Hamble River Logboat: Report on Recent Investigation by HWTMA



Hampshire and Wight Trust for Maritime Archaeology

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I. DOCUMENT CONTROL

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II. LIST OF FIGURES & TABLES

Figure 1. Location of Fairthorn Manor, near Curbridge on the River Hamble.

Figure 2. Location of boathouse where the Hamble logboat was found, as shown on 1909 Ordnance Survey.

Figure 3. 1940 Ordnance Survey.

Figure 4. The Hamble Logboat in its current location at Southampton Museum Stores.

Table 1. Summary information of dendrochronological analysis of Hamble Logboat.

III. ACKNOWLEDGEMENTS

The recent work on the Hamble logboat has been made possible with a grant from the Roman Research Trust. Thanks must be extended to the Botley and Curdridge Local History Society, Botley Market Hall Committee and Southampton City Museums for their help with arranging permission for the sampling and access to the boat.

1. Background

1.1 PROJECT AIMS AND OBJECTIVES

This project was concerned with establishing the date of the logboat discovered in the banks of the River Hamble in 1888. The logboat has always been classified as Roman in date due to the presence of Roman remains in the adjacent countryside. The logboat is currently held in the stores of the Southampton City Museum.

Preliminary funding was granted by the Roman Research Trust to conduct Stage 1 of the study, with the objective of;

Establishing the date of the logboat using dendrochronology.

If the logboat proved to be Roman in date a further approach to the Roman Research Trust would be made for Stage 2 with the following objectives;

- Survey of the logboat, to gain a modern drawn and photographic record of the boat.
- Further specialist timber analysis.
- Targeted research into the wider context of the logboat in the surrounding Roman landscape

1.2 THE RIVER HAMBLE

The River Hamble rises near Bishops Waltham and flows for c. 17 km in a generally southerly direction before entering the sea towards the southern end of Southampton Water. The river is currently considered navigable as far north as Botley, the site of a watermill which lies around 1.3 km upstream of Fairthorn Manor. 300m below Fairthorn Manor, the river is joined by the Curbridge tributary and widens considerably. The River Hamble is rich in archaeological material, 143 sites of maritime archaeological interest were identified along the banks of the River Hamble during survey by the HWTMA (HWTMA 2008: 3). In addition to this, NMR records indicate widespread remains of Roman settlement, including kilns and a settlement site, believed to be a villa, in the vicinity of Curbridge Creek. These sites have been the subject of recent investigation by the Archaeology Department, University of Southampton (D. Barker & T. Sly pers.comm.)

1.3 HISTORY OF THE HAMBLE LOGBOAT

The Hamble logboat was discovered in 1888 during the construction of a new boathouse on the estate of Fairthorn Manor, near Curbridge (Figure 1 & 2). The finding of the logboat was reported in the Hampshire Chronicle (13th October 1888) in the following way:

BOTLEY

AN ARCHAEOLOGICAL DISCOVERY of the greatest interest has been made this week in the tidal river Hamble. At the point of junction of the Curbridge Creek with the river, some considerable distance above the still existing wreck of the Danish man-of-war, a boat house is being built, and in order to make sufficient waterway the workmen removed the mud and alluvial soil. Something hard was encountered and, thanks to one of the workmen having an intelligent taste for antiquities, the obstruction was carefully uncovered, and proved to be a portion of a possible pre-historic canoe — certainly pre-Roman. It is a few feet higher up the river that the old Roman hardway or landing place, and was evidently sunk close on shore.

An account of the finding of Hamble Logboat was also published in the Proceedings of the Hampshire Field Club and Archaeology Society for 1889. This recorded that it was found five feet deep in the mud. The report also included the vessel's dimensions as 13'6" (4.11m) in length, 2'6" (0.76 m) wide and a height of side above the bottom of 3-6" (75-150 mm). The thickness of the bottom was recorded as 6" (150 mm) in the middle and 4" (100 mm) near the sides. The logboat was identified as being made from oak. It was also noted that it had been built by being 'scooped-out' after the wood had been charred.

