

# Association *for* Environmental Archaeology

AEA Newsletter 145

December 2019

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Dear members,

I'd like to start by saying a big thank you to everyone at Sheffield for putting on such a great conference in celebration of the AEA's fortieth birthday. It was a hugely enjoyable few days and made me so proud to be part of such a wonderful community of environmental archaeologists. An edited version of my speech from the conference is included in this newsletter following requests from the newsletter editors and conference delegates.

At our AGM, we welcomed three new members to the managing committee. Alex Livarda and Eva Fairnell were elected as ordinary members, and Róisín Nic Cnáimhín is our new student representative. Congratulations to them all. Jo McKenzie has kindly agreed to stay on as membership secretary for another year and is duly co-opted. Thank you so much Jo. I would also like to thank the retiring members of the committee: Lee Broderick, who steps down from being

conference officer, Ben Gearey, who has made great efforts to make the AEA more sustainable, and Tom Fowler, student representative, mover and shaker.

Don't forget that applications for the association's small research grants are open until the end of January. You need to be a fully paid-up member of the AEA to apply, so make sure you renew your membership. Rates for 2020 are unchanged.

Please also think about nominating an archaeological society for our Archaeological Society Membership Prize. This has been held by the South Somerset Archaeological Research Group (SSARG) between 2017 and 2019. The winning society receives a free institutional membership of the association for 3 years. Nominations from AEA members for this prize are now open. Please send your suggestions to me by 15th January 2020.

**Gill Campbell,  
December 2019**



Delegates at the AEA's 40th Anniversary Conference in Sheffield

ISSN 1363-6553

## The AEA at 40: Environmental Archaeology enters its prime

An abridged version of AEA Chair Gill Campbell's opening keynote from the AEA 40th Anniversary conference in Sheffield

*My fellow archaeologists, friends and colleagues welcome to the 40<sup>th</sup> annual conference of the Association for Environmental Archaeology and to our 40<sup>th</sup> anniversary celebrations. In speaking to you this evening about environmental archaeology and its role in today's world I should begin by saying that I am, to borrow from Jane Austen, 'a partial, prejudiced and an ignorant historian' (Austen 1993, 1). My reflections are personal and from a UK and European perspective. There will also be 'very few dates' (Austen 1993, 1).*

### Defining Environmental Archaeology

Environmental archaeologists have a bit of an obsession with defining or redefining environmental archaeology, though as Evangelia Piskin and Marta Bartowiak in their 2018 paper conclude "nobody knows why a rose is called a rose but everybody knows what a rose is: for we know its components and its usefulness" (Piskin and Bartowiak 2018, 10).

I believe that our difficulty in defining environmental archaeology is because it has always been multi-disciplinary and is increasingly cross-disciplinary, ever expanding in scope and thus ever expanding its boundaries. As environmental archaeologists enter new territory, already occupied by other disciplines, or take on concepts and theories put forward by non-archaeologists we can ask ourselves whether what we are doing still counts as environmental archaeology especially when faced with questions along the lines of 'What are you doing here? Environmental archaeologists don't do this, this is our area of research! My answer to this would be, to be brave, and boldly go where no environmental archaeologist has gone before (though they very probably went there and did that but not within the current parameters and collective memory of territory being entered).

As Terry O'Connor observed in his 1998 paper, very few disciplines feel the need to define themselves by the means they use to study their subject rather than by the aims of that study. While archaeology seems fairly happily defined as the study of the material remains of the past, environmental

archaeology can no longer be defined as the study of environmental remains to understand the past. It is much bigger than this. Environmental archaeology seeks to find out about how people lived in the past and their interaction with the world around them, I purposefully avoid the use here of the 'natural world'. As Umberto Albarella (2018) stated, there is a danger in doing this that we perpetuate the division between culture and nature, a theme that I will return to later in this presentation.

Environmental Archaeology is concerned with how people obtained the necessities of life, how they both shaped and were shaped by the environment, in human induced climate change, pollution, the creation of cultural landscapes, novel habitats, from changing relationships with individual species to major shifts in human culture. The reason why we do this is to understand how we got where we are today and how by understanding and learning from our past relationships with our planet we can help build a better relationship with our planet today.

### History of the AEA

The Association for Environmental Archaeology was built on firm foundations with much innovative work done in the 1970s. It all began with 'the gang of four':

Don Brothwell, Simon Hillson, Nick Balaam and Geoffrey Dimbleby; although David Smith (*pers. comm.*) reports that Susan Limbrey first came up with the idea. The gang of four met in the spring of

1979 at the Institute of Archaeology in London to form the association, and with the aim of bringing environmental archaeologists together from across the UK. This evolved over the course of the year to include not only those based in UK working on sites overseas but also environmental archaeologists from around the world. Although the majority of AEA members are still based in the UK we have members in 28 countries.

The first conference was held at Lancaster University in the autumn of the same year and was on the *Environmental Aspects of Coastal and Island Situations*. It cost the princely sum of £18.50 to attend. This covered three days B&B, two extra meals, tea and coffee. The membership fee was £2.00 and there were 84 founding members.

Roll on ten years to the 10<sup>th</sup> anniversary conference, held at the Institute of Archaeology, London, in early July 1989. This conference reflected on *Aims and Achievements in Environmental Archaeology* and included a session on the public role of environmental archaeology. The 20<sup>th</sup> anniversary conference was postponed and actually took place in the spring of 2000 at University of Guildford. This conference, on *The Environmental Archaeology of Industry*, took on what was then a neglected area, and shone a light on the impact of industry, from lead pollution to the procurement and use of raw materials, to the effects of industry on human health. It sought to bring the gap between environmental and industrial archaeology.

The 30<sup>th</sup> Anniversary conference, *Environmental Archaeology in a Changing World*, was held at the University of York. It explored similar themes to [this conference](#) but with an emphasis on the role of developer-funded archaeology; recognising that the majority of the archaeology being carried out in the UK was being done as part of the planning process.

### What has changed over the last 40 years?

As mentioned above, the AEA was built on excellent foundations with work in the 1970s developing recovery techniques, establishing identification criteria and collating results. I would suggest that this involved trying to answer the

what question. The 1980s can be viewed as being more about the when, with AMS dating arriving on the scene in 1984. This transformed our ability to date material as Terry O'Connor observed in his 30<sup>th</sup> anniversary keynote. Before this innovation 300g of material was needed to obtain a radiocarbon date whereas nowadays a few milligrams will suffice. The 1990's were more about the how, with a focus on integrating different lines of evidence. The 2000's can be seen as being about the who, as the bimolecular revolution built up steam and it became possible to put together osteological biographies of individuals, both people and animals. The last decade has continued to be about the who, but also about the where. GIS is now accessible to everyone meaning that we can pinpoint where things happened. So what of the next ten years? I believe that the future is about the so what, about why environmental archaeology matters.

