

**WHERE RIVERS MEET:**

**Landscape, Ritual, Settlement and  
the Archaeology of River Gravels**

**CHAPTER 6  
CATHOLME RITUAL LANDSCAPE  
GROUND TRUTHING PROJECT 2004**

Aggregates Levy Sustainability Fund

**Project No. 1214**  
April 2005

**WHERE RIVERS MEET:**

**Landscape, Ritual, Settlement and the  
Archaeology of River Gravels**

**CHAPTER 6**

**CATHOLME RITUAL LANDSCAPE GROUND TRUTHING PROJECT 2004**

Aggregates Levy Sustainability Fund

By

K. Bain, S. Buteux, E. Hancox, M. Hewson

With contributions by

L. Barfield, R. Bracken, R. Ixer, E. Macey-Bracken, S. Rátkai, & A. Woodward

*For further information please contact:*

Birmingham Archaeology  
The University of Birmingham  
Edgbaston

Birmingham B15 2TT

Tel: 0121 414 5513

Fax: 0121 414 5516

E-Mail: [bham-arch@bham.ac.uk](mailto:bham-arch@bham.ac.uk)

Web Address: <http://www.barch.bham.ac.uk/bufau>

# CONTENTS

## SUMMARY

1.0	INTRODUCTION .....	2
2.0	SITE LOCATION .....	6
3.0	ARCHAEOLOGICAL BACKGROUND .....	6
4.0	AIMS AND OBJECTIVES .....	7
4.1	Summary of project aims.....	7
5.0	METHODOLOGY .....	8
6.0	RESULTS.....	9
6.1	Introduction to Results.....	9
6.2	Area A1 .....	9
6.3	Area A2 .....	10
6.4	Area B1.....	11
6.5	Area B2.....	11
6.6	Area F1 .....	14
6.7	Area F2.....	14
7.0	THE ASSESSMENT.....	15
7.1	Stratigraphic Data.....	15
7.2	Quantification .....	15
7.3	The Pottery (Dr Ann Woodward).....	16
7.3.1	Area B2, F100.....	16
7.3.2	Statement of potential .....	16
7.3.3	Methodology.....	17
7.4	The sieved artefacts – spot dating (S. Ratkai).....	17
7.4.1	Comments .....	17
7.5	Flints: A preliminary assessment (L. H. Barfield).....	19
7.6	Charred Plant remains (Dr. James Greig).....	20
7.6.1	Objectives .....	20
7.6.2	The site.....	21
7.6.3	Samples.....	21
7.6.4	Laboratory work.....	21
7.6.5	Results.....	21
7.6.6	Conclusions .....	22
7.7	Other finds (Erica Macey-Bracken).....	24
7.7.1	Ceramic Tile and Brick.....	24
7.7.2	Animal Bone (Emma Hancox) .....	24
7.7.3	Glass (Robert Bracken) .....	24
7.7.4	Iron .....	25
7.7.5	Stone (identifications by Dr. Rob Ixer).....	25
7.7.6	Other Finds.....	25
8.0	UPDATED PROJECT DESIGN .....	25
8.1	The 2004 Catholme excavations.....	275
8.2	Further specialist analysis required for Catholme 2004 excavations.....	277
8.3	Integration of Catholme 2004 results into the wider results of the Where Rivers Meet Project.....	277
9.0	PUBLICATION .....	27
9.1	Publication synopsis .....	278
9.2	Contributors to the publication .....	30
9.3	Publication format .....	30
10.0	TASK LIST .....	30
11.0	PROJECT MONITORING POINTS.....	32
12.0	ACKNOWLEDGEMENTS.....	32
13.0	REFERENCES .....	33

## FIGURES

Figure 1.	Site location.
Figure 2.	Focus Area.
Figure 3.	Location of excavation areas.
Figure 4.	Area A1.
Figure 5.	Area A2.
Figure 6.	Area A2. Plan of post-pits.
Figure 7.	Area B1.
Figure 8.	Area B2.
Figure 9.	Area F1.
Figure 10.	Area F2.
Figure 11.	F100 – the central burial.
Figure 12.	Sections.

## TABLES

Table 1.	Quantification of the Paper Archive
Table 2.	Quantification of the Excavation Finds Archive
Table 3.	Artefacts from sieving exercise
Table 4.	Results from the flots

## PLATES

Plate 1.	F209.
Plate 2.	F224.
Plate 3.	F234.
Plate 4.	Area B2. Pre-excavation.
Plate 5.	F100.
Plate 6.	Sieving exercise Area B2.

## APPENDICES

Appendix 1.	An archaeological gazetteer of the <i>Where Rivers Meet</i> Study Area
Appendix 2.	Archaeological synthesis
Appendix 3.	Bibliography for <i>Where Rivers Meet</i> Study Area
Appendix 4.	Project programme
Appendix 5.	Project budget

**Where Rivers Meet:  
Landscape, Ritual, Settlement and the Archaeology of the River Gravels  
at the Confluence of the Rivers Trent and Tame**

**Catholme Ritual Landscape Ground Truthing Project 2004:  
Post-Excavation Assessment and Updated Project Design**

By

K. Bain, S. Buteux, E. Hancox and M. Hewson

With contributions by

L. Barfield, R. Bracken, R. Ixer, E. Macey-Bracken, S. Rátkai and A. Woodward

***SUMMARY***

*Birmingham Archaeology undertook a ground truthing exercise and archaeological excavation at Catholme Farm, Catholme, Staffordshire (NGR SK196416) from August to October 2004. This was undertaken as part of a wider research project, the Where Rivers Meet project, funded by the Aggregates Levy Sustainability Fund (ALSF) and concerned with making a study of the surviving archaeological resource at the confluence of the Trent and Tame rivers in southeastern Staffordshire.*

