

Discovering a fulling mill at Wheathampstead

Mike Smith

In this article Mike Smith demonstrates the value of maps to the local historian. When combined with field walking, geophysics and LIDAR, they can offer evidence of important past features, such as, in the case of Wheathampstead, the site of a sixteenth-century fulling mill.

My investigations into the possible site of the Wheathampstead fulling mill began in 2015. I had been out field walking and noticed an earthwork at one end of an open space managed by Wheathampstead Parish Council, called Melissa Field. This was to be the beginning of an investigation which was principally devoted to the study of the historical maps for the locality and extracting every fragment of evidence they contained.

Melissa Field and its locality

Melissa Field is located on the Lower Luton Road opposite Folly Fields, also known as 'The Folly'. The River Lea bounds the southern side of the field. Its general location within the broad stretch of countryside between Harpenden and Wheathampstead is shown in Fig. 1.

The earthwork lies at the west end of Melissa Field. It consists of a flat rectangular platform that drops away abruptly at the southern edge where it faces the River Lea. The platform measures approximately 10 x 5 metres.

At the time I could not find any information about either the origin or age of the earthwork. Its shape and location suggested that it was the site of a water mill. The only reference to a water mill in the locality was contained in a research project undertaken by the Workers' Education Association (WEA) and published in 1978. This mentioned that a fulling mill had once existed at

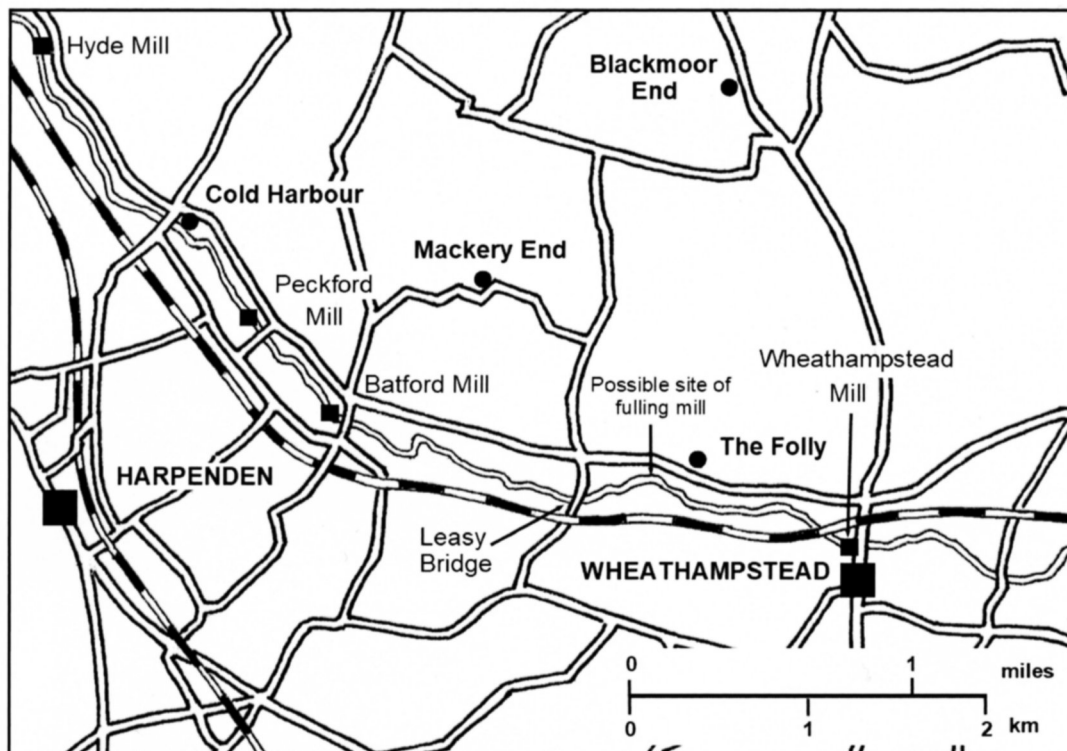
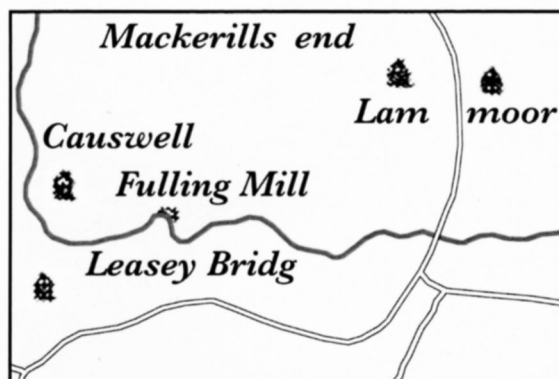


Fig. 1: A general view of the countryside along the River Lea between Harpenden and Wheathampstead, based upon the Ordnance Survey map of 1898.