### Environmental Archaeology in a Volatile World – Hey do speak my language!

We live in a volatile world, in a VUCA world – a term that is becoming parlance in the business world and I believe useful when thinking how we present our evidence and results to businesses, policy makers and funders. VUCA stands for - volatile, uncertain, complex, and ambiguous.

- Volatile refers to the speed of change, that things are moving ever faster;
- Complex refers to number of factors that need to be taken into account;
- Uncertain, because is it difficult to predict what will happen with any confidence;
- Ambiguous, because the evidence can be interpreted in a number of ways.

These are all concepts that environmental archaeologists understand and deal with in their work. They are our bread and butter. Therefore by couching our results in these terms we can use the right language for this audience. We can also use aids such as the Uncertainty Handbook (Corner *et al* 2015) to help explain the robustness and reliability of our evidence.

However, this is not a language that most people understand. For this audience we have strong

iconic images and concepts at our disposal—the human planet, a plastic bag floating in the ocean, the Anthropocene. By making use of these concepts and perceptions we can help people understand what we do and why it matters. At the same time, we can demonstrate, as many are, the relevance of our work to the Sustainable Development Goals and feed into debates on how we navigate the balance between the local and the global.

These are big ideas for big projects but beneath all this, everyone working in environmental archaeology can contribute to building the parts that form a greater whole.

### Importance of observation

Environmental archaeology is fundamentally about observation, about looking carefully at things. This is the means by which we identify macroscopic and microscopic animal and plant remains, and understand deposits and stratigraphy whether through describing cores or careful examination of exposed sections. It is the foundation of science and essential to environmental archaeological practice.

However, as machine learning and image recognition become a reality and bio-molecular techniques become ever more powerful the art of observation is in danger of becoming undervalued. Research funders seem to be more interested in funding projects that develop new and innovative techniques and in machines that go ping! rather than training students and funding projects that are concerned with the observation, measurement and recording of material to produce robust datasets that can be used and re-used for years to come. In some measure developer-funded projects, undertaken as part of the planning process, have come to fulfil this role, with some very successful research projects, such as the Roman [Rural Settlement project](#) and Marijke van der Veen's *et al* reviews of Roman and Medieval plant foods in Britain making use of these results to great effect (van der Veen *et al.* 2008; 2013).

2020 sees the 300th anniversary of Gilbert White's birth, the curate/ naturalist whose book *The Natural History and Antiquities of Selborne*, first published in 1789, has famously never been out of print. Gilbert White writes about the habits of

earthworms (White 1789, 217) 100 years before Darwin. Observations in his diary between 1783 and 1784 during the eruption of the Laki fissure system in Iceland, describe vividly the widespread impacts of this event and have been used as evidence, along with other publications of the day, for the presence of volcanically generated gases in the lower atmosphere that had catastrophic consequences across the planet (Grattan and Charman 1994; Jacoby *et al* 2019).

To quote briefly White's words: "the peculiar haze or smokey fog prevailed for many weeks in this island, and in every part of Europe.... wind varied to every quarter without making any alteration in the air. The sun at noon looked as blank as a clouded moon... All the time the heat was so intense that butcher's meat could hardly be eaten the day after it was killed" (White, 1789, 301 -302)

Gilbert's evocative and engaging narrative is surely one of the reasons that this book is so well loved. Many have also argued that it is because it provides a window into another world, as Virginia Woolf wrote "by some apparently unconscious device ....a door [is] left open, through which we hear distant sounds" (Woolf 2013, 13).

However, more than this, the book illustrates how people even if they live in an ordinary place and never stray beyond it, can observe and record the natural world on their doorstep and by doing so come to know it intimately and add to a collective understanding of a changing world. As [Richard Mabey states](#) "Gilbert White's book, more than any other, has shaped our everyday view of the relations between humans and nature." (Mabey 2006, 21).

This is why Gilbert White and his book should matter to environmental archaeologists, not so much for itself but because of the reaction of scientists, writers, artists and readers to the work. Understanding the relations between people and nature in the past and how this has shaped and is shaping the world we live in today is what we strive to do. This is important to people, it is one of the things they care about and talk about and as environmental archaeologists we have a responsibility to tell people what we have discovered and engage in constant dialogue with



the communities we live and work in, an ethical promise as Riede *et al* (2016) advocate.

Above and beyond this, and if as chair of the AEA, I can present you all with a challenge, it would be this, that in 2020, the 300th anniversary of Gilbert White's birth and as the association enters its 5<sup>th</sup> decade, we as promoters, doers and teachers of environmental archaeology, celebrate, practice and teach the importance of careful observation and recording, not only in the laboratory but also in the field. That we value data and datasets however humble and seemingly inconsequential, giving due credit to those who beaver away to produce them and making every effort to produce robust datasets that are FAIR –Findable, Accessible, Interoperable and Reusable.

### Culture and Nature

The idea that nature is in any way separate from culture is alien not only to many cultures but also to environmental archaeologists. As Umberto Albarella (2018) states human societies do not operate outside the natural world “everything that humans have made and managed comes from nature” (Albarella 2018, 17) but whenever we think that the “struggle has nearly been won” (Albarella 2018, 16) the splitters, to use a taxonomic term, come along and the divide is reinstated.

Yet there is hope. Projects such as [Exploring the Easter E.g.](#), [PLANTCULT](#) and [Reconstructing the 'Wildscape'](#) are embracing a holistic approach that is cross-disciplinary and seeks to understand the things that make us who we are. Such projects are gaining traction and changing attitudes but there is still much to be done.

One of the principal issues we face, and I say this having worked either indirectly or directly for a national heritage organisation for 30 years, is that the division between culture and nature is enshrined in the protection we give to significant places from Sites of Special Scientific Interest, to Scheduled Ancient Monuments to World Heritage Sites. A place can be designated in England for its nature conservation value or as a heritage asset but not both, though descriptions in either case often include reference to historic or nature conservation

interest. While attempts have been made to change this, in particular in the management of protected landscapes and in changing the emphasis to describing significant places, it remains the case that different organisations have different remits meaning that one is quite often faced with a statement along the lines of we don't do that, this is their job /remit or nothing to do with us.