*In March 2004 the main phase of non-intrusive work was completed. This comprised a number of elements: Palaeofluvial Analysis, Hydrogeological Modelling, GIS-based landscape modelling, including LiDAR, multi-technique geophysical survey of the monuments, a synthesis of the archaeological data and a discussion document for the management of the landscape. On the basis of the results of this work, six target areas were selected for ground truthing. These were located over potential surviving remnants of prehistoric ritual monuments. Archaeological remains associated with the prehistoric ritual landscape were identified in four of the excavated areas.*

*In Area B2, a ring ditch with radiating pit alignments (termed a 'sun burst' monument), previously known only from aerial photography, was exposed following the removal of topsoil. Although the radiating pits were not uncovered during the excavation, the ditch, which had in a later phase been re-cut, was visible in its entirety. A number of small features were identified within the ring ditch. An ovoid pit was excavated at its centre which contained numerous fragments of incised Beaker pottery and some worked flint. This pit was interpreted as the surviving remains of an inhumation, although no human remains were recovered, due most likely to the soil conditions.*

*In Area A1, part of a pit alignment was identified. This had also previously been identified in aerial photographs and as a geophysical anomaly. In total six closely spaced pits measuring up to 2.84m in diameter were exposed and excavated. These were found to contain several distinct deposition layers, although no artefacts were recovered.*

*In Area A2 a feature comprising a series of five concentric rings of circular pits was partially exposed. Again the area was located on the basis of the evidence of aerial photographs. This monument had not been identifiable in the initial geophysical survey despite the clarity of the crop marks. Each of the excavated pits had steep, near vertical sides and measured between 0.7m and 1.23m in depth. One example contained what appeared to be the degraded and burnt remains of a wooden post. Two other pits also contained evidence of a post in the form of staining. It is likely that many if not all the pits once held an upstanding post, and as such this monument can tentatively be termed a 'woodhenge'.*

*In Field F, a second ring ditch was selected for excavation. This feature had previously been identified in aerial photographs and by means of geophysical survey. Only a small section of the 50m diameter ring ditch was exposed during the excavation in Area F1. It proved to measure over 2.0m wide and clearly had been re-cut in a later phase. Two linear features were also located converging towards the ditch. These pre-dated the ring ditch, having been truncated during the ditch's primary construction phase. Area F2 contained a number of insubstantial features which were situated within the ring ditch. These had previously been located by geophysical survey and were shallow, irregular pit-like features, perhaps remnants of tree root activity or changes in the natural subsoil.*

*Over all the excavated areas both medieval ridge and furrow and modern plough scarring was evident at the upper horizon of the surviving archaeology and the natural gravel surface.*

*This report provides a detailed assessment of the results of the 2004 ground truthing excavations and provides an updated project design for further analysis and publication. The proposed publication will set the results of the 2004 Catholme excavations in the context of the wider research carried out by the Where Rivers Meet project, thus providing an account of the full archaeological outcomes of the Where Rivers Meet project.*

## **1.0 INTRODUCTION**

The Where Rivers Meet project comprises a study of the archaeological resource at the confluence of the Trent and the Tame rivers in southeastern Staffordshire (Figs 1 and 2). This is one of the most intensively quarried landscapes for aggregate extraction in the country. It also contains a remarkable archaeological record, beginning with well-preserved megafauna from the Late Pleistocene and including a Neolithic/ Early Bronze Age ritual landscape, an Iron Age and Romano-British settlement landscape, and an extensive Anglo-Saxon settlement and cemeteries. Most of our knowledge of these landscapes has arisen as a consequence of archaeological work undertaken in the context of aggregate extraction.

The overall project study area measures 6km by 12km (72km<sup>2</sup>) – this is termed the 'Full Area'. Within the Full Area a smaller 'Focus Area', covering 235ha of land, has been

designated at the physical confluence of the Trent, Tame and Mease rivers, at Catholme Farm (Fig. 2). The Focus Area contains an important concentration of monuments, revealed as crop marks by aerial photography and believed to comprise a complex of ritual monuments of Neolithic/ Early Bronze Age date. These monuments include a 'woodhenge'-type monument consisting of multiple rings of postholes, a 'sunburst' monument consisting of a central ring ditch with radiating pit alignments, and a very large ring ditch with apparently associated linear features. These monuments, together with a series of smaller ring ditches, a possible cursus and a series of pit alignments, are collectively termed the 'Catholme Ceremonial Complex'.

The Where Rivers Meet ALSF project had two main phases. The first phase, in 2002-4, comprised an analysis of the whole archaeological landscape (the 'Full Area') at the confluence of the Trent and Tame Rivers.

This phase of work involved six principal elements:

- Palaeofluvial analysis
- Hydrogeological modelling
- A gazetteer and synthesis of the archaeology
- GIS-based digital landscape modelling, including LiDAR data
- Extensive multi-technique ground-based geophysical survey
- Preparation of a management plan discussion document.

This resulted in six reports, currently unpublished.

The second phase of work, in 2004, comprised detailed fieldwork at the 'Catholme Ceremonial Complex', the complex of Neolithic/Early Bronze Age ritual monuments (mostly scheduled) lying within the 'Focus Area'. This phase involved the 'ground truthing' of geophysical survey data, with the aim of achieving a better understanding of the relationship between geophysical survey results and buried remains. In essence, the work involved sample excavation of four monuments accompanied by detailed investigation of the geophysical and sedimentological properties of the deposits. This work resulted in a further four reports (all 2005), currently unpublished.

- A site narrative, post-excavation assessment and updated project design for the 'conventional' archaeological results of the partial excavation of four important prehistoric monuments (Kate Bain, Emma Hancox and Mark Hewson, Birmingham Archaeology). The present document is a revised version of this report, which proposes publication of the archaeological results of the excavations in the context of a book of wider scope, including a summary of the archaeological outcomes of the whole *Where Rivers Meet* project.
- A report on the very detailed and intensive geophysical survey work which accompanied these excavations (Meg Watters)
- A geophysical report on the magnetic properties of the deposits (Mark Hounslow and Vassil Karloukovski, University of Lancaster).

