Mesolithic and Bronze Age archaeology on the Thames Foreshore at Vauxhall

1.1 Abstract

A short reconnaissance survey on Vauxhall foreshore to assess the rate of erosion and the archaeological evidence that is emerging from new peat exposures, this coincides with survey work undertaken by the Foreshore Recording and Observation Group (FROG). The main aim and concern of this report is the potential level of archaeological material that could easily be lost after the installation of a new pier upstream of Vauxhall Bridge.

1.2 Introduction

This was my own survey project to assess the level of peat exposure at Vauxhall, London. I conducted this survey over a period of two mornings in January 2012 as recent installation of a pier near Vauxhall Bridge has caused increased erosion of the peat layers at Vauxhall exposing many organic remains such as wood and faunal remains along with lithics. The aims of the project were to assess new exposures and the types of artefacts within them.

1.2.1 Survey Method

For my survey method I choose to use non evasive techniques for a number of reasons:

- So as to not damage the fragile natural environment
- Or to damage delicate archaeological evidence
- I would require a special permit from the Thames Port Authority to dig

My method of reconnaissance surveying is sometimes considered an initial survey method as it can cover a wide area (as outlined earlier) and gather a wider variety of information. This type of surveying is often associated with field walking but the term field walking can appear limited to agricultural fields. Like field walking, a sample of surface finds are collected for analysis and interpretation of a site before any further work is conducted. In the case of Vauxhall the type and importance of the site is already known so this survey was conducted to determine the new extent of the site after recent erosion.

The target for sample collection was limited to prehistoric evidence only (typically this would include lithics (likely to be only flint), faunal remains and exposed wood. However special consideration must be taken for wood as it may not be at all profitable to disturb it without carefully revised method for recovery and a plan for conservation. All other finds were ignored and left in position, or reviewed for personal interest only. The primary purpose of recovering a sample is to build a collection of statistically useful data that can be used to create plots of finds. Finds will be removed from the site for cleaning and processing, as this will not have any impact upon the subsurface archaeology.

Where appropriate, the Code of Practice section in the **Permit to Search the Thames Foreshore** (issued by The Port of London Authority and Crown Estate Commissioners) was followed.

1.2.2 Limitations of Approach

The limitations of the survey method used are:

- Non-systematic survey means that finds cannot be accurately measured in terms of their find location or proximity to other finds, however finds such as lithics, will generally be out of context
- Non-invasive survey means that no digging or excavation of finds can be conducted which limits data that can be recovered
- 100% sampling of relevant prehistoric material is time consuming and therefore limits the area covered
- Surveying alone relied on my ability to observe, identify and interpret finds, therefore other finds may have been missed or discarded by mistake

1.2.3 Survey Period

Date	Start Time	End Time	Survey Time	Tide Times	General Weather Conditions
25/01/12	09:20	12:10	02:50 hours	09:53: 0.48m 15:24: 7.12m	Cloudy/Overcast
27/01/12	10:15	12:40	02:25 hours	10:56: 0.65m 16:38: 6.94m	Cloudy/Overcast, some sunny spells

1.2.4 Site Location

The site location is on the south bank of the River Thames, either side of Vauxhall Bridge. The Bronze Age causeway is upstream of the bridge, in front of new apartment buildings (within the blue area – fig.1) while the Mesolithic site is downstream and directly in front of the MI5 building (within the red area – fig.1).

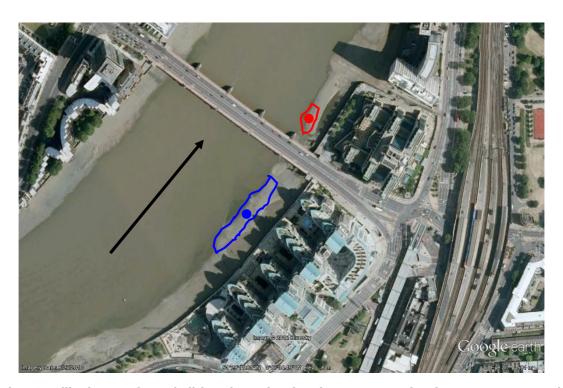


Fig.1 Satellite image of Vauxhall foreshore showing the two areas of main peat exposure and visible archaeology. Black arrow show river flow direction

Area	Period	Coordinates		Approximate Survey Area
RED	Mesolithic	51°29′15.21″N	0°07′32.31″W	30m - 10m
BLUE	Bronze Age	51°29′10.87″N	0°07′37.01″W	100m - 10m

(From Google Earth, coloured circles show coordinate point on fig.1)

1.2.5 Access to the Site

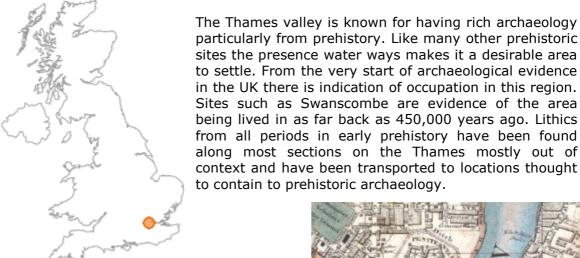
Access to the foreshore is via the slipway near Vauxhall Bridge. Care should be taken as this is also used by the amphibious bus. Mud and aquatic plants can be slippery, extra care was taken for particularly muddy patches. Access to the site without strong, tall boots is not recommended.