To use World Heritage Sites (WHS) as an example and by way of illustration, there are three types of WHS: Cultural, Natural and Mixed. St Kilda, first inscribed in 1986 is mixed while The English Lake District, inscribed in 2017 is cultural. The Dorset and East Devon Coast, inscribed in 2001, is natural, so are the Ancient and Primeval Beech Forests of the Carpathians and Other Regions of Europe, inscribed in 2007. Although the descriptions of these sites give insights into why they were placed in a particular category, I would argue that these categories add nothing and it would be better just to have plain World Heritage Sites.

Concepts such as biocultural heritage and shifting baseline syndrome are useful here in that they allow us as environmental archaeologists to articulate knowledge of the deep past of places, input into conservation and future management plans, and to discuss the whether a significant place is degraded. Although there is some danger that these concepts just reinvent the wheel.

### The example of Swedish Rural Landscapes

Biocultural heritage (BCH) is defined by UNSECO as “living organisms or habitats whose present features are due to cultural action in time and space” (UNSECO, 2008, 8). BCH tends to be associated with indigenous people and isolated rural areas (Eriksson 2018, 2). Various authors have sought to refine this definition, with debates echoing those concerning how we determine heritage values -something which is beyond the scope of this presentation.

There is also an issue with how BCH in different landscapes is perceived or even recognised. This may linked to how [Sustainable Development Goal 15 \(Living on Land\)](#) is being taken forward, specifically 15.5:

“Take urgent and significant action to reduce the degradation of natural habitats, halt the loss of biodiversity, and, by 2020, protect and prevent the extinction of threatened species.”

Ove Eriksson in his 2018 paper discusses this problem (Eriksson 2018). Using Swedish Rural Landscapes as an example he shows how BCH tends to be overlooked in forests as opposed to open and semi-open pastures and meadows. This is particularly interesting for archaeologists as in the past there would have been no division between the forests and the meadows. They are all part of the same traditional landscape. Eriksson puts forward two reasons for this different treatment of forests:

- Loss of cultural memory (cultural severance) – people not remembering that the forests were used, linked to shifting baseline syndrome;

- A perception of forests as wilderness, leading to a laissez faire or hands off approach to conservation.

Environmental archaeologists can put the culture back in the wilderness, and forests in particular, as Althea Davies, Jane Bunting, Suzi Richer and others have demonstrated through their work. As Eriksson states “cultural landscapes may be biologically rich....It is important to gain knowledge of how this biological richness has developed and can be maintained” (Eriksson 2018,16).

### **The Lake District: thinking more about landscape**

This protected place provides a useful example of how different landscapes can occupy the same space and how environmental archaeologists can help refine these perceived landscapes. Landscapes can have different meanings and significance to different people. Thus the European Landscape Convention defines landscape as “an area, as perceived by people, whose character is the result of the interaction of natural/ and/ or human factors” (Council of Europe 2000).

This has lead Kennet Olwig (2018) to propose that multiple landscapes can occupy the same space, arguing that in the case of England’s Lake District two different landscapes can be defined. The first

encompasses the area defined by the boundary of the protected area, an essentially picturesque landscape forming a single social and economic unit managed to preserve the environment and for recreation, particularly by visitors from urban areas. The second landscape is one that is perceived by the people who live and work in the area, in particular pastoral farmers, whose practices and traditions have shaped a cultural landscape with established rights of use and a mosaic of common resources (Olwig 2018, 1038). Groups holding these different perceptions of the Lake District can come into conflict, when for example rewilding is adopted as a way of increasing biodiversity and reversing the effects of pastoralism without understanding that by fencing off areas of upland the sustainability of farming in the area is threatened (Olwig 2018, 1042).

Environmental archaeologists can help resolve these conflicts by introducing another perception of this landscape, which sees the Lake District as a novel ecosystem, a new wild (Ellis 2018, 118), created by complex interactions of people with their environment over millennia. The origins of the pastoral Lake District lie in the Neolithic. However the extent of woodland cover has changed over time and has varied in scale and over different time durations. At the same time the Lake District is also an industrial landscape, from Neolithic quarries and hand-axe factories in the central uplands to use of woodlands to provide fuel and other products for domestic and industrial purposes, in particular charcoal for iron production. By demonstrating this complex cultural and environmental history, environmental archaeologists can provide a different perspective in caring for this landscape, recognising that change is inevitable but that preserving the environment and biodiversity of pastoral landscapes is as much about culture as nature.

This leads me to my second challenge. Environmental archaeologists need to engage actively in debates and decisions about how we preserve and manage the threats facing both the special and ordinary places we inhabit, with the ambition that we transform conservation management and policy over the next ten years.

Are we up to these challenges and opportunities? Yes, certainly. It does not matter that the Association for Environmental Archaeology has outgrown its denomination; we know what we are about. Our strength lies in the community that the AEA represents and the curiosity, adventure and passion we bring to our work. Here is to the next 10 years. Environmental archaeology live long and prosper.

Life begins at forty!

### Gill Campbell, AEA Chair

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## Living through change: the archaeology of human-environment interactions

### 29th November 2019 to 1st December 2019, University of Sheffield

The 'Living through change' conference at the University of Sheffield marked the 40th anniversary of the Association for Environmental Archaeology. The 40th conference "provided the opportunity to reflect on the discipline's past, and debate its future in the context of growing bodies of data, the integration of multiple proxies for change, new analytical techniques and fresh theoretical paradigms." The two day conference involved presentations from 15 UK universities, archaeological units, and international universities from countries including Japan, Italy, Poland, Spain, and Switzerland. With an audience of students, researchers, academics, and a range of AEA members, the conference provided an insight into interdisciplinary research and highlighted the diverse world of environmental archaeology.

Caroline Jackson, head of the Department of Archaeology at the University of Sheffield, opened the conference and welcomed all delegates to the much appropriate location of the 40th AEA conference. With a long history of environmental archaeology, the University of Sheffield shared the occasion as the 40th anniversary of their own environmental archaeology program.



Gill Campbell, chair of the AEA, followed with a keynote paper 'The AEA at 40: Environmental Archaeology enters its prime' which celebrated the anniversary and recognised those who formed the association in 1979. With a focus on the 'natural and cultural divide', Gill's discussion was inspiring and thought-provoking to both early researchers and those who pioneered this association. Reflecting on both the history and growth of the association, definitions and the role of environmental archaeology, this presentation proposed questions of the future of environmental archaeology and how its research and our understanding of the past will contribute to the future of our planet.

