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**Shardlow Quarry,
Derbyshire, 2000:
Surface Collection**

Birmingham University Field Archaeology Unit



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1996

Birmingham University Field Archaeology Unit
Project No. 691
April 2000

**Shardlow Quarry, Derbyshire, 2000:
Surface Collection**

by
Gary Coates
with contributions by Lynne Bevan & Annette Hancocks

For further information please contact:
Simon Buteux, Iain Ferris or Gwilym Hughes (Directors)
Birmingham University Field Archaeology Unit
The University of Birmingham
Edgbaston
Birmingham B15 2TT
Tel: 0121 414 5513
Fax: 0121 414 5516
E-Mail: BUFAU@bham.ac.uk
Web Address: <http://www.bufau.bham.ac.uk>

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Summary

Systematic surface collection of artefacts was undertaken on a site of approximately 65 hectares at Shardlow Quarry, Derbyshire (centred on SK 420 280) in advance of development proposals. Finds of prehistoric flint may be associated with activity on the site dating from the Later Mesolithic to the Early-Late Bronze Age. A dispersed scatter of medieval and post-medieval pottery sherds may be attributed to manuring and activity during the construction of the Trent and Mersey canal.

Introduction

The following report details the results of archaeological fieldwork at Shardlow Quarry, Shardlow, Derbyshire (centred on NGR SK 420 280). The work, commissioned by Phoenix Consulting on behalf of the clients, Hanson Aggregates, consisted of systematic fieldwalking and surface collection of artefacts from the ploughsoil. This was undertaken by Birmingham University Field Archaeology Unit during April 2000.

The fieldwork was designed to provide archaeological information to assist the local planning authority in determining a planning application for minerals extraction.

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Site Location (Fig. 1)

The site consists of approximately 65 hectares of fields, approximately half of which are under permanent pasture, with the remainder being used for arable farming. The site is c.1km south of the village of Aston Upon Trent. The Trent and Mersey canal defines the eastern side of the site and the River Trent the southern and western sides. The present quarry workings border the north of the area. A railway line, running east-west, dissects the site, as do several overhead power lines.

The topography of the land is flat and the drift geology is river terrace gravels below coarse loamy soils.

Archaeological Background

The area to the north of the application site is rich in recorded cropmarks, of which few have been evaluated or excavated, originally identified through aerial photographic surveys carried out by J. K. St. Joseph, J. Pickering and D. Riley (Powell 1992, 2).

The most notable of these features is the Aston Cursus, Derbyshire Scheduled Ancient Monument No. 185. This was defined by two parallel ditches aligned south-west to north-east for a length of over 1.8km, with a squared south-western terminal, but no apparent north-eastern end (*ibid.*). Comparison with other cursus monuments suggests a date of construction in the Middle Neolithic (c. 3700 – 2900 BC) (Loveday 2000, 438) and they are interpreted as having a ritual function as gathering places, often in areas of woodland clearance (Whittle 1999, 72).

In the absence of excavation it is difficult to determine whether other cropmark features apparently associated with the cursus are contemporary. A triple ring ditch, to the north-east of the cursus, was excavated by Trent and Peak Archaeological Trust and principally dated to the Early Bronze Age, although there was evidence of both earlier and later activity (Knight 1998, 32). Approximately 2km north of the village of Aston-on-Trent, excavations in advance of the A564(T) at Foxcovert Farm sampled features associated with a small Iron Age settlement (Hughes 1995, 10).

The area therefore has a high concentration of prehistoric archaeology, which is likely to extend into the site, reflecting the fact that gravel terraces are renowned for occupation and early activity by the first farmers.

Some of the cropmark features may relate to Romano-British, or later, agricultural landscapes, rather than prehistoric features and there is certainly evidence of medieval ridge and furrow within and in the vicinity of the site. This suggests a continued use of the site principally for agriculture over several millennia, which was probably only interrupted with the completion of the Trent and Mersey canal in 1775 and the later construction of the railway line.

Objective

The objective of the surface collection was to provide information to help determine the nature, extent, character and date of any potential archaeological features present on the site.

Methodology

Initially, 100m² grids were laid out using a Nikon Total Station E.D.M., and surveyed into the national grid. These were then divided into 20m intervals. Surface collection was carried out along 20m transects and 20m stints. Modern artefacts, including brick and tile, were not collected, but their presence was noted. All other finds categories were collected.

Half of the site had been ploughed and sown with a crop of winter wheat prior to the field walking, which had grown to a few centimetres high. Approximately 5ha had been ploughed and left as set-aside; the remainder was under permanent pasture and not suitable for field walking. Conditions under foot were generally good as the sandy topsoil had been subject to prolonged weathering. The weather conditions were mixed, alternating between wintry showers and dry periods. In general, conditions were not ideal for fieldwalking.

