

LATE UPPER PALAEOLITHIC AND MESOLITHIC ARCHAEOLOGY

The Late Upper Palaeolithic and Mesolithic are two successive archaeological periods dating from 14,000 to 6,000 years ago. These were times of great and sometimes rapid change in climate and environment, with the end of the last ice age and sudden switch to warm conditions occurring around 11,300 years ago. Hunter-gatherer people had to adapt their technology, lifestyle and food sources in response to these changes. Artefacts from these periods include flint tools ranging from long blades to tiny microliths, worked bone and, where they survive, worked wood and objects such as fish traps and baskets. Analysis of associated remains such as animal bones, pollen, snails and seeds tells us about people's diet and the contemporary landscape.



Microliths and blades from Victoria Park

WHY ARE THEY SO IMPORTANT?

Remains from these periods are relatively rare in the UK. Where they do occur they are ephemeral, very fragile and often hard to find, either because they consist of lithic scatters or buried soils without obvious structures, or due to erosion or deep burial. West Berkshire has one of the highest known concentrations of these remains in Europe, with sites such as Wawcott and Thatcham Reedbeds being of national significance. At present these vulnerable sites are not eligible for designation (scheduling) due to a lack of structures, but are protected via the local authority planning process. There are certainly many more to be found and if not properly recorded before the evidence degrades or is removed, we lose the only way to understand more about this part of our heritage or indeed learn lessons about how people can adapt to climate change.



Geophysical survey in Victoria Park, Newbury

HOW DOES DEVELOPMENT AND AGGREGATE EXTRACTION AFFECT REMAINS?

Without appropriate mitigation, the following can occur:

- Destruction during extraction or construction
- Compression during and after construction
- Dewatering, which causes waterlogged organic remains to rot

A small footprint can have a wide impact.

HOW CAN WE BALANCE ARCHAEOLOGY WITH DEVELOPMENT AND EXTRACTION?

The National Planning Policy Framework provides a context for conserving and enhancing the most significant parts of the historic environment. There are a number of techniques to help assess the significance of heritage assets. Used in combination, they can make the archaeological resource more predictable and reduce the risks to both the archaeology and the proposed scheme.

A Staged Approach

1. **Consultation** with the West Berkshire Council Archaeological Officer and use of the Historic Environment Record (HER) as early as possible in the design process will improve outcomes (contact details below).
2. **Assessment** using appropriate expertise by a competent archaeological practitioner. This will generally start with a Desk Based Assessment (DBA) but may include fieldwork. A link to organisations registered with the Chartered Institute for Archaeologists is given overleaf.
3. **Mitigation** design, where any potential of or risk to early prehistoric remains is identified. A scheme of archaeological mitigation will be designed to form part of the planning application, and will need approval from the West Berkshire Council Archaeological Officer. The scheme will need to employ fieldwork methods appropriate to the nature of Late Upper Palaeolithic and Mesolithic archaeology. Useful guidance specifically for aggregate extraction can be found in the document "Assessment of the Archaeological Resource in Aggregate Areas of West Berkshire" (MoLAS 2014).
4. **Public benefit** can arise from this process in furthering understanding of our past and protecting important remains for the future. Outreach or public participation can be good publicity for an application or development.



Coring at Wawcott

Best Practice and Methods for Mitigation

Best practice makes use of all or some of the following techniques as deemed appropriate.

Geophysics: techniques such as Electrical Resistivity Tomography, Ground Penetrating Radar and Magnetometry surveys can alone or in combination identify buried land surfaces, structures or landforms such as old river channels over large areas quickly and without disturbing the ground, to narrow down where suitable deposits occur and where people may have been active in the landscape.

