

# Association for Environmental Archaeology

AEA Newsletter 122

November 2013

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**Chair's piece** It gives me enormous pleasure to write my first 'Chair's piece' for the newsletter. I would like to start off by expressing my sincerest thanks to the membership for electing me as Chair, at what is an exciting time for the Association, not least because of the expansion of the journal, increased student participation and growing internationalisation through our seminars and conferences. The strength and depth of our discipline, and the contribution of the Association within it, was reinforced to me recently by the series of essays and videos that accompanied Maney's profile of *Environmental Archaeology* as journal of the month in September: <http://maneypublishing.com/index.php/journal-of-the-month-env>.

This growth has occurred in large part to the dedicated efforts of the management committee and I would like to take this opportunity to acknowledge the indispensable input of outgoing committee members: Andy Howard, Lisa Lodwick, Rebecca Nicholson, Ruth Pelling, and Jørn Zeiler. Andy deserves special commendation for his ten years of service on the committee (five as Chair). I would also like to welcome personally some new and returning faces to the management committee – Julia Cussans (Archaeological Solutions), Emma Jenkins (University of Bournemouth), Daniella Vos (University of Bournemouth), Nicki Whitehouse (University of Plymouth), with Ruth Pelling co-opted to remain as Membership Secretary. I look forward to working alongside all committee members over the next four years.

*Instruction in making a dung cake*  
(See "Ethnoarchaeological Research in Iraqi Kurdistan" by Robin Bendrey et al on Page 3)

Nomination and election as Chair has prompted me to reflect on the place of the AEA within my own career. I first joined the AEA as an Mphil/PhD student in 1998. I distinctly recall being attracted to join by the considerable benefits afforded by the journal, newsletter, and reduced conference rates, for low cost membership: benefits that have not only remained unchanged, but have been enhanced through the development of the website and the application of social media. These outlets fostered my sense of belonging amongst the professional community and afforded me with an important means of networking, learning, and refining and disseminating my research. Indeed, included amongst the earliest publications on my CV are a contribution to the AEA newsletter - a bibliographic review of articles relevant to environmental archaeologists, subdivided by specialism, from the journals *Agricultural History* and *Agricultural History Review* - and a co-authored article in Volume 5 on the consumption of horseflesh at Dudley Castle in the early eighteenth century. While I am now considerably less fresh-faced, the AEA conferences and the journal have remained a critical venue for me to share ideas and disseminate my research (see, for example, Volume 17.2).

On reflection then, the AEA has been critically



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important in all stages of my career and I am delighted to return to the management committee (after a stint as Publicity Officer from 2004-8) and attempt in some small way to reciprocate the benefits that the AEA has bestowed upon me. My experience-led conviction is that the student base is critical to the future health of the AEA, but I am also keen to further develop the international base of membership during my tenure, facilitating further the connections between environmental archaeologists working independently, in commercial units, and academia.

**Richard Thomas, AEA Chair**



Stonehenge Internal Gallery

## *The English Heritage Science Strategy*

The English Heritage Science Strategy (EHSS) was launched on 29<sup>th</sup> October at the Arts and Humanities Research Council (AHRC)/Engineering and Physical Sciences Research Council (EPSRC) Science & Heritage Programme Conference. It lays out how English Heritage will harness its resources to help deliver the aims and objectives of the National Heritage Science Strategy and demonstrates how heritage science threads through the different measures of the National Heritage Protection Plan from understanding the threats facing heritage assets to assessing significance. Importantly the EHSS lays out short and medium term actions with defined measures and products.

The actions detailed in the strategy address three broad themes or topics incorporating the 9 objectives of the National Heritage Science Strategy

(<http://www.english-heritage.org.uk/publications/nhss-vision-strategy-heritage-science/>) and linked to existing projects and activities identified within the National Heritage Protection Plan (<http://www.english-heritage.org.uk/professional/protection/national-heritage-protection-plan/all-about-NHPP/>).

These are;

- Understanding materials and environments.
- Raising awareness, improving methods, access to information and advice.
- Capacity, capability and public benefit.

Topic 1 *understanding materials and environments* includes collaborative projects undertaken as part of the joint at the Arts and Humanities Research Council (AHRC)/Engineering and Physical Sciences Research Council (EPSRC) Science and Heritage Programme such as *In situ preservation of wetland heritage: hydrological and chemical change in the burial environment of the Somerset Levels, UK* (University of Reading). While other collaborative projects are just getting started, for example an AHRC funded project, based at University College London which will investigate the use of temporary covers in the conservation of marble and metal sculptures and monuments in historic gardens.

These projects underline two important points: firstly partnership working is fundamental if English Heritage is to achieve its mission of preserving our cultural heritage for generations to come; secondly heritage science covers a

broad range of disciplines encompassing “all technological and scientific work that can benefit the heritage sector, whether through improved management decisions, enhanced understanding of significance and cultural value or increased public engagement” (EHSS, page 7).

**Topic 2 *Raising awareness, improving methods, access to information and advice:*** Is about enabling and encouraging the uptake of methods, tools and approaches developed through research, both by using these in our own projects, and providing advice and guidelines in best practice. Examples include the use of portable XRF at our properties and on English Heritage funded projects and the provision of guidance on the destructive sampling of human remains for scientific analyses such as DNA studies.

**Topic 3: *Capacity, capability and public benefit*** covers training including support for professional groups and societies and English Heritage’s commitment to post-graduate training and Continued Professional Development.

It is also about making heritage science integral to displays and interpretations at our sites. The new visitor centre at Stonehenge is a case in point. Laser scanning of the stones has been used to create 3-D reconstructions, conservators, finds specialists and environmental archaeologists have worked together on the displays of objects from the World

Heritage Site, while the results from environmental archaeology are informing reconstructions of the landscape at different periods.

