

Association *for*Environmental Archaeology

Inside this issue:

Chair's Piece 1

3

10

12

15

27

Research Pieces

AEA Spring Conference 2025

Conference Ads

Short Course

Book Reviews

News from the Committee

Trending in Environmental 26 Archaeology

Key Dates

AEA Newsletter 165

December 2024

Dear members of the AEA,

As we reach the end of 2024, I hope you all have had a productive year and get some opportunity for rest and recuperation over the holidays.

The year has ended very much on a high with the 44th annual autumn conference in Oxford. The conference was by far the largest ever of the AEA, with over 200 attendees. The Oxford team did an astounding job to deliver an energetic programme set in a wonderful venue. Everyone I spoke to there felt enthused - the whole affair was huge fun. I'd like to extend special thanks to Tina Roushannafas, Richard Palmer and David Kay of Oxford Archaeology and Charlotte Diffey and Elizabeth Stroud of the School of Archaeology, Oxford, who were the principal organisers and poured hours of work to make the event happen. A much wider team was involved alongside these people, and to all of those I extend our thanks.

The Oxford conference also hosted our Annual General Meeting on Friday 13th December. We had a very strong showing from members in attendance and those joining online. A main point of note was that alongside our regular budget, the AGM approved a plan to begin a gradual reduction in the AEA's surplus by increasing our expenditure

on sponsorship - especially of local seminars and workshops run members - and expanding the budget of our research grants. It is hoped this will provide tangible benefits to the membership and further drive membership. We also voted to accept a motion for the journal to begin data accepting notes and methodological papers as we continue to promote the principles of FAIR data.

One of the main aspects of the AGM is the leaving of some members of the managing committee and welcoming in new members. At the AGM the AEA said farewell to Aldona, Tom, Shyama, Daisy (who has agreed to be co-opted temporarily as newsletter editor to ensure this issue reaches you) and Jo, as well as our student representative Kay (who stood as an ordinary member). I thank all of them for their commitment to the AEA, but Jo requires special mention as our longstanding membership secretary. Jo kindly stayed on an extra year to ease the transition with the secretary and treasurer roles also changing hands last year. Thank you Jo, you've been essential to the AEA for so long! Joining the committee, we have Tom, Kay, Evi, Colin and Paul as well as new student rep Sigrid - find our more about all of them on envarch.net in due course.

ISSN 1363-6553

I

You may remember that my last few chair's pieces have had a mini survey. Whilst it was but a few, I'd like to thank those that have responded. And I'll also address some of the questions and comments. Yes, we have explored registering as a charity, but this requires a fairly substantial increase in administration and obligations which may outweigh the benefits of charitable status.

I'm glad to hear people find the newsletter a useful roundup of relevant events. And I welcome the comment that we are on a par with

similar organisations in terms of our membership offering.

That just leaves me to wish you all a very happy holiday, to remind you that we have looming deadlines for the spring conference in Bulgaria and the AEA research grants, and hope you enjoy the newsletter.

Best wishes, Michael



Not that we're near my birthday, but I felt the urge to share these stunning cakes with you all

Environmental Archaeology and Bioarchaeological Studies in the Sertao Paraibano

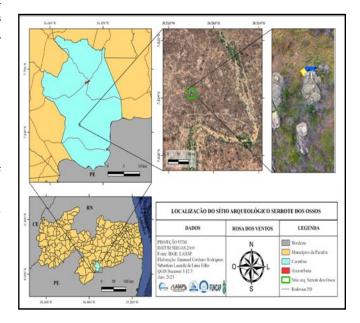
<u>The Case of the Serrote Dos Ossos Site,</u> Northeastern Brazil.

Marcos Tadeu Ellery Frota¹
Sebastiao Lacerda de Lima Filho²
Allysson Allan de Farias³
Manoel Odorico de Moraes Filho⁴

INTRODUCTION

This study explores the investigative potential within the fields of environmental archaeology and bioarchaeology to comprehend the environmental and ecological contexts surrounding the formation of the Serrote dos Ossos archaeological site in the Sertão Paraibano region of northeastern Brazil. By integrating these disciplines, we aim to elucidate the various processes and events that shaped the site and facilitated its occupation by past indigenous populations in these hinterland areas. Our research seeks to uncover the behavioural patterns of the communities that once inhabited this region, with a particular focus on health and disease dynamics that impacted these populations historically.

In this research, environmental archaeology is defined as the examination of past humanenvironment interactions, assessing how ancient societies both influenced and were influenced by their surroundings including vegetation and water availability, and geomorphology including altitude and climate. This involves analysing natural and cultural remains, understanding their diachronic relationships, and interpreting the symbolic constructs developed within these environment dynamics. Bioarchaeology, on the other hand, is approached as the identification and study of ancient and more recent human remains, including osteological materials such as bones and teeth. The goal is to understand the biological, cultural, and health-related aspects of past populations and situate these findings within a broader archaeological framework. Analyses are conducted at both macro and micro scales, providing extensive data that enrich the investigative context of our research.



The Serrote dos Ossos site is situated in the rural area of Caraúbas, within the interior of Paraíba state in northeastern Brazil. Historical evidence, particularly the work of Santos (2019, 2022, 2023), indicates that this region was inhabited by the indigenous Cariri ethnic group. The Cariri people also occupied areas in the states of Rio Grande do Norte and Ceará, extending across the Northeastern macro-region of Brazil. Carbon-14 dating of artefacts from these sites suggests occupations dating between 700 and 1,100 years before present (B.P.). Current research efforts are focused on characterising data from a paleopathological perspective and genomic studies to deepen our understanding of these ancient populations.

During the identification, characterization, and excavation phases at Serrote dos Ossos, numerous activities were undertaken to exhume and analyze all available remains.

