Further Archaeological Evaluations at Sheep Lair Farm, Folksworth.

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1995

Cambridgeshire County Council
Report No. A61

Commissioned By the Department of Transportation, Cambridgeshire County Council.
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SUMMARY

In March 1995 an archaeological evaluation was carried out within OS Field 8776 (TL 1593/9059), Sheep Lair Farm, Folksworth in advance of the A1 road widening. Work was undertaken by the Archaeology Field Unit, Cambridgeshire County Council. The site lies to the south-west of the Norman Cross roundabout on the A1, North of Stilton. Geophysical survey detected a high magnetic anomaly which was interpreted as a possible kiln (Geophysical Surveys of Bradford 1994).

One 30 metre long trench and two test pits were excavated in the south-east corner of the field, within the road widening corridor to assess the archaeological potential of this magnetic anomaly. The trench was placed in the position of the anomaly, but revealed no trace of archaeology. The area was re-scanned with a fluxgate magnetometer in order to more accurately fix the location of this anomaly and a test-pit excavated to define the nature of this feature. Several artefacts, but no archaeological remains, were encountered.

The site is located on land which has surviving evidence of extensive 'Ridge and Furrow' cultivation. The topsoil and subsoil produced sparse amounts of post medieval, glazed cream ware and redware pottery, brick fragments, small fractured parts of bones from medium to large sized animals, a small quantity of metal working debris, and most significantly a large piece of iron slag. The slag has a distinctly globular surface which is clearly the result of prills of slag cooling on a part of one side. This is indicative of slag, formed below the tuyere, or air inlet, in a smelting hearth. The location of this distinctive smelting hearth bloom, in this area, suggests that this anomaly may mark the remains of a small scale smelting hearth, alternatively, the slag may represent a coincidental intrusion onto the site from elsewhere. Archaeological soil samples were analysed from the test pit located over the magnetic anomaly and were found to contain evidence of metal working. Given the importance of the Great North Road, and associated route ways for horse-born travel and droving, small scale smelting hearths were probably not uncommon.
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FURTHER ARCHAEOLOGICAL EVALUATION AT SHEEP LAIR FARM, FOLKSWORTH

1. INTRODUCTION

In March 1995 an archaeological evaluation was carried out in advance of road widening developments by The Archaeological Field Unit (AFU) of Cambridgeshire County Council on OS Field 8776, Sheep Lair Farm; Folksworth, which lies to the south-west of Norman Cross roundabout on the A1, Cambridgeshire (TL 159/905).

One 30m long trench, and two test pits, one 2m square and one 0.5 metre square, were excavated in the south-east corner of the field (Fig 1). The excavations were placed over and around an anomaly, identified by a fluxgate magnetometer survey carried out by Geophysical Surveys of Bradford (Ovendon 1994), which was believed to be a kiln.

2. GEOLOGY, TOPOGRAPHY AND LAND USE

The underlying geology is recorded as being Boulder Clay (British Geological Survey 1985), however, archaeological trenching identified Jurassic clay as being the underlying natural geology.

Norman Cross lies on the A1, approximately 9 km to the south of Peterborough, and 1.5 km to the north of the village of Stilton. The site lies at 30.00 m OD., slopes down to the south-west, and is presently used as pasture. The present A1 runs north/south 10 metres to the east of the site, and 65 metres east of the Trench 1.

The site is located within an area of extensive ‘medieval ridge and furrow’ cultivation remains.

3. ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

In 1993 the AFU excavated trenches through the Roman Agger of the Roman Road of Ermine Street to the north of Stilton, also within OS field 8776, at TL 1605/9042 (Kemp 1995). These excavations showed the road to be disturbed, these remains consist of two cobble layers overlying made-up ground. No roadside ditches were encountered.