Fig. 2: A map showing the fulling mill and its surroundings, based upon the map of Hertfordshire drawn up by John Seller in 1676.



Leasey Bridge, 400 metres to the west of Melissa Field. This claim, however, was based upon a map of Hertfordshire, produced by John Seller in 1676 (Fig. 2). Recently, while reviewing the historical maps of Wheathampstead, I realised that the WEA interpretation of the 1676 map was unconvincing.

The map had been drawn to a large scale and there was a lack of precision about the features shown. It was thus most unwise to use the map for ascertaining the precise location of an individual feature. As can be seen in Fig. 2, there is a symbol inserted upon a prominent bend in the river. The words 'Fulling Mill' and 'Leasey Bridg' are appended to the north and south of the river at this point, but it is not clear which of these words relates to the symbol. The WEA study assumed it was Leasey Bridge. However, by comparing the 1676 map to the Ordnance Survey map of 1898 (Fig. 3), I concluded that the name 'Leasey Bridg' depicted on the 1676 map, referred to the bend in the river at the point where the name is marked on the 1898 map. The symbol on the 1676 map was located to the east of this point on the bend in the river opposite The Folly. It would thus correspond to the location of the earthwork at Melissa Field.

Mapping evidence

Mills were not consistently depicted on early maps and this makes interpretation difficult. Interestingly, while the fulling mill appears on the 1676 John Seller map, no other mills on the Lea are shown. Was this because this mill was an important local landmark and thus needed to be included, or was the mill owned by one of the sponsors of the John Seller map? We do not know. A map drawn up 20 years later in 1695 by John Oliver map does not show any mills on the Lea. In 1749 the John Warburton map of the county included Batford, Pickford and Hyde mill (shown on Fig. 1), but the fulling mill is missing and so is Wheathampstead mill. The latter omission might be because there was no room for a label on an already crowded map.

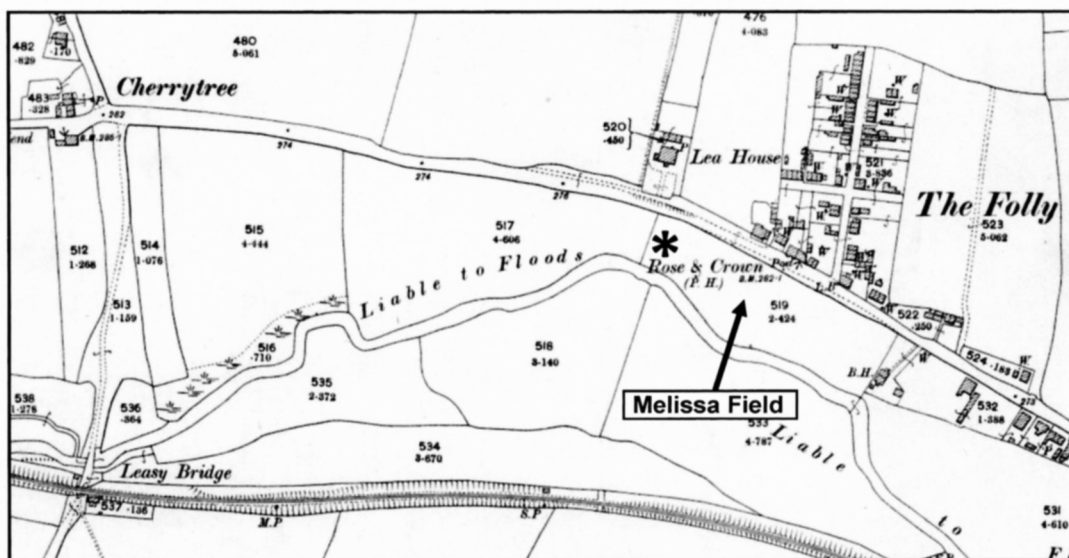


Fig. 3: An extract from the Ordnance Survey map of 1898, showing Melissa Field, The Folly and Leasey Bridge. The asterisk marks the position of the earthwork.

Fig. 4: An extract from a map drawn up by John Yeoman in 1758, showing the holdings of Westminster Abbey. The asterisk marks the unidentified building on the site of the fulling mill.