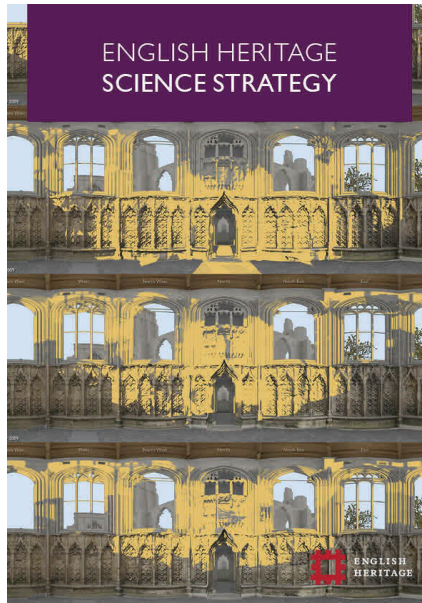
There is also a medium term action within topic 3 to work with the National Heritage Science Forum (<http://www.heritagescienceforum.org.uk/>) to consider the role heritage science can play in the teaching of science within secondary education, how to inspire a new generation.

In addition to these 3 topics the EHSS also details a number of overarching actions that are about how we can work more effectively and efficiently. These include for example developing a Science Network to bring together English Heritage scientists to share skills, ideas and establish future priorities.

The EHSS is not a great page turner, what strategy is? Rather it provides a vehicle to direct, drive and focus heritage science work over the next three years across English Heritage, and a means whereby we can help grow the discipline, harness the potential and demonstrate the value of heritage science.

<http://www.english-heritage.org.uk/publications/ehss/>

***Gill Campbell, English Heritage Science Network Convenor and Head of Environmental Studies***



## Ethnoarchaeological research in Iraqi Kurdistan

Robin Bendrey, Jade Whitlam, and Sarah Elliott  
(University of Reading)

Over the last few years we have been lucky enough to regularly visit and work in Iraqi Kurdistan as team members of the Central Zagros Archaeological Project (CZAP). This major AHRC-funded research programme, directed by Prof Roger Matthews and Dr Wendy Matthews (University of Reading) is investigating the nature of Neolithisation in this region of the eastern Fertile Crescent, comprising parts of modern-day western Iran and eastern Iraq (Matthews et al. in press). This period in prehistory witnessed the emergence of animal and plant domestication, alongside innovations in human settlement, social and ritual institutions.



*Out herding with a mixed herd of sheep and goats for the day*





*Freshly baked local bread*

Repeated visits to the modern village of Bestansur each year, and at different seasons, to excavate an Early Neolithic archaeological site there ([www.czap.org](http://www.czap.org)), has afforded the opportunity to observe at close quarters variations in animal and plant husbandry throughout the year, and to engage with the local families, determining how and why the farming calendar changes. This permitted the development of focussed ethnographic research, firmly anchored in the context of the wider project aims, to elucidate aspects of the local farming system and how this functions in the surrounding landscape and environment.

Our research is founded on the premise that modern behaviours can suggest testable patterns for past practices within the same topographical and ecological contexts (e.g. seasonal use of different altitudes for animal grazing), therefore providing a further means of evaluating archaeological evidence. For example, if areas of the local and regional landscape are distinguishable by analyses of the modern biosphere, we may then be able to infer past use of these areas from isotopic analysis of archaeological finds, such as enamel in animal teeth formed at different seasons. It is essential to understand the full social and environmental context for integrated farming systems, to explore the drivers behind mobility, including how mobile herding practices may be associated with differing local resource pressures. Moreover, addressing the interplay of social and environmental factors and their influences on animal husbandry and arable

farming practices are key for developing a more nuanced understanding of animal and plant use and economies at archaeological sites.

It is both a pleasure and a privilege to undertake ethnographic work at the village of Bestansur. Through interviewing different generations we have been able to explore how practices have changed in living memory, from the changes in herding practices wrought by the division of the landscape by modern roads, to the cessation in the use of animal dung for cooking and heating homes. We have been lucky enough to witness some of these practices first hand.

While modern stores and international products are becoming more common in Iraqi Kurdistan there is still a strong tradition of local food production. Households bake their own bread, make yoghurt, and exploit local wild resources to great effect, such as making thistle fritters in the spring. We have been grateful beneficiaries of these delicious products!

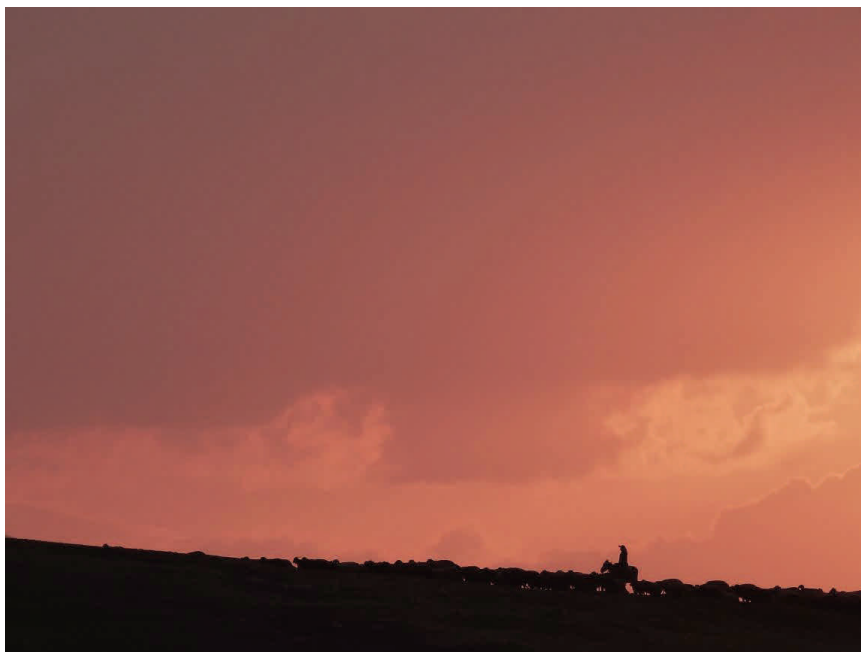
The research has been focussed largely on understanding animal husbandry, including the connections between the animal and plant production in the local economy, and the inputs and outputs to this system. We have been concerned to explore locally applicable archaeological signatures of these practices, such as variations in animal dung use and the isotopic variation in the local biosphere, as mentioned above. The first publications from this research are currently in preparation.