Remnants of a medieval and post medieval landscape have also been recognised in the form of medieval agricultural remains, largely of ridge and furrow and headlands, with a possible hollow way lying on the eastern side of the Roman road (Pelling and Leith 1992, Kemp 1995)

Quarrying was also a major cause of landscape alteration during the post-mediaval period. This is reflected in earthworks to the south of the present site. References to gravel extraction occur in 1550 and again in 1821 and 1844 suggesting land
Figure 1  Location plan
alterations associated with the construction and maintenance of the Great North Road (Way 1995). The Great North Road was Turnpiked in the late seventeenth century, the course of which lies beneath the present A1. A toll house, associated with the turnpike, is known to have stood in the area (Kemp 1995).

Ogilbey's map of 1675 indicates that Ermine Street was certainly a major route way in the seventeenth century. However, Taylor (1979) demonstrated that during parts of the medieval period a more westerly course was preferred. Historical research indicates a single shift of route from the Roman road to the present alignment by 1821 (Way 1995). This probably occurred during the late seventeenth century when the Great North Road between Alconbury and Peterborough was turnpiked (Way, ibid).

Geophysical survey undertaken within this field (OS field 8776), recognised a series of high magnetic anomalies which may represent some form of industrial activity. As these features were not recognisable during the course of the earthwork survey it is probable that they represent archaeological activities dating prior to the transfer of arable fields to pasture which took place during the late seventeenth century. The possibility that these anomalies represent the remains of upstanding structures or features within or above the ploughsoil should not be ruled out.

4. METHODOLOGY

One 30m long trench, Trench 1, was machine excavated using a 1.6m wide toothless bucket. After de-turfing, the topsoil and subsoil from the trench was removed in 0.1m spits in order to reveal any potential archaeological features, without excessive disturbance of their structure. Any artefactual evidence uncovered by the mechanical excavator was retrieved and its position recorded. The sections and base of the trench were then cleaned up, photographed, and recorded.

As the trench failed to uncover anything which could have caused the geophysical anomaly, the area was quickly re-scanned with a fluxgate magnetometer and the anomaly located precisely, two metres from Trench 1. A 2m square test pit, Test Pit 1, was then excavated by hand over this anomaly. As no archaeological remains were uncovered, a one litre sample of topsoil was removed from this location for further investigation. This was air dried, broken down in a crucible and a magnet drawn over it to extract any ferrous material, which was then examined under a microscope.

An anomaly, which was identified as one of the several 'ferrous spikes' in the area by the geophysical survey, was investigated by removing a 0.5 metre square of turf from over it (Test Pit 2), and the topsoil carefully removed down to the subsoil. Several artefacts were removed for further analysis.
5. RESULTS

5.1 Trench 1

The generally stone free sandy clay loam topsoil averaged 0.2m in depth, and lay on 0.2m of sandy clay subsoil which contained occasional fragments of sandstone. This context overlay a 0.4m band of stone free silty clay which in turn lay on a distinctive bed of hard clay.

The topsoil and subsoil produced a sparse amount of post medieval, glazed cream ware and redware pottery, brick fragments, small fractured parts of bones from medium to large sized animals, and most significantly a large piece of iron slag.

This tapering, well formed piece of slag, measures 0.10m long, 0.8m at its widest point, is approximately 0.7m thick and weighs 399 grammes. It generally has an axial symmetry and has the appearance of being complete, with a faced surface on its thickest end which has remains of mortar or silica from the walls and/or the floor of the hearth attached to it. Below this is a distinctly globular surface on the underside which is clearly the result of prills of slag cooling on its lowest side.

Three pipelines of early ceramic field drains were uncovered, one in the base of each of the furrows, which the trench dissected. Each section of pipe is circular, measures 0.32 long, 0.7m in diameter, and has walls 0.1m thick. The pipes are crudely formed with evidence of distortion in both width and length. No cut could be seen associated with any of these pipelines.

No other features were apparent in the trench other than those directly associated with the rise and fall of the ridge and furrow cultivation.

