

# Association *for* Environmental Archaeology

#### AEA Newsletter 146

#### March 2020

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#### Dear members,

Welcome to the first newsletter of the new decade and thank you for your continuing support of the association. My focus over this next year, as we get the new agreement with our publishers up and running, is to see how we can improve our infrastructure, in particular the reliability of the website. We are also planning to seek your views via an online survey to help us plan our activities and ensure the AEA continues to grow and thrive, promoting environmental archaeology worldwide.

What strikes me about this newsletter is the variety of contributions from different countries it contains, including pieces from Sweden, Spain, the Netherlands and Scotland. The AEA is a global community, collaborative, innovative and interconnected. This is both a comforting and a sobering thought as we experience the outbreak and spread of Covid 19. My thoughts go out to colleagues in Italy and elsewhere in these extraordinary times.

This newsletter has a few dates for your diaries. First-up the association is sponsoring a seminar taking place at the University of Glasgow on Wednesday 25<sup>th</sup> March. This event, organised by Prof. Nicki Whitehouse, will be live streamed and features Prof. Naomi Sykes talking on 'Shifting Baselines and Changing Perceptions of Cultural and Biological "Aliens". Hot on its heels is our Spring Conference 'Open Science Practices in Environmental Archaeology' on Saturday 28<sup>th</sup> March in Oxford. This conference is free to attend and is proving extremely popular. conference 'Sustainable The autumn Environmental Archaeology – Past and Future', will take place in Groningen between 4<sup>th</sup> and 7<sup>th</sup> November. I have every confidence that we will be able to gather to discuss and debate this deeply relevant topic and hope to see many of you there.

Gill Campbell, March 2020



# A research platform about a wooden platform

A new research platform with resources which may be of interest for environmental archaeology has recently been launched in Stockholm, Sweden (<u>https://historiska.se/alvastra</u>).



Plan of wooden platform. (Browall 2011: Fig.382)

The platform concerns a Neolithic site in Sweden called the Alvastra pile dwelling. The Alvastra pile dwelling is a wooden platform in the middle of a mire connected to the mainland by a wooden causeway. It is the only pile dwelling in Sweden. The platform is surrounded by a fence or palisade of oak poles or piles driven into the ground. It was built around 3000 B.C. in the Broby spring mire at Alvastra in the parish of Västra Tollstad and the province of Östergötland. The wooden platform was not an everyday dwelling, even though pile dwelling is its archaeological name. On the contrary, it was the scene of large-scale ritual activities which were focused on the meeting of cultures.

The pile dwelling is for several reasons of great archaeological significance.

• At this place two archaeological cultures are represented – the Pitted Ware Culture and the

Funnel Beaker Culture.

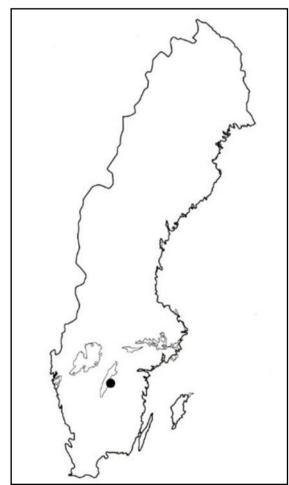
• The site is fixed in time. The more than 800 piles represent 42 years, a floating chronology, which has also been attached to calendar year by numerous radiocarbon dates.

• Because of the waterlogged conditions in this mire, organic material has been preserved in unusually large amounts – tools of bone and antler, wooden objects apart from the piles in the platform and the platform itself, apples, carbonized grain, tinder mushrooms, and large numbers of human and animal bones.

The non-organic material excavated from the site consists of potsherds, flint tools and stone tools of various kinds. It is diverse and very rich, making many different kinds of archaeological research possible. Other research is also possible, for example, research into climatic change. Much ongoing genetic research is based on the human bones, but much remains to be done with the other kinds of material.