Two excavation campaigns conducted in 2022 successfully unearthed substantial bioarchaeological material for laboratory analysis. The primary objectives include recovering sufficient elements for genetic analyses and identifying diseases that may have affected this indigenous settlement.

Ongoing fieldwork and laboratory research are essential for identifying markers and aspects related to the quality of life of these indigenous populations. This includes insights into health conditions and diseases that may have influenced mortality rates within the community in the past.





A BRIEF REVIEW OF THE CURRENT PHASE OF THE PRELIMINARY INVESTIGATION

Bioarchaeological remains at most Brazilian sites encounter significant conservation challenges due to the tropical climate and acidic soil conditions, which accelerate the degradation of biological and bioarchaeological samples. Despite these challenges, the collections from the central area of the Serrote dos Ossos site, including floristic elements and faunal remains, are abundant and demonstrate the site's successive periods of use.

Macro and microscopic analyses have identified specific features of the bones, particularly the preservation of materials such as teeth and hair. These well-preserved elements are invaluable for DNA extraction and sequencing analyses. Additionally, chemical and microscopic examinations have revealed a high degree of calcification in much of the osteological material.

¹Coroner and Forensic Anthropologist. PhD student in Translational Medicine at PPGMDT-NPDM/UFC,
Brazil.

²Archaeologist and anthropologist. PhD student in Translational Medicine at PPGMDT-NPDM/UFC, Brazil.

³PhD in Genetics. Visiting professor at PPGMDT-NPDM/UFC, Brazil.

⁴Research advisor. Coordinator of the PPGMDT-NPDM, Federal University of Ceará - UFC. CNPq Productivity Fellow 1A, Brazil.

Osseous and Keratinous Objects from the Netherlands

Recently our research project in which we present an overview of osseous and keratinous objects from the prehistoric to the modern period was published by The Cultural Heritage Agency of the Netherlands.

M.J. Rijkelijkhuizen, J.T. Zeiler and J. van Dijk

Presenting an overview of the accumulated knowledge of the different types of objects found in the Netherlands that are made of bone, antler, ivory and other animal materials like shell and horn, from the Prehistoric to the Modern period. That was the aim of this research project, which has now resulted in a database in which 21,000 objects can be accessed, and in an accompanying report comprising a textual section and a catalogue.

Both the text and the catalogue are divided into three chronological sections: Palaeolithic to Iron Age, Roman period to Early Medieval, and Late Medieval to Modern. Over two-hundred object types are being discussed, from a decorated bone of an aurochs or steppe wisent dated to 11,560±50 BP – possibly the oldest object – to a twentieth-century manicure set.

The tools and other objects included here are agricultural and craft tools like adzes, axes, awls, ripples, planes, marlin spikes, spindle whorls, bodkins and lace bobbins; weapons for hunting or warfare and fishing tools, like spears, harpoons, fishing hooks, (elements of) swords, daggers, knives, backswords and crossbows; domestic items like spoons, butter knives, sieves, pastry cutters and mountings for chests; objects for personal hygiene, ornamentation and dress such as dress pins, brooches, beads, combs, toothbrushes, razors, syringes and artificial dentures, powder compacts, spectacles and binoculars; and finally items relating to games, play, and music, like dice, gaming pieces, knucklebones, jingles, whistles, tuning forks, and tuning pegs.

Special attention was given to combs, a category that is frequently encountered in archaeological contexts. For this group, a more detailed typology was constructed with indications as to origin and chronology, when possible.

Nearly all artefacts are tied to certain periods. Projectile points no longer occur after the Mesolithic period, ripples are mostly Neolithic. Dice, chapes and bone hinges were introduced in the Roman period (and to some extent disappear afterwards), while items like spectacles, binoculars, pocket sundials and powder horns are typical of the Late Medieval and (Early) Modern periods.

Different periods are also characterized by different materials. For example, bone of steppe bison and reindeer were used up until the most recent Ice Age; the most commonly used species in the Mesolithic period were red deer and aurochs: and from the Neolithic onwards bone and other materials of domesticated species like cattle, sheep and pig dominate the assemblages. In later periods, the spectrum expands to include the ivory of exotic species like elephant, walrus and hippopotamus as well as turtle and mother-of pearl, while antler now had to imported as local populations were becoming depleted by the end of the Early Medieval period. Less is known about the use of horn as this material is highly perishable. In time, animal materials were gradually replaced by metal, and with the introduction of synthetic materials animal materials virtually ceased to be used.

The regions of origin of materials and objects were equally diverse. Some materials were sourced locally but others were directly or indirectly imported from elsewhere. Panther cowry shells come from the Red Sea or the Gulf of Aden while tiger cowries occur naturally in the Indian Ocean and the Pacific. Elephant ivory was imported on a modest scale in the Roman period but between the sixteenth and eighteenth century reached the Dutch Republic from West Africa in large quantities. Also the other exotics mentioned earlier arrived in the Low Countries through trade.

Besides these topics this overview also addresses themes such as the role of animal materials in daily life, and how this role might change due to factors like outside cultural influences. Crafts and trade are also discussed: domestic versus workshop production, import of and trade in objects and raw materials, techniques and production methods, and the standardization which started after the Medieval period.

One of the goals of this project was to make the frequently 'hidden' information on objects of bone, antler, ivory and other hard animal materials more easily accessible in the form of a database. Recorded in this database are objects published in reports and other publications as well as unpublished items in depots and museum collections. The database can be accessed via Data Archiving and Networked Services (DANS). The level of detail and the accuracy of the data with regard to for instance material or

object type are variable. This does not diminish the database's usefulness as a starting point for studies of certain object types or their use and meaning during specific periods. The final chapter offers suggestions for future research and other recommendations.