- An analysis of the geoarchaeology of the deposits at Catholme, relating the geophysical properties of the deposits to soil properties and formation processes (David Jordan, Terra Nova)

Taking a broader view of the outcomes of both phases of the *Where Rivers Meet* project, it can be seen that these outcomes fall into three broad categories that may be called for convenience the ‘archaeological outcomes’, the ‘scientific outcomes’ and the ‘management outcomes’. These outcomes may be defined as follows:

‘Archaeological outcomes’. These are the outcomes of the project that contribute to a much fuller understanding than has been hitherto possible of a very rich archaeological landscape. These outcomes include an understanding of the geomorphological development of the landscape (palaeofluvial analysis, LiDAR, digital landscape modelling) and, closely related to this, the cultural development of the landscape (results of excavations on the Catholme Ceremonial Complex and results of earlier excavations in the wider *Where Rivers Meet* landscape as synthesised by the project). Virtually all of these earlier excavations have been carried out in the context of aggregation extraction, both pre-PPG16 ‘rescue’ excavations and post-PPG16 ‘mitigation’ investigations.

‘Scientific outcomes’. These are the outcomes of the project that contribute to a better understanding of the effectiveness and applicability of archaeological prospection and evaluation techniques, both within the specific landscape studied by the project and more widely. Further development of these outcomes needs to be set within the broader context of related research carried out by other ALSF projects and is not dealt with here.

‘Management outcomes’. Both the ‘archaeological outcomes’ and the ‘scientific outcomes’ of the project suggest ways in which the archaeological management of this landscape might be improved in the future, and contribute to ongoing discussion and research into management approaches to similar landscapes. Again, these outcomes are not dealt with here.

While these three categories of outcomes are interrelated, they are also to a considerable extent distinct and address different audiences. The ways in which these outcomes are developed and disseminated needs to reflect this distinction.

This document is concerned only with the development of the first of these categories, the ‘archaeological outcomes’, and the publication these archaeological results. The other two categories of outcomes are being pursued by other routes.

Essentially, what is proposed here is a publication, in an attractive book format with considerable use of colour, which combines appropriate publication of the results of the 2004 excavations on the monuments of the Catholme Ceremonial Complex with an overview of the whole evolution of the archaeological landscape from the Pleistocene through to the early medieval period. This represents a larger and more wide-ranging publication than just a report on the results of the 2004 Catholme excavations, as proposed in the earlier updated project design (Bain et. al. 2005). This publication will of

course draw on the ‘scientific outcomes’ of the project, but only insofar as these contribute to an understanding of the development of the landscape, and not as an end in themselves.

The justification for a publication of this scope may be summarised as follows:

- It will make the archaeological results of the Where Rivers Meet project, including the 2004 Catholme excavations, available to the widest possible audience.
- It will synthesize the results of many disparate excavations and investigations, nearly all of which were carried out in the context of aggregate extraction, but which are at present scattered through diverse literature, comprising both journal and monograph reports and ‘grey literature’.
- Such synthesis falls outside the remit of the publication of either pre-PPG16 ‘rescue’ archaeology reports or post-PPG16 ‘mitigation’ reports. However, such regional synthesis of archaeological work arising as a consequence of aggregate extraction is an important area in which the ALSF may contribute to realising the full benefit of work carried out in the context of quarrying over more than four decades.
- The archaeological results on which the synthesis will draw are of great interest and quality, although in general poorly known, in part because ‘buried’ in diverse and sometimes comparatively obscure literature. They range from the various excavations (Neolithic to Roman) carried out at Fisherwick in the 1960s and 70s, to the major excavations carried out at Whitemoor Haye quarry from the 90s through to the present (again mainly Neolithic to Roman), and include both the 2004 excavations on the Catholme ritual monuments and the very important Anglo-Saxon settlement at Catholme (recently published: Losco-Bradley and Kinsley 2002).
- Much added value is given to this synthesis by the results of the geomorphological and digital landscape analysis carried out by the *Where Rivers Meet* project, this analysis providing the basic framework upon which the synthesis will be built.

In addition to the synthesis of archaeological results from previous excavations, the work will include further primary analysis required on the material from the 2004 Catholme Ceremonial Complex excavations. This latter comprises:

- Further assessment and possible analysis (if justified by the assessment) of palaeoenvironmental samples.
- Identification of carbonised wood remains.
- A programme of radiocarbon dating on the remains of posts from the ‘woodhenge’ monument and features of the ‘sun burst’ monument.
- Specialist analysis of prehistoric ceramics and lithics.

Sections 2.0-7.0 of this report provide a narrative and assessment of the results of the 2004 ground truthing excavations. Sections 8.0-11.0 provide an updated project design

(UPD), publication synopsis, task list and monitoring points for work leading to publication of the archaeological outcomes of the *Where Rivers Meet* project, including a fully detailed report on the 2004 excavations.

## **2.0 SITE LOCATION**

The site (centered on NGR SK 197163) lies approximately 1.5km to the southeast of the village of Barton-under-Needwood and is bounded to the east by the Birmingham to Derby railway (Fig. 1). It lies on a sand and gravel terrace on the west bank of the River Trent, just north of its confluence with the River Tame.

## **3.0 ARCHAEOLOGICAL BACKGROUND**

The focus of this landscape would appear to lie at Catholme Farm on the extensive river terrace immediately to the north of the confluence of the two rivers. The cluster of monuments here has been termed the ‘Catholme Ceremonial Complex’, but further monuments spread out to the west and south up the valleys of the Trent and Tame, making the Catholme complex a focus for a more diffuse ritual landscape.

The most easily recognised component of this ritual landscape is a large number of ring ditches, generally interpreted as the ploughed out remains of Bronze Age round barrows, together with a few such barrows still surviving as earthworks. There are more than 90 examples of such ring ditches/barrows spreading up the river valleys from the confluence. On a regional scale, this forms the most significant lowland concentration of known and probable barrows in the middle and upper Trent basin (Vine 1982, 289: Map AF).