1.2.6 Future Work

Future work could include:

- Comparison of results with other published primary sources (e.g. Museum of London, Thames Discovery Programme).
- Initial surveying of other nearby areas of similar size to compare plotted finds information
- Further survey of exposed peat to create accurate plan of exposure possibly with the use of GPS equipment and software
- Small scale excavation (within the Code of Practice section of the Permit to Search the Thames Foreshore) of the sites to recovery more artefacts
- Analysis of flint tools for wear-usage patterns

Site Background 1.3



particularly from prehistory. Like many other prehistoric sites the presence water ways makes it a desirable area to settle. From the very start of archaeological evidence in the UK there is indication of occupation in this region. Sites such as Swanscombe are evidence of the area being lived in as far back as 450,000 years ago. Lithics from all periods in early prehistory have been found along most sections on the Thames mostly out of context and have been transported to locations thought to contain to prehistoric archaeology.

Fig.2 - Location of London

The map (right) is from the 1840' maps such as these do occasionally have notes or symbols for the presence of archaeology. By comparison, other early maps have notes suggesting "Roman remains" or "flint implements found - *date*". In the case of this map there is no note to show the presence of archaeology suggesting the area was not picked clean by mudlarkers, early antiquarians collectors or "oddities".

Fig.3 - 1847 Map showing Vauxhall, There appears to be no reference to the presence of prehistoric structures on the foreshore



It has only been in the last few decades that prehistoric remains at Vauxhall have been recognised. In 2002 Time team broadcasted an episode in which they excavated and recovered on the Bronze Age timbers (series 9 episode 1). This type of 'TV archaeology' raises awareness of sites such as Vauxhall but can do more damage than good if archaeological method is rushed or important recovery steps are missed to meet the filming quota. The Bronze Age timbers were first noticed in 1993 during an exceptionally low tide. Between 1993-95 the timbers were recorded by team from UCL and Museum of London. At the end of the Time Team episode a new (modern) post was placed and reburied to the top of the post where they had removed one. This post now stands 5-6 inches above the gravel showing the rate of erosion.

1.3.1 The Bronze Age Timbers

The timbers have been dated to about 3500 years old and their purpose is not clear. The Time Team excavation in 2001 (broadcasted 2002) showed the posts were sharpened piles rather than flat bottomed posts placed in a post hole. This evidence suggested the structure was built as part of a waterway, perhaps and pier or walkway to a gravel island in the middle of what once was a much wider Thames. The area where the Parliament buildings are today was once an island known as "Thorny Island". It was interpreted by the Time Team that the wooden posts were part of a network of crossings that were built for people to island hop. Diatom analysis done during the Time Team excavation showed the structure was at the tidal head of the river at the time it was built. As summed up by Francis Prior; this would have been important for ritual and economic activity.



The picture (left) was taken on the 27th January at low tide and clearly shows the good condition of the timbers. The timber closest is about 42cm in diameter (for scale). Careful study of the surface of the timbers shows evidence of tool marks (highlighted on the Time Team episode) which shows the timbers were stripped of bark then piled into the ground. Due to the size of the timbers it was concluded some sort of pile driver must have been constructed to force the posts into the ground.

During my first visit to Vauxhall on the 25th January I teamed up with the Thames Foreshore Archaeology Group (also known as FROG) they were conducting investigations into the current condition of the site and were being filmed.

Fig.4 - Bronze Age Timbers with new pier in background

During their investigation they found some new posts that had been revealed by erosion after the installation of the new pier (fig.4). The erosion has removed gravel that had covered a patch of peat downstream of the timbers; on this patch were lithics and faunal remains (picked up myself and members of FROG during surface searches – fig.5 and fig.6).



Fig.5 - Flint blades picked up from the exposed peat downstream of the Bronze Age timbers however the quality of flaking is not characteristic of Bronze Age knapping and so therefore may be part of the Mesolithic evidence in the area. Scale is in cm.



Fig.6 - Lithics recovered downstream of the Bronze Age timbers, again on the exposed peat. The poorer quality flaking of these lithics make them very likely to be Bronze Age in date. The three cores on the upper row from the right are in typical Bronze Age flaking style. Scale is in cm.