This report and the accompanying database are part of the Cultural Heritage Agency's Valetta Harvest research programme. This programme aims to make existing information on specific geographical, chronological or thematic archaeological topics more widely accessible.

The publication can be downloaded **here**.



High Energy Meteorological Events Miguel A Vázquez

HIGH-ENERGY METEOROLOGICAL EVENTS AND THEIR EFFECTS ON THE PRE-COLUMBIAN SOCIETY OF PUERTO RICO: THE CASE OF THE BATEYES DE VIVÍ

Miguel A Vázquez, PG, MS RPA Center for Advanced Studies of Puerto Rico and the Caribbean

According to the data collected during this study, it is possible that Los Bateyes de Viví were built on the remains of a series of structures that seem to have included smaller bateyes. Evidence suggests that the area was initially divided by a low area or depression, which, according to the geophysical and magnetic susceptibility study, extends northwest of the center of Precinct A and in the direction of the retaining wall on the riverside. Opening a series of excavation units would be essential to validate these observations better.

The soil cores collected during the research indicate the presence of a paleosol and an anthropogenic paleosol. The paleosol shows leaching evidence, suggesting they were exposed to the weather for a long time. These paleosols appear to be culturally barren. Therefore, this researcher postulates that the paleosol marks the beginning of the site's occupation.

In conjunction with archaeological evidence from the excavations of Oliver and Rivera Fontán, geophysical evidence indicates the potential existence of structures on the paleosol. The fact that structures exist on the paleosol suggests that the site was occupied for an indeterminate period before the impact of the high-energy weather event. Due to the limited data collected during previous studies and this study, it is essential to extend the area of research to understand the relationship and functions of the observed structures.

Data from the soil cores and the excavation during this study, in conjunction with Oliver and Rivera Fontán's descriptions of the soil strata, indicate that at least one high-energy weather event (storm) adversely affected the site. This high-energy meteorological event left its footprints on the upper paleosol, and its deposit consisted of two subevents. The first sub-event is a deposit of colluvial material deposited on the paleosol. Similar deposits are observed in the Utuado batholith area, which is composed of coarse sand, chiefly quartz. This indicates that the site area was cleared of trees, and the soil was exposed to the weather, so it was eroded and transported by a rain event and deposited on the paleosol.

According to a review of modern hurricane data, the effect of a rainfall of approximately 500 millimeters, such as Hurricane Maria in 2017 (Category 5), can cause the Viví River to rise more than two meters. The fact that Hurricane Maria's flooding did not invade the site but its surroundings shows that a hurricane of the same magnitude could have affected the original population area.

It is important to note that the design and construction of the mitigation elements associated with Los Bateyes de Viví served their purpose and mitigated the impact of a high-energy event like Maria, which devastated the island of Puerto Rico.

What were the mitigation measures used by this group? This study provides a view of the design of mitigation measures and the change to the natural and cultural landscape. Based on the stratigraphy observed, especially in soil core G3, the first mitigation step was leveling the area. A stone layer was installed on top of the storm deposit to level the area, followed by a fill composed of sand and many rock fragments. This fill layer was completed to approximately 20 cm from the land surface.

Interestingly, coarse sand and gravel were used to cover the depression. This material is much more permeable, allowing water to flow more easily. Even more interesting is that this coarse fill material was covered by a less porous material (medium to fine sand), which makes this researcher conjecture that the use of the material was by design. More detailed studies of this area are needed to determine the reason for the variation in the design of the mitigation element.

As stated, the stone layer was observed above the storm deposit. In the geophysical survey, this rock layer was observed across the extent of the study area. This leads to the hypothesis that the stone layer was the foundation of what would be the basis of the reconstruction and leveling of what is now Precinct A. Initially, this researcher, like Oliver and Rivera Fontán during their research, thought that it was part of a lithic workshop. But like Oliver and Rivera Fontán, it is now concluded that it was a secondary deposit and that the material was transported there for mitigation activities. This conclusion allows us to hypothesize that the mitigation elements' construction required substantial labor and a specialized group or understanding of this type of construction.

Another critical area documented by the geophysical study, soil cores, and Oliver and Rivera Fontán's work is that this lithic fill is most prominent on the western side of Precinct A; this was not documented on the eastern side of Precinct A. This leads to the hypothesis that the effect of the high-energy weather event impacted the western area of the Precinct more. This motivated the builders to vary the design of mitigation measures in that area. It should also be noted that the orientation of the rock layer on the western side is northerly and almost perpendicular to the retaining wall next to the river. Additional studies in this area are needed to understand variations in mitigation measures and the correlation of the rock layer with the retaining wall, if any.

The fact that the depression and rock layer are aligned almost perpendicular to the retaining wall appears significant. It can be stated that part of the area's levelling design included the retaining wall construction. The wall is located on the deposition side of the meander instead of the erosion side, where it is usually built to prevent riverbank erosion. Therefore, it is logical to think that this was built to level Precinct A's interior area and mitigate the place's interior. It is essential to study the relationship of the retaining wall with the elements of the depression and the rock layer.

The building base of the bateyes, the rock layer, is covered by strata composed of medium to coarse sand material and is mixed with lithic material debris on the western side of Precinct A and similar but culturally barren material on the eastern side. The amount of lithic material is reduced as the material

approaches the elevation of the completion of mitigation measures. This material mixture makes it possible to create a stable and comfortable surface and subsurface for human use. Again, this indicates that the placement of this filler material was designed for use. Notably, the surface material is thinner and, in turn, contains little to no coarse material.