*'How can we help form policies and practices that will shape the future from the past?'*

The first day of the conference saw four sessions, 'Impacts on and of early subsistence', 'Land-use across complex landscapes', 'Arable land managements and subsistence strategies' and 'Challenges in semi-arid and arid environments'.



The second day of the conference saw five sessions, 'Environments of power and industry', 'Expansions and empires', 'Mobility and innovation in agropastoral societies', a poster session, and 'People and commensal carnivores'.



The conference highlighted the significance and volume of inter-disciplinary research within environmental archaeology. Disciplines outside of archaeology, such as geography and anthropology, compliment and contribute to our overall understanding of the past. Studies of pollen, dental calculus, insects, and canine coprolites are only a handful of research techniques discussed during the conference which show the potential of environmental archaeology.

Both days involved local and international case studies taking us from Sutherland to East Anglia, and from the Atacama Desert to Ustica Island. While exploring the globe we also travelled from prehistory to the historic periods through a range of time periods including the Upper Palaeolithic, the Bronze Age, and the Roman period.

The conference was concluded by Umberto Albarella with a final review on the contents of the conference. Umberto highlighted many presentations and finished with a discussion on ‘environmental archaeology’s very right to exist’, perhaps some food for thought?



A public lecture on the Saturday evening by Mark Knight, ‘The Must Farm pile-dwellings and the Flag Fen Basin – settlement mediated by sediment’, captivated the audience with its well-preserved material history of a short-lived prehistoric settlement. A study of investigating movement through time and space of a landscape which started out dry and ended wet as the river valley changed between the Early and Late Bronze Age

displays the preservation potential on the Flag Fen Basin. Finds from Must Farm include fish weirs and fish traps, log boats, metalworking (such as swords, rapiers and spears), causeways, pile dwellings, textiles (including a ball of wool and plant fibre bundles which were not spun), animal bone, pottery, and human remains. This list alone demonstrates the diverse materials recovered from the site, each adding to our understanding of this Bronze Age settlement in the Fenland basin.

An excursion to the Peak District was undertaken on the Monday, a refreshing way to end the AEA 40th conference. Lead by Emily Forster, we walked over Gardom’s Edge on the hunt for scenic views and rock art (some harder to find than others). The original rock art panel is buried beneath the replica, a unique example of preservation.

**Róisín Nic Cnaimhin**





# AEA

Spring conference 2020

Open Science Practices in  
Environmental Archaeology

## Open Science Practices in Environmental Archaeology Saturday 28<sup>th</sup> March 2020

The 2020 AEA Spring meeting will be taking place at the University of Oxford. Whilst the quantity of data produced through environmental archaeology, and the range of analytical techniques used to analyse it continues to grow, too often, methods, data and findings are not made available.

This one-day conference aims to discuss the collection, sharing, reuse, and reproducibility of all forms of environmental archaeological data and to explore how open science concepts are being implemented. Topics include open methods, open data, open source software, open access, open education and citizen science. We are keen to hear from those adopting these concepts in their research, which could include methodological standardisation, data compilation, meta-analysis, and the use of open publication platforms.

We look forward to seeing you in Oxford!

Organisers: Lisa Lodwick, Tom Maltas, Tina Roushannafas, Rubi Wu

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anthraco2019  
7th International Anthracology Meeting  
Liverpool, 2-6 September 2019

Charcoal science  
in archaeology and  
palaeoecology



## anthraco2019 – 7th International Anthracology Conference Charcoal Science in Archaeology and Palaeoecology University of Liverpool, 2-6th September 2019

The 7<sup>th</sup> International Anthracology Conference took place at the University of Liverpool's award-winning Central Teaching Hub – designed around a central atrium, it is a bright light-filled space, with multi-functional zones – a wonderful setting for this important conference (usually held once every 4 years), specifically promoting the dissemination and discussion of all things charcoal. It was a truly international conference, with more than 80 delegates from a wide range of European countries, the Americas, Asia and Africa.



Anthraco2019 delegates at the entrance of the conference venue (University of Liverpool Central Teaching Hub)

©Eleni Asouti





*Anthraco2019 reception area at the University of Liverpool Central Teaching Hub (© Marvin Demicoli)*

The papers were equally eclectic, showcasing charcoal studies from Late Neolithic sites in China (Marvin Demicoli), Medieval England (Robert Francis & Alexa Dufraisse), Chalcolithic Anatolia (John Marston & Peter Kováčik), 4<sup>th</sup>-3<sup>rd</sup> millennium BC Oman (Katleen Deckers), Roman cremations in Portugal (Filipe Costa Vaz), tropical anthracology from Sri Lanka (Ethel Allué) and archaeo-metallurgical sites in Zimbabwe (Joseph Chikumbirike) – to name but a few.

Extending over 5 days of paper and poster presentations, the conference permitted in-depth exploration of themed sessions, starting off with *New Developments in Charcoal Science*, where we heard from keynote speakers Ceren Kabukcu & Lucie Chabal on the multiple applications of quantitative methods in anthracology including new avenues such as multivariate analyses. In the same session there were also highly interesting papers on isotopic analysis on charcoals from Neanderthal settlements in France (Benjamin Audiard) and the identification of xylophagous insect species through the galleries/frass observed in charcoal (Magali Toriti).

Eleni Asouti gave a stimulating presentation re-evaluating the classic model of the Principle of

Least Effort, a theme returned to by Laura Obea Gomez in her examination of firewood gathering strategies in the Pyrenees, as well as Alexa Dufraisse & Sylvie Coubray on Neolithic lacustrine sites in France. Sylvie Coubray also gave a fascinating guide on dendro-anthracological recording, in her presentation of the DENDRAC anthracological toolkit:

<https://dendrac.mnhn.fr/>

Another particularly interesting theme raised by Ceren Kabukcu and returned to later by Alan Crivellaro in his keynote presentation 'Beyond Wood Anatomy' was the potential application of vessel diameter measurements to determine age and position along the tree in order to infer stem/log cutting practices and reconstruct growth habits.

There were multiple presentations around the theme of Charcoal Science and Human Palaeoecology, offering insights into wood use, fuel management and landscape cultivation in multiple countries and periods. Sally Hoare presented some interesting results on measuring luminosity and radiative heat outputs, based on experiments with different fuel sources.



A dedicated session on dendro-anthracology showcased some of the useful results gained from growth ring analyses (mostly charcoal-pith distance and ring width) in reconstructing woodland exploitation practices. Sessions on kilns and charcoal burning, interdisciplinary studies and pedoanthracology provided insights into heritage and the benefits of holistic approaches.