The principal monuments of the Catholme Ceremonial Complex are afforded statutory protection as scheduled ancient monuments (SAMs). No previous excavation has taken place within the scheduled areas and the monuments have not been affected directly by sand and gravel extraction. However, extensive quarrying has taken place in adjacent areas, accompanied by archaeological investigations, which have, for example, revealed Neolithic/ Early Bronze Age ritual monuments and a major Anglo-Saxon settlement (Losco-Bradley and Kinsley 2002).

Whilst the majority of archaeological investigation has been associated with quarrying in the local area, other development has impacted on the archaeological resource. Just to the north of the fields containing both the ‘woodhenge’ and the ‘sunburst’ monuments, a development for an industrial estate revealed the remains of a ring ditch with central cremation and a substantial pit alignment. Both of these monuments were known from cropmark evidence and were excavated by Birmingham University Field Archaeology Unit in 2001 (Neilson 2002). An archaeological evaluation in advance of possible development was undertaken in 1999 immediately adjacent to the scheduled areas associated with SAM 21679 and SAM 216 (Hughes & Coates 1999). All 22 trenches

were located outside the areas protected by scheduling, so did not investigate the monuments themselves. Pits belonging to two pit-alignments were, however, exposed and sample excavated but no dating evidence was obtained.

In addition to the Neolithic/ Early Bronze Age ritual landscape, Catholme is also significant, as noted above, as an area of Anglo-Saxon settlement. The evidence for the Anglo-Saxon period in the study area is dominated by the excavation of the 7<sup>th</sup>-9<sup>th</sup> century settlement (Losco-Bradley and Kinsley 2002). Catholme is one of very few early medieval rural settlements in England to be excavated on a large scale, making it a site of national importance. It is exceptional in several respects, including its long-lived stability, its layout and its organisation around a system of enclosures and trackways. Sixty-five buildings were excavated, which cannot unfortunately be easily divided into well-defined phases, perhaps representing only about half of the settlement, which clearly extended into unexcavated areas to the southwest, west and northwest. The only contemporary settlement to have been excavated in the vicinity is at Willington in Derbyshire (Wheeler 1979), some fourteen miles away, but this excavation was on a much smaller scale.

## **4.0 AIMS AND OBJECTIVES**

### **4.1 Summary of project aims**

The principal aim of the ground truthing project was to:

- Further understand the relationship between the remote sensing survey data collected by the *Where Rivers Meet* project and below-ground archaeology and soil properties, as a means to enhance the interpretation of survey results and as a guide to future practice.

Secondary project aims were:

- Characterisation of the archaeology of the Focus Area in terms of preservation, date and significance.
- Evaluation of alternative geophysical techniques and methods (including data processing) to those employed in the initial Focus Area survey.
- Isolating factors which have affected preservation of archaeological remains in the past and assessing the effects of future land-use regimes on preservation (particularly in relation to hydrology).
- Obtaining appropriate samples for scientific dating and palaeoenvironmental reconstruction.
- Using all of the above to contribute to the existing GIS-based geoarchaeological model of the Focus Area.
  - Using all of the above to contribute to an archaeological research strategy and historic environment management plan for the Full Area. This plan will include recommendations on appropriate methodologies (sampling strategies, *etc*) for future work in the Full Area (and further afield) and will assist in the preparation of briefs.

## 5.0 METHODOLOGY

The Focus Area covers 235 hectares, with the excavation areas located within the three fields that had been subjected to the most intensive remote sensing survey, Fields A, B and F (Fig. 3). In total six target areas were stripped of overburden by mechanical excavator fitted with a toothless ditching bucket and were subsequently hand excavated. The position of the areas was located by a combination of rectified aerial photographs showing crop marks and remote sensing information (Fig. 3).

Each area was chosen for its unique characteristics, based on the combined evidence of these surveys. Two areas in each of the three fields were excavated, measuring 10m x 10m and 20m x 10m respectively. Each was located and plotted using a Leica GPS system (see Appendix 1). The topsoil and subsoil were stored in separate, sealed bunds on site. Should a significantly distinct subsoil sealing the archaeology have been encountered, a further intensive remote sensing survey would have been undertaken. This proved not to be necessary and the topsoil was machined off down to the uppermost horizon of surviving archaeology.

In Areas A2 and B2 a strip of overburden measuring 1.0m x 10m was left *in situ*, then subsequently removed manually and hand sieved. The sieving exercise was performed in order to assess the composition of the topsoil, with regard to the natural and man-made inclusions within it, and particularly with reference to objects whose properties might affect the results of geophysical survey.

The excavated surfaces were hand cleaned and a further intensive remote sensing survey undertaken. In each area where significant archaeological features had been located, sub-areas of 2.0m x 5.0m were selected for hand excavation in 0.20m spits in order to undertake a further stage of high resolution remote sensing surveys intended to measure the very specific geophysical properties associated with particular archaeological features and natural deposits.

The remaining archaeology was then hand excavated and recorded utilising *pro-forma* record cards, supplemented by scale drawing, colour slide and print photography.

A systematic programme of sampling was undertaken for the purposes of scientific dating and palaeoenvironmental reconstruction. Where possible 40 litre samples were taken from every archaeological feature, for potential palaeoenvironmental/ radiocarbon dating. Soils and deposits were also sampled and tested for the specific purpose of geophysical ground truthing. In this case the samples were measured in the laboratory for magnetic susceptibility and for any remnant magnetic component. In addition, samples were taken for the purposes of geoarchaeological analysis, in order to attempt to understand the origins of the geophysical properties of the deposits.

## 6.0 RESULTS

### 6.1 Introduction to Results

The red sand and gravel natural subsoil was exposed in Fields A and B at *c.*0.35m-0.45m below the topsoil. The top 0.5m of the subsoil was homogenous with small and very small rounded and sub-rounded stones mixed with fine red, orange and dark yellow sands, with occasional patches of silty sand. It was fairly loose in character with occasional flint inclusions. Below 0.5m the natural subsoil separated into very distinct bands of sands, gravels and small stones.