The Alvastra pile dwelling was first excavated between 1090 and 1930 by Otto Frödin, the Museum of National Antiquities (now the Swedish History Museum, SHM), Stockholm, Sweden. The very large assemblage from these excavations was already part of the collections at the SHM when the current project was initiated. The results of this excavation were published in 2011 by Hans Browall of the SHM. The second excavation was conducted between 1976 and 1980 by Mats P. Malmer, Stockholm University, Sweden. The results were, for various reasons, never published in their entirety. They have now been processed in a project financed by the Infrastructure for Research programme of the Swedish Foundation for Humanities and Social Sciences (Riksbankens jubileumsfond). The project, launched in 2015 and completed in 2019, was a joint venture between the SHM and the Department of Archaeology and Classical Studies at Stockholm University. The aim of the project was to make the results of the excavations of the site in general, and Mats P. Malmer's excavations in particular, digitally accessible. This project has resulted in a research platform.

One section of the research platform is entitled Field Documentation and it is here that the main sources for research into the pile dwelling are available in digitized form. Most of these sources derive from the later excavations. They consist of 20 field diaries, seven ledgers of all the samples (soil, charcoal, wood, etc) taken, two ledgers describing the more than 800 wooden piles recovered and seven lists of all the documentary photographs taken. The photographs themselves have been scanned and are also available in this section. Approximately 8130 images, both colour and black/white, scanned within the present document the project, excavation. Field documentation also contains 453 field drawings made accessible digitally on this site. 40% of these have been scanned in the present project.



The position of Alvastra on the eastern shore of Lake Vättern. After Janzon 2009:fig 1.

It has not been possible to digitize all the documentation of the older excavations. This has been listed on the platform and a small portion has been digitized. Around 200 photographs had been previously scanned by Hans Browall. The archives that hold these images (Antiquarian-Topographical Archives, ATA) has granted copyright and they are now available on the platform. 153 field drawings have been scanned within the present project in order to facilitate GIS applications (also available on the research portal). Two plans showing the wooden platform and rows of piles in the trench excavated in 1909-1930 have been photographed by the project and are available on the platform.

The archaeological assemblages from the later excavations registered in the project have been summarised in a section of the research platform called Archaeological Materials. For the first time an overview of all that was found has been published. The material is presented category by category. Summarising tables from the database are made available. Comparisons are made with the assemblages found during the earlier excavations and tables of the material from the earlier excavations registered in the database are presented.

#### Jackie Taffinder

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Janzon, G.O., 2009. *The dolmen in Alvastra*. Kungl. Vitterhets Historie och antikvitets akademien, Handlingar. Antikvariska serien 47. Stockholm.

# Palaeoenvironmental and Archaeological Sciences Scotland (PALASS)

There is a sizable number of palaeoenvironmental and archaeological scientists based in Scotland but our institutions are geographically dispersed and there are few opportunities for us to meet as a group to share ongoing work, exchange ideas and, particularly, to connect early career researchers working in this broad field.

To counter this, Althea Davies (University of St Andrews) and Nicki Whitehouse (University of Glasgow) have initiated a new network to connect researchers and practitioners in Scotland. The network focuses on terrestrial aspects of late Quaternary/Holocene palaeoenvironmental and archaeological sciences, rather than pre-Quaternary, marine and atmospheric sciences, to ensure plenty of common ground.

We anticipate holding about 2 meetings a year, at rotating venues. These will consist primarily of relatively informal meetings, consisting of short talks followed by conversation in a local pub. We also plan to seek funding for training events to meet members' needs – dependent on funding and support from members to organise these. If you would like to join the network, please use this link to subscribe to our mailing list: <u>https://www.jiscmail.ac.uk/cgi-bin/webadmin?A0=PALASS</u>.

Our second meeting will be held in autumn 2020 – details to be confirmed.