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Results

The finds were quantified by occurrence only (Table 1) and sorted into the following groups: humanly struck flint, medieval and post-medieval pottery, post-medieval brick, tile, vessel glass and clay pipe and miscellaneous finds (small quantities of slag and iron).

Find type	Quantity
Flint (flakes)	8
Flint tools	1
Flint cores (blade and flake)	7
Flint struck chunk	1
Medieval pottery	31
Post-medieval pottery	301
Clay pipe	12
Post-medieval tile/brick	112
Post-medieval vessel glass	56
Miscellaneous	20

Table 1: Summary of finds recovered by surface collection

Figures 2 and 3 provide distribution plots of the worked flint and medieval pottery respectively.

The flint by Lynne Bevan (Fig 2) – The assemblage consisted of 17 items of humanly-struck flint comprising one scraper, six cores and a core fragment, eight flakes and one struck chunk (Table 1).

Based upon the thin compacted remnant cortex visible on most of the fragments, the material used was pebble flint from a secondary source, probably local river gravels or boulder clay deposits. With the exception of the unusually large randomly flaked core, which also exhibited remnant pebble cortex (1960/8460), the flints were small in size. A high incidence of hinge fractures on the blade cores, large crystalline inclusions visible on the largest of the flakes (2100/8320) and the struck chunk (2320/8700) suggest that the flint was of an unpredictable quality. Good quality flint might have been at a premium in the area. Resource stress is also indicated by the fact that all of the blade cores have been worked beyond their apparent usefulness. The flint was in a fresh condition, generally translucent, and ranged in colour from light grey and beige to medium grey and brown. Only a few pieces were re-corticated to any extent.

Due to a lack of chronologically diagnostic artefacts, few elements of this small assemblage are datable, with the exception of the four blade cores, which could be of either Later Mesolithic or Early Neolithic date. The rest of the assemblage appears to be much later in date, based upon the flake cores, especially the one made from a split pebble (2120/8520) which is typical of later prehistoric exploitation of pebble flint (Bevan 1995, Fig. 10:8, 9, 35-36). The generally broad, squat shape of the waste flakes is also indicative of a later prehistoric date (Pitts 1998). While scrapers are not generally datable tools, the example identified (2020/8380), which has been steeply

flaked from the dorsal face and worked around its total circumference, would not look out of place in a Beaker assemblage, although an earlier date cannot be ruled out.

The medieval pottery (Fig 3) – A small scatter of 31 medieval oxidised sandy sherds was recognised. The ceramics were unabraded. Diagnostic material comprised a single base and two rims. Some of this material was decorated with a splashed green glaze. This is indicative of a late 13th/14th century date. The distribution centred on the north-western edge of the fieldwalking boundary.

The post-medieval pottery – A total of 301 sherds of post-medieval pottery was recovered from surface collection. The range of pottery recovered includes blackwares, creamwares, willow pattern, stoneware, yellow ware, manganese ware, slipware, trailed slipware and tin-glazed earthen wares. No clear patterns emerged from the plotted data. The distribution of material appears to represent periods of manuring of fields or perhaps rubbish associated with the construction of the Trent and Mersey canal.

Other finds – A small quantity of other post-medieval finds, including vessel glass fragments, iron nails and brick/tile were also recovered. The presence of this material was deemed not to add anything of further significance to the overall interpretation of the post-medieval material.

The finds and archive are currently stored at Birmingham University Field Archaeology Unit, prior to arrangements being made for deposition with Derby Museum. The finds archive consists of a single box of finds.

Conclusions

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A scant, episodic use of the landscape is suggested by the small flint assemblage, which does not denote the presence of settlement of any duration. However, some degree of Later Mesolithic/Early Neolithic activity, involving flint-knapping, is indicated by the presence of the four blade cores. The rest of the assemblage is probably later, dating to the Later Neolithic/Early-Late Bronze Age, and there is no reason to suggest that any of the elements were contemporary with each other.

No overall pattern was evident from the distribution of medieval pottery sherds. It is probable that the scatter of both post-medieval and medieval pottery is associated with the common medieval/post-medieval practice of manuring.

Given the very low numbers of pre-18th-century finds recovered, the study area would appear to have a low archaeological potential. However, the recovery of prehistoric flint artefacts combined with the nearby evidence of prehistoric activity would imply the possible presence of prehistoric features on the site. One also has to take into consideration the limitations of this evaluation technique, especially in conditions that are not ideal.