Nine years later the Thomas Yeoman map of 1758 shows an unlabelled building in the same location as the earthwork 'platform' (Fig. 4). The map is highly detailed, so it is odd that this building was not identified. This was a map commissioned to show the holdings of Westminster Abbey and so all their assets were surveyed, drawn in and identified. Indeed, only property owned by the Abbey was depicted on the map, which means that many buildings and features are missing because they did not belong to the Westminster estate. These buildings include the entire range of sixteenth-century houses on the east side of the High Street and the Bull Inn. So why does this building appear on the map, but without a label? Perhaps the building belonged to the Abbey, but was no longer in use? Interestingly, in 1758 Melissa field appears to be in joint ownership. The Westminster estate held Hogmoor, the lower section of the field, while the Garrard estate held the top section of the field.

The next and arguably the most important map, is the Dury and Andrews county map of 1766 (Fig. 5). The fulling mill is still in place, but again it is not labelled as a mill. A second building stands nearby, aligned to the road. A feature that looks like some form of enclosure lies approximately 80 metres to the east. But how accurate is this map? Dury and Andrews have been criticised for their fanciful depiction of field systems and the course of the River Lea in Fig. 5, for example, looks particularly unconvincing. Despite these faults, however, it is thought that the map is generally accurate in depicting features visible from the road, which the mill would have been.

So what happened on the site between the maps of 1758 and 1766. Had the mill re-opened and expanded with the addition of a second building and an enclosure? An alternative explanation is that the second building and enclosure were in existence in 1758, but they were not depicted on the map because they were within that part of the field held by the Garrard estate. Ownership was not an issue for Dury and Andrews who surveyed and depicted all the structures on the site and labelled them 'The Folly'.

Fig. 5: An extract from the map drawn up by Andrew Dury and John Andrews, 1766. The asterisk marks the buildings and enclosure on the site of the fulling mill.



A fulling mill at work in the seventeenth century (taken from Theatrum Machinarum Novum by Georg Andreas Bockler 1661)



This is the first recorded occasion on which the name 'The Folly' was documented. The word starts next to the enclosure, which suggests that the title 'The Folly' is specific to the features on the south side of the road. It may be that the mill was locally known as the 'Fully'. The name was later corrupted to the 'Folly' and outlived the eponymous mill site.

After 1766 the fulling mill disappears from the map. It does not feature on a map of 1799 commissioned by Westminster Abbey to show all the property holdings across the manor, so its absence is highly significant. Nor is there any trace of the mill on the map for the Tithe Award of 1840 or the early editions of the Ordnance Survey maps.

Is it possible to suggest a narrative based on the map regression evidence? The evidence could suggest that a fulling mill was established on this site during the late Medieval/Early Modern period, perhaps in the sixteenth or seventeenth century. There are many examples of fulling mills being established during this period on minor rivers on the Chiltern dip-slope. There were examples nearby at St Albans, Codicote and Welwyn.

Fulling was a manufacturing process by which woven wool was washed and thickened by pounding with water-powered tilt hammers. The wool was then hung out to dry on frames called tenters. This type of manufacturing pre-dated the Industrial Revolution and most fulling mills went out of use in the eighteenth century, replaced by larger and more efficient manufactories. The fulling mill at Melissa Field must have been in operation before its appearance on the 1676