Guidelines can be found at: <https://www.historicengland.org.uk/images-books/publications/geophysical-survey-in-archaeological-field-evaluation/>

Coring: use of hand held or powered coring equipment allows the examination of deep sediments, which when repeated across a targeted area will further narrow down the existence of important layers and potential preservation of early prehistoric remains. Guidelines can be found at: <https://www.historicengland.org.uk/images-books/publications/geoarchaeology-earth-sciences-to-understand-archaeological-record/>

Test Pitting: is used to further evaluate whether archaeological remains are present and are at risk. Small trenches are opened by machine or hand excavation by an archaeological team, and sequences, features and artefacts recorded and sampled to inform any further work. Hand digging and sieving are critical for the recovery of artefacts of these periods.

Excavation: larger scale archaeological excavation, recording and sampling tends to proceed by hand for sites of these periods, since large scale mechanical stripping destroys lithic scatters contained in the topsoil.

Environmental Sampling, Assessment and Analysis: a key part of our understanding of Upper Palaeolithic and Mesolithic lifestyles comes from knowledge of the contemporary environment and people's impact on it. This comes from appropriate sampling, processing and assessment/analysis of a range of indicators such as pollen, seeds, wood, snails and bone. These may be preserved for many thousands of years by waterlogging or charring. Guidelines can be found at: <https://www.historicengland.org.uk/images-books/publications/environmental-archaeology-2nd/>

Watching Brief: is appropriate in some cases, where an archaeologist will observe and record any archaeological deposits encountered while construction, piling or extraction is already underway. Any such programme would need to allow opportunity for sieving and sampling if lithics were encountered.