#### **Acknowledgements**

This research was funded by the AHRC within the framework of the Central Zagros Archaeological project ([www.czap.org/](http://www.czap.org/)). We would like to thank the co-directors Dr. Wendy Matthews and Professor Roger Matthews for their support and guidance with this research. We would like to especially thank the families of Bestansur, without whom this research would not have been possible, and Kamal Rauf Aziz (Directorate of Antiquities and Heritage, Sulaymaniyah) for collaborating on this the research.

#### **References**

Matthews R, Mohammadifar Y and Matthews W (eds.) in press, *The earliest Neolithic of Iran: The Central Zagros Archaeological Project 2008 excavations at Sheikh-e Abad and Jani*. Oxford: Oxbow Books and British Institute for Persian Studies.



*A herd returning to the village, silhouetted against the evening sky*

## CONFERENCE REPORT

### **AEA Autumn Conference, 27<sup>th</sup>-29<sup>th</sup> September 2013, Kiel University, Germany: *Social Space and Environment: Landscape Reconstruction in Environmental Archaeology***

Members of the AEA attending the 2013 autumn conference and AGM received a warm welcome at the Institute of Prehistoric and Protohistoric Archaeology, Kiel University. Following opening addresses by the President of the University and Director of the Graduate School (*Human Development in Landscapes*), the conference showcased some of the research highlights from the School with a focus on northern German and Scandinavian studies, as well as papers on geographical regions as far apart as Ireland, Switzerland, Spain and Rapa Nui (Easter Island). The subject matter, which broadly fitted within the theme of '*Social Space and Environment*', covered issues concerning inter- and intra-site space of local and pan regional landscapes. The presentations were complemented by a range of interesting posters.

An exciting range of methodological approaches were presented. The use of phytoliths to detect crop processing debris of Eurasian cereals (*Pennisetum glaucum* and *Sorghum bicolor* vs *Panicum miliaceum* and *Setaria italica*) suggested potential for the use of morphometric phytolithic analysis to determine differences between the taxa groups and consequently use in determining crop processing activity areas (Welmoed Out and Marco Madella). By using the English Heritage Soay sheep fleece and skeletal collections, Isabella von Holstein was able to establish the extent to which the differential expressions of carbon, nitrogen and (un-exchangeable) hydrogen isotopes in animal keratin products (skin, wood, hair in textiles etc) compared to collagen (bone) is related to tissue type or animal husbandry/diet. Charcoal fragmentation was discussed by Doris Jansen, while Hannes Knapp and colleagues used novel stable isotope analysis on *Sphagnum* cellulose and pollen diagrams to understand 2000 years of environmental change in the Harz Mountains of Germany. Broader landscape methodologies included a pan European study of vegetation cover presented by Marco Zanoni and colleagues, which used satellite imagery plotted against modern surface pollen data to build models of vegetation density, enabling the authors to challenge current perceptions of openness of the vegetation at key points in prehistory. On a more local scale, Ralph Fyfe demonstrated the benefits of applying the 'Landscape Reconstruction Algorithm' to multiple pollen sequences as a method of refining localised vegetation patterns through time. Jeff Blackford went back to basics in his paper examining vegetation cover and openness within an area of current moorland (the North York Moors) by examining woodland remains beneath the peat. Jessie Woodbridge and colleagues demonstrated the potential of using pollen records together with summed radiocarbon dates to elucidate land-

scape change and provide insights into population density, examining the impact of the Neolithic transition on the vegetation of Britain. A more philosophical paper presented by Walter Dörfler on the role and sources of salt in Neolithic di-



*Walter Dörfler providing delegates with background environmental information*

ets was one of the highlights of the conference, bringing together archaeological and physiological evidence.

A number of papers focused on subsistence strategies and both inter- and intra-settlement relationships. The Neolithic and Bronze Age of northern Germany, the Baltic Sea coastal regions and Scandinavia were particularly well discussed with exciting new results including the confirmation of tetraploid free-threshing wheat in the Funnel Beaker culture (Wiebke Kirleis and colleagues). Further afield, subsistence strategies were also discussed for first cultivation at Tayma Oasis, Saudi Arabia (Michèle Dinies, Reinder Neef, Harald Kürschner) and the Terramare culture of northern Italy (Marta Dal Corso).

Papers examining internal site space included the use of Neolithic Causewayed enclosures in Funnel Beaker societies, reconstructed using plant remains (Stefanie Kloß, Elske Fischer and Wiebke Kirleis) and the Bronze Age sites of Bruszczewo in Greater Poland reconstructed using animal bones, plant remains and finds distribution/refuse disposal (Jutta Kneisel and Helmut Kroll). A number of papers examined the impact of early monumentality and agriculture on the landscape: Sarah Diers explored human induced landscape changes in the Funnel Beaker period through pollen studies and the shift from megalithic to single grave traditions; Jordi Ravelles and colleagues used a multi-proxy approach to explore the economic impact of the Neolithic site of La Draga on woodland around Lake Banyoles, Girona, Spain, while Tim Mattis Schroedter examined the impact of economic strategies on the woodland environment around the early Chalcolithic settlement of Aktopraklik, Bursa, northwestern Turkey. Michael O'Connell





*The reconstructed Viking village of Haithabu*

discussed the impact of early prehistoric farming on the landscape of western Ireland. Ingo Feeser stressed the cyclical nature of adaptive cycles for the Early Neolithic area of Eastern Schleswig-Holstein and Western Mecklenburg. The cyclical nature of woodland exploitation was also explored by Niels Bleicher who has used palaeodendroecology to reconstruct woodland management patterns around Neolithic Swiss Lake villages. Corinna Hoff discussed the relationship between landscape and Lycian burial customs (where stone tombs appear to represent wooden structures) from the 6<sup>th</sup>-4<sup>th</sup> centuries, Teke Peninsula, Asia Minor.