Geological evidence shows that the floor's finishing elevation remained for a prolonged time of occupation. Oliver and Rivera Fontán documented cultural material in the subsequent strata and at the top of the anthropogenic soil. The review of the G3, G4, and G5 nuclei shows that a modification of this floor occurred later. In the G3 core, it is noted that organic material covered the surface while a filling material of approximately 20 cm was added to that floor. A contact surface close to the same depth of 20 cm as the current surface was noted in the G4 and G5 cores. Secondary evidence was the tests carried out with the penetrometer, where areas of no or minor compaction were documented.

Oliver and Rivera Fontán pointed out that the material in this stratum seemed to come from the lower strata and resulted from placing stones from a Batey earlier in a ritual burial (Oliver & Rivera Fontan, 2006, p. 20).

As previously reported, the mitigation work in this place is not only a way of claiming its use but also a tribute to a historical event that affected its occupants. Its value was not only subscribed to by a small family group but also by an extended or regional family group.

It is a monument to an event that affected their lives and led them to a ceremonial burial of the initial bateyes. As many Puerto Ricans have experienced, this meteorological event destroyed something that should be remembered. The mitigation elements show that there was a design in its construction. This design includes preserving what is buried under the surface of what is today Los Bateyes de Viví, keeping the memories of a past that motivated them to bury that event and create a monument ceremonially.

During my research, Dr. Oliver commented on the importance of this archaeological landscape modification for the group that modified and created it.

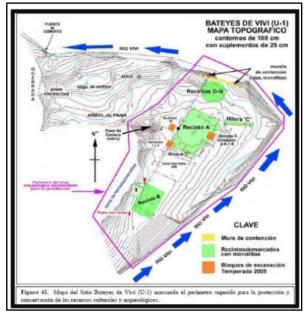
Dr. Oliver stated the following about the ceremonial tomb of the earlier bateyes:

"They are stones from a previous batey but were all ritually buried on purpose. They are not in situ remnants of the previous batey. These stones were selected and collected in who knows where in the Batey to move them and bury them there... ceremonially. Many are together and standing inside the hole. Another 2-3 were lying inside the ceremonial pit/tomb. This gives an idea of how important the monoliths, per se, were – possibly as a testament (hence, monument) to the articulation and heritage of the old and new square. It is, I think, the life cycle... The old square dies and is ceremonially buried (like our ancestors) and gives way to the new generation of squares... without forgetting (hence the Latin monument: to remember again) the old. ... They seal that hole with a monolith with two petroglyphs, one facing down the hole (no one can see it) and the other facing up and looking east, not towards the square. In short, Viví is the only place I have seen this cycle of life, death, and resurrection of Caribbean architecture... so common in areas such as the Peruvian Andes."

The mitigation elements show that there was a design in its construction that under the surface of what is today Los Bateyes de Viví are the memories of a past. Such was the importance of the place, which led its builders to ceremonially bury monoliths that represented the previous bateyes and what they

represented for the group. This researcher believes that the effort put into creating a new cultural landscape in this place including preserving its history, as mentioned by Dr. Oliver, is a monument, a remembrance again.

We hope this work will lay the groundwork for further studies on the effect of high-energy weather events and how it motivated Aboriginal people to develop engineering methods to mitigate their impact. During this study, it was possible to show how an adverse event could improve monumental structures such as the bateyes and the social organization of the human group that created them.



The approximate location of the different structures Oliver and Rivera Fontán identified.



Photo of the G3 Core

Click **here** to view the full paper online.

AEA Spring Conference, Sofia, Bulgaria 12th—13th April 2025



Conference topics

We welcome abstracts developed around major environmental factors, such as mountains and rivers within the main conference topics, but not limited to:

- Archaeobotany
- Zooarchaeology
- Physical anthropology
- Landscape archaeology
- Multi-proxy approaches in environmental archaeology
- Digital approaches in environmental archaeology
- Other

Host institutions: Institute of Biodiversity and Ecosystem Research (Bulgarian Academy of Sciences) and Department of Archaeology (Sofia University "St. Kliment Ohridski")

Location: University of Sofia, Sofia, Bulgaria

Abstracts and call for papers: We accept two types of submissions:

- Oral presentation format (15-minute presentation)
- Poster presentations (A0 size)

Abstract submission is limited to 300 words.

Submit here!

Abstract submission deadline: 30th December 2024

Registration deadline: 10th February 2025

Registration fee*: 40 EUR (Regular, non-member)

30 EUR (Regular AEA member)

20 EUR (Student member/non-member)

*Payment details are provided upon abstract acceptance.

General queries can be sent to the organisers here or at aea2025sofia@gmail.com

International Workgroup for Palaeoethnobotany 21st—25th July 2025

The IWGP returns to Groningen

After a successful meeting of the International Work Group for Palaeoethnobotany in České Budějovice, the organization for the 20th IWGP conference in Groningen in 2025 is in full swing.

The organisation is a collaboration between the <u>Groningen Institute of Archaeology</u>, the <u>Centre for Landscape</u> <u>Studies (University of Groningen)</u> and the <u>Cultural Heritage Agency (Ministry of Education, Culture and Science)</u>.

The <u>IWGP</u> was established in 1968 by, amongst others, Willem van Zeist and is one of the most important meetings for researchers specialised in paleoethnobotany in Europe and parts of Asia. The meeting has taken place triennially since its establishment, and the <u>last Groningen IWGP</u> was organised in 1983 by Willem van Zeist, Sytze Bottema and Wil Casparie. We are thus proud to once more represent the strong archaeobotanical tradition of Groningen, including an emphasis on studies of landscape history and cultural heritage of the Netherlands!

The conference will be held from July 21st–25th July 2025, the post-conference excursion will take place on the 26th July 2025.

The conference will be held at the city of Groningen, the Netherlands. Further information about the venue and practicalities will follow soon.