# The Integrated Microscopy Approaches in Archaeobotany (IMAA) 2020

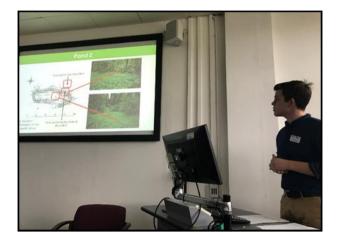
## **University of Reading**

And, here we are, one year later, and the organisers of the Integrated Microscopy Approaches in Archaeobotany (IMAA) find themselves in the now-familiar warm glow of having delivered another successful two-day workshop.

If you have never participated in an IMAA event or are not aware of it, the workshop provides space for skill and knowledge sharing across a variety of archaeological specialisms from across the spectrum of the sector for those who are united by a shared reliance on the microscope. Since 2016, geoarchaeologists, and specialists in macro- and micro-botanical assemblages and NPPs, have all been welcomed to the workshop held at the Archaeology Department at the University of Reading, for a weekend event of presentations, microscopy sessions, discussions and poster sessions. This year's workshop took place on the 15<sup>th</sup> and 16<sup>th</sup> of February. Seminar themes focused 'agricultural revolutions on and crop developments', 'archaeobotany of unusual materials', 'new methodological innovations', 'developments in archaeobotany', 'plants, pests and parasites' and 'reference collections in archaeobotany'.

Speakers, who visited from across Europe as well as Japan and Australia, presented a range of engaging papers, some of which highlighted cutting edge methods and techniques. These included Renée Enevold's pollen analysis from an Iron Age grave in Hammerum, Denmark, whose methods have been adopted into Danish forensic practice. We also heard from Luc Vrydaghs, who introduced the International Code for Phytolith Nomenclature 2.0 and outlined the new additions to this vital and much used resource. Also presenting were delegates from Historic England, namely Ruth Pelling, Dan Miles, Don O'Meara and Matt Canti.

Microscopy sessions complemented the themes, focusing on 'agricultural revolutions and crop developments,' with a training talk on cereal pollen identification from Dr Petra Dark (University of Reading), 'plants, pests and parasites,' 'charcoal and wood identification,' and 'bioturbation for archaeobotanists.' sessions The provided opportunities for the sharing of ideas, techniques, and working practices amongst delegates representing commercial archaeology organisations, academic institutions, and government-sponsored organisations.



Ivan Krivokorin, MSc student (University of Reading), presents his results from his undergraduate research in ancient hydrotechnical structures.



Dr Rowena Banerjea (University of Reading) leads a microscopy session on bioturbation with Yannick Devos (Maritime Cultures Research Institute (MARI) – VUB).



Yannick Devos, Dr Luc Vrydaghs (both Maritime Cultures Research Institute (MARI) – VUB) and Dr Martin Hodson (Oxford Brookes University) discuss phytoliths around a microscope.



Dr Lionello Morandi (Universitat Tübingen) prepares the delegates for the plants, pests and parasites microscopy session with a short talk on taphonomic and morphological considerations when using parasitology in archaeological contexts. IMAA 2020 Report

Additionally, there were discussions on phytolith extraction methods, chaired by Martin Hodson, and fluorescence microscopy. We were also privileged to have a tour of the University of Reading herbarium by Professor Alistair Culham from the School of Biological Sciences.



As is now customary, the Saturday evening hosted an Association for Environmental Archaeology funded wine reception and poster session followed by the workshop meal.

The Association for Environmental Archaeology has supported the IMAA from its inception, and they continue to offer their support by sponsoring the event. As we look forward to the 2021 event, we warmly invite all AEA members to attend and contribute to the proceedings. So please, look out for upcoming announcements and the call for papers and feel free to email through the channels listed below for more details. Alternatively, follow the link to the IMAA blog, where abstracts from all previous workshops are included.

#### **Paul Flintoft**

Professor Alistair Culham leads a tour around the University of Reading herbarium.