Social events were particularly enjoyable. An opening night drinks reception was accompanied by "Angli Clamant", a wonderful early music ensemble, while all those delegates who attended the conference dinner at Das Kleine Strandhouse, Möltenort, enjoyed both the beach side location and the food. Two excursions were arranged, a longer one to Eastern Holstia, and a shorter one to the Viking village and museum of Haithabu; on the latter, we were able to enjoy the beautiful museum and treasures held there, as well as informative guided tours of the reconstructed village.

The reviewers and members of the AEA committee congratulate the

organisers, Walter Dörfler and particularly Wiebke Kirleis, and their team on an excellent conference. Such breadth of research activity by the Institute, demonstrates its international profile and impact through collaborative projects. The conference, and particularly the short excursion under the informative guidance of Helmut Kroll, provided a wonderful introduction to Kiel and the surrounding landscape of southern Jutland and have

wetted the appetite for many for a return visit.

**Ruth Pelling and Andy Howard**

*Poster prize winners Andry Mitusov (left) and Masters dissertation prize winner Alice Berger (right) with AEA Chair Andy Howard*



**AEA SPRING MEETING**



**The Association for Environmental Archaeology (AEA) and the  
Conchological Society of Great Britain and Ireland Joint Conference  
on *Molluscs in Archaeology***

**Saturday 26<sup>th</sup> April 2014**

*Neil Chalmers Seminar Room, Natural History Museum, London*

The subject of Molluscs in Archaeology has not been dealt with collectively for probably three or four decades. Next year's one day Spring Conference (April 2014) will be dedicated to *Molluscs in Archaeology*. It is proposed that the conference will include speakers talking on all aspects of molluscs. Possible topics could include the following:

***Marine molluscs; Middens – composition – food waste or bait waste; Isotopes; Trade; Jewellery; Dyes; Palaeo-ecology – long landscape/site histories – the chalklands, sand dunes etc; Experimental ecology; Ecology; Species studies; Regional perspectives; Period perspectives; Theoretical frameworks; Interpretational frameworks; Future research directions***

It is also proposed to publish a book on Molluscs in Archaeology with Oxbow, covering aspects of Method, Theory and Interpretation, Diet and Economy, Landscape and Seascape.

***Please contact Mike Allen with offers of lectures, and for any further information.***

*Mike Allen*

*Allen Environmental Archaeology and President of the Conchological Society of Great Britain & Ireland*

[aea.escargots@gmail.com](mailto:aea.escargots@gmail.com)

**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**

Deadline for submissions *March 31st 2014*

For more information contact Lee G. Broderick (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)).

## European Geosciences Union General Assembly 2014 (EGU2014)

27 April - 02 May 2014, Vienna, Austria

<http://meetingorganizer.copernicus.org/EGU2014/sessionprogramme>

Call-for-Abstracts deadline: 16 January 2014, 13:00 CET

Financial Support deadline : 29 November 2013, 13:00 CET

convenors: Luca Trombino, [luca.trombino@unimi.it](mailto:luca.trombino@unimi.it) & Martine Gérard,

[martine.gerard@impmc.jussieu.fr](mailto:martine.gerard@impmc.jussieu.fr)

<http://meetingorganizer.copernicus.org/EGU2014/session/14534>

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## JOBS

### 2014-2016 Post-Doctoral Research Fellowship

#### Wiener Laboratory of the American School of Classical Studies, Athens

A description of this fellowship and how to apply can be found at <http://www.ascsa.edu.gr/index.php/wiener-laboratory/wlfellowships>.

Applications are also being solicited for other Wiener Laboratory fellowships, research and travel grants. The deadline for all these fellowships and grants is

**January 15 2014**

### Fully-funded PhD (EU/UK students only)

**Archaeology Dept, University of Aberdeen** - Strontium and oxygen isotope study of reindeer palaeoecology and biogeography in late Holocene Alaska as part of our AHRC funded 'ELLA' project.

The online advert can be found at: <http://www.findaphd.com/search/ProjectDetails.aspx?PJID=48463>

**Closing date 6th December 2013**



## SUMMARY OF THE AGM, 27<sup>TH</sup> SEPTEMBER 2012, KIEL UNIVERSITY, GERMANY

The annual general meeting was held at the end of the first day of lectures of the autumn conference *Social Space and Environment: Landscape Reconstruction in Environmental Archaeology*. Andy Howard presented a report on Committee activities since the last autumn conference, announced the winners of the 2013 John Evans Dissertation Prize and presented the Treasurers report for 2012 before the election of new Committee members and opening the floor to members' comments for any other business. The content of the AGM is summarised below, with the John Evan's Results published on page 15.

### Report on Committee Activities

#### **Conferences (Conference Officer Rebecca Nicholson)**

Last years' autumn meeting *Environmental Archaeologies of Neolithisation*, University of Reading, was organised by Robin Bendrey, Sarah Elliot, Wendy Matthews, Amy Richardson and Jade Whitlam of the University of Reading. The AEA distributed £600 in bursaries to attend the conference and awarded a student poster prize to Sarah Kneen (University of Manchester).

The 2013 Spring meeting was a joint meeting with UK Archaeological Sciences at the University of Cardiff (organised by Penny Bickle, Dani Hofmann, Jane Henderson, Paul Nicholson, Rebecca Nicholson, Richard Madgwick, Yiota Mantti, Steve Mills, Jacqui Mulville, Dave Watkinson and Tim Young). The conference included a day themed around environmental archaeology with a reduced day rate for AEA Members. Four prizes were awarded, the AEA sponsoring those for posters: John Stewart, University of York (1st prize student paper); Jennifer Bates, University of Cambridge (2nd prize student paper); Christophe Snoeck, University of Oxford (1st prize student poster); Joanna Simpson, University of York (2nd prize student poster).