5.2 Test Pit 1

The soils in this test pit were very similar to those in the nearby trench in that they had the same composition and inclusion content.

The topsoil and subsoil once more produced a variety of post medieval artefacts and one sherd of Romano-British pottery. The former took the form of white, and blue and white, glazed cream ware, glazed and unglazed redware, salt glazed grey ware, a piece of early post-medieval tile, several sherds of glass, one very badly abraded and corroded, and brick fragments. The dateable artefacts appear to be from the late eighteenth or early nineteenth century.

The Romano-British sherd is of a sandy orange ware and is very badly abraded. A rib bone from a medium sized to large animal was also uncovered.

The soil sample revealed minute traces of iron which could be seen to be very hot when formed, as its surface was either globular or rippled with pit-like depressions. Others included rounded, wire like strands, smaller than a human hair, which could only be formed whilst in a molten state. This evidence therefore suggests the working of hot metal.

5.3 Test Pit 2

Only the topsoil was removed from this test pit as the object which had caused the 'ferrous spike' on the geophysical survey soon became apparent.
Just below the surface of the turf, above the subsoil, lay a spread of artefacts. These included, a horse shoe with downward turning lips at the rear, several unused horse shoe nails, what appears to be a three quarter ounce weight from a 'typical kitchen type conical set', and three sherds of a metallic glazed, thin walled vessel. More interestingly, the same test pit revealed three pieces of clinker, several pieces of unburnt coal of a uniform size (approximately two centimetre rough cubes), a small piece (approximately 3cm x 1cm x 1cm), of iron which has been chopped with a chisel when hot, and what appears to be one bent horse shoe nail clipping from a farrier's waste.

6. INTERPRETATION

The ceramic field drains were laid down in approximately the early nineteenth century in an attempt to drain the clay soil.

The lack of any distinctive feature which could be seen to correspond to the geophysical anomaly noted on the fluxgate gradiometer survey, suggests that the anomaly existed in the topsoil itself.

The large piece of iron slag, found in the centre of Trench 1, appears to be a complete example of a slag, formed below the tuyere, or air inlet, in a smithing hearth.

The collective evidence of;

a distinctive smithing hearth bloom,
a large geophysical anomaly, apparently in the topsoil, associated with several 'ferrous spikes',
the piece of iron, chopped whilst hot,
the evidence of hammer scale and fragments of molten metal,
the unused and used horse shoe nails,
the horse shoe dating from the eighteenth or early nineteenth century,
the clinker and unburnt coal,

indicates the presence of a farrier's or blacksmith's smithing hearth, although the lack of any structural evidence in the vicinity may suggest that this was an open or temporary structure. Judging by the associated, predominantly late eighteenth/early nineteenth century, pottery it appears that the remains probably date to this period.

On another part of the geophysical survey, in an adjacent field 200m to the north of the site, another very similar anomaly can be seen inside what appears to be a small enclosure ditch. This also appears to be filled with magnetically enhanced material. Approximately 20m to the south of this feature there appears to be a very large anomaly which is made up of ferrous material. If these anomalies were found to belong to industrial processes similar to those presently investigated, they would suggest extensive smithing activity in the area during the eighteenth to nineteenth centuries.
7. CONCLUSION

Although the evidence is non conclusive, it does appear that the site was occupied by a smith or farrier at the same time as the military occupation at the cross roads, that is, in the Napoleonic War period around the turn of the nineteenth century. These took the form of barrack blocks, a prisoner of war camp and a military cemetery. The similarity between the two geophysical anomalies within such a small area should be noted as they may be the result of the comparable activities.

ACKNOWLEDGEMENTS

The author would like to thank the land owners, J and J.M. Blackman, for permission to work on the site, and the Transportation Department of Cambridgeshire County Council for the funding of this work. Thanks must also go to Steve Kemp for his support, Geophysical Surveys of Bradford, Alice Pyper and Richard Helm who aided in the on site excavations, and Melodie Paice for the illustrations.

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