A new innovation at this conference was the use of lecture capture technology to record oral presentations, with the intention of providing a digital depository of select conference presentations on a dedicated website once various IPR issues are resolved. The anthraco2019 proceedings will be published next year as a 3-part peer-reviewed special issue in *Quaternary International*.



*Tour of the Liverpool Archaeobotany lab (© Marvin Demicoli)*

There was also time for wine, food and laboratory visits, firstly to the Liverpool Archaeobotany Lab, with its suite of specialist charcoal and general archaeobotany microscopes and its wonderful reference collection of Near Eastern wood taxa (collected and charred by Asouti and her team) and to the Central Teaching Hub's Environmental Sciences Lab - very impressive in scale, with row upon row of microscopes and a table-top SEM. Finally, a tour of the Garstang Museum of Archaeology, with its fascinating exhibits of Egyptian mummies and Ancient Nubian artefacts, brought this informative and inspiring conference to a close.

Many thanks to all the support staff at the University of Liverpool, and to our wonderful hosts, Eleni Asouti and Ceren Kabukcu.

**Dana Challinor**



*Tour of the Environmental Sciences lab in the Central Teaching Hub (© Marvin Demicoli)*

# UNDERSTANDING ZOOARCHAEOLOGY I

A short course for archaeology and heritage professionals, students and enthusiasts

20<sup>th</sup> - 22<sup>nd</sup> April 2020



# UNDERSTANDING ZOOARCHAEOLOGY II

A short course for those who have a basic knowledge of zooarchaeology.  
For professionals, students and enthusiasts

23<sup>rd</sup> - 25<sup>th</sup> April 2020



For more information, please email: [zooarch-shortcourse@sheffield.ac.uk](mailto:zooarch-shortcourse@sheffield.ac.uk)



The  
University  
Of  
Sheffield.

DEPARTMENT OF ARCHAEOLOGY



<https://cutt.ly/zooarch>



@ZooarchLab Sheffield



Sheffield Zooarchaeology Short Course

SCAN ME



## University of Sheffield Zooarchaeology Short Courses

**Understanding Zooarchaeology I: 20th-22nd April 2020**

**Understanding Zooarchaeology II: 23rd-25th April 2020**

**Price for one short course: £ 200 / £ 140 (student/unwaged)**

**Price for both short courses: £ 350 / £ 240 (student/unwaged)**

The next Understanding Zooarchaeology I short course will be run in April 2020. This three-day course aims to provide an understanding of the basic theory and methods which zooarchaeologists use to understand evidence from animal remains.

The introductory course will be followed by Understanding Zooarchaeology II, a three-day course suitable for anyone who has already attended our Understanding Zooarchaeology I course, or who has a basic knowledge of zooarchaeological methods. This course will cover the identification of a wider range of species than our introductory short course, including wild British mammals and birds, and the separation of sheep and goats. It will also provide participants with experience in recording and analysing a real archaeological assemblage.

Both courses will use short lectures, hands-on practical activities, and case studies focused on current zooarchaeological research.

For more information please visit our website:

<https://www.sheffield.ac.uk/archaeology/research/zooarchaeology-lab/short-course>

You can also follow us on:

**Facebook** (<https://www.facebook.com/Sheffield-Zooarchaeology-Short-Course-100619023380021/?ref=hl>)

and

**Twitter** (<https://twitter.com/ZooarchLabSheff>).

**For any questions, please feel free to email us at: [zooarch-shortcourse@sheffield.ac.uk](mailto:zooarch-shortcourse@sheffield.ac.uk).**





Department of Archaeology, Classics and Egyptology  
@LivAncWorlds

## Call for papers

### Trial by Fire



An interdisciplinary conference on the transformative power of fire.

Fire always leaves its mark and a wealth of information behind. Our aim is to bring together research on experimental archaeology, archaeomaterials, archaeobotany, anthracology, pyrotechnology, taphonomic investigations including burned bone, combustion features, or accidental burning.

Abstracts are welcome on a range of topics and case studies, including:

- Can fire be considered an artefact?
- How can fire be used as an experimental tool moving forward?
- How have people engaged with fire over the course of prehistory and history?
- What can the analysis of heated and burnt materials tell us about burning events?

**Abstracts are due by 31<sup>st</sup> January 2020**


**For abstract submission and further information:**

[www.trialbyfireteam.com](http://www.trialbyfireteam.com)

The conference will take place on **2<sup>nd</sup> -3<sup>rd</sup> May 2020**

Dept. Archaeology, Classics and Egyptology,  
University of Liverpool, Central Teaching Hub.



 @trialbyfireteam

 [trialbyfireteam@gmail.com](mailto:trialbyfireteam@gmail.com)

2020 organising committee UoL  
Sally Hoare & Ceren Kabukcu



## EAA 2020 call for papers, session #253

### The rural economy in transition: agriculture and animal husbandry between the Late Roman times and the Early Middle Ages

#### Organisers

**Idoia Grau-Sologestoa** (IPNA – University of Basel, Switzerland, [idoia.grau@unibas.ch](mailto:idoia.grau@unibas.ch))

**Mauro Rizzetto** (University of Sheffield, UK, [mauro.rizzetto11@gmail.com](mailto:mauro.rizzetto11@gmail.com))

**Tudur Davies** (Cardiff University, UK, [daviest32@cardiff.ac.uk](mailto:daviest32@cardiff.ac.uk))

The main aim of this session is to bring together researchers from different archaeological disciplines (such as archaeobotany, palynology, zooarchaeology, geoarchaeology, landscape archaeology, etc.) to explore common patterns and dissimilarities in the ways that rural economies changed or adapted to the new socio-political scenarios as the result of the collapse of the Roman Empire and the formation of medieval economies. We particularly welcome interdisciplinary papers which involve the integration of different scientific methods.

The EAA 2020 meeting will take place in Budapest (26<sup>th</sup> - 30<sup>th</sup> of August 2020). Abstracts of no more than 300 words for oral presentations or posters should be submitted via the conference website <https://www.e-a-a.org/EAA2020> by the deadline **13th of February 2020**.

Please do get in touch with any of us if you have any queries.