The AEA sponsored wine reception and poster session in full swing

Email address - imaaworkshop@gmail.com or p.e.flintoft@pgr.reading.ac.uk

Blog link - https://blogs.reading.ac.uk/integrated-microscopy-approaches-in-archaeobotany/imaa-2020/



# **BEA**

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

Contact: aea2020spring@gmail.com

# SAVE THE DATE!

# The 41st AEA conference will take place in Groningen, The Netherlands

Reception and registration: Wednesday, November 4th 2020

# Sessions: November 5th-6th

# Excursion to megalithic tombs, salt marshes and terp mounds: November 7th

# aeawinter@rug.nl

#### Sustainable Environmental Archaeology - Past and Future

Sustainability is a key issue in societal, political, and scientific debate. The pressing need to create a more sustainable future is reflected in the United Nations' 'urgent call to action' detailed in 17 Sustainable Development Goals (SDGs). This raises the question of how the issue of 'sustainability' is or should be incorporated into archaeological research, practice, and discourse.



The SDGs, created by the UN, are the blueprint to achieve a better and more sustainable future for all. The goals address the global challenges we face, including those related to poverty, inequality, climate change, environmental degradation, peace, and justice.

Arguably, no other branch of archaeology offers more detailed deep-time insights into anthropogenic environments and the ecosystem role of human societies than environmental archaeology. In the past, communities were challenged by issues similar to those facing present-day societies, such as climatic fluctuations, environmental and landscape change, and subsisting on vulnerable ecosystems. Moreover, environmental archaeology seeks answers to the fundamental question of how human societies innovated social and technological mechanisms to cope with environmental changes. Insights from the discipline can contribute to research on these issues in modern society, and to the understanding of the wider concept of 'sustainability'.

But it is not without precedent that data from environmental archaeology is misconstrued in the modern debate on climate change and environmental issues. This demonstrates the urgency to re-evaluate how environmental archaeologists communicate with each other, with societal partners, educators, and the general interested public. Finally, the increased tendency of governments to underestimate the power of archaeological research and education to speak to current-day issues requires us to rethink the sustainability of environmental archaeology as a profession and a vehicle to safeguard our cultural and natural heritage.

The 17 goals and the concept of 'sustainability' will be central to the AEA annual conference in Groningen. They are addressed and explored through four themes: 'Sustainability of Archaeology as a Profession', 'Sustainability in the Past', 'Social Sustainability', and 'Sustainability and the Environment'. Through these themes the 41st AEA conference will revolve around the concept 'sustainable environmental archaeology', exploring it from different perspectives and topics. Speakers are invited to submit papers to one of the four themes and to reflect upon the relevance and implications of SDGs in their research.

The conference is organized by the University of Groningen Institute of Archaeology (GIA) and the Department of Landscape History, in collaboration with the TerpenCentrum and the Dutch Heritage Agency.

Organizing Committee: Nathalie Brusgaard, Canan Çakirlar, Merit Hondelink, Youri van den Hurk, Arnaud Mauer, Mans Schepers, Taravat Talebi Seyyedsaran, Francesca Slim

Scientific Committee: Peter Attema, Hans Huisman, Rene Cappers, Alex Livarda, Michael Wallace





#### About the UN Sustainable Development Goals

#### Sustainability in the Past

Sustainability is not only a topic of concern for societies today. In the past, communities were also challenged by issues such as climate fluctuations, environmental and landscape change, and the cultivation and maintenance of healthy, sustainable human, animal, and plant populations. The archaeological record can inform us on how people dealt with these issues and what it reflects about the interactions between humans and their living and non-living environment. This may be visible and studied at different scales, from local hunter-gatherer communities that practiced selective hunting and foraging strategies to long duréé changes in the landscape due to human intervention and their socio-economic practices. Reflecting on sustainability in the past can contribute to both a broader understanding of the past and new perspectives on the future.