Forthcoming 2014 Spring meeting will be a joint meeting with the Conchological Society of Great Britain and Ireland. Expressions of interest should be sent to Mike Allen [aea.escargots@gmail.com](mailto:aea.escargots@gmail.com)

The AGM marked the end of Rebecca Nicholson's term of office on the committee. The AEA is grateful to Rebecca for all her efforts as Conference Officer over this time.

#### **Membership (Membership Secretary Ruth Pelling)**

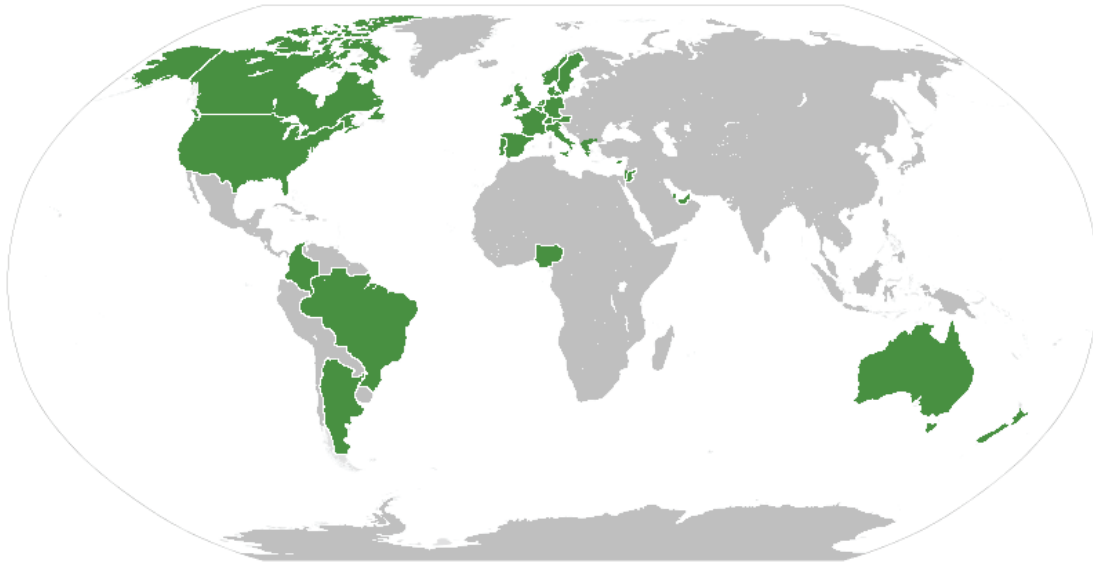
Individual subscriptions have returned to their 2011 level after a slight reduction in membership in 2012. Current membership includes 26 new or returning long-term absent members and 9 honorary members.

Two membership initiatives have been in place for 2012. A conference membership offer at the Reading and Cardiff meetings resulted in 12 new members. A three year membership award, donated by our honorary members, has been awarded to Jimoh Ganiyu Adedeji, from Ibadan, Nigeria. We look forward to reading Jimoh's [first Newsletter](#) report. The 3 year instructional award of hard copy journals has not been awarded this year and we welcome nominations to the Secretary ([fay.worley@english-heritage.org.uk](mailto:fay.worley@english-heritage.org.uk)).

July 2013 saw the launch of our WorldPay, online membership subscription payment facility on our website (<http://envarch.net/register/>). It is proving to be very successful (and much liked by the Membership Secretary and Treasurer). We hope that this will become the principal payment method used by those without standing orders. Members were reminded that 2014 subscriptions are due on 1<sup>st</sup> January 2014, and payments can be made anytime before that date.

Although Ruth Pelling's term of office as Membership Secretary concluded at the AGM, she has agreed to be co-opted back into the role for 2014. The AEA thanked Ruth for her work over the years as both Membership Secretary and ordinary member.

## AEA MEMBERSHIP DISTRIBUTION



	201 1	201 2	201 3
Outside Europe	26	25	32
Europe (exc. UK)	59	48	62
UK	262	235	253
<b>TOTAL</b>	<b>347</b>	<b>308</b>	<b>347</b>

	201 1	201 2	201 3
Argentina	-	1	1
Australia	4	4	3
Brazil	-	-	1
Canada	10	9	10
Columbia	-	1	1
India	-	1	-
Israel	1	1	1
Jordan	1	1	1
N.Zealand	1	1	1
Nigeria	-	-	1
S. Korea	1	-	-
Qatar	-	-	1
UAE	1	1	1
USA	7	5	10
Total	26	25	32

	201 1	201 2	201 3
Andorra	1	1	1
Austria	7	5	6
Belgium	2	2	2
Cyprus	-	-	1
Czech Republic	1	1	-
Denmark	1	1	1
France	5	4	4
Germany	11	7	13
Gibraltar	1	-	-
Greece	-	-	1
Iceland	1	-	1
Ireland	7	7	10
Italy	2	2	2

Malta	-	1	-
Norway	1	2	1
Portugal	1	1	1
Slovenia	1	-	1
Spain	3	3	3
Sweden	1	1	1
Switzerland	2	1	2
The Netherlands	11	9	11
Total non-UK	59	48	62
UK	262	235	253

**Journal (Co-ordinating Editor Tim Mighall)**

Ingrid Mainland has stepped down as co-ordinating editor, to be replaced by Tim Mighall from vol 19 (2014). The AEA is grateful to Ingrid for her hard work over many years, which has contributed to the journal's success. Other developments this year include a move to online submission which is now up and running.

Maney made *Environmental Archaeology* their journal of the month for September 2013. Several extra short papers and videos were posted on their website. Maney reported that they had 145 institutional subscribers for the journal in 2012, 42% were e-journal only.