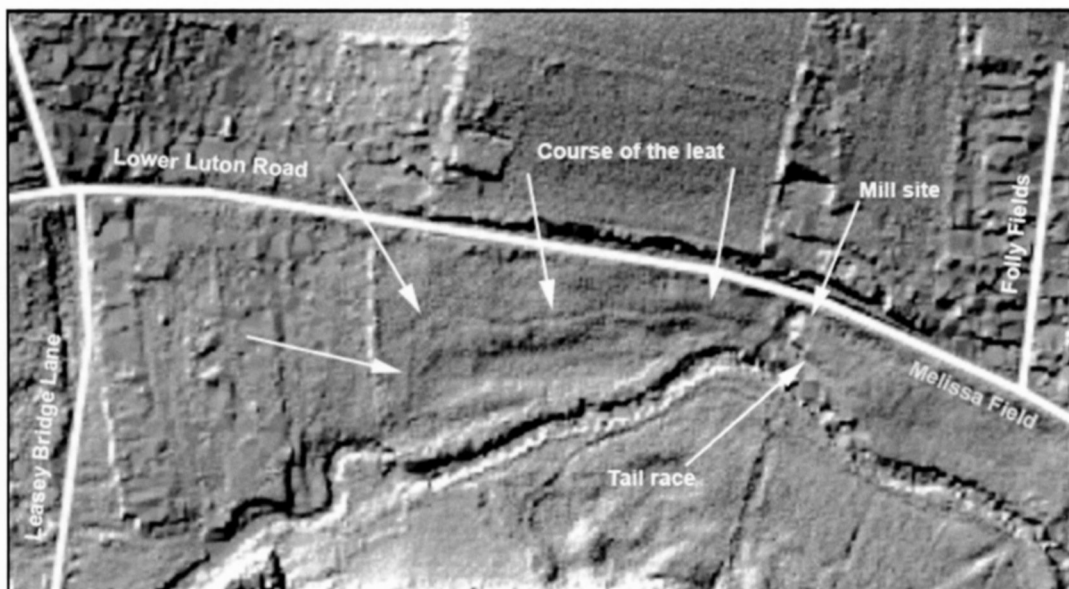


Fig. 6: Melissa Field and its neighbourhood, as depicted on the LIDAR data, processed using QGIS.

map. If we assume that all the structures were of the same period, then it is reasonable to suppose that the mill comprised a water wheel and machinery building, and a separate tenter shed for drying the treated cloth. The nearby enclosure could have been where sheep were folded and sheared, although this is all highly conjectural. Later, after the mill closed down, that part of the field containing the enclosure and drying shed was sold to the Garrard estate. The lack of labelling on the 1758 map suggests that the mill was no longer in operation, but the building was still standing. It may have gone out of use earlier than this since the mill does not appear on the earlier 1749 Warburton map. The buildings may have survived until later in the eighteenth century, but they do not appear on the 1799 map.

Hydraulic landscape features

The most striking evidence for old mill sites on the Chiltern dip-slope are the substantial hydraulic landscape features such as the leat, also known as a mill-race, that supplied water to the mill. A significant feature on slow-moving rivers was the tail-race which took water out of the wheel-race and improved water flow. These features are often plainly visible on nineteenth-century Ordnance Survey maps, even when the mill buildings associated with them have long disappeared.

This was not the case, however, at Melissa Field. This is not perhaps surprising, since the fulling mill may well have been out of use for over a hundred years before the surveyors from the Ordnance Survey arrived and unpacked their surveying equipment. Nonetheless, despite the lack of mapping evidence, even a cursory glance at the land to the west of Melissa Field reveals many 'lumps and bumps' and what looks like a contour leat snaking across the pasture, particularly when viewed in oblique light.

The leat is clearly visible as a sinuous line in the Environment Agency LIDAR data (Fig. 6). It appears to originate at a sharp meander in the river 225 metres upstream where the water level may have been raised by a weir. The leat headed north before following the contour of the field. There is still a depression in the hedgerow where the leat entered Melissa Field near to the wheel-race of the mill. Also visible on the LIDAR is the route of the tailrace as it re-joined the river.

A combination of field walking, map regression and LIDAR evidence strongly support the existence of a pre-industrial fulling mill, dating back to at least the sixteenth century, at Melissa Field. Future lines of enquiry entail documentary research at the Westminster Muniments Room and also a geophysical survey of the site.

References

- Environment Agency, LIDAR data download, 2014.
- Hodson, D. (1985) *Four county maps of Hertfordshire*, Hertfordshire Publications.
- Howes, H. (2016) *Wind, Water and Steam: The story of Hertfordshire's mills*, Hertfordshire Publications.
- Macnair, Rowe and Williamson (2016) *Dury and Andrews map of Hertfordshire: Society and landscape in the eighteenth century*, Oxbow Books
- Mumford, John (1799) Westminster Muniments Room.
- Yeoman, Thomas (1758) Westminster Muniments Room.
- Workers' Education Association (1978) *Wheathampstead & Harpenden: The age of independence*, The History Publishing Society.

Mike Smith is Chair of the Wheathampstead History Society and an active member of the Hertfordshire-based Community Archaeology Geophysics Group.

Awards for Personal Achievement

Each year HALH makes awards as a means of publicly honouring Hertfordshire local historians who have made outstanding and significant voluntary contributions to the subject in their own areas. Nominations must be made on the form available from the Awards Secretary, or on our website at: www.halh.org.uk/halh-awards-for-personal-achievement.

Contact: HALH Awards Secretary, 59 High Street, Ashwell SG7 5NP