Early bird scholar: € 250

Early bird (PhD) student: € 150

Late bird scholar: € 325

Late bird (PhD) student: € 195

(Early bird fees are applicable until the 28th of February 2025)

Dinner and party (24th July): € 50 Excursion (26th July): € 50

You can register $\underline{\text{here}}$. Information on stipends to attend the conference can be found $\underline{\text{here}}$.



Full session information can be found here.

Session 1: Wild plant use in past societies

Session 2: Method development within archaeobotany

Session 3: Archaeobotanical 'storytelling': developing science-based narratives and dissemination activities for different audiences

Session 4: Exploring the archaeobotany of food

Session 5: Data sharing and FAIR principles in archaeobotany

Session 6: Plant management, plant cultivation & resilience

Session 7: Archaeobotany beyond binary oppositions:

Traditional Ecological Knowledge & fresh ways of understanding past plant-people interaction

Session 8: Global plant domestication

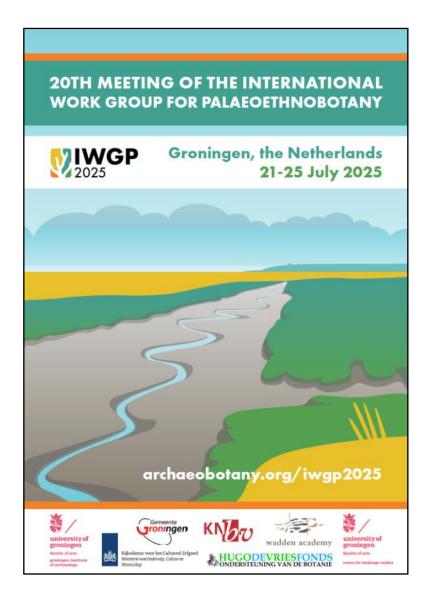
Session 9: The archaeobotany of settlements and urban landscapes

Session 10: Innovations and legacies in medieval agriculture

Session 11: The movement of plants

Session 12: General session

For queries please contact iwgp2025@rug.nl



NPP Workshop, Göttingen 2nd—6th June 2025

We are pleased to invite you to the 10th Non-Pollen Palynomorph Workshop in Göttingen, Germany from 2nd—6th June 2025.

Our regular NPP Workshop with its classical structure including oral and poster presentations, and possibly excursions, will be combined with the COST-Action "<u>PaleoOpen</u>" for which we will have an open discussion on nomenclature of the NPP taxa and start NPP taxa harmonisation in Neotoma.

Preliminary Schedule:

2nd Dec: Arrival and Ice Breaker 3rd Dec: Presentations and Posters

4th Dec: Presentations, Posters and Microscopy Sessions 5th Dec: Discussion on NPP nomenclature, Neotoma Workshop

6th Dec: Excursion

For preliminary registration please fill out the <u>registration form</u> by 31st January 2025.

Based on the number of participants we will plan and calculate the costs and inform you in the 2nd information letter.

Deadlines:

31st Jan: Preliminary Registration 31st Mar: Abstract Submission and Payment









PhD Short Course in Research Design Arkeologisk Museum, Stavanger



The Museum of Archaeology, University of Stavanger, Norway, offers a short course for PhD candidates on Interdisciplinary research design in environmental archaeology. Through lectures by established researchers, discussions, and practical sessions including an excursion, candidates will examine how archaeologists can address human-environment interactions in the past.

The course will be centred on themes related to interdisciplinary research in Scandinavian archaeology including geoarchaeology, archaeobotany, palynology, wetland archaeology, landscape reconstruction and agricultural development.

During the course, candidates will present case studies related to these themes, followed by discussions involving all participants. Case studies will be prepared in an assigned session during the course. Lectures will provide an overview of interdisciplinary research design and methodology. Case studies of current research in environmental archaeology will be presented, with a focus on the methodological and theoretical approaches used to address different research questions.

The course will enable the PhD-candidate to develop their own research project. Assessment will be based on participation during the course and a written assignment to be completed afterwards. This should ideally be related to the candidate's own project, and should be informed by current archaeological research.

Course information

Course code: PHD802 Credits: 5 ECTS

Teaching dates: 22/04/25 - 25/04/25 Application deadline: 04/04/2025 Location: Museum of Archaeology, University of Stavanger, Norway Teaching language: English

How to apply: Email course coordinator Dawn Elise Mooney at dawn.e.mooney@uis.no



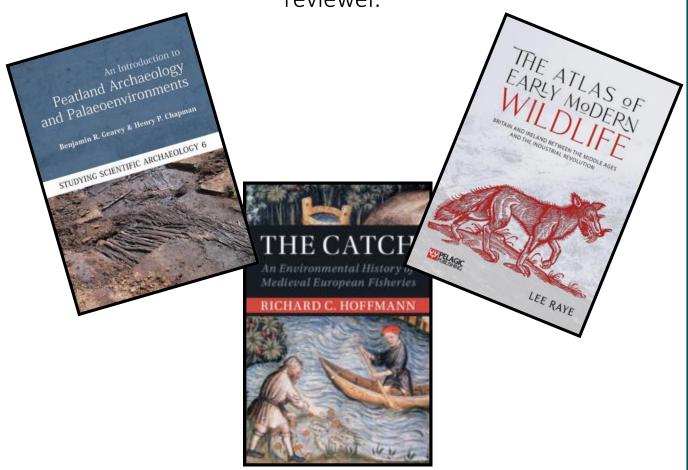
For further information about the course see https://bit.ly/infoPhD802 or email Dawn We welcome PhD students in archaeology and related disciplines to join us in exploring the research potential of environmental archaeology!

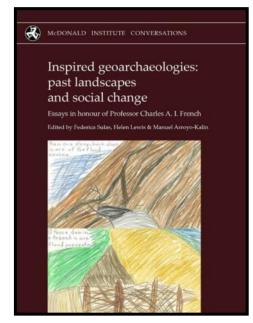


Book Reviews

The AEA has a long history of reviewing the latest book releases and the AEA newsletter is now home to these book reviews.