**Newsletter (Editors Wendy Carruthers, Vanessa Straker, Jade Whitlam)**

The Newsletter was revamped in 2013 and now includes issues in colour, refreshed content and better integration with the website (see website, below). The editors are keen to receive suggestions for improvement and content. Articles (word documents and images) can be submitted through [newsletter@envarch.net](mailto:newsletter@envarch.net)

**Discussion lists (Jiscmail Manger Hannah Russ)**

Paul Davies stood down from the role of Jiscmail manager after several years as a co-opted committee member. The AEA thanked him for his service. The lists are now managed by Hannah Russ. [aea@jiscmail.ac.uk](mailto:aea@jiscmail.ac.uk) is our moderated list for AEA related information only (AEA conference calls, newsletter etc) and the discussion list is [env-arch@jiscmail.ac.uk](mailto:env-arch@jiscmail.ac.uk)

**AEA Seminar Series (Publicity Officer Richard Madgwick)**

The UK Seminar series has seen five seminars since the last AGM. Presented in Oxford, Sheffield, Durham, Liverpool and Bangor. Three forthcoming seminars are currently arranged for the 2013-14 academic year:

**Carolyn Chenery** (NIGL, British Geological Survey) *A boat load of Vikings or raiders of a different sort? Isotope investigations on the Mass Grave at Ridgeway Hill, Weymouth.* 14th November 2013 17.10, Cardiff University

**John Lowe** (Royal Holloway): *Title TBC.* 1st May 2014 17.00, University of Oxford, Institute of Archaeology  
TBC Aberdeen. To be confirmed shortly

In 2013 the seminar series expanded into continental Europe with Seminars held in the British School at Rome and the American Academy in Rome. We currently have three forthcoming seminars out side the UK:

**Sandra Pichler** (University of Basel) *Insights into the worlds of the living and the dead - Human skeletal remains from the Basel-Gasfabrik La Tène site (CH)* 30th October 2013, 15.30-17.15, VU University, Amsterdam

**Dorian Fuller** (University College London) *Title TBC.* 27th February 2014, University College Dublin  
TBC Poland. To be confirmed

**Website ([www.envarch.net](http://www.envarch.net)) (Web Officer James Morris)**

The website has been redesigned and is continuing to be developed to increase its functionality. It now hosts an online membership subscription facility, James Greig's bibliography has moved to the website from the newsletter and can now be downloaded and searched, and we have a form to allow members to submit abstracts from post graduate theses. A member's only section is under development.

The AEA also now has a social medial web presence, administered by the Publicity Officer, Web Officer and Student Representatives. Our Facebook page ([www.facebook.com/pages/Association-for-Environmental-Archaeology](http://www.facebook.com/pages/Association-for-Environmental-Archaeology)) had 371 'likes' at the time of the AGM and our Twitter feed (<https://twitter.com/Envarch>, new for 2013 following members suggestion at the 2012 AGM) had 102 followers.

**Treasurer's Report (Jacqui Huntley)**

The accounts are presented below. Subscriptions were slightly down in 2012 compared to 2011, however savings interest is up. Subscriptions do not need to be raised for 2014.



*AEA Accounts to the end of 2012 (Sterling Account)*

	2011	2012
<b>Assets at start of year</b>		
Bank – current account	£11,962.98	£13,989.16
Bank – savings account	£18,785.88	-
Fixed term savings deposit account	-	£20,000.00
<b>Total assets at start of year</b>	<b>£30,748.86</b>	<b>£33,989.16</b>
<b>Income</b>		
Subscriptions	£12,238.25	£11,599.10
Books inc. journal back numbers	£2,601.45	£5,095.90
Interest earned	£4.66	£333.55
Maney Royalties and Editorial income	£1,566.11	-
Payment in error	-	£100.00
Income sub-total	£16,410.47	£17,128.55
<b>Initial total assets excluding books in stock</b>	<b>£47,159.33</b>	<b>£51,117.71</b>
<b>Expenditure</b>		
Office stationery, stamps, poster	£113.75	£14.99
Credit card charges (Streamline)	£166.18	£199.40
Web page	£1,000.00	£55.00
Journal production and postage (inc. back numbers)	£9,100.00	£10,444.00
Committee meeting travel related	£550.95	£87.85
Book purchase	£1,937.50	£728.00
AEA Seminars	-	£50.40
Conference support	£125.00	£967.00
Conference prizes	-	£370.00
Standard bank charges	£138.79	£199.45
Re-imburse of payment in error	-	£100.00
Subscriptions reimburse (duplicate standing order)	£38.00	£114.00
<b>Expenditure subtotal</b>	<b>£13,170.17</b>	<b>£13,330.09</b>
<b>Total assets minus expenditure</b>	<b>£33,989.16</b>	<b>£37,787.62</b>
<b>End of Year</b>		
EoY current account	£13,989.16	£17,454.07
EoY savings account	-	£333.55
EoY Term Deposit	£20,000.00	£20,000.00
<b>Sterling total</b>	<b>£33,989.16</b>	<b>£37,787.62</b>

*Accounts to the end of 2012 (Euro Account)*

	2011	2012
<b>Assets at start of year</b>		
Current account = total assets	€6037.73	€8,903.19
<b>Income</b>		
Books	€1,341.94	€1,326.23
Subscriptions	€1,960.54	€1,929.47
Reversal of bank charges	-	€5.08
Unknown credit	-	€0.95
Income sub-total	€3,302.48	€3,261.73
<b>Initial total assets</b>	€9,340.21	€12,164.90
<b>Expenditure</b>		
Books	-	€-9,307.02
Standard bank charges	€-23.34	€-22.30
Committee expenses	€-401.83	-
Postage	€-11.85	-
Rejected subs cheques	-	€-150.00
<b>Expenditure subtotal</b>	€-437.02	€-9,479.32
<b>Total assets minus expenditure</b>	€8,903.19	€2,685.60
<b>End of Year</b>		
Bank - current account	<b>€8,903.19</b>	<b>€2,685.60</b>

**Elections for the Managing Committee**

The elected terms of the AEA Chair, Andy Howard, and Committee members Jørn Zeiler, Ruth Pelling (Membership Secretary), Rebecca Nicholson (Conference Officer) Lisa Lodwick (Student Representative) concluded at the AGM. They were all thanked for their contributions over their terms of office. Ruth Pelling has been co-opted to remain as Membership Secretary for 2014.