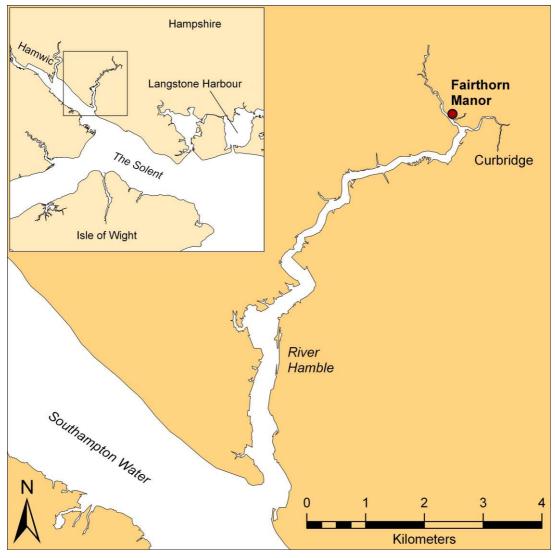


Figure 1. Location of Fairthorn Manor, near Curbridge on the River Hamble. The immediate vicinity of the site is shown in its historical context in Figure 2 and 3.

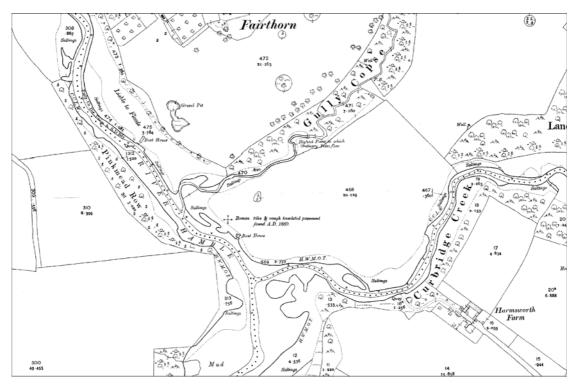


Figure 2. Location of boathouse where the Hamble logboat was found, to the south-east of the Roman remains, as shown on 1909 Ordnance Survey. The present Fairthorn Manor boathouse is upstream (Image source: EDINA).

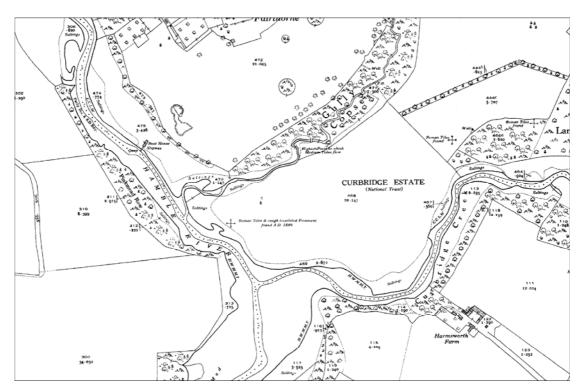


Figure 3. 1940 Ordnance Survey. The logboat boathouse is no longer visible, although the Roman remains are still shown (Image Source: EDINA).

The site of the finding of the logboat is listed in the National Monuments Record (NMR 234780). This summarises the published accounts of the vessel and also includes verbal information gained after an inspection by staff from the National Maritime Museum. They confirmed that the vessel had been hollowed out by burning and could therefore be older than originally thought, possibly prehistoric. The NMR entry also includes an extract from the Minutes of Meetings held by the Trustees of the Market Hall, Botley on the 9th April 1890. The finding of the logboat is reported and the location is described as the place "where there is believed to have been an ancient Roman and Saxon village, and a ford from the east to the west side of the river". The NMR location for the find spot of the logboat is given as 230 m downstream of the present Fairthorn Manor boathouse. The Ordnance Survey map of 1909 illustrates the location of the downstream boathouse and its proximity to the find-site of Roman tiles and pavement (Figure 2). The downstream boathouse where the logboat was found has disappeared from comparable maps by the 1940's (Figure 3).

1.4 THE HAMBLE LOGBOAT TODAY

The logboat was loaned to Southampton City Council from the Botley Market Hall Committee in 1913. In recent years the vessel has been kept in the Southampton City Museums stores. It was in this location (Figure 4) that it was inspected and sampled for dendro-chronological analysis (Section 2).



Figure 4. The Hamble Logboat in its current location at Southampton Museum Stores.