As a perk of AEA membership, you can request to review a book. Please email the <u>AEA secretary</u> if interested in reviewing or if you are promoting a new book release and require a reviewer.





Inspired Geoarchaeologies: past landscapes and social change

Essays in honour of Professor Charles A.I. French

Sulas, F., Lewis, H., and Arroyo-Kalin, M. (eds.)

Open access download—click here.

Charly French's career in geoarchaeology has spanned over four decades, including three at the McBurney laboratory in Cambridge, and work on five continents in biomes ranging from semi-arid desert to the Cambridgeshire fens where he began his archaeological career. This book, edited by three of Charly's former PhD students, and rich in contributions by former students, collaborators and contemporaries, reflects some of

that broad geographic scope, with case studies from the UK, Denmark, Hungary, Italy, Norway, France, South Africa, Greece, India and Israel.

Across fifteen chapters (including Helen Lewis and Anna-Maria Hart's delightfully titled Four Wettings and a Funeral), a range of topics are explored including micromorphology, landscape reconstruction, wetland geoarchaeology, fluvial landscapes, soil pollen analysis, farming in southern Africa and geophysical survey. The broad range of topics reflects Charly's wide-ranging interests, although his expertise in land snail analysis is not represented here.

Alongside the thematic chapters are nine biographical chapters and personal accounts, from which we learn about the man behind the prolific career, such as his early career on the Fenland project and his affection for classic cars, and set the research themes he has explored into broader archaeological context. The cover is illustrated charmingly with a drawing of a cause of flooding and a mitigation measure, drawn by Charly aged around 10. A useful list of Charly's publications and reports is included, along with an impressively long list of PhDs, MPhils and post-doctoral researchers supervised, all testament to what continues to be a tremendously productive career.

Broad in scope and rich in expert contributions, there is much to commend this book to readers of this newsletter (all this for free as well!). My only very minor gripe is the decision to pool the references at the end of the book rather than after individual chapters. Overall, this is warm, interesting and highly informative tribute to a highly distinguished geoarchaeologist and to geoarchaeology as a discipline.

Matt Law
Bath Spa University
m.law@bathspa.ac.uk

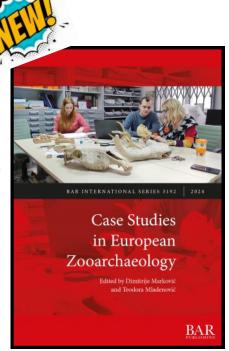
Current titles available for review to AEA members:

Please get in touch if you would like to review any of the following titles!

Case Studies in European Zooarchaeology

Dimitrije Marković and Teodora Mladenović

First intended as proceedings from the 9th Postgraduate ZooArchaeology (PZAF) Forum, this volume puts the spotlight on a series of case studies from emerging scholars across Europe. The topics covered in this volume include a wide range of traditional and non-traditional zooarchaeological analysis, including taphonomy, zooarchaeology of ritual, isotope analysis, radiocarbon dating, and animal iconographic representations.

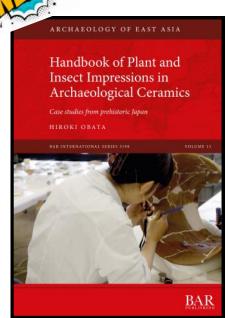


Handbook of Plant and Insect Impressions in Archaeological Ceramics

Case studies from prehistoric Japan

Hiroki Obata

Focussing on examples from prehistoric Japan, this book provides a case study of the use of impressions analysis techniques. New insights include evidence of soybean cultivation, pest infestations in chestnut storage, and the cohabitation of cockroaches alongside humans. This handbook introduces these new methodologies to an international audience, opening up opportunities for pottery impressions analysis worldwide.



La fauna del villaggio dell'età del Ferro di Bressanone-Stufles (Alto Adige, Italia)

Indagini archeozoologiche e paleoecologiche nel quadro della protostoria padano-alpinaClaudia Brosseder

Silvia Eccher

In Italian with English and German forewards

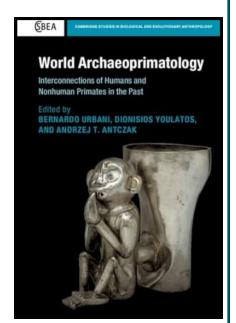
The large animal bone assemblage analysed in this study, which includes published data from previous publication as well as unpublished materials, made it possible to formulate hypotheses on the palaeo-economy adopted by the human group inhabiting this village and to establish a socio-economic model for the Rhaetian area.



World Archaeoprimatology

Bernardo Urbani

Archaeoprimatology intertwines archaeology and primatology to understand the ancient liminal relationships between humans and nonhuman primates. During the last decade, novel studies have boosted this discipline. This edited volume is the first compendium of archaeoprimatological studies ever produced. Written by a culturally diverse group of scholars, with multiple theoretical views and methodological perspectives, it includes new zooarchaeological examinations and material culture evaluations, as well as innovative uses of oral and written sources.

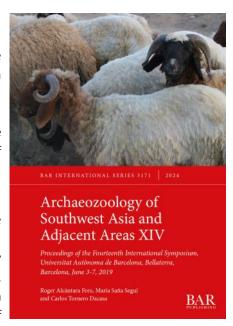


Archaeozoology of Southwest Asia and Adjacent Areas XIV

Roger Alcàntara Fors, Maria Saña Seguí and Carlos Tornero Dacasa

This volume represents a collection of papers resulting from the Archaeozoology of Southwest Asia Working group meeting held in Barcelona in 2019, when early-career and well-established researchers debated on nearly 10,000 years of adaptation and change in human-animal interactions. The 14 chapters in this volume range from the Neolithic to the Byzantine period, travelling through the regions of modern Turkey, Syria, Iran, United Arab Emirates, Oman and Egypt, among others.