Elections were held for a new Chair, Student Representative and three ordinary members, voting in person on the day and by proxy. Candidates' statements had been circulated in advance and were also available on the day. The successful candidates were:

As Chair: **Dr Richard Thomas** (University of Leicester)

As Ordinary Members: **Dr Julia Cussans** (Archaeological Solutions), **Dr Emma Jenkins** (Bournemouth University), **Dr Nicki Whitehouse** (Plymouth University)

As Student Representative: **Daniella Vos** (Bournemouth University)

The 2013-14 Managing Committee Structure is as follows:

**ELECTED COMMITTEE MEMBERS** [term]

<b>Chair</b>	Dr Richard Thomas (Leicester) [2013-17]
<b>Treasurer</b>	Jacqui Huntley (Durham) [2011-15]
<b>Secretary</b>	Dr Fay Worley (Portsmouth) [2010-14]

**Ordinary Members**

Dr Robin Bendrey (Reading) [2010-14]  
 Dr Julia Cussans (Bury St Edmunds) [2013-17]  
 Dr Emily Forster (Sheffield) [2010-14]  
 Dr Emma Jenkins (Bournemouth) [2013-17]  
 Dr Alex Livarda (Nottingham) [2012-16]  
 Dr Richard Madgwick (Cardiff) [2011-15]  
 Dr Preston Miracle (Cambridge) [2010-14]  
 Dr James Morris (Preston) [2011-15]  
 Mr Don O'Meara (Durham) [2012-16]  
 Dr Hannah Russ (Sheffield) [2011-15]  
 Dr Sarah Viner-Daniels (Sheffield) [2012-16]  
 Dr Nicki Whitehouse (Plymouth) [2013-17]

**Student Representatives**

Jade Whitlam (Reading) [2012-14]  
 Daniella Vos (Bournemouth) [2013-15]

**CO-OPTED COMMITTEE MEMBERS**

**Journal editor** Dr Tim Mighall (Aberdeen)  
**Newsletter editors** Wendy Carruthers (Llantrisant)  
 Vanessa Straker (Bristol)  
 Jade Whitlam (Reading)  
**Membership Secretary** Dr Ruth Pelling (Portsmouth)

**Any Other Business**

Members attending the AGM noted that the Association's finances are currently healthy and asked whether funds could be diverted towards initiatives such as small grants, and whether the value prize awards should be increased. These suggestions will be discussed at the next Managing Committee meeting.

Members also commented that following the election the Managing Committee for 2014 will be entirely UK based. The Managing Committee always welcomes nominations for candidates from outside the UK and has several ways to mitigate travel for meetings including a travel budget and utilisation of virtual meeting (e-meetings, video conferencing, tele-conferencing).

The AGM was closed and delegates gathered for the conference reception.

**Fay Worley, AEA Secretary****2013 JOHN EVANS' DISSERTATION PRIZE**

John Evans (1941-2005) was an inspirational environmen-

tal archaeologist, responsible for advancing the discipline and fostering many of today's top researchers in the field. His many books continue to make a contribution to practical and theoretical aspects of environmental archaeology. To honour the memory of John and his achievements within environmental archaeology, the Association for Environmental Archaeology (AEA) awards prizes annually for the best undergraduate and masters dissertations, for work which may be on any aspect of environmental archaeology worldwide. The abstracts from the winning dissertations are printed below, and the winners each receive £75 and the opportunity to submit an abridged version of their dissertation for publication in the Association's journal, *Environmental Archaeology*, subject to the usual review process.

This year we received submissions of excellent quality demonstrating a high standard of work from both undergraduate and masters students. It was particularly pleasing to receive submissions from diverse nationalities, from departments across Europe, North America and the Near East. The projects submitted covered a broad temporal, geographical and subject range, from European Upper Palaeolithic art to Roman cock-fighting, and from megalithic monuments of the Funnel Beaker Culture to the Neolithic landscape around Çatalhöyük, Turkey.

**Masters dissertation prize winner**

Alice Berger (Department of Archaeology and Ancient Near Eastern Cultures, Tel Aviv University) for her dissertation entitled "Plant Economy and Ecology in Early Bronze Age Tel Bet Yerah"

Abstract

Situated on a former peninsula between the Sea of Galilee and the ancient course of the Jordan River, Tel Beit Yerah was one of the largest and a central settlement of the Early Bronze Age in the southern Levant. In excavations conducted on this site since the 1930's remains of several phases of occupation were exposed, including an unfortified village which developed into a walled city in the EB II, followed by a later phase in the EB III when monumental architecture was introduced, as well as a population of newcomers who, based on their ceramic assemblage, belong to the Early Transcaucasian Culture. The recent excavations at Tel Beit Yerah, conducted by a Tel Aviv University expedition, yielded a rich assemblage of charred archaeobotanical remains, which were used to address issues of urbanization, economic structure and cultural interactions at the site, as well as evaluation of the local climate during the 3rd millennium B.C..

Considering deposition processes, it seems the origin of most charred botanic finds was in deliberate combustion of refuse from crop processing, rather than accidents or burnt dung. The assemblage included domesticated cere-



als, pulses and fruits typically found in the region, along with numerous agricultural weeds. The latter revealed that agricultural practices in the examined period included the use of deep plough, autumn following, harvesting twice a year, in late spring and early autumn, using sickles to reap bundles. Irrigation and manuring were probably in use as well.

The level of pre-storage processing of cereals changed through time, with a great degree of processing, taken as indicative of organized labour, only evident in the EB II. After the new population entered the site little cooperation is seen in agricultural production, yet with different weed composition in assemblages attributed to the autochthonic and migrant populations. The two groups also exhibit different dietary preferences - Remains of edible plants vary in their relative proportion, with the assemblage recovered from contexts attributed to the newcomers resembling those reported from other sites of the Early Transcaucasian Culture.