Fig.7 – Blade core found approx. 12m from Bronze Age structure. Likely to be Mesolithic as blade core technology was common at this time, style and quality more also indicate Mesolithic however there are some knapping errors present (several hinge and step fractures). Scale is in cm.

1.4 Finds

A breakdown of the lithic and faunal material recovered from Vauxhall

1.4.1 Lithics Recovered from Vauxhall

Lithic type	Quantity	Comments
Blade	3	Likely to be Mesolithic by quality of
		flaking
Blade Core	1	Much finer flaking than on Bronze Age
		cores, very likely Mesolithic
Core	3	Typical Bronze Age core flaking
		indicate approx age
Flake	6	Unclear as to age but 1 or 2 flakes
		likely to be Bronze Age
Scraper	3	Neolithic- Bronze Age including a
		"duck-billed scraper" All recovered
		from the new area of peat
		downstream of the Bronze Age
		structure
Burnt Flint	2	Likely to be Neolithic or Bronze Age
Burnt quartzite pebble	2	Likely to be Neolithic or Bronze Age
fragments		



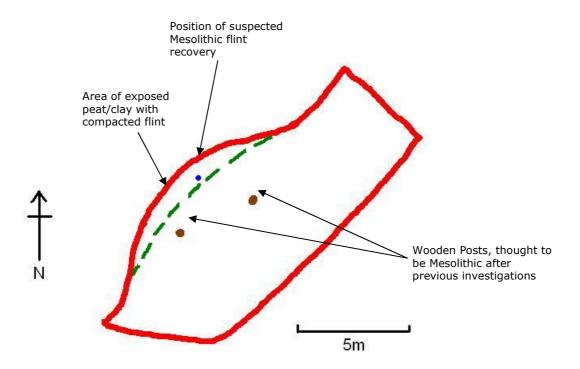


Two of the flint scrapers recovered from the new exposure of peat downstream of the Bronze Age structure, here lithics were most concentrated. The scraper on the right has a short retouch area (2cm long) in the bottom right corner of the flake (probably Bronze Age). The scraper on the left is much more distinctive and has a recognised 'style' ("duck billed") and is likely to be Neolithic or Mesolithic.

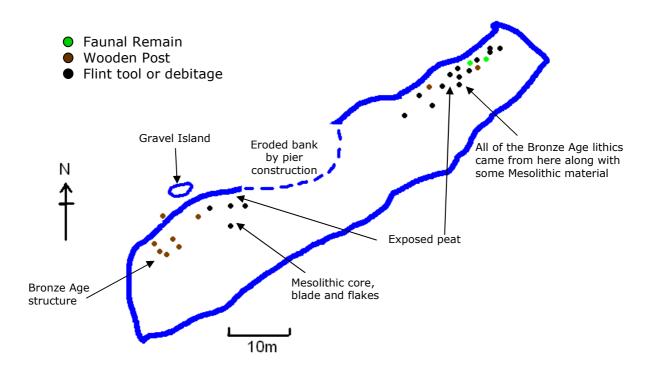
1.4.2 Other Material Recovered from Vauxhall

Faunal remains	Quantity	Comment	Photo (scale shown in cm)
Mandible (with teeth)	1	Both very dark in colour suggesting they are from peat and therefore of prehistoric age. Right side mandible from adult sheep.	
Scapula	1	Incomplete, probably post depositional damage. Possibly sheep?	International and

1.4.3 Finds from Area RED



1.4.4 Finds from Area BLUE



1.5 Summary of Survey

The installation of the new pier has revealed new sections of the peat layers. These layers hold vast quantities of material important to the understanding of Vauxhall's use by humans and change through prehistory. As stated there is much data available which gives opportunity for a wide range of future research; however this research must be undertaken swiftly so that further erosion of the site does not result in the loss of too much material. It is well known that this part of the Thames contains material that has been preserved under exceptional conditions meaning perishable materials such as wood and faunal remains have survived. For this reason as well as erosion it would be advisable if longer and more detailed survey and potentially excavation was conducted at the sites discussed.

References:

- 1. Time Team (series 9 episode 1) available on Channel 4 on demand
- 2. Google Earth For satellite images of the site
- 3. Permit to Search the Thames Foreshore (The Port of London Authority and Crown Estate Commissioners) http://www.pla.co.uk/pdfs/pe/Fm920.pdf
- 4. Tide Table (The Port of London Authority)
- 5. http://www.vauxhallandkennington.org.uk/firstbridge.shtml Accessed 20/02/12
- 6. http://www.ianvisits.co.uk/blog/2011/02/20/a-trip-with-the-archaeologists-on-the-river-thames/ Accessed 22/02/12