The natural subsoil in Field F was located *c.*0.5m below the modern surface and was much sandier in character than in Fields A and B, with occasional small patches of gravel. The archaeology here was badly damaged by modern plough scarring.

All three fields showed evidence of medieval farming in the form of ridge and furrow. The ridges had all been ploughed away whilst the bases of the furrows remained, cutting through the upper horizon of the archaeology in all six areas. The furrows were clearly visible on the aerial photographs and stretched across the whole Focus Area.

### 6.2 Area A1

This area measured 10m by 10m and was located at a point at which the geophysical data and the crop marks suggested the presence of a pit alignment, orientated east - west and running from beyond the railway line to the east across both Fields A and B and on towards the A38 (Fig. 4). A 2.0m by 5.0m sub-area was located within the area for detailed geophysical analysis.

The most distinctive features in A1 comprised a row of six large pits orientated east - west across the northern edge of the area. The pits were roughly 2.3m-2.8m in diameter and 0.8m deep. They had been dug very close together, with only *c.*0.2m separating them. The five that were excavated (F209, F210, F211, F212 and F218) all contained similar fills (Fig. 12). These comprised a grey silty sand and gravel in the base, up to 0.28m deep, over which lay a thin deposit of grey ash, a charcoal rich deposit of brownish black silt, and finally a dark brownish grey silty sand with charcoal flecking in the upper 0.3m of each pit. No evidence for the emplacement of either posts or other upstanding structures in these pits was observed during the excavation.

Two post-holes (F220 and F260) were excavated on the southern edge of the pit alignment, to either side of pit F218. F220 was 0.6m in diameter and F260, 0.4m in diameter; both features were 0.3m deep, cut into the edge of F218 and filled with a mid-brown silty sand with moderate small rounded stones.

With the exception of furrow (F200) the only other features in this area were five small possible pits (F201, F202, F203, F204 and F214). Each of them was cut into the natural subsoil and filled with a sterile light-brown silty sand, similar to the natural subsoil.

F202 and F204 appeared on morphological grounds to be archaeological. F201, F203 and F214 may well have been roughly circular patches of siltier natural subsoil.

No artefacts were recovered from any features in this area.

### **6.3 Area A2**

This area measured 20m by 10m and was located at a point where the geophysical data and the crop marks suggested that a possible 'woodhenge' monument (SM 21679) was located (Figs. 5 and 6). A sub-area, 2.0m by 5.0m, for detailed measurement of geophysical properties was located within the area.

Five concentric rings of pits were exposed, which cut the natural subsoil (Fig. 6). The rings were spaced *c.*2.5m apart with the pits of each ring slightly offset from those in the rings to each side. All the post-pits were of similar shape, circular with vertical sides and a flat base.

The innermost ring comprised seven pits (F226, F227, F228, F236, F249, F253 and F259) with a possible eighth under the furrow between F236 and F259. The pits lay between 0.75m and 1.5m apart and measured commonly about 1m in diameter. They varied in depth between 0.8m and 1.2m (Fig. 12). F253 contained evidence of a post in the form of dark staining (2085) and occasional charcoal flecks. The post stain measured roughly 0.6m in diameter and was visible from the bottom of the pit to the top.

There were four pits in the second ring (F232, F238, F243 and F245) plus a possible two further pits under the furrow. The exposed pits lay between 0.5m and 2.0m apart and measured 0.8m-1.1m in diameter. They varied in depth between 0.8m-1.0m. F245 contained evidence of a post in the form of staining (2091).

There were four pits in the third ring (F208, F224, F229 and an unexcavated example). There was a possible fifth pit under the furrow. These pits lay 1.0m-1.5m apart, measured *c.*1m in diameter and were 0.7m-1.2m deep.

The fourth ring was completely exposed and was made up of five pits (F206, F213, F221, F230 and F234). These lay between 1.5m and 2.5m apart. Again, commonly they were about 1m in diameter and varied in depth between 0.64m - 1.1m. F234 contained the best evidence for a post, in the form of charred wood and charcoal (2062). The remains of the post were *c.*0.6m in diameter and 0.2m in height, and were set almost at the base of the pit. A layer of mid-sized stones appeared to have been packed around the base of the post. A mid to light-brown sandy silt layer lay above the post remains. It exhibited a fair degree of charcoal staining, particularly at the centre where the post would have been located.

The fifth ring was made up of four pits (F205, F207, F215 and an unexcavated example). These were 1.5m - 3.0m apart, 1.0m in diameter and 0.9m-1.2m deep (Fig. 12). No evidence for posts was observed.

Several features were located inside the woodhenge. A probable post-pit (F239) was located *c.*2m to the southeast of the centre of the monument and measured 1.0m in diameter and 0.64m deep. Morphologically it was similar to the other post-pits having vertical sides and a flat base. No evidence of a post was observed. There were also four small pits in the central area (F240, F246, F247 and F250), which ranged in diameter between 0.7m – 1.6m and were between 0.16m – 0.4m deep. All four were filled with a brown silty sand.

A pit 0.75m to the southwest of the centre of the monument remained unexcavated due to its location outside the 20m x 10m grid.

Two shallow, irregular pits (F255 and F256) were recorded just inside the inner ring. These may simply have been patches of siltier natural subsoil rather than features of archaeological interest. A V-shaped linear feature (F254), which was packed with seeds and roots, appeared to be fairly recent, although no artefacts were recovered from its fill. It extended north from a point where it had been truncated by the furrow and divided before it met the northern baulk.