Acknowledgments

The fieldwork was carried out by Gary Coates, Mary Duncan, John La Niece and Leslie Mather. The finds were processed by Erica Macey and identified by Annette Hancocks, with the exception of the worked flint, which was identified by Lynne Bevan. Figures were prepared by Sally Exon, Annette Hancocks and Sarah Watt. The report was edited by Simon Buteux.

The project was monitored by Dr. Andrew Richmond from Phoenix Consulting, on behalf of the clients, Hanson Aggregates.

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Figures

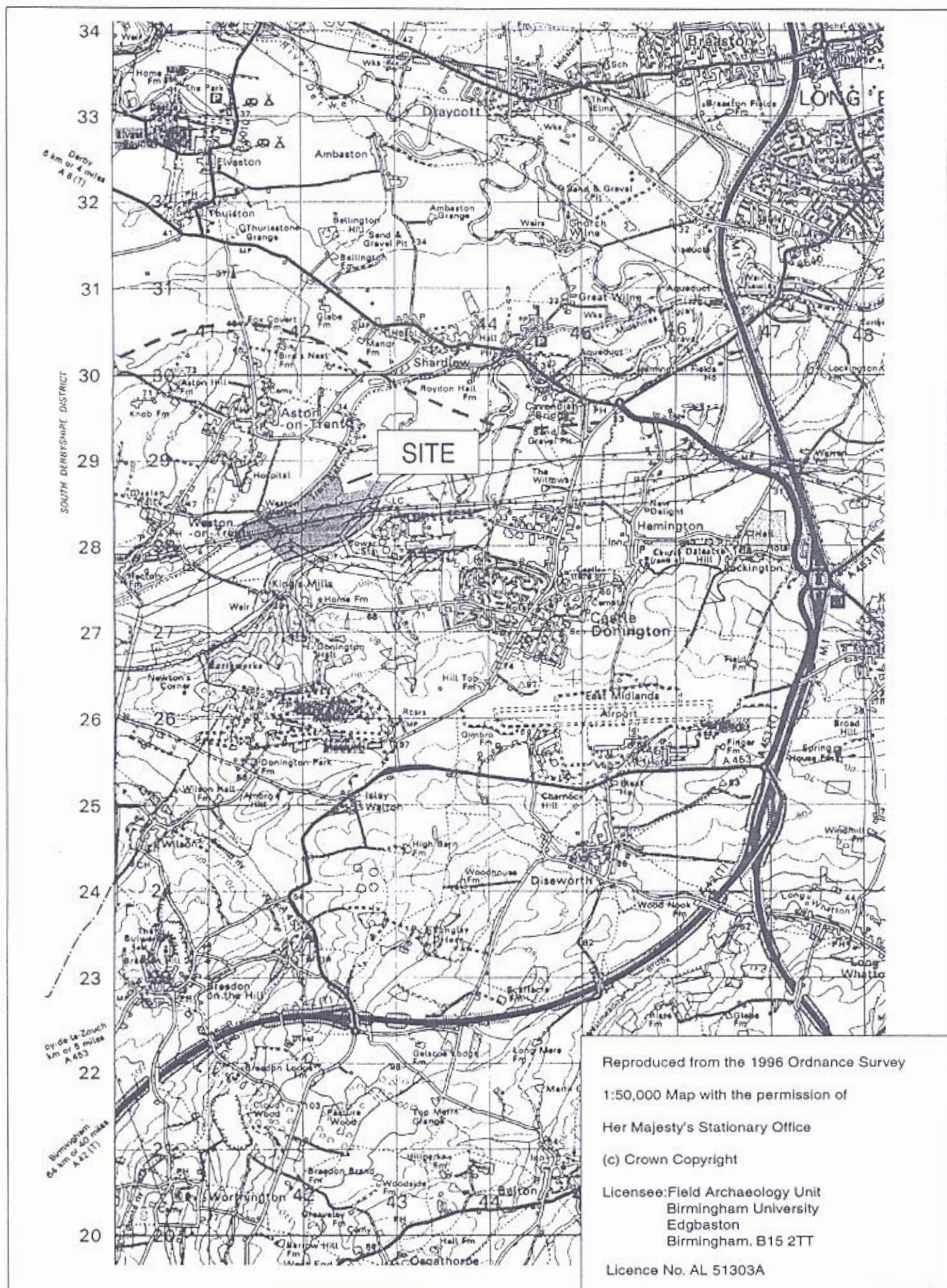


Figure 1

Figure 2 Shardlow: Flint distribution



Figure 3 Shardlow: Medieval pottery distribution