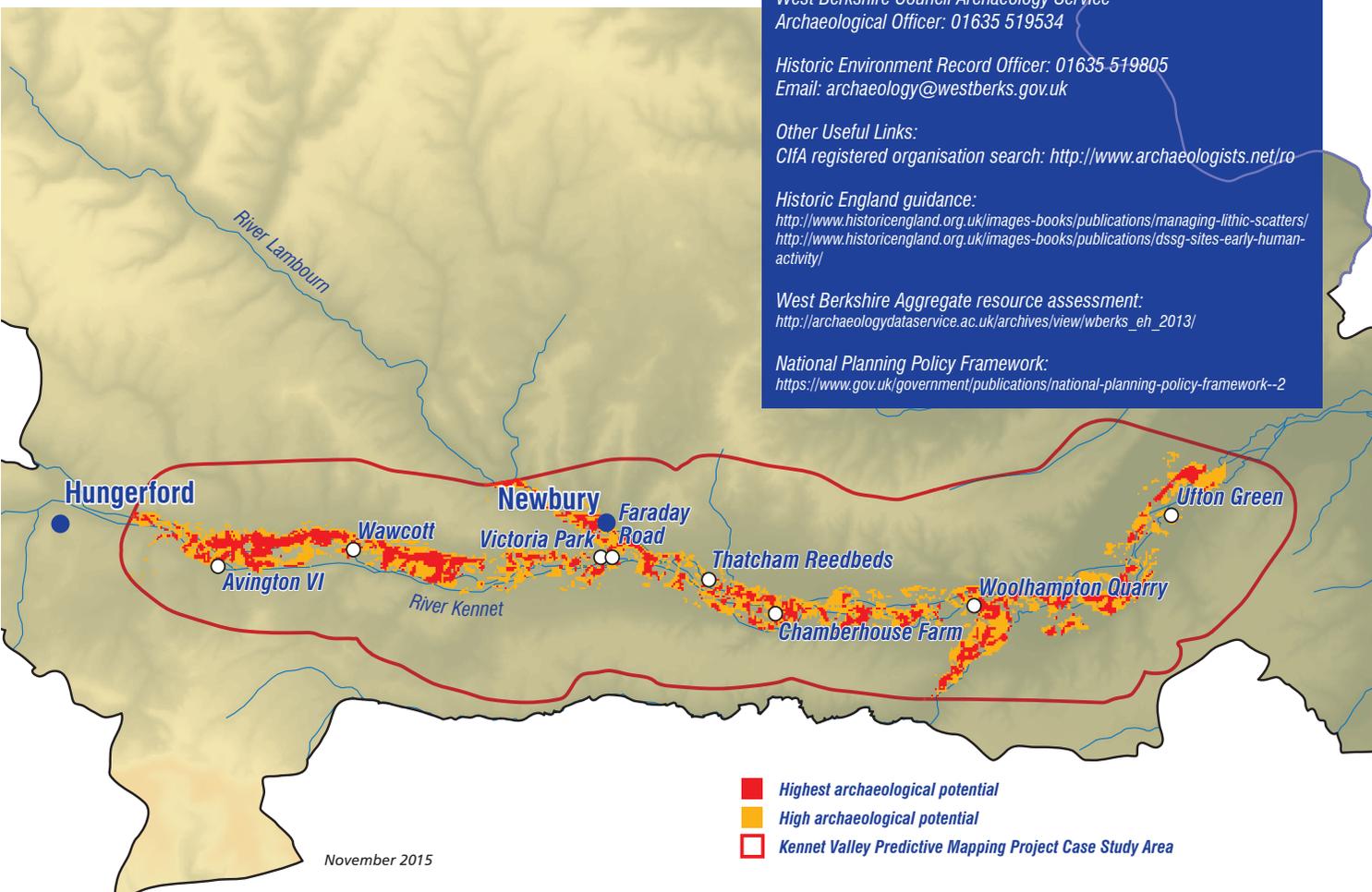


Monolith sampling at Victoria Park, Newbury

HOW HAS THIS GUIDANCE ARISEN?

There has been an increasing awareness of the vulnerability and importance of early prehistoric remains coupled with improvements in the techniques for their investigation. This document is particularly informed by the results of the English Heritage funded Kennet Valley Predictive Mapping Project, co-authored by Wessex Archaeology, West Berkshire Council archaeology service and the University of Reading. Existing knowledge of Upper Palaeolithic-Mesolithic finds, sediments and environmental data has been coupled with areas of known past extraction in order to produce a predictive map of areas of high potential and risk. The map below shows the potential for encountering Late Upper Palaeolithic and Mesolithic archaeology in the study area based on our current understanding. It can be used to help predict the likelihood of encountering this type of archaeology beyond the study area where we have less data.

Map to show West Berkshire and Areas of High Potential for Upper Palaeolithic and Mesolithic remains identified in the Kennet Valley Predictive Mapping Project.



WHO IS RESPONSIBLE FOR SAFEGUARDING THE HISTORIC ENVIRONMENT?

- Local planning authority archaeology services (e.g. West Berkshire Council) will maintain a Historic Environment Record and provide appropriate advice on the conservation and recording of heritage assets when determining planning applications
- National bodies such as Historic England are responsible for the management of nationally designated heritage assets, as well as policy making and advice
- Applicants (e.g. developers, mineral extraction companies or individuals) are encouraged to positively engage with the historic environment, which can include taking an active role in the investigation and mitigation of heritage assets.

WHO TO CONTACT

West Berkshire Council Archaeology Service
Archaeological Officer: 01635 519534

Historic Environment Record Officer: 01635 519805
Email: archaeology@westberks.gov.uk

Other Useful Links:
CIfA registered organisation search: <http://www.archaeologists.net/ro>

Historic England guidance:
<http://www.historicengland.org.uk/images-books/publications/managing-lithic-scatters/>
<http://www.historicengland.org.uk/images-books/publications/dssg-sites-early-human-activity/>

West Berkshire Aggregate resource assessment:
http://archaeologydataservice.ac.uk/archives/view/wberks_ah_2013/

National Planning Policy Framework:
<https://www.gov.uk/government/publications/national-planning-policy-framework--2>

Late Upper Palaeolithic and Mesolithic Archaeology and Environment in West Berkshire:

A Best Practice Guide for Developers and Extractors