Other features in Area A2, which either cut the post-pits or the natural subsoil, comprised several small pits (F222, F237, F244, F251, F252 and F257) and a post-hole (F241). There was also a large elongated pit (F235 = F223). This measured *c.*4.0m long by 1.5m wide and was filled with a soft dark-brown silty sand. It had later been re-cut by a pit of similar dimensions (F261). This pit was in-filled with redeposited natural gravels in four layers and was hard to distinguish from the surrounding natural subsoil (Fig.12). Both pits were U-shaped in profile and 0.8m deep. F235 produced a high magnetic signal.

Two plough furrows (F216 and F225) oriented northeast – southwest cut much of the archaeology in A2.

As in area A1, no artefacts were recovered from any of the features in this area.

#### **6.4 Area B1**

This area measured 10m by 10m and very little of archaeological significance was observed in it. With the exception of two furrows (F101 and F102), there were two small pits (F103 and F104). They measured between 0.75m and 0.9m in diameter and were between 0.1m and 0.16m deep. Both were filled with a mid-brown silty sand which contained charcoal flecks. No artefacts were recovered. It is useful to note that the cropmark over which this area was located was not evident once the area was opened. The feature which caused it is therefore likely to be geological.

#### **6.5 Area B2**

Area B2 measured 20m by 10m, with a 2.0m by 5.0m sub-area (for detailed investigation of geophysical properties) situated within it, and was located over the centre of the ‘sunburst’ monument (SM 2167902, Fig. 8). The ring ditch, which was visible by means of remote sensing techniques and in aerial photographs, was exposed and subsequently

excavated, along with several internal and external features. However, with one exception the radiating pits associated with the monument were not exposed.

The ring ditch was clearly visible in the light gravel natural subsoil. It had been re-cut at least once and on first sight, prior to excavation, appeared to have two opposing entrances to the north and south. The primary ditch (F112) was visible in seven of the excavated sections (Fig. 12). It measured 2.2m - 2.3m wide and was 0.55-0.63m deep. With the exception of one clearly defined entrance in the west, the ditch appeared to be continuous. However, it was impossible to ascertain this definitively since in several of the sections the re-cut ditch (F105) had obscured the original ditch. The primary ditch was filled with grey silt in its base, which may be related to a period of silting up sometime after it was originally dug. There was also evidence of natural subsoil slumping from both the internal and external sides of the ditch, suggesting banks may originally have been constructed on both sides of the ditch. Above this, the ditch appeared to have been infilled with redeposited natural subsoil making the ditch cut very difficult to discern from the gravel surface at this level.

The re-cut ditch F105 also measured *c.*2.2m - 2.3m wide with a depth on average of *c.*0.6m. As noted above, prior to excavation there appeared to have been two opposing entrances to this ditch, located to the north and south. However, excavation revealed that the re-cut ditch was actually composed of a series of elongated pits which cut the primary ditch. These served to form a discontinuous circle with multiple entrances. Several pieces of worked flint were recovered from the upper fill of the ditch.

Two small pits (F123 and F124) cut one of the termini of the re-cut ditch sometime after it had been partially infilled (Fig. 12). Both were filled with a black, very charcoal rich, silt. Pit F124, which measured 0.6m in diameter and was 0.3m deep, also cut pit F123, which in turn measured 0.7m in diameter and was 0.2m deep. It is possible that these two pits were the remains of cremations although no evidence of bone survived.

Of the features within the ring ditch, F100 was the most clearly visible (Fig. 11). This centrally located pit was oval in plan, oriented east – west, and measured 2.4m long by 1.8m wide and was 0.4m deep. It was a visible anomaly in both aerial photographs and following the geophysical survey. The location of the feature and its clear visibility suggested its potential to be of great significance. In addition, during initial cleaning a small sherd of incised pottery was recovered. It was decided on this basis that the pit should be excavated and recorded in 0.10m spits. The primary fill (1052) was similar in composition to the natural sands into which the pit had been cut. Overlying this deposit a spread of material (1002) was removed to a depth of 0.10m. This was dark-brownish black in colour and contained some carbonised material.

The contrast in colour and composition of the two deposits highlighted the distinct shape of deposit 1002 and the inference is that it may have been caused by the gradual decomposition of an inhumation. The shape in plan of the deposit suggested that the head was near to the eastern side of the pit. When the second 0.10m spit was removed, the deposit was reduced to an area just to the west of the pit's centre. This may be

associated with tissue saponification in the abdominal area since this would have been where the greatest weight of soft tissue was. The date of the pottery, Late Neolithic/ Early Bronze Age Beaker ware (see below), and the shape of the deposit suggested that the body would have been placed in a crouched position with the knees drawn up toward the abdomen, thus creating a greater mass of tissue in the area of the deeper, surviving area of deposition. Another dark deposit, close to the presumed position of the head may also be indicative of the decomposition of tissue. The incised Beaker sherds which derived from either one or two vessels were almost entirely confined to the northeastern quadrant of the feature within deposit 1052. This is the area where the head is thought to have been. It would seem reasonable, therefore, to interpret this feature as a burial pit despite the lack of surviving bones. In addition to the recovered pottery, several worked flint artefacts were also discovered. These were located in the northern half of the burial pit along with further patches of staining. These other isolated areas of differential staining may indicate the presence of former organic grave goods.

A large rectilinear pit (F126) measured 3.1m long by 1.5m across. It showed up in the geophysical data as a result of the *in situ* burning at its surface. The pit was U-shaped in profile, 0.5m deep and situated just inside the eastern arc of the ring ditch (Fig. 12). It contained four fills. The uppermost of fill comprised a hard, red, burnt silty sand and charcoal. The purpose of this pit is unknown and no artefacts were recovered.

The other features excavated within the ring ditch comprised three areas of intercutting pits and two isolated post-holes. Two medium sized pits (F129 and F130) were located adjacent to the central burial. F129 cut the edge of F130. Four small - medium sized pits (F119, F120, F121 and F122) were situated just to the west of burnt pit F126. Pits F119 and F121 both cut pit F120. Pit F121 also cut pit F122. All four were filled with similar deposits, which comprised a light-brownish yellow sand with occasional charcoal flecks.

