Innovation Festival 2025

# 6-10 October 2025

# Monday, 6 October

### 09:30 – 12:30 Prophet or Pariah? Overcoming obstacles to science-based archaeology for commercial projects

Organisers: Andy Boucher, Michael Wallace (Headland Archaeology)

With an ever increasing variety of science-based applications being developed through academic institutions, the session looks to explore what future benefits the discipline might expect from these in terms of increased or different knowledge about the past and why in many cases these take so long to become part of main-stream commercial archaeology. It is about opportunities and obstacles to scientific innovation and how we promote and overcome these respectively.

### 14:00 – 17:00 Specialists, story-tellers and Sarmatians: Adventures in post-excavation

Organisers: Andrew Henderson-Schwartz (MOLA), Ruschane Joginder, Alex Smith, Owain Scholma-Mason (Headland Archaeology), Emily Johnson (Finds Group), Jessica Lowther (Community Group)

This session will explore the potential of the post-excavation process for engagement and storytelling, drawing on examples from mega projects like the A14 Cambridge to Huntingdon Road Improvement Project as well as more everyday case studies. A workshop style discussion will share practical, scalable tips to harness the power of post-ex to tell compelling stories and engage wider audiences.

# Tuesday, 7 October

### 09:30 – 11:00 Deep time – Collective intelligence for nature recovery

Organiser: Brendon Wilkins (DigVentures)

The UK’s natural heritage faces an adaptive challenge: since 1970, wildlife has declined by 19%, and one in six species now faces extinction. The data to target recovery exists in abundance – through satellites, LiDAR, and digital mapping – but the sheer scale overwhelms professional capacity.

Deep Time addresses this by shifting responsibility from experts alone to a wider participatory community. By training citizens as ‘Pastronauts’ and ‘Futurenauts,’ the platform transforms a technical problem into a collective solution: mapping hidden heritage, regenerating habitats, and producing trusted datasets for Local Nature Recovery Strategies, Biodiversity Net Gain, and national reporting.

Validated across 5,300 km² engaging over 6,000 participants, Deep Time demonstrates how adaptive innovation can harness public energy, strengthen professional practice, and generate measurable impact. This presentation will show how bridging grassroots action with policy frameworks doesn’t just solve data gaps; it reimagines archaeology and ecology as shared infrastructure for recovery.

### 11:00 – 12:30 Contributing to flood risk management and flood resilience: looking at what the archaeological record can offer

Organiser: Katerina Velentza (University of Hull)

This presentation, stemming from the ‘Risky Cities’ project of the University of Hull (Brookes et al. 2023; McDonagh et al. 2023; McDonagh et al. 2024; Smith et al. 2024; Velentza et al. forthcoming), explores what type of archaeological data survive as evidence for flooding incidents and flood management in Medieval and Post-Medieval England. With this paper we address the question of how archaeological data could assist in contemporary flood risk management and resilience. By providing contemporary societies important lesson from the past, while raising awareness and assisting communities to utilise local knowledge and former cultural practices, the field of archaeology (in both academic and commercial contexts) could assist in building climate resilience and normalise adaptability to environmental needs of lived spaces. It is hoped that this research will promote the better documentation and interpretation of the archaeological record of flooding in future projects with a view to contribute to policy.

### 13:00 -15:00 CIfA AGM

### 15:30 – 17:00 Not-so-remote: Application of drone-mounted magnetometry in UK archaeology

Organisers: Loic Boscher (WSP), Joss Piper-Jarrett (East West Rail)

Drone mounted magnetometry is emerging as a transformative tool in commercial archaeological prospection, providing flexible deployment while maintaining the spatial resolution necessary to identify significant archaeological remains and to inform both impact assessments and the development of evaluation and mitigation strategies.

In this study, we present the results of a pilot programme of drone magnetometry carried out over a range of geologies, crop cover, and archaeology. The results are compared against conventional terrestrial magnetometry data. The study also assesses the technical capabilities, methodological approaches, constraints, and practical applications of deploying magnetometers on unmanned aerial vehicles (UAVs) for subsurface detection of buried archaeological features.

Lastly, the study explores the implications of this emerging technology on development-led archaeology in the United Kingdom. This includes programme and delivery efficiency, ease of land access, health and safety, integration with broader remote sensing techniques, and potential issues arising from regulatory compliance and professional standards.

# Wednesday, 8 October

### 09:30 – 12:30 Is the juice worth the squeeze: Developing effective sampling strategies for archaeological projects

Organisers: Don O’Meara (Historic England), Matt Law (Bath Spa)

This workshop aims to help attendees develop the approaches and vocabulary for effective environmental sampling strategies on archaeological projects by introducing the new edition of the Historic England Environmental Archaeology Guidelines (3rd edition). The session will consider how an iterative process of sampling can be developed for projects at a range of scales and for different burial environments. As well as helping participants develop their own skills in understanding significance in environmental archaeology it will also build their skills in asking specialist practitioners what tangible benefits further work will bring to a project.

Using examples from developer-funded archaeological projects the workshop is intended to allow feedback to the session organisers on some of the difficulties, issues and stumbling blocks which have been experienced by the sector in the incorporation of environmental archaeology into their own projects. The session is aimed at project managers, site supervisors and consultants who are involved in the development and implementation of sampling strategies as part of archaeological fieldwork projects.

### 13:00 – 14:00 Creative engagement and evaluation at Archaeology South-East, UCL

Organisers: John Sygrave, Sarah Wolferstan, Louise Rayner, Jim Stevenson

ASE has been developing a network of expertise with UCL academics, local government, local NGO's, schools and creative partners to work with young people across Sussex. Thanks to AHRC innovation funding we have been able to commission local creative artists and test fun and informative new co-design methods for participatory research. Our aim is to create a supportive space for young people to get involved in heritage, without being extractive or raising expectations, in which they can shape future research and articulate their preferred outcomes. We are also testing creative approaches to evaluating our engagement.

### 15:00 – 17:00 Showcasing early career innovation

Organisers: Rosie O’Toole, Theo Seddon, Guillermo Diaz de Liano, Bronwyn Powell (Early Careers Group)

This session takes the opportunity to shine a spotlight on the innovative early career research taking place across the historic environment sector. We have a suite of papers lined up focusing on the use, development, and application of various innovative techniques showcasing their potential applications/implications for current and future archaeological practice.

# Thursday, 9 October

### 09:30 – 17:00 AI and Cultural Heritage: Critical Reflections and Future Pathways

Organisers: Laura O’Connor, Historic Environment Scotland (Information Management Group)

This session will explore the increasing role of artificial intelligence (AI) in the cultural heritage sector, highlighting both the opportunities it presents and the challenges it raises for professionals, institutions and public sector bodies. We invite case studies that critically examine the use of AI in areas such as interpretation, reporting, digitisation, conservation and improving the discoverability and usability of heritage resources. Submissions should consider the broader implications of their work on future research, industry standards, and ethical practice. The session aims to encourage dialogue on responsible innovation and sustainable integration of AI across heritage sectors.

### 09:30 – 12:30

Case studies delivered by Holly Wright, Archaeology Data Service, Anthony Corns, The Discovery Programme, Laura Hone, Historic Environment Scotland, Evie Brown, Welsh Government and Tom Elliot, Historic England

### 14:00 – 17:00

Panel discussion chaired by Laura O’Connor, Historic Environment Scotland with panellists Anthony Corns, The Discovery Programme, Holly Wright, Archaeology Data Service, Ben Wallace Warwickshire County Council (ALGAO HER Committee), Robert Sutton, Cotswold Archaeology, Laura Hone, Historic Environment Scotland, Tom Elliot, Historic England and Evie Brown, Welsh Government.

Discussion themes: Artificial intelligence (AI) is opening up new opportunities across the heritage sector - from uncovering previously hidden trends in archives and collection to creating immersive experiences that compellingly bring the past to life. However, these innovations also raise complex questions about authenticity, ethics and accuracy. This panel will explore how AI can be used responsibly to support research, storytelling and community engagement, while also safeguarding the vital human expertise and perspective that are foundational to its use. We will examine how AI can augment - rather than replace - the human experience that underpins meaningful heritage engagement.

# Friday, 10 October

### 09:30- 12:30 Shaping the future: Heritage’s hybrid working policy

Organisers: Evgenia Burgess, Daniel Evans (Arcadis)

As professional archaeologists we pride ourselves on the transferable skills our jobs furnish us with but often we don’t fully appreciate the full extent of the diversity of career options available to practitioners of the Historic Environment. Far too often, the focus on the profession’s shape is in the field. Archaeology is the original hybrid profession, providing career opportunities not limited to just the field, but in the (home) office via consultancy/academia/curatorship; or in the lab undertaking post-excavation research.

The challenge of the last 10 years and next 10 years is retention of our skilled workforce. A fit for future profession can only be realised when the value and contribution of each arm of the profession is recognised, and we work cohesively together to achieve the overall goals of the profession in championing heritage at all stages of a project’s life cycle. Fieldwork is not for everyone, there are many reasons why individuals with much to offer our profession cannot or do not want to dig for a living. Disability, caring responsibilities or a simple search for stability can mean that a career in the field cannot be the only option. In order to retain their valuable skills it is our responsibility to promote all career paths and ways of working.

This session will hear voices from different arms of the profession to demonstrate opportunities. The session will seek to open up career path opportunities beyond the field (or skipping it entirely), whether that be apprentice/graduate opportunities or the opportunity for career progression out of the trench but staying within our heritage family. During the session speakers will be invited to present their career journeys, highlighting the milestones that shaped them as archaeologists. Then the floor will be opened for a round table discussion focusing on how to driving workforce retention by shedding light on the full range of career opportunities available to archaeologists. If you are at a crossroads and want to know what is next then this session may be for you, whatever stage of your career you are at!