Limited comment can be made on the current condition of the Hamble logboat. Its recorded length and width when recovered was 4.11 m in length and 0.76 m wide. Given that the vessel seems to have undergone no conservation of any sort, at any time since its recovery, it might be expected to have shrunk through drying out. Recent measurements of the vessel record it as 4.05 m in length and 0.55 m in width. Superficially this suggests that the logboat has shrunk by around 60 mm along its length and 200 mm across its width. However, some caution must be assigned to these measurements as there is no way of knowing exactly where on the boat the 1888 measurements were taken.

It is hoped that the planned development of Southampton's Sea City Museum may provide the opportunity to put the logboat on public display in the near future.

2. Investigation of the Hamble Logboat

2.1 DENDRO-CHRONOLOGY (BY NIGEL NAYLING)

Dendro-chronological study of the Hamble logboat was carried out by Nigel Nayling of Lampeter University. Techniques employed in the Lampeter dendrochronology laboratory generally employ methods described in English Heritage guidance on best practice for this activity.

The logboat was examined in the stores of the Southampton Museum Service. Two cores were taken near the surviving bow and stern. Ring width sequences from the two cores were cross-matched and a combined raw ring width sequence calculated. This was compared with a range of previously dated tree-ring width sequences from archaeological sites and standing buildings throughout the United Kingdom.

Significant correlations between the sequence from the logboat and tree-ring chronologies from the excavation of early medieval urban settlements in Hamwic (Southampton) and Winchester were observed with the same date of AD 658 for the outermost surviving ring. Examination of the boat during sampling suggests that this outermost ring equates with the heartwood/sapwood interface of the parent tree, pointing to felling of the tree in the date range AD 668-704. This information is summarised in Table 1.

Sample Code	Description	Conversion	Total Rings	Sapwood	Average Ring-width	Date	Felling Date Range
Hamblelog	Stern & Bow	Whole	90	+?HS	1.36 mm	AD 569-658	AD 668-704

Table 1: Summary information of dendro-chronological analysis of Hamble logboat

The most likely date for the manufacture of the Hamble logboat is the late 7th or early 8th century AD (AD 668-704), based on the felling date range of the tree. The Hamble logboat is therefore not Roman in date, but instead can be classified as Saxon.

3. Analysis of the Hamble Logboat

Although the boat is not Roman its date in the early Saxon period is an interesting one. Some further comments regarding its construction and wider context can be made.

3.1 CONTEXT

Although often considered as primitive craft, logboats are amongst the most long-lived form of vessel to be found in the archaeological record. In the UK examples can be found from the Neolithic (eg. Niblett 2001) to the medieval (eg. Marsden 1989) period. The dating of the Hamble logboat to the late 7th/early 8th century AD places it firmly in the Saxon period. As such, it can be associated with at least eight other logboats dating to the Saxon period from the south-east of England.¹ This includes a logboat excavated by HWTMA from Langstone Harbour, dated via radiocarbon dating to AD 400-620 (HWTMA 2002: 14-15; 2003: 8-9). On this evidence it may be assumed that such vessels were a common feature of Saxon ship and boat technology and were utilised alongside plank-built vessels such as the Graveney boat (for details see Fenwick 1978)

Geographically, logboats are comparatively rare finds in the Solent region. The only other confirmed example is the near-contemporary Saxon logboat from Langstone Harbour. It is possible that this is a result of the maritime environment of the Solent region, where sea level rise has buried early watercraft under marine sediments. McGrail (2001: 172, cf. Table 1.2) considers that simple logboats are only suitable for use on inland waters. The majority of other medieval logboat finds in England are of simple logboats from riverine or inland waters. Such environments are typically much calmer than coastal waters like the Solent. Only rivers such as the Hamble, or more sheltered areas like Langstone Harbour or Southampton Water may have been considered suitable for every-day use by a logboat with relatively low freeboard. It has been estimated on the basis of experimental archaeology and naval architectural analysis that the Clapton logboat was probably suited to one (max two) people with a cargo of around 130 kg and could travel at a speed of c. 2.5 knots (see McGrail 1990). The slightly greater dimensions of the Hamble logboat in comparison to Clapton² suggest that the Hamble vessel would have been able to at least equal this performance.