The third area of intercutting pits comprised F111, F113, F114 and F115. Pit F115 cut F111, whilst F111 in turn cut pit F114. Pit F113 was not related stratigraphically but was located just to the north of F111. All four pits were filled with similar light-brownish yellow sands with occasional charcoal flecks. The two postholes (F118 and F134) were filled with a light-brown silty sand. No artefacts were recovered from either the pits or post-holes.

A series of thirteen small – medium sized pits was situated around the outside of the ring ditch. With the exception of pit F141, all of these were shallow, bowl-shaped and contained soft silty sand fills, from which no artefacts were recovered. F141 was morphologically similar to the post-pits in Area A2, with vertical sides and a flat base. This may have been one of the radiating pits which were visible on aerial photographs of the monument.

A single feature, other than furrows (F101 and F102), had cut the ring ditch. This was a pit (F125) filled with a mid-brown sandy gravel.

Two possible postholes (F127 and F128) were also recorded near the edge of the ring ditch. These were both filled with a mid-brown silty sand. Both cut the natural subsoil and had no evident stratigraphic relationships.

## **6.6 Area F1**

The two areas excavated in Field F were located within scheduled ancient monument SM 214. Area F1 measured 10m by 10m and was situated in an area where both cropmark and geophysical data indicated the position of a very large ring ditch with projecting linear ditches (Fig. 9). A 2.0m by 5.0m sub-area (for detailed analysis of geophysical properties) was also located within F1.

The archaeology in F1 was characterised by a partially exposed curvilinear ditch (F307 = F320) (Fig. 12). The ditch measured *c.*2.25m wide and was 0.8m deep. A bowl-shaped profile was observed in both excavated sections. A clear episode of re-cutting was observed both in plan and section. The re-cut ditch (F324 = F323) was shallower than the primary ditch and had been dug on its outer side. No artefacts were recovered from either feature.

Two linear features were observed running across F1, roughly on an east - west alignment. Both were irregular in plan and appeared to have been truncated by the ring ditch. On excavation both were found to contain very sterile sand fills. The more westerly of the two (F315) was quite shallow, measuring 0.43m deep, with a bowl-shaped profile, whilst F317 was considerably deeper, measuring 0.86m in depth (Fig. 12). No artefacts were recovered from either ditch. Several pits were identified within the excavated area, primarily located on its western side. Three of these (F300, F303 and F304) were roughly circular in plan with very shallow bowl-shaped profiles. All were filled with sterile, slightly silty sand, not dissimilar to the natural subsoil.

Two further pits (F319 and F321) were excavated adjacent to the ring ditch within the 2.0m by 5.0m sub-area (Fig. 12). F319 was located near to the centre of the excavated area, *c.*1.25m to the east of the ring ditch. It was circular in plan, measuring 1.8m in diameter and 0.8m deep. Pit F321 was located *c.*1.3m to the west of the ring ditch and measured 2.0m in diameter and 0.7m deep. Two distinct episodes of deposition were recorded in each pit.

## **6.7 Area F2**

Area F2 measured 20m by 10m and was located just to the west of F1 (Fig. 10). The aim was to identify possible features which were located within the ring ditch and which had been highlighted in the geophysical data.

Few features of archaeological significance were identified in this area, with the exception of a cluster of four irregular pits (F302, F306, F311 and F312) which were observed toward the northwest corner of the excavated area. All of these were filled with a single, very similar mid-brown silty sand deposit with gravel inclusions. The pits varied in diameter between 0.5m to 0.8m with depths up to *c.*0.2m. Two further shallow,

slightly irregular pits (F305 and F316) were identified in the northeast corner of the site. Lastly, a curvilinear gully (F310), aligned mainly northwest – southeast, was located near the southeast corner of the area. It measured 0.82m wide and 0.2m deep and was filled with single deposit of orange brown silty sand. This gully had been truncated by one of two medieval plough furrows which ran northwest - southeast across the area. No artefacts were recovered from any features.

## 7.0 THE ASSESSMENT

### 7.1 Stratigraphic Data

The majority of the features and deposits described above could not be dated, either by associated chronologically diagnostic artefacts or by their archaeological stratigraphic relationships. The nature of the site, therefore, limited any potential phasing of the monuments in this manner. Further analysis and radiocarbon dating may enhance our understanding and enable a more rigorous phasing..

### 7.2 Quantification

Table 1. *Quantification of the Paper and Photographic Archive*

<b>Record</b>	<b>Quantity</b>
Contexts	240
Features	151
Assemblage Summaries	33
Colour Slide	180
Colour Print	176
Black and White Print	166
Drawings	117 (8 sheets of drawing lists)
Env. Sample File Records	6

Table 2. *Quantification of the Excavation Finds Archive*

<b>Material Type</b>	<b>Quantity</b>
Tile Ceramic	11
Brick Ceramic	99
Undated Pottery	2
Prehistoric Pottery	31
Medieval Pottery	10
Post-Medieval Pottery	71
Clay Pipe	2
Iron Nails	7
Lead	1
Other Iron	9
Glass Vessel	29
Other Glass	1
Flint	365
Stone	4
Animal Bone	19
Charcoal	2
Miscellaneous	1

### **7.3 The Prehistoric Pottery (Dr Ann Woodward)**

#### **7.3.1 Area B2, F100**

A total of 27 sherds was recovered, which may derive from one or two vessels. All the pottery was of Beaker type, dating to the Late Neolithic/ Early Bronze Age period. The sherds included fragments from the rim and neck of a large vessel, and sherds from a rounded belly area. No base or base angle sherds were present. The belly sherds may belong to the rim and neck pieces or may come from a second vessel. The rim and neck sherds are decorated with various horizontal zones of cord-impressed geometric motifs, including diagonal lines and filled pendant triangles. The belly on the other hand appears to be decorated with a scheme of closely spaced irregular and discontinuous incised horizontal strokes. The rim and neck appear to derive from a Beaker of late style.