The archaeobotanical finds suggest a humid climate throughout the whole period of occupation, with vegetation composition comparable to the modern one and possible aridification only after the site was abandoned. No correlation between cultural and climatic processes was observed, suggesting that the reasons for fluctuations in economic and social organization in the southern Levantine Early Bronze Age should be sought in the cultural or social realms.

#### ***Undergraduate dissertation prize winner***

**Tristan Henser-Brownhill** (Department of Archaeology, University of York) for his dissertation entitled "Pathogen Degradation and Persistence: Are Ancient Pathogens a Biohazard for Archaeologists?"

#### **Abstract**

This dissertation was conducted to assess the probability of discovering virulent ancient pathogens in excavation environments, with the intention of providing an accurate and well-evidenced foundation for future health and safety guidelines. In order to achieve this goal, a myriad of information from scientific and archaeological sources was consulted, resulting in the first comprehensive interdisciplinary literature review of the subject. Unfortunately, the information evaluated could not provide specific statistical estimations for pathogen survival. Nonetheless, it is hoped that this report will leave archaeologists in a better position than they were previously to evaluate possible risks associated with well-preserved human or animal remains encountered in their line of work.

Our congratulations go to Alice and Tristan, their work was very highly regarded by the judges.

It was a very strong field, and we would like to pass on our

compliments to all candidates for the high quality of their work.

We do hope that departments will continue to support this prize and we look forward to receiving such diverse and high quality pieces of work next year.

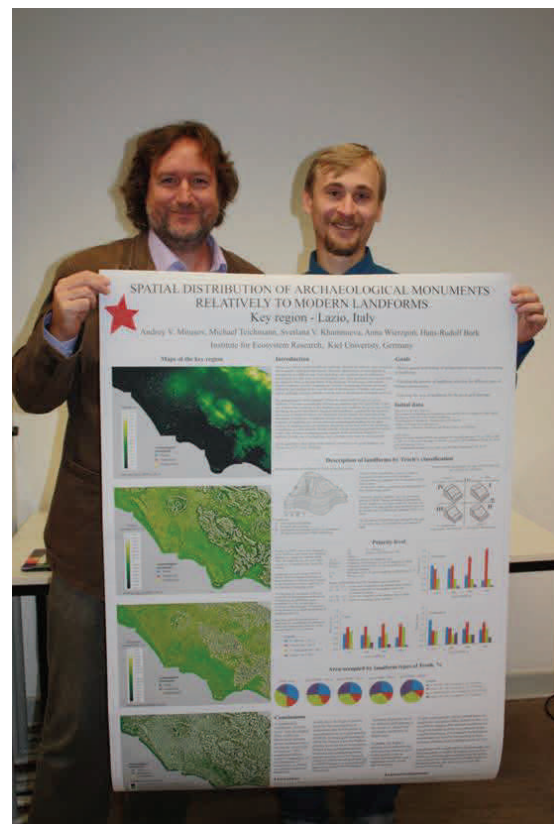
**Robin Bendrey**

#### **KIEL CONFERENCE POSTER PRIZE**

The prize for the best poster for a student project was awarded to Andrey Mitusov, Michael Teichmann, Svetlana Khamnueva, Anna Wierzgoń, Has-Rudolf Bork (Institute for Ecosystem Research, Kiel University) "Spatial Distribution of Archaeological Monuments Relatively to Modern Landforms" (see photos below on Page 6). Congratulations to the authors!

#### **MEMBERSHIP RENEWAL REMINDER**

All members are thanked for their continued support and interest in the AEA. Membership renewals for 2014 are due on 1<sup>st</sup> January 2014, and payments can be made any-time before that date. Subscription rates remain unchanged at £38 for waged members or £28 for unwaged/retired/student members. Our preferred method of payment is via our safe online facility through WorldPay.



***Andrey Mitusov displaying his winning poster with AEA Chair Andy Howard in Kiel.***

## AEA Membership Form

NAME (First name / Surname)  

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TITLE (Prof. / Dr / Mr / Mrs / Ms / Miss)  

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ADDRESS  

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POST CODE / ZIP  

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EMAIL ADDRESS  

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Although no qualifications are required for membership, we ask that you inform us of your research interests below.

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**Subscription rate** (please circle the relevant figure below). I am paying for (**year**): \_\_\_\_\_

Student / unwaged members      £28

Waged members                      £38

Our preferred methods of payment are by secure online payment via WorldPay or by standing order from a UK bank account (contact the membership secretary for a standing order form). Cheques, made payable to **Association for Environmental Archaeology**, or cash are also accepted. With certain exceptions (see below), **all payments must be made in pounds sterling**.

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**PAYMENT BY IBAN (Eurozone members)**

Members can pay their AEA membership fees using the IBAN (International Bank Account Number) electronic transfer system. Using this system, an AEA member can go to their local bank in the Eurozone and transfer money to an AEA account for a small fee. Please see the separate **information sheet** on payment using the IBAN system.

**Subscription rate** (please circle the relevant payment below): I am paying for (**year**): \_\_\_\_\_

Waged members: €50 / Student/unwaged: €37

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**Please send your completed form to:** Dr Ruth Pelling, English Heritage, Fort Cumberland, Fort Cumberland Road,  
Eastney, Portsmouth, Hampshire, PO4 9LD,

Email: [membership@envarch.net](mailto:membership@envarch.net)



[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

(see page 7 for further details).



### **AEA Seminars**

**Carolyn Chenery** (NIGL, British Geological Survey) *A boat load of Vikings or raiders of a different sort? Isotope investigations on the Mass Grave at Ridgeway Hill, Weymouth.* **14th November 2013 17.10, Cardiff University**

**John Lowe** (Royal Holloway): *Title TBC.* **1st May 2014 17.00, University of Oxford, Institute of Archaeology**



## **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](mailto:newsletter@envarch.net)**

Wendy Carruthers, Vanessa Straker & Jade Whitlam