#### **Social Sustainability**

Social archaeology examines the social dimensions of human life in the past through the interpretation of archaeological remains, informing us about expressions of ethnicity, race, age, status, class, and gender. It provides insights into the social sustainability of past societies. Through, for example, the investigation of the unequal distribution of power, wealth, and resources, social archaeology can reveal patterns regarding social practices and how communities and societies were shaped and developed through time. Interpretations of the past. are also influenced by social issues in the present. Increasingly, archaeological studies advocate for more agency for groups traditionally under-represented in research. Here environmental archaeology also plays an important role in lending more agency to non-human species, for example in social zooarchaeological and multi-special approaches.

#### Sustainability of the Environment

Throughout history, humans have been exploiting a wide variety of environmental resources and have been niche-constructing both the biotic and the abiotic environments. This impact on our surroundings has in some instances led to environmental degradation, climate change, and the introduction, endangerment, alternation, extirpation, or even extinction of animal and plant species. Environmental archaeology offers the possibility to assess the status of environmental factors in the past, and can provide modern sustainability studies and approaches with a baseline or data that can benefit attempts to protect our environment.

#### Sustainability of Environmental Archaeology as a Profession

Environmental archaeology as a discipline is in constant motion. New methods, practices, and research ideas are constantly being developed and excavations revealing new information regarding the past. It may be argued, however, that the discipline of archaeology itself is struggling with several sustainability issues. New methods often require destructive sampling, exhausting available resources. Furthermore, the sustainability of archaeology as a profession is affected by aspects such as the number of students taking a degree course in archaeology, limited financial sources, and fast-paced advancements made in scientific methods. This justifies the need for archaeology to continuously develop new methods, carry out outreach activities, engage in new partnerships with various fields, and improve heritage management. This all contributes to the potential impact of environmental archaeology on our understanding of a sustainable environment.

#### University of Sheffield Zooarchaeology Short Courses

March 2020

# 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





https://cutt.ly/zooarch @ZooarchLab Sheffield

Sheffield Zooarchaelogy 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.

#### **Current Research**

At the end of last June (2019), after more than 20 years in the UK, I made a step change in my career, moving south to join the Catalan Institute of Classical Archaeology (ICAC). This is a research only position that also involves post-graduate teaching. Here is a brief description of my new 'home' and my new research project:

#### The Catalan Institute of Classical Archaeology (ICAC)

ICAC is based at the historic centre of Tarragona (Spain) that was designated a UNESCO World Heritage Site in 2000. Tarragona is built on the ancient city of *Tarraco*, the capital of *Hispania Citerior*, and this has led to extensive research on its Roman past, much of which is led by ICAC. The Institute belongs to the CERCA institution, organised and partly financed by the Catalan government, and is associated to the Rovira i Virgili University (URV, also located in Tarragona). It is a very dynamic research centre, with an extensive range of international collaborations in 12 countries and a rapidly-increasing international community of PhD and postdoctoral researchers.

ICAC hosts a number of research groups, one of which is *GIAP* that has three main research lines: (1) Landscape archaeology, (2) Computational archaeology, and (3) Bioarchaeology and palaeoenvironment. GIAP includes currently a highly integrated research community of three members of staff (Drs Josep Maria Palet, Hector Orengo and Alexandra Livarda), one technician, seven PhD students and eight post-doctoral researchers.

Masters students are also important members of the GIAP research community and participate in active research through their dissertations within the framework of ICAC's inter-university Masters programme in collaboration with the URV and the Autonomous University of Barcelona.

#### https://www.icac.cat/en/

<u>https://twitter.com/ICAC\_cat</u> <u>https://www.icac.cat/en/training/master-in-classical-archaeology/ https://www.icac.cat/en/training/</u> interuniversity-phd-in-classical-archaeology/