Intertwining new archaeological and archaeozoological data, this volume reviews the development of complementary food acquisition strategies. These approaches to understanding fishing, hunting and husbandry practices discuss adaptation and perseverance against constant social, cultural, economic and political change. They reveal changes through time in food preferences, preparation and storage, the social value of animals, as well as their incredibly adaptive nature.

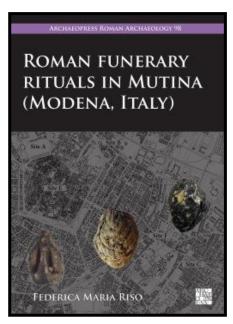


Roman Funerary Rituals in Mutina (Modena, Italy)

Federica Maria Riso

This book presents the results of a research project undertaken in collaboration with the University of Huddersfield. The project sought to identify and reconstruct the funerary space and rituals of the necropolis in Mutina (now Modena) in the period between the first century BC and second century AD.

The research is a key example of integrated analyses, linking the different results in the same interpretative system and supporting traditional strategies (archaeology and archaeobotany) with advanced technology (SAXS, CT-scan). The archaeobotanical remains (seeds and fruit) and the objects involved in the ceremonies constitute an important investigatory lens to reconstruct the mortuary rituals and attendance at the funerary space.

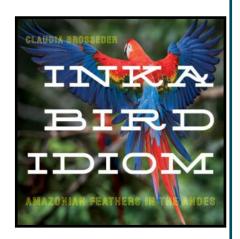


Inka Bird Idiom. Amazonian Feathers in the Andes

Claudia Brosseder

How Indigenous People Used Feathers as a Significant Way of Symbolic Communication in the Andes

From majestic Amazonian macaws and highland Andean hawks to tiny colorful tanagersand tall flamingos, birds and their feathers played an important role in the Inka empire. Claudia Brosseder uncovers the many meanings that Inkas attached to the diverse fowl ofthe Amazon, the eastern Andean foothills, and the highlands. She shows how birds andfeathers shaped Inka politics, launched wars, and initiated peace. Feathers provided protection against unpredictable enemies, made possible communication with deities, and brought an imagined Inka past into a political present.

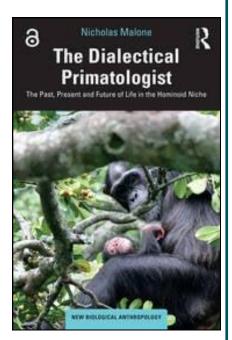


The Dialectical Primatologist

Nicholas Malone

The Dialectical Primatologist identifies the essential parameters vital for the continued coexistence of hominoids (apes and humans), synthesising primate research and conservation in order to develop culturally compelling conservation strategies required for the facilitation of hominoid coexistence.

This book will be of keen interest to academics in biological anthropology, primatology, environmental anthropology, conservation and human–animal studies.



AEA Research Grants

Call for Grant Applications: 2025 AEA Research Fund DUE DATE 28th February 2025

Once again, the AEA is offering a number of grants to fund specific aspects of research projects concerning any area of environmental archaeology. The AEA offers both small grants of up to £750 (c. €850 /c. US \$900) together with a Research Grant of up to £2000 (c. €2300/c. US \$2500). Grant applications are open to all AEA members including students and unwaged members.

On your application form please indicate which grant you are applying for: the £750 or £2000 grant.

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 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.

The application form and evaluation criteria will be available via the <u>website</u> (note that this will be updated in January).

Please consider the evaluation criteria when you are preparing your application. Note that applications exceeding the word limit as indicated in each section will be penalised (reduction of 2 points of their final score in the evaluation process).

For those of you that are planning to apply to this round of small research grants, please **email your expression of interest to the grant administrator, Dr Matt Law, at <u>m.law@bathspa.ac.uk</u>. (note: this does not require any explanation, simply your name, affiliation and a statement that you intend to apply, and does not commit you in case you later decide not to go ahead).**

For this round, the **application deadline** is the **28TH of FEBRUARY 2025**. Please email a pdf of your application to the grant administrator by the deadline.

The breadth of research in our discipline is extraordinary and we look forward to receiving your applications for the 2025 round.

All best wishes,
Dr Matt Law
on behalf of the AEA committee

Below are summaries of some of this years awardees of the AEA Research Grant.

Recipient: Erica Rowan

Affiliation: Royal Holloway, University of London

Award: £750

Title: Olives All Around: Environmental analyses around Lago di Paterno, Italy

In antiquity, the Lacus Cutiliensis (Lago di Paterno) in the Reiti basin was considered a sacred lake and the geographical centre of Italy (Pliny HN 3.109). Located in the Velino valley, the region has a history of human occupation and modification from the Neolithic onwards. Despite its proximity to Rome, the environmental impact of major periods of transition remain poorly understood. Since May 2022, a collaborative project between Saint Mary's University, McMaster University (Canada) and Royal Holloway (Classics and Geography departments), has introduced an extensive suite of environmental archaeological analyses, including archaeobotany, sediment coring, and pollen analysis to the nearby Villa of Titus and the lake. Pilot analyses by the team have already revealed significant landscape change from the Roman to Medieval periods.

This project aims to built on our previous findings by taking new and deeper cores. We plan to provide an environmental archive for contextualising the Roman occupation of the site and the interaction of local populations with the landscape. From our initial findings, funding will be sought for a SSHRC Partnership Grant that will enable us to develop a larger project that includes the sampling of additional lakes and a pilot excavation, with a strong environmental focus, of a nearby Roman town. Here, we have an opportunity to closely couple archaeological records from this region with on-site and lacustrine palaeoenvironmental data to test questions surrounding abrupt climatic events and patterns of human settlement and population density from the Neolithic to the early Medieval period.