## John Evans Prize

### Undergraduate Winner 2019

#### **Daniel Gallagher, Royal Holloway, BSc Physical Geography**

*Understanding the response of vegetation to human activity and climate change in the Holocene: evidence for early farming at Treanscrabbagh Valley, Co. Sligo, Ireland*

#### **Abstract:**

The analysis of pollen grains and fungal spores is used to create a better understanding of the vegetation response to human and climate induced changes throughout the Holocene. The record produced provides a much clearer understanding of the changes seen in vegetation through the Mesolithic, Neolithic and Bronze Age. The most significant climate induced vegetation changes could result from a 6.5 ka BP climate anomaly unseen in other records. The human induced vegetation changes are due to small scale Mesolithic game hunting, the introduction of farming in the Neolithic showing two arable farming events one pre- and one post-elm decline. Support for arable farming events comes from cereal pollen grains, however, confirmation of *Hordeum*-type and *Avena*-type grains cannot be asserted without ambiguity. Additional evidence can be seen in a later switch to arable farming which could either be in the late Neolithic or early Bronze Age. Despite the significant improvement on the evidence for farming there is potential to further improve the record. Firstly with the creation of a chronology but also through macrofossil and further pollen analysis.

**Congratulations from all on the AEA committee!**

**Please note the closing date for the 2020  
John Evans prize is 31st July**

## John Evans Prize

### Postgraduate Winner 2019

#### **Kate Dudgeon, Reading, MSc Environmental Archaeology**

*A micro-botanical investigation of environment and plant-use at Abu Hureyra, Syria (~13,000-8000BP)*

#### **Abstract:**

The transition to agriculture at the start of the Holocene laid the foundations for modern food production. Understanding complex human-plant-animal-environment interactions during the Late Pleistocene-Early Holocene offers a deep-time perspective on current challenges. This research investigates human ecology during the occupation of Epi-Palaeolithic-Neolithic Abu Hureyra in Northern Syria (c. 13,000 – 8000BP) as this site has some of the earliest evidence of cultivation and is one of the largest early farming villages in the world. The relationship between past plant-use and environment is investigated by analysing phytoliths to inform on plant types present at Abu Hureyra. The phytolith evidence suggest woodlands and dryland grasses were exploited throughout the site occupation, as well as some wetland plants. Understanding the taphonomy of archaeobotanical remains is critical for accurate interpretations. This project quantifies spherulites as a potential indicator of dung to inform on depositional pathways of archaeobotanical remains which may have entered the archaeological record as dung burnt as fuel. Spherulites are present in all samples analysed within this study, which if proven to originate from dung, show that this was an important resource throughout the occupation of Abu Hureyra. This further raises the possibility some of the charred plant remains represent animal diet. The use of space and processing activities are investigated by analysing phytolith morphologies which are indicative of different plant parts and can be used to infer spatial function or processing strategies. Phytoliths identified represented stems, leaves and inflorescences of grasses which indicates the presence and exploitation of all parts of the plant. Furthermore, this study illustrates the importance of multi-proxy approaches in Archaeobotany and provides a case study for the potential of archival environmental archaeological samples to deliver new information when a site is no longer accessible for excavation.

## Don Brothwell Prize 2019

Professor Don Brothwell (1933-2016) was a founder member of the AEA, one of the "gang of four" (his words) who established the association in 1979. He gave the opening paper, along with Geoffrey Dimbleby, on *Environmental aspects of coasts and Islands: a justification* at the first annual conference in Lancaster and was one of our first honorary members. For more about his career and contribution to environmental archaeology see:

<https://www.york.ac.uk/archaeology/staff/academic-staff/in-memoriam-don-brothwell/>



In Don's honour we have established the Don Brothwell Prize to be awarded to best paper published in *Environmental Archaeology* each year. The prize will comprise free electronic access to the paper for a period of 2 years following announcement of the award.

Each year the journal's editorial board will select a shortlist of 5 to 8 papers, which in their opinion, form the best and most significant papers published. Peter Gane, Taylor and Francis' managing editor, will then choose the winner from this shortlist.

We were pleased to announce this year's winners of the Don Brothwell award at our AGM in Sheffield as Paloma Vidal-Matutano, Ruth Blasco, Pablo Sañudo and Josep Fernández Peris for their paper: The anthropogenic use of firewood during the European Middle Pleistocene: Charcoal evidence from levels XIII and XI of Bolomor Cave, Eastern Iberia (230–160 ka).



## 2019 Winner:

**Vidal-Matutano, P., Blasco, R., Sañudo, P. and Fernández Peris, J.** 2019. The anthropogenic use of firewood during the European Middle Pleistocene: Charcoal evidence from levels XIII and XI of Bolomor Cave, Eastern Iberia (230–160 ka). *Environmental Archaeology*, 24(3), pp.269-284. <https://www.tandfonline.com/doi/full/10.1080/14614103.2017.1406026>

## 2019 Shortlist:

**Arnay-de-la-Rosa, M., García-Ávila, C., Marrero-Salas, E., Criado-Hernández, C. and González-Reimers, E.** 2019. Footpaths Marked by Changes in Geological Clasts as Indicators of Mobility in Tenerife, Canary Islands. *Environmental Archaeology*, 24(3), pp.285-293.5

**Çakırlar, C. and Marston, J.M.** 2019. Rural agricultural economies and military provisioning at Roman Gordion (Central Turkey). *Environmental Archaeology*, 24(1), pp.91-105.

**Fernández, J., Moshenska, G. and Iriarte, E.** 2019. Archaeology and climate change: evidence of a flash-flood during the LIA in Asturias (NW Spain) and its social consequences. *Environmental Archaeology*, 24(1), pp.38-48.

**Lindskoug, H.B. and Marconetto, M.B.** 2019. Reconstruction of Fire History Using 'Dry'Sediments, An Approach for Microcharcoal Studies from the Sierras Pampeanas, NW Argentina. *Environmental Archaeology*, 24(1), pp.61-78.

**Russell, N.** 2019. Spirit Birds at Neolithic Çatalhöyük. *Environmental Archaeology*, 24(4), 377-386

*Many congratulations to all who made the shortlist from the AEA committee!*

## Winner of the AEA Photo Competition 2019



**Lenny Salvagno:**

“Umberto engaging with the next generation of environmental archaeologists”



David Smith: "Henry Chapman briefing interested locals on our up coming excavations at the Berth in Shropshire"



Laura Basell: "Reading Landscapes at Ferriter's Cove: Bilingual guided walk explaining our research and techniques ahead of fieldwork"



Angela Maccarinelli: "The production line". The History of British Fauna Short Course (16th – 19th July 2018, Sheffield).



Meriel McClatchie: "Development of a Bloom show garden in 2019 enabled research from the UCD Archaeobotany Laboratory to move beyond the academic sphere to the public domain. More than 115,000 Bloom visitors learned the hidden history of what we ate in Ireland over the past 8000 years, based upon archaeobotanical evidence."