#### 'Shedding Light on the 'dark side' of the Aegean'

Being at the last stages of my work on the Bronze Age Minoan town of Palaikastro (PALAP research project, see AEA Newsletter 127, February 2015) I have now embarked in a new project focusing on the Late Bronze and the Early Iron Age Aegean. The project has two main, equally important aims. The first one is to identify agricultural management, land use and dietary strategies between the Late Bronze and the Early Iron Age, across the diverse socio-economic landscape of the Aegean. The second aim is to develop a new methodological tool that will be key in addressing the first aim. This involves using the actual morphology, the 3D shape, of plant remains, to obtain information on farming practices. To do so we will conduct experimental growing of selected cereals as well as use material from the Greek Gene Bank, study the grains with a combination of 3D GMM and stable isotope analyses, and apply Machine Learning-based algorithms to examine the results, to ultimately propose hypothesis for linking certain shapes with specific agricultural regimes. I will be aided in this project by two coinvestigators, Dr Hector Orengo (ICAC), who will be directing the 3D GMM and the Machine Learning component of the project and Dr Ioannis Mylonas, based at the Institute of Plant Breeding and Genetic Resources, in Thessaloniki, Greece, who will collaborate in the experimental cultivation and the processing of traditional varieties of cereals, alongside numerous collaborators from Greece, Spain and the UK. The archaeobotanist Dr Cemre Üstünkaya will be joining the project as a Marie Sklodowska-Curie Fellow due to start in November 2020, while more postdoctoral and PhD positions are due to open within 2020, so stay tuned!

#### Alex Livardi



Dr Alexandra Livarda and Dr Lidia Colominas, the lead archaeobotanist and zooarchaeologist of ICAC, respectively, in front of the Institute during an interview on bioarchaeological research for the local radio station (Tarragona Ràdio).



Dani Benítez Nadal, member of Dr Livarda's research team, currently conducting his Masters dissertation the archaeobotanical on assemblage of Cova des Pas, a funerary cave site dated to the end of the Bronze and the beginning of the Iron Age in the island of Minorca, in the Balearic Isles. The microenvironment of the cave allowed excellent preservation of organic material, including plants, and we are currently working on the plant offerings of selected individuals that will allow us unique insights into past peopleplant relations considering gender, age and social parameters.

# **Obituary** Fritz Hans Schweingruber (1936-2020)

## Dendroecologist and plant anatomist

Over the course of a wildly prolific career, dendrochronologist and wood anatomist Fritz H. Schweingruber would repeatedly enter some area, contribute to several of its problems and create new fields of study in the process. His stomping grounds were dendrochronology and wood anatomy, disciplines that interconnect to botany, ecology, climatology and archaeology. But, unlike many wood anatomists, he turned the powers of the discipline outward, using the lens of analysis to explore large sampling networks, including herbs, not only trees and shrubs. "Look at this little herb, anatomically it looks like a huge beech tree!" he said very often to amused students.

#### From elementary school teacher to leading dendrochronologist and wood anatomist

Fritz H. Schweingruber, who died on 7 January 2020, shortly before his 84<sup>th</sup> birthday, was born on 29<sup>th</sup> February 1936 in Krauchthal (Canton Bern). From 1956 to 1965 he was a primary school teacher and an organist in Rüderswil (Emmental). From 1965 he studied Botany, Zoology, Geology as well as Pre- and Early History at the University of Bern. His PhD-thesis was supervised by Max Welten at the University of Bern, where he graduated in 1972 in systematic plant sociology. In 1971 he started working at the Federal Institute for Forest Research (EAFV), nowadays named the Swiss Federal Research Institute for Forest, Snow and Landscape (WSL) in Birmensdorf (CH). As he often remembered, he was told to "do something with wood", so he soon got involved in both dendrochronology and wood anatomy.

#### An active scientist and teacher

At the WSL, Schweingruber originated an international dendrochronological network contributing for decades to global climate research. He collected much of the tree-ring data himself traveling on all continents, either reaching remote sampling sites by helicopter along a northern Eurasian transect or in a Volkswagen van with his wife Elisabeth sampling along the Rocky Mountains and Canada. These late '80s and early '90s sampling trips at the altitudinal and latitudinal cold distribution limits of trees allowed yearly resolved climatic reconstructions of the last centuries (Briffa et al. 1998; Esper et al. 2002). While constantly hosting international students in his laboratory at WSL, and teaching at the University of Basel, Schweingruber initiated the Dendroecological Field Weeks and later the Wood Anatomy and Tree-ring Ecology course. These courses are still highly participated events, aiming to introduce novice into dendroecology and wood anatomy and to widen their view on the topics (Sánchez-Salguero et al. 2017).

