THE EXCAVATION OF A MEDIEVAL OR EARLY POST-MEDIEVAL WINDMILL AT FLIXTON PARK QUARRY

by STUART BOULTER

INTRODUCTION

IN THE 1970s a number of ring-ditches were identified through aerial photography on the gravel terrace of the River Waveney within the historic bounds of Flixton Park (Fig. 30) and one of those rings was allocated the Suffolk Historic Environment Record (SHER) reference number FLN 008. By that time FLN 008 lay within the consent area of the Hall Pit sand and gravel quarry operated by Allen Newport Ltd. In 1990 Mike Hardy, the Hon. Secretary of the Suffolk Archaeological Field Group, who was undertaking a fieldwalking survey of Flixton, visited the quarry. He observed that quarry operations were starting to encroach on the ring-ditch and alerted Suffolk County Council's Archaeological Service. No funding for an excavation was available at that time, so members of the Suffolk Archaeological Field Group undertook the excavation fieldwork on a voluntary basis under the direction of Edward Martin of Suffolk County Council's Archaeological Service. As resources were limited, total excavation was not an option, but an area of approximately 460 square metres was opened up in the form of linear trenches cut through the surviving mound and surrounding ditch (Fig. 31).¹

THE EXCAVATION

During the excavation the ring-ditch was sectioned, with only the presence of prehistoric worked flint in its lower fill and dispersed fragments of a collared urn and calcined bone internal to the ring confirming its Early Bronze Age date. An indication that the monument continued to be a focus for much later burials was found in the form of an Anglo-Saxon grave in the ditch fill. Detailed evidence of these two phases has already been published as part of *East Anglian Archaeology* Monograph 147.² However, the excavation also revealed evidence for a later phase of activity relating to the modification and reuse of the burial mound as the base for a windmill in the medieval or early post-medieval period. It is this phase of activity that is reported on here.

The windmill mound

The presence of a low mound in the vicinity of the known ring-ditch had been confirmed prior to the excavation; it survived to a height of 0.65m and covered a roughly circular area with a diameter of approximately 35m. However, when the excavation trenches were positioned to encompass the centre of the mound it was found not to coincide exactly with the underlying ring-ditch, but was displaced nearly 10m to the south-east. While the make-up of the mound did not exhibit any structure, comprising relatively homogenous brown silty sand with common inclusions of gravel/stones, it was thought to represent the vestiges of an original mound that was contemporary with the ring-ditch but subsequently remodelled for use for a windmill, as detailed below.

One other feature, recorded in the westernmost trench, may have been related to the later windmill phase rather than the initial ring-ditch: a curving external lip with a maximum depth of 0.25m followed an arc contrary to the edge of the ditch and appeared to respect the cross-shaped windmill footing instead.





The windmill footing

A cross-shaped trench cut into the top of the surviving mound was interpreted as the footing for a windmill of post-mill type. This type of construction is recorded from medieval to post-



FIG. 31 - Site plan.

medieval times, which makes close dating difficult and the suggested medieval or early postmedieval dating is based on two crucial, but not definitive pieces of evidence:

- The presence of medieval finds, albeit in small numbers, in the immediate vicinity.
- The initial landscaping of the park around Flixton Hall occurred early in the seventeenth century and the windmill is not likely to have continued in use beyond that time.

The cross-shaped windmill footing measured 5.3m from south-west to north-east and 3.8m from north-west to south-east (Figs 31–33). The junction between the two components was at 1.3m from the southern end of the south-east to north-west arm and 3m from the western end of the south-west to north-east component. An unexplained 0.58m gap in the feature was identified 0.8m to the west of the central intersection in its south-west to north-east component.

The footing itself comprised a regular, 0.4m wide, vertical-sided, flat-bottomed trench with a depth of 0.25m. Ends of the trenches were also regular, with the exception of the short south-east arm which tapered to a single large flint cobble. Large flints and hard-packed yellow chalky clay were the primary constituents of the footing fill, with the vestiges of a 'capping' composed of plain red roof tiles, the majority of which had been disturbed by ploughing. Similar flat building materials, for example slate roof tiles in the nineteenth and twentieth centuries, are frequently introduced to level up and pack under beams and sills, while also functioning as a rudimentary damp course.

A post-hole cutting the southern side of the westernmost end of the south-west to north-east component was filled with rotten wood and was considered to be modern.



FIG. 32 - Windmill footing: plan and sections.

THE ARTEFACTS

Roof tile

A total of sixty-seven fragments of ceramic building material weighing 2409g were collected from six excavated contexts. The material was collected from the upper fills of the ring-ditch and the windmill foundation. It consists largely of mid to dark red peg tiles with square holes. The fabrics are all in a medium sandy matrix with sparse background inclusions of flint and chalk. It is not possible to date this material precisely as medieval roof tiles are difficult to distinguish from those of early post-medieval date.