At present, the sherds are unmarked and stored in plastic bags. After marking, the apparent conjoins can be assessed, and it should be possible to reconstruct some of the vessel profile (or profiles). This will then allow appropriate comparisons with other Beaker vessels to be undertaken.

#### **7.3.2 Statement of potential**

Following reconstruction, the Beaker forms could be compared with other such vessels, concentrating on those from the Trent valley and from adjacent areas of the Peak District. Beakers have rarely been recovered from the Trent gravels, and the Catholme material provides an important contribution to the local corpus. It will need to be identified and

discussed in relation to Beakers listed in the national corpora, and those found more recently, such as the two vessels from Whitemoor Haye, Staffordshire (Hewson forthcoming). The pottery is intrinsically of regional importance. At the site level it is very important in that it provides key dating evidence for the feature and structure within which it was found.

Macroscopic and petrographic analysis of the fabric will aid such comparisons and may provide information concerning manufacture of the pottery as well as possible sources of the clay and inclusions employed. A study of abrasion and condition may inform the process of deposition within the pit.

### **7.3.3 Methodology**

The sherds will be marked, and reconstruction of a vessel profile (or profiles) will be attempted. The pottery will be recorded in detail according to the *Guidelines* provided by the Prehistoric Ceramics Research Group (1995). The fabric will be examined using a hand lens and also examined in thin section by a petrographer.

## **7.4 The sieved artefacts – spot dating (S. Rátkai)**

### **7.4.1 Comments**

Nearly all the pottery is late 18<sup>th</sup> - 19<sup>th</sup> century and is in poor condition. No further work is recommended. There is a small amount of medieval material, none of which need be earlier than the 14<sup>th</sup> century. The medieval gritty ware is common in north Staffordshire. It has been found for example at Croxden Abbey and in Uttoxeter and a similar fabric occurs in north Derbyshire. Occasional examples are found further south in towns such as Lichfield and Birmingham. Their presence further south may be connected with a trade in dairy products (mainly butter but also cheese), from the Staffordshire highlands. This trade is well attested in the post-medieval period but there is no reason why it should not have begun in the late medieval period. The fabric of the jug sherd from the topsoil is paralleled by pottery from northern Staffordshire, for example from Lawn Farm, Stoke-on-Trent. The two small cooking pot sherds have fabrics not dissimilar from pottery found at Tutbury and a local source is probable.

Table 3. *Artefacts from sieving exercise*

Area	Metre	Type	No.	Date range
A2	1	Blackware	1	Late 18 <sup>th</sup> – Early 19 <sup>th</sup> C
A2	1	Creamware	1	Late 18 <sup>th</sup> – Early 19 <sup>th</sup> C
A2	1	Pearlware	1	Late 18 <sup>th</sup> – Early 19 <sup>th</sup> C
A2	2	Mottled ware	1	19 <sup>th</sup> C
A2	2	Coarseware	2	19 <sup>th</sup> C
A2	2	Salt-glazed stoneware	1	19 <sup>th</sup> C
A2	2	Modern yellow ware	2	19 <sup>th</sup> C
A2	3	Midlands purple ware	1	15 <sup>th</sup> - 16 <sup>th</sup> C
A2	3	Blackware	1	Late 17 <sup>th</sup> – 18 <sup>th</sup> C
A2	3	Slip-coated ware	3	Late 17 <sup>th</sup> – 18 <sup>th</sup> C
A2	3	Utilitarian whiteware	1	19 <sup>th</sup> C
A2	3	Green transfer-printed ware	1	19 <sup>th</sup> C
A2	3	Grey stoneware	1	19 <sup>th</sup> C
A2	3	Light-bodied stoneware	1	19 <sup>th</sup> C
A2	3	Fired clay	1	?
A2	3	Fired clay	2	?
A2	6	Sandy whiteware	1	Mid 13 <sup>th</sup> – 14 <sup>th</sup> C
A2	6	Trailed slipware?	1	Late 18 <sup>th</sup> C
A2	6	Blackware	1	Late 18 <sup>th</sup> C
A2	6	Creamware	2	Late 18 <sup>th</sup> C
A2	6	Fired clay	1	?
A2	7	Creamware	2	19 <sup>th</sup> C
A2	7	Blue transfer-printed pearlware?	1	19 <sup>th</sup> C
A2	7	Fired clay	1	?
A2	7	Fired clay	1	?
A2	8	Medieval gritty ware	1	13 <sup>th</sup> – 15 <sup>th</sup> C
A2	8	Tin-glazed earthenware	1	17 <sup>th</sup> or 18 <sup>th</sup> C
A2	8	Slip-coated ware	1	18 <sup>th</sup> C
A2	8	Brown stoneware	1	Later 19 <sup>th</sup> C
A2	8	Utilitarian whiteware	2	Later 19 <sup>th</sup> C
A2	9	Mottled ware	1	18 <sup>th</sup> C
A2	9	Slip-coated ware	1	18 <sup>th</sup> C
A2	9	Coarseware	2	18 <sup>th</sup> C
A2	9	Fired clay	1	18 <sup>th</sup> C
B2	2	Glazed gritty ware	1	14 <sup>th</sup> – 15 <sup>th</sup> C
B2	3	Brown salt-glazed stoneware	1	19 <sup>th</sup> C
B2	3	Coarseware	1	19 <sup>th</sup> C
B2	3	White salt-glazed stoneware	1	19 <sup>th</sup> C
B2	3	Utilitarian whiteware	1	19 <sup>th</sup> C
B2	4	Grey stoneware	2	Later 19 <sup>th</sup> C
B2	4	Creamware	1	Later 19 <sup>th</sup> C
B2	4	Blue transfer-printed ware	1	Later 19 <sup>th</sup> C
B2	5	Creamware	1	Post 1770s
B2	6	Stoneware bottle	1	Later 19 <sup>th</sup> C
B