeoeconomy from the University of Sheffield (2004) and a PhD (AHRC funded), from the University of York (awarded in 2010). I have always had an interest in the relationship between people and the environments they used and inhabited. I began to investigate this relationship through palynology as part of my Masters dissertation. My PhD thesis continued this theme by examining pollen sequences from off-site locations, but in close proximity to known archaeological sites in the southern French Alps. Whilst working towards my PhD I was a Graduate Teaching Assistant and managed and delivered a module on Mediterranean Landscape Archaeology.

gy and chaired seminars in Environmental Archaeology and Archaeological Theory.

I am currently a Senior Environmental Archaeologist for Worcestershire Archive and Archaeology Service, specialising in pollen analysis within the commercial sector. As such, I have gained a wide experience of working on lowland deposits covering a range of periods, which complements my upland research. I am also part of the Himalayan Exploration and Archaeological Research Team, a multi-disciplinary team undertaking work in the Annapurna and Langtang regions of Nepal. My research lies in understanding environmental change and how people use/d this extreme landscape today and in the past, with a particular focus on the biography of juniper.

Environmental archaeology can often provide a corner-stone that links both the academic and commercial worlds of archaeology. In my opinion, the AEA is very much at the heart of this relationship, seen through the diversity of conferences (themes, speakers and participants), publications and journal articles. I welcome the opportunity to be part of the AEA committee and to help continue to raise the profile and integration of environmental archaeology.

#### **As Student Representative (one position available, two year term)**

##### **Laura Green (University of Oxford)**

*Nominated by E Forster, Seconded by H Russ*

I am currently approaching the second year of my AHRC-funded PhD at the University of Oxford, specialising in archaeobotanical analysis, supervised by Dr Amy Bogaard and Dr Michael Charles. I aim to establish the nature and conditions of early cultivation practices in western Asia, by applying a functional ecological approach to the 'weed' dataset, as part of the wider ERC funded 'The Agricultural Origins of Urban Civilization' Project (AGRICURB).

My undergraduate degree in archaeology was completed at the University of Sheffield (2007-2010). It was here that I first developed my passion for 'the origins of agriculture'. During my master's degree at UCL, in the 'Archaeology of the Eastern Mediterranean and Middle East', I specialised in archaeobotany. My master's dissertation, supervised by Prof Dorian Fuller, explored the exploitation of non-staple plant species in the Neolithic period.

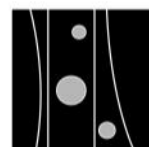
I have worked on many varied excavations across the UK, Europe and the Middle East, including over 14 months of experience in the UK commercial sector. During this time I have witnessed great discrepancies in the levels of attention given to environmental archaeology procedures. I believe that it is crucial to continue to promote awareness of environmental analyses and their important roles in establishing valid interpretations of archaeological sites.

As student representative for the AEA, it would be my intention to undertake an active role in the promotion of environ-

mental archaeology among other students and the general public, via methods such as social media and conference participation. I have found the correspondence from the AEA to be incredibly informative and I have felt a greater sense of community since joining earlier in the year. I would very much like the opportunity to share these experiences with others, as well as to forge new connections with like-minded people.

## Conference Fund Application Autumn Conference 2014

Deadline: 30<sup>th</sup> September 2014



Association for  
Environmental  
Archaeology

Name:	Occupation:
Address:	E-mail:
Date you joined the AEA:	
I am presenting a Paper/ Poster (please delete as appropriate) entitled:	

### Please provide full breakdown of costs

Registration:	Cost:
Mode of transport (rail/air etc):	Cost:
Type of accommodation:	Cost:
Meals included:	Cost:
Other (Please specify):	Cost:
<b>Total</b>	<b>Cost:</b>

Have you attempted to obtain funding from other sources?	Yes / No
If not, why not?	
If yes, how much have you requested?	
How much have you obtained?	
If other applications are still pending, when do you expect to hear the outcome?	
How much do you request from the AEA:	

I certify that the information I have given is true.

**Signature:**

*Postgraduate applicants should include a letter of support from their supervisor.*

*Please return to the AEA Conference Officer: Dr Sarah Viner-Daniels, Department of Archaeology, University of Sheffield, Northgate House, West Street, Sheffield, S1 4ET, UK.*

Any queries should be directed to Sarah Viner-Daniels ([s.viner@sheffield.ac.uk](mailto:s.viner@sheffield.ac.uk)).





[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 Autumn Conference**

7–9 November, 2014, Plymouth University (Devon, UK)

*The big picture: archaeology, society and environment*

<http://www1.plymouth.ac.uk/research/ceres/AEA2014>

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### **AEA Seminar**

12 November, 2014 18.30 at the Auriana Auditorium, American University of Rome, Via Pietro Roselli 16, Rome 00153.

*Dr Margarita Gleba, Senior Research Associate at the McDonald Institute for Archaeological Research, University of Cambridge:*

*'A New Spin on Fibre Revolution: Plants, Textiles and Technology in the Ancient Mediterranean'.*

## **Notes from the Newsletter Editors**

Please note 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