Small finds (Richenda Goffin)

All of the medieval finds from the site were unstratified and consisted of metal small finds located by metal detector. These are listed in the catalogue below and illustrated as Fig. 34.

Catalogue

(1) 008:0063 Copper alloy sword-chape, length 71mm, width 32mm and height 9mm. The front face has a trefoil-headed finial, and it is decorated with openwork with roundels and rectangles. On the reverse there is a simpler pattern of five impressed roundels below the attachment slot.

The chape is characteristic of a relatively common type found prevalently during the late 15th and 16th centuries. Similar examples can be seen in the

72 STUART BOULTER

Medieval Catalogue of the London Museum (fig. 87 sub-type no. 1, and pl. LXXX no. 3 (finial missing)).

- (2) 008:0064 Copper alloy pinhead with broken-off shank. Globular hollow head with slight collar, diameter 13mm. Dating uncertain (H. Geake, pers. comm.).
- (3) 008:0067 Copper alloy lace-tag, length 67mm, diameter at widest point 5mm. Very tapering, ending in a point. Late medieval/early post-medieval.
- (4) 008:0068 Copper alloy Nuremberg jetton, Rose and Orb type, with rectangular perforation midway between edge and centre. Very worn. Diameter 22mm. 16th century. Not illustrated.



FIG. 33 – The windmill footing.

INTERPRETATION

There is little doubt that the cross-shaped feature central to the shallow mound represents the footing of a post-mill (Fig. 35). In this type of mill, the main body, comprising a timber-framed box-like structure, is supported on a substantial vertical timber post around which it is rotated when the wind direction changes. The shallow lip identified in the western trench may have represented the position of the tail pole used to turn and balance the mill, where it would have rested on the ground. Support for the central, upright, post is provided by four diagonal timber braces known as quarter-beams, the upper ends of which are attached to the central post below the level of the superstructure, and their lower ends are joined to a horizontal, cross-shaped, arrangement of beams that provide the foundation for the mill. At Flixton, the horizontal timbers also coincided with the point at which the central pole meets the ground. Indeed, an irregular disturbance in the footing at this juncture, recorded as 'animal disturbance' during the excavation, may actually have been structural and relate to the position of the central supporting post.



FIG. 34 – The artefacts (scale 1:1).



Dating the structure is problematic. The earliest post-mills are thought to date to the late twelfth century, and their use, with modifications, continued widely from then on.³ The early mills were generally small with the wooden 'trestle-like' structure formed by the quarter-beams open to the elements, and typologically the Flixton example fits this pattern.⁴ While artefactual evidence was sparse, medieval finds were present, although the roof tile described as a 'capping' on top of the footing was undiagnostic and could be medieval or post-medieval in date.

Flixton Hall was constructed early in the seventeenth century, probably before 1611,⁵ and while it is by no means certain that the windmill did not continue in use beyond this time, it had certainly been removed when an estate map of *c*. 1750–83 was

> FIG. 35 – Post-mill at Winsen Farm Museum, Lower Saxony (photo: Edward Martin).

74 STUART BOULTER

drawn up.⁶ It does then seem reasonable to assume that as the parklands around the hall were developed, probably during the seventeenth century, the windmill would have become perceived as an eyesore due to its location in front of the hall. None of this evidence can be considered as definitive, but on balance, a later medieval/early post-medieval date (fifteenth to early seventeenth century) can be postulated as the time when the windmill was in use.

ACKNOWLEDGEMENTS

I would like to thank the original excavation team from the Suffolk Archaeological Field Group and Edward Martin for his advice during the preparation of the article and editing of the text. Also, thanks are extended to Sue Holden for preparing Figures 30, 31, 32 and 34. Finds were examined by Richenda Goffin and Sue Anderson.

NOTES

1 Martin et al., 1991.

- 2 Boulter and Walton Rogers 2012.
- 3 Holt 1988, 20.
- 4 Hemming 1936, 7.
- 5 Evans 1980, 275.
- 6 Suffolk Record Office Lowestoft, 947/A/1.

BIBLIOGRAPHY

- Boulter, S.P. and Walton Rogers, P., 2012. Circles and Cemeteries: Excavations at Flixton Volume I. E. Anglian Archaeology 147.
- Evans, N., 1980. 'The Tasburghs of South Elmham: The Rise and Fall of a Suffolk Gentry Family', *Proc. Suffolk Inst. Archaeol.*, XXXIV, 269–80.
- Hemming, P., 1936. Windmills in Sussex, A description of the construction and operation of windmills exemplified by up-to-date notes on the still existing windmills in Sussex with photographic illustrations. London.

Holt, R., 1988. The Mills of Medieval England. Oxford.

Martin, E. et al., 1991. 'Archaeology in Suffolk 1990', Proc. Suffolk Inst. Archaeol., XXXVII, 268–69.