Recipient: Gillian L. Wong, PhD

Affiliation: Adjunct Lecturer, Sociology & Anthropology Department, University of Texas at El Paso, USA

Award: £750

Title: Human Paleoecology in the Western Cape (South Africa) from Micromammal Remains

Boomplaas Cave, in the Western Cape of South Africa, holds a unique record of the Middle to Late Stone Age transition. My work at this site focuses on using micromammal remains to reconstruct the paleoecology of this transition and apply those reconstructions to questions of human behaviour. One goal of our work at this site is to prepare students for careers in archaeological research by training them in paleoecological analysis and archaeological field methods. During the summer of 2024, the project had graduate students from the University of Utah attending field work to work with micromammal remains under my supervision.

This grant provided funding to support my travel to the University of Utah in Salt Lake City (USA) in March of 2024 to train these students to work with micromammal remains before they went to the field. Normally, I would conduct this training in South Africa during the summer field season, but this year I gave birth to my daughter during the field season and so did not attend. Training included taxonomic identifications of remains, identification of taphonomic signatures, theoretical discussion, database entry, material handling, and organization. Using this training, the students successfully ran micromammal preparation and analysis in the field lab; they supervised other students, helped the field director make informed decisions about the remains, and put on a workshop for other students to teach them about micromammals and taphonomy.



The field set up for doing taxonomic identifications of micromammals, based on our training in Salt Lake City.



University of Utah graduate student Alyssa McGrath sorting, bagging, and tagging micromammal specimens that have come out of a float sample from Boomplaas Cave.

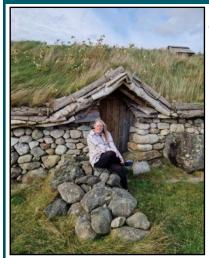


Student sorting micromammal remains out of an owl pellet. Our project explores both micromammal remains found in the archaeological site Boomplaas Cave and taken from modern owl pellet assemblages in the local area.



Students attending the Boomplaas Cave Field School learn to work with micromammal remains during an in-field workshop put on by the micromammal team.

Note from the Newsletter Editor



Exploring the Iron Age farm reconstruction, Stavanger.



I wanted to take this opportunity

to express my thanks to all those who have contributed to the AEA newsletter whilst I have been editor.

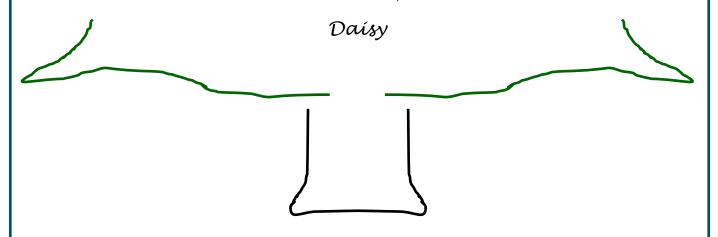
It has been a pleasure to read about your research and findings and publish them for the wider AEA community.

As some of you may know I have recently taken a new position as Associate Professor in Palynology at the Arkeologisk Museum, University of Stavanger.

This is an adventure that will create new challenges for me, including learning Norwegian (!), and so I have taken the decision to step down as newsletter editor.

I'm sure you will be in good hands and I look forward to reading the future newsletters!

All the Best,







Trending in Environmental Archaeology



Welcome to our Social Media roundup of all things environmental archaeology! Here you will find snapshots from social media selected by our student representative to provide a flavour of what has been happening online in the world of environmental archaeology during the last quarter. If you have a particular social media campaign that you would like featured on this page, please email the newsletter editor newsletter@envarch.net



David Roberts @davidrobertsarch.bsky.social · 13d

Whistle-stop visit to Wessex Archaeology this afternoon to drop off some flots and environmental remains. Always good to drop in to the big enviro processing tent... its like bake off, but with mud. Exciting results to come hopefully! Maybe we can find out what date this hypocaust went out of use..





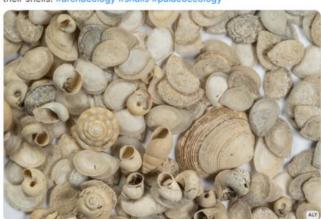
Catherine Coxon @catherinecoxon.bsky.social - 11d

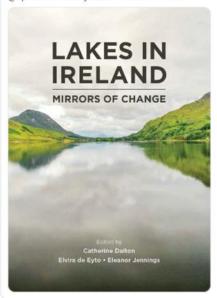
I'm really enjoying this new open access book on Irish lakes, spanning geomorphology and environmental history, hydrology, ecology, archaeology, management... Congratulations to the editors @cathdalt.bsky.social @edeeyto.bsky.social @ejen.bsky.social and to all the contributors!



PCA @pcaarchaeology.bsky.social · 16d

This week's #FindsFriday takes a closer look, literally. Tiny snail shells from environmental sampling reveal ancient habitats, climates & human activity. Marshes, grasslands, or settlement soil? Their story is written in their shells! #archaeology #snails #palaeoecology







www.envarch.net







The AEA

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

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

Key Dates

AEA Spring Conference Registration Deadline

10th February 2025

AEA Research Grant Deadline

28th February 2025

AEA Spring Conference

12th—13th April 2025

NPP Workshop

2nd—6th June 2025

14th IMPR

14th-19th July 2025

We are always keen to receive newsletter content, especially from our non-UK members. We accept short research pieces, thesis abstracts, conference announcements and calls for papers, and are always open to other suggestions.

To submit please email word documents and images to:

newsletter@envarch.net

Next deadline for content is 10th February for inclusion in the February newsletter

Daisy Spencer