Ben Geary: "Rosie Everett (University of Warwick) talking sections, sediments and sedaDNA: Heritage week guided walk, Ferriter's Cove, Dingle, Ireland"



Róisín Nic Cnáimhín: "Zooarchaeological engagement at Cork Public Museum; a joint event between University College Cork Archaeology Department, and the Cork Historical and Archaeological Society"

**Watch this space for AEA's 2020 Photo Competition theme!**



# Minutes of the AEA Annual General Meeting 2019

The 2019 AGM was held at 17.00 on 30th November 2019 at the Sheffield University, with 44 members attending. The AGM was chaired and presented by Gill Campbell and minuted by Don O'Meara. The accounts were presented by Mark McKerracher.

## Agenda

1. Report on Committee activities and John Evans Prize Result
2. Election of new committee members
3. Treasurer's report including summary
4. Any Other Business (none received)

### **1. Report on Committee Activities** (Gill Campbell, Chair, [gill.campbell@historicensland.org.uk](mailto:gill.campbell@historicensland.org.uk))

#### **1.1 Membership** (Jo McKenzie, Membership Secretary, [membership@envarch.net](mailto:membership@envarch.net))

2019 has seen the AEA membership increase once again, with 72 new members joining this year (46 Ordinary and 26 Student). We are pleased to see the AEA continue to represent an international community. 28 of our new members are non-UK based, with 16 located in 7 EU countries and a further 12 new members joining us from Australia, Canada, Chile, India, Japan, Turkey and the USA. Our fully paid up membership currently stands at 281 – an increase of 40 members from 2018.

While the majority of our individual members use our online payment facility, we still have a number of Standing Order (SO) payers as well as a few who pay via other means (cheque, cash, bank transfer). We still receive a number of Standing Order payments at superseded subscription rates. These individuals are therefore not fully-paid up and will not be eligible for any membership benefits including the journal. If you pay by SO, but haven't received your journals – get in touch, and check your SO amount! The Association is unable to cancel or amend your SO for you and, following the introduction of GDPR in May 2018, only holds membership data for three years (see <http://envarch.net/privacy/>).

Our current subscription rates are £45 waged, £35 student/unwaged/retired (equivalent in other currencies, calculated at time of payment through Worldpay), with payment due on January 1st each year. Members are reminded that prompt payment of subscriptions guarantees journals will be received and makes the job of managing membership significantly easier. Individual, Institutional and Archaeological Society Membership Awards

#### **1.2 Journal** (Tim Mighall, Journal Editor, [t.mighall@abdn.ac.uk](mailto:t.mighall@abdn.ac.uk))

The journal includes four issues a year. Copy for volume 24 (2019) is complete and online. All issues for Volume 25 (2020) are allocated and issues 1 and 2 are with the production team. There are two independent papers and two special issues (Archaeobotany and Andean pastoralism) scheduled.



### 1.3 Newsletter (Rhiannon Philp and Daisy Spencer, newsletter@envarch.net)

The newsletter editors thanked everyone who contributed to the newsletter this year. They encouraged members to keep sending in short news stories, notes and early research summaries, recent PhD abstracts and news of forthcoming workshops and conferences to newsletter@envarch.net. **The next deadlines for copy are 20<sup>th</sup> January and 20<sup>th</sup> April 2020**, but please send content at any point throughout the year!

In addition to the Newsletter and our Social Media channels, the Association may also contact you through AEA@jiscmail.ac.uk and maintains a members discussion list for members: envarch@jiscmail.ac.uk (see <http://envarch.net/privacy/>)

### 1.7 Small Research Grants (Niklas Hausmann, Grants Administrator, researchgrants@envarch.net)

2019 was the fifth successful year of AEA grants, with a highly competitive submission and many worthy applications. There were 24 applications totalling £14,354 in requested funding. Applicants came from the Netherlands, UK, Spain, US, France, Italy, India, Sweden, and Turkey. Of these 16 were postgrads, 1 undergrad, 5 academics and 2 independent researchers. The recipients of the 2019 grants are listed in the table below.

Recipient	Affiliation	Title
Emma Karoune	Independent	Creating an accessible phytolith reference collection for British plant species
Ewan Chipping	Uni.York	Humans influence on morphological variation in wild and domestic cattle from prehistory to the present?
Alvaro Castilla-Beltran	Uni. Southampton	Domesticating Fire Island
Kelly Reed	Uni. Oxford	Agricultural transformations

Members were reminded that applications for up to £500 (or equivalent) are welcomed for 2019 grants, and the deadline is 31st January 2020. Further details available from <http://envarch.net/funding/grants/>

### 1.8 John Evans Prize (Jen Harland, Prize Administrator johnevansprize@envarch.net)

The Chair was pleased to announce the winners of the 2019 John Evans Prize. The undergraduate prize went to Daniel Gallagher at Royal Holloway for a dissertation entitled *Understanding the response of vegetation to human activity and climate change in the Holocene: evidence for early farming at Treanscrabbagh Valley, Co. Sligo, Ireland*. The post-graduate prize went to Kate Dudgeon at Reading for *A micro-botanical investigation of environment and plant-use at Abu Hureyra, Syria (~13,000-8000BP)*. Abstracts of these winning projects can be found on pages 18-19 of this Newsletter.

## 2. Election of new committee members

Elections were held for the posts of two Ordinary Member positions and Student representative. Congratulations to Eva Fairnell, Alexandra Livarda and Róisín Nic Cnáimhín who were duly elected. The AEA Managing Committee for 2020 is presented below (terms of office in square brackets). Committee personal statements and contact details can be found at <http://envarch.net/committee-members/>

<b>Chair:</b>	<b>Treasurer:</b>
Gill Campbell [17-21]	Mark McKerracher [16-20]
<b>Secretary:</b>	<b>Journal Editor:</b>
Don O'Meara [18-22]	Tim Mighall
<b>Elected Ordinary Members:</b>	
Michael Bamforth [18-22]	Alexandra Livarda [19-23]
Canan Çakirlar [18-22]	Jo McKenzie [15-19]
Eva Fairnell [19-23]	Rhiannon Philp [17-21]
Lynne Gardiner [16-20]	David Smith [17-21]
Jen Harland [16-20]	Daisy Spencer [18-22]
Niklas Hausmann [16-20]	Michael Wallace [17-21]
<b>Student Representatives:</b>	
Nora Battermann [18-20]	Róisín Nic Cnáimhín [19-21]

## 3. Treasurer's Report (Mark McKerracher; treasurer@envarch.net)

Main comments:

- Subscription income marginally down but healthy; still some paying old rates (recorded as 'donations').
- Journal royalties up, and costs down (paying for actual numbers).
- Deficit eliminated, but this year's 'surplus' is more apparent than real, because:
  - It includes >£6,000 funds transferred in from the closure of our Euro account.
  - No accruals system, so some payments (e.g. Aarhus travelling expenses; research grants) don't show until the following year.
  - Any budget surpluses carried forward into 2019.