#### Wood identification and plant stem anatomy reference books

His landmark books on dendrochronology (Schweingruber 1988;1996; 2012) and wood anatomy (Schweingruber 1978; 1990; 2007) can now be found in libraries and laboratories around the globe. Some of his notable early works in the field of wood anatomy and identification concerned European woody species. In his first works, he dealt directly with wood and charcoals in archaeological and sedimentary contexts, also analyzing taphonomic aspects such as carbonization, rounding, presence of fungal hyphae etc. His contributions on the anatomy of the Pomoideae (Schweingruber 1974), along with his atlases of wood anatomy, still circulate among anthracologists from all over Europe. Schweingruber applied his unique approach aiming to broaden the view of wood scientists by providing multiple images and detailed descriptions of stem anatomy in shrub and herbaceous species (Schweingruber et al. 2011; 2013; Crivellaro & Schweingruber 2013; Schweingruber & Poschlod 2005), as well as of twigs, piths (Crivellaro & Schweingruber 2013, Zibulski & Schweingruber 2019) and bark (Schweingruber et al. 2019).

After his retirement in 2001, Schweingruber continued collecting and preparing the plant stem samples he described in numerous atlases and extended his approach towards fruit stalks (Schweingruber et al. 2020) and leaf petioles (unpublished), while investigating anatomically yet unexplored regions (Doležalet al. 2018) and plant lifeforms (Schweingruber & Berger 2018; Schweingruber et al. 2020). He aimed to provide a general overview of the anatomical structure in the plant kingdom as a whole (Schweingruber & Börner, 2018).

Schweingruber's remarkable flow of ideas has ended, but the flow of inspiration probably has not. His collaborators will publish books and papers posthumously. Together with his densely written papers and atlases, these will give archaeologists, ecologists, foresters, and wood scientists treasures to mine for decades to come.

Alan Crivellaro, Department of Geography, University of Cambridge, UK. Email: alan.crivellaro@geog.cam.ac.uk.

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# **Science Communication and Writing Workshop**

# Organised by PalaeoSIG – the Palaeoecology Special Interest Group within the British Ecological Society

# 13-14th May 2020

# University of Stirling, Scotland

Writing for non-specialist audiences is an increasingly important skill for academic and non-academic careers, but there are relatively few opportunities to learn to write for wider audiences. This workshop aims to: (1) provide training and practice in writing effectively about palaeoecological research for non-specialist audiences, and (2) produce accessible summaries of 50 influential palaeoecology articles.

The workshop will focus on practical skills to produce short, effective summaries of papers representing influential and/or innovative research in palaeoecology. A major barrier to better integration of palaeoecology into ecology and management is limited awareness among non-specialists of the potential and scope of palaeoecological research. Making important works quickly accessible will help lower this barrier. The summaries produced during the workshop will be disseminated via a weekly blog maintained by PalaeoSIG, with all contributors acknowledged. This will provide a learning resource to help communicate palaeoecological science. The workshop will be led by facilitators from The Conversation and will include time for participants to apply lessons learned to their own writing. We welcome attendees from other SIGs to help improve mutual understanding and communication.

Papers used in the workshop are being identified in advance by asking all palaeoecologists to help identify 50 influential papers.

Join the survey: https://standrews.eu.gualtrics.com/ife/form/SV\_byJXkMC5864I0Pi.

# **Registration & Tickets**

https://www.britishecologicalsociety.org/event/palaeosig-science-communication-writingworkshop-2/

# **Registration open NOW until the 22nd April 2020**

Open to BES and non-BES members

# Archaeological Science Seminar Series and AEA Sponsored Seminar, University of Glasgow

25th March 2020, 4pm - all welcome

Venue: Gregory Building, Room 109LT (basement)

We are delighted to be hosting Prof Naomi Sykes to Archaeology, University of Glasgow, for her research seminar. All colleagues are invited and welcome to attend. The seminar will be followed by a reception sponsored by the AEA. The lecture will be live streamed here:

https://echo360.org.uk/section/cafca830-ec2b-4c8b-8b3f-a8235d716316/public

Talk details:

Prof Naomi Sykes, University of Exeter

#### Exploring the Easter E.G. - Shifting Baselines and Changing Perceptions of Cultural and Biological 'Aliens'

Easter is the most important event in the Christian calendar. Despite its global reach and cultural significance, Easter has attracted minimal academic attention since the 1970s. Astonishingly little is known about the festival's genesis, when it first appeared in Britain, the origins of its component customs – e.g. the gifting of eggs purportedly delivered by the Easter 'bunny' – or how they coalesced to form current practices. Equally obscure are the timing and circumstance by which animals that have come to be associated with the festival – notably the brown hare and the rabbit but also the chicken – arrived in Britain. As a result, Easter is a high-profile natural and cultural history puzzle.

This talk, timed to coincide with the festival, will bring together the results of an AHRC-funded project on the subject. Evidence from (zoo)archaeology, linguistics, (art) history and evolutionary biology, will be integrated to inform on patterns of human diasporas (both physical and ideological) and processes of religious syncretism in



ancient, early modern and present-day societies. In addition, it will refine the natural history of the brown hare, rabbit and chicken, charting their impact on ancient biodiversity. Finally, and perhaps most importantly, the talk will use Easter as a lens for examining and highlighting shifting baseline syndrome.

"Shifting baseline" refers to the phenomenon whereby people consider the socioenvironmental circumstances of their childhood to be natural and morally absolute. In the absence of deeper historical and archaeological understanding, these nostalgic ideals are adopted blindly (and often erroneously) as the foundation for decision-making both at a personal level and more broadly in science and policy. Nowhere is this better exemplified than in discussions about 'native' versus 'alien' status, be it in relation to animals, people, or religious ideologies. While Easter and its animals are all 'alien' to Britain, they are viewed positively because they arrived in the long-forgotten past. Easter is therefore an excellent example to highlight the impact of shifting baselines and challenge negative attitudes to cultural and biological aliens.

#### AEA Newsletter 146

**Social Media** 

#### March 2020



# **Musings from Social Media**







David @DS t

Something very different & fun for me last month when @ruthcardenphoto dropped by to take some pics of me at work @ucdarchaeology looking at early medieval & medieval plant remains from Azer & Ireland

Check out ruthcardenphotography.ie #archaeobotany #Archaeology @IrishResearch



This is very cool! A human tibia that has become encased in mineral deposits in processes similar to those that create stalagmites and stalagmites. Very unusual taphonomy! #archaeology #fossilfever #bones #taphonomy

#### Shelby Kilpatrick

Check out this #3Dprint of @3Dpollenproject's Echinacea angustifolia (coneflower) #pollen grain! Thanks @OliJWilson for the file & @psulibs @psutIt Maker Commons for printing! So wonderfully spiny! ♥

#SciArt #SciComm #education #teaching #research #outreach





A saccum+lumber vertebra from a Fresian cow. She probably produced lots of delicious milk in her lifetime,but was also probably prone to mastitis,lameness,and udder infection. Zooarchaeology teaches us <u>#eugenics</u> benefits the person making the selection,not the organism being bred





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 Meeting, Oxford 28th March 2020

John Evans Prize Nominations 31st July 2020

EAA Budapest 26th - 30th of August 2020

AEA Winter Conference, Groningen 4th—7th November 2020

### 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:

## <u>newsletter@envarch.net</u>

Next deadline: 20th May 2020 Rhiannon Philp, Daisy Spencer and Nora Battermann