The extensive Roman remains in the vicinity of Curbridge were noted above. The Hamble logboat can no longer be associated with this site on a temporal basis. The presence of such a vessel in the area does however provide an indication as to some form of continuity of use of the River Hamble, during the early to middle Saxon period. The latest date (AD 704) for the felling of the tree used to make the Hamble logboat corresponds closely to the origins of the town of Hamwic at the beginning of the 8th century AD (Brisbane 1988:

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¹ These are from Walton-on-Thames (AD 405-530), Langstone Harbour (AD 400-620), Snape (late 6th/early 7th century AD), Walthamstow (AD 750), Clapton (AD 950), Sewardstone, Waltham Cross (AD 960). Recently (August 2010) the remains of a Saxon logboat have been recovered from the River Ant in Norfolk. For details of the Snape logboat see Filmer-Sankey 1990.

² The Clapton logboat originally measured 3.73 m long, 0.6 m wide and 0.4 m deep. The remains of the Hamble

The Clapton logboat originally measured 3.73 m long, 0.6 m wide and 0.4 m deep. The remains of the Hamble logboat are recorded as 4.11 m long and 0.76 m wide at the time of recovery, not enough of the vessel sides remain to estimate the depth.

101). It is obviously impossible to establish the purpose of the logboat at Curbridge at the time of its sinking/deposition. The vessel serves to illustrate a snapshot of the smaller types of watercraft plying the Hamble and possibly Southampton Water during this important period in the development of Hamwic/Southampton as a maritime centre. The importance of short-distance water transport of this type in Saxon England has been noted elsewhere (Milne & Goodburn 1990: 633), in relation to the port of London.

3.2 Construction

The primary study of logboats in England and Wales has been conducted by McGrail (1978), with summaries of the main points (updated in the light of new finds) in later publications (1998: chapter 6; 2001: 172-180). At a basic level, logboats are produced by subtractive techniques – the raw material is reduced in volume by the hollowing and shaping of the log – either from a whole log or a half log. On the basis of this work and reference to some of the comparative examples outlined in section 3.2, the Hamble logboat can be classified as a simple logboat. That is; a logboat without any additional fittings or fixtures and which has been constructed simply by hollowing out a whole log.

The reference in the original Hampshire Field Club report to charring on the surface of the wood (section 1.2), raises the possibility that the logboat was made via 'expansion' (see McGrail 1998: 66-70). However, three factors suggest that this is unlikely;

- Oak construction: It has not yet been demonstrably proven, either through the archaeological and ethnographic record or through experimental archaeology that expanded logboats can be constructed from oak (McGrail 2001: 179).
- Dimensions: The thickness of the Hamble logboat (as recorded by the Hampshire Field Club is 150mm for the bottom and 100mm for the sides. Expanded logboats generally have much thinner walls (McGrail 1998: 68), McGrail (2001: 179) considers 60mm to be too thick.
- Fittings: The Hamble logboat has no evidence for the presence of any
 of the fittings, usually frames, that are associated with expanded
 logboats.

The use of oak, in addition to the size and simple form of the Hamble logboat means that it is directly comparable to a group of logboats from the River Thames, dating between AD 750-960. Unlike this group, the Hamble logboat does not seem to have been built with a central bulkhead (for the example in the Clapton logboat see Marsden 1989: fig. 3). It may therefore represent a south-coast variant of the type of logboat generally seen in Saxon England.

4. Conclusion

4.1 FUTURE RESEARCH

The Hamble logboat has great potential to inform us further about a relatively ordinary aspect of maritime activity around the Solent during the Saxon period. The significant corpus of near contemporary vessels from the South of England means that a meaningful comparative study could be undertaken.

However, this would require the detailed survey and recording of the physical attributes of the Hamble Logboat;

- Fully measured, archaeological survey.
- Detailed recording of tool-marks.
- Creation of photographic record.
- Further analysis of timber.

Such an in-depth survey of the logboat has not been available within the remit of the present study. However, such work would greatly facilitate future study of this potentially significant vessel to place it in the wider, relatively undeveloped, context of Saxon maritime studies. Particular reference could be made to the relationship between the developing Saxon port of Hamwic, its immediate Solent hinterland and the motives and methods drawn upon by its inhabitants for maritime activity.

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