The accounts were accepted by attending members.

<b>Assets at start of year</b>	<b>2016</b>	<b>2017</b>
Bank current account	£22,489.21	£16,803.71
Bank savings accounts	£20,489.17	£20,489.22
<i>Total assets at start of year</i>	<b>£42,978.38</b>	<b>£37,292.93</b>
<b>Income</b>		
Subscriptions	£14,387.25	£13,509.25
Donations	-	£151.00
Books	£3,734.50	£752.02
Interest earned	£9.05	£3.23
Conference proceeds	£988.61	-
Maney Royalties and Editorial income	-	£3,718.48
<i>Income sub-total</i>	£19,119.41	£18,133.98
<b>Initial total assets excluding books in stock</b>	<b>£62,097.79</b>	<b>£55,426.91</b>
<b>Expenditure</b>		
Stationery, flyers, publicity	£570.80	£114.94
Web page	£67.75	£51.85
Journal production and postage	£13,622.40	£13,692.80
Committee expenses	£1,582.84	£1,363.28
Book purchase	£1,261.06	£635.76
Event sponsorship	£165.90	£431.27
Conference support	£3,829.76	£1,322.93
Conference prizes	£85.00	£25.00
Bank and Worldpay fees	£634.09	£684.49
Subscriptions reimburse	-	£73.00
Research grants	£2,984.48	£2,216.90
<i>Expenditure subtotal</i>	<i>£24,804.08</i>	<i>£20,612.22</i>
<i>Total income minus expenditure</i>	<i>-£5,684.67</i>	<i>-£2,478.24</i>
<b>Total assets minus expenditure</b>	<b>£37,293.71</b>	<b>£34,814.69</b>
<b>Assets at end of year</b>		
eoy current	£16,803.71	£14,290.55
eoy savings	£20,489.22	£20,501.45
<b>£37,292.93</b>	<b>£34,792.00</b>	

### Proposed budget for 2020

2019 expenditure is likely to be within budget. The proposed budget for 2020 is based on a projected annual income of **£18,200** – i.e. £200 higher than 2019—based on estimated revenues in 2019.

Changes from 2019 budget:

- Journal budget reduced by £400, based on 2018-19 expenditure, and retaining buffer.
- Expenses, conference bursaries, and sponsorship budgets increased.

Attending Members voted to approve the proposed budget for 2019, with no objections or abstentions.

Account heading	% budget	£ amount	£change
Committee expenses	8.2	1,500	+ 400
Conference fund	8.2	1,500	+ 100
Publicity & sponsorship	3.6	650	+ 100
Website	0.4	75	
Finance	3.7	675	
Journal costs	61.5	11,200	- 400
Prizes and Grants	14.3	2,600	



### Call for Grant Applications: AEA Research Fund - DEADLINE APPROACHING (31st Jan)

(Fund administrator: Niklas Hausmann, [researchgrants@envarch.net](mailto:researchgrants@envarch.net))

The AEA is offering a number of small grants to fund specific aspects of research projects concerning **any area** of environmental archaeology. Grant applications are open to **all AEA members** (<http://envarch.net/register/>) including students and unwaged members.

Grants will normally be up to **£500** but applications for larger amounts may be considered. Grants cannot cover the cost of equipment or conference attendance or costs that should normally be covered by developers or larger funding bodies (e.g. AHRC, NERC, ERC) funding other areas of the same research project.

Costs that may be covered include travel and accommodation for visits to research facilities, scientific analyses or time buy-out for those working in the commercial sector and wishing to carry out research beyond that funded by developers. Grants may also be used for research start-up or pilot projects.

#### Apply online

- Go to <http://envarch.net/funding/grants/>
- Deadline: 31st January







# Musings from Social Media



**40th Association for Environmental Archaeology Conference**  
 4. Dezember um 15:16 · 🌐

Just a quick thank you to everyone who came on the excursion on Monday! Hope you enjoyed it, and thank you again for your patience while we tracked down the replica rock art! Chris took some great photos of the group - we can look at ways to share those with participants if people are interested. Thanks again! Emily



**AEA @Envarch** · 6 Dec  
 People might not be aware this one of @osteconnor's talents! 🤩 I think we need a slam poetry reading to feature at the @Envarch conference next year in Groningen?! 🤔

**Terry O'Connor @osteconnor** · 5 Dec  
 Oh, I seem to have published a slim volume of about 70 poems just in time for Christmas. The lemur's nice. [feedaread.com/books/Out-To-G...](https://feedaread.com/books/Out-To-G...)



**Durham Cathedral Library @BedesBooks** · 28 Nov

For over 100 years (c.1856 – 1978) a whale skeleton was kept in the undercroft of @durhamcathedral. Stranded at Seaton Carew in 1766, the valuable carcass of this 'Royal fish' was claimed by the Bishop of Durham as the monarch's representative. #ArchivesAtSea #ExploreYourArchive



**AEA40 Sheffield @AEA40Sheffield** · 30 Nov  
 @Jennifer\_Bones kicking off to a full house for @Envarch #aea40



**AEA @Envarch** · 2 Dec

Thanks to all our @Envarch @AEA40Sheffield photo competition entries. This entry from @BenjaminGearey @uccarchaeology shows @arch\_sedaDNA of the @LostFrontiersBD project presenting a guided talk around Ferriter's Cove, Dingle, Ireland #Engagement



**Fay Worley @FayWorley** · 22 Jul

Does anyone recognise this? Three sides of the same item. I think its a fossil, but I've found a few now and am intrigued! Found in an archaeological context dug into greensand







<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

### **Nominations for Archaeological Society Membership Prize**

15th January 2020

### **IMAA, University of Reading**

15th-16th February 2020

### **AEA Spring Meeting, Oxford**

28th March 2020

### **John Evans Prize Nominations**

31st July 2020

### **EAA Budapest**

26th - 30th of August 2020

### **AEA Winter Conference, Groningen**

TBC

## Notes from the Newsletter Editors

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

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

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

**Next deadline: 20th February 2020**

*Rhiannon Philp, Daisy Spencer and Nora Batterman*