Midlands4Cities Doctoral Training Partnership
Birmingham Coventry Leicester Nottingham

Arts and Humanities Research Council

M4C Collaborative Doctoral Award (CDA)

PROJECT TITLE				
Set in Stone: Understanding Ancient Farming Communities through Dartmoor's Prehistoric Monuments				
LEAD INSTITUTION				
Name of HEI institution	University of Leicester			
Lead regional city	Birmingham ☐	Coventry ☐	Leicester ☒	Nottingham ☐
PARTNER ORGANISATION				
Name of organisation	Dartmoor National Park Authority			
Website	https://www.dartmoor.gov.uk/			

Project

This project will explore Dartmoor National Park's well-preserved prehistoric monumental landscape, investigating early farming communities' attitudes towards stone. Using novel geoarchaeological approaches, it will uncover how monuments were sourced, quarried, moved, and modified, informing future landscape management and contributing to current debates on heritage conservation, climate impact, and global mobility.

Process

We invite applications for a PhD project in landscape archaeology, focusing on prehistoric monuments in southwest England. The successful candidate will employ a multidisciplinary approach, integrating geology and archaeology to enhance heritage management practices as follows:

1. **Literature Review**: Critically synthesise relevant geological and archaeological literature.
2. **GIS Database**: Create and utilize a GIS database incorporating regional geology and Neolithic/Bronze Age monuments for sampling and analysis.
3. **Petrological Analysis**: Conduct sampling and petrological analyses (e.g., XRF, PXRF, LA-ICP-MS, SEM) of monuments and Dartmoor's geological diversity.
4. **Sampling**: Develop and apply non-destructive methodologies (PXRF, visual mineralogical assessment) to characterize monument lithologies and compare them with geological samples (destructive and non-destructive).
5. **Geomatic Survey Techniques**: Use techniques such as terrestrial laser scanning, photogrammetry, and analytical software (e.g., D-Stretch) to record and analyse monument surfaces, identifying quarrying, modification, or decorative marks.
6. **Heritage Management Methods**: Develop methods to incorporate new understanding into landscape management, outreach activities, and the cultural significance of stone.

<u>Expected Outputs Beyond the Thesis:</u>

1. Enhancement of the Historic Environment Record.
2. Creation of outreach materials to promote public understanding, including events in the Midlands and Dartmoor.
3. Provision of stone characterization data relevant to the aggregate industry and heritage organisations for monument curation and landscape conservation.
4.

Place

In delivering a PhD project applying novel geoarchaeological approaches to Dartmoor's prehistoric monumental landscape, you will explore the intricate relationship between people, place, and stone manipulation. Your research will be crucial as heritage assets face pressures from climate change and landscape restoration projects. It will inform exciting developments in Neolithic and Bronze Age archaeology, where genetic, isotopic, and artefact studies have demonstrated significant population and object mobility.

In this collaboration between the University of Leicester and Dartmoor National Park Authority, you will benefit from UoL's geoarchaeological expertise and cutting-edge equipment and DNPA's fantastic fieldwork and networking opportunities, with access to diverse geospatial datasets and benefit from DNPA's support in navigating complex landowner relationships. You will have the opportunity to spend part of the PhD on placement with DNPA and engage in active fieldwork and outreach projects.

Guided by an experienced supervisory team Dr. Laura Basell (UoL), Dr. Andrew Miles (UoL), and Dr. Lee Bray (DNPA), the successful applicant will gain valuable fieldwork experience and develop practical skills for careers within and beyond academia. This project promises to make a significant impact on understanding prehistoric landscapes and their enduring legacy.

Person

We seek a dynamic and enthusiastic candidate for this PhD position in landscape archaeology. This position offers a unique opportunity to develop skills of relevance in several sectors, use cutting-edge techniques, and gain hands-on experience in landscape archaeology. Beyond enhancing knowledge of the earliest farming communities in the study region, the methodologies generated will have wider applicability for heritage management practice and relevance in fields beyond archaeology, maximizing employability after the PhD.

Essential Skills

1. A Master's degree or equivalent professional experience in archaeology, geology, or a closely aligned discipline.
2. Existing skills in **EITHER**:
    - **Archaeological Survey/Geomatics**: Familiarity with the principles and practice of archaeological survey. Skills in using equipment and software associated with differential GPS/total station, photogrammetry and/or laser-scanning, GIS, photography, digital archiving, metadata management, and digitalization.
      OR
    - **Geological Provenancing**: Experience in sampling, preparation, and analytical techniques, including the use of relevant equipment and software (e.g., XRF, PXRF, LA-ICP-MS, SEM, and basic visual mineralogical assessment).
3. Excellent writing skills to articulate ideas and research results clearly.
4. Ability to gather, analyse, and interpret data methodically and effectively.
5. Time management and organizational skills to plan and complete the thesis within the given timeframe.
6. A driving licence due to the field site locations.

Desirable Skills

7. Knowledge of or expertise in prehistoric monuments in southwest England associated with early farming communities.
8. Experience in public engagement and outreach activities. We can support you in developing your presentation and communication skills.
9. Ability to work independently and as part of a team.

10. A commitment to advancing interdisciplinary research and engaging with diverse audiences.

This project offers a unique opportunity to contribute to understanding prehistoric landscapes, informing heritage management, and developing skills for diverse career paths. Apply now to join this transformative research initiative.

HOW TO FIND OUT MORE. Please email the lead university supervisor if you want to find out more about this CDA project.	
Lead HEI Supervisor:	Dr Laura Basell
Lead HEI Supervisor Email:	lb434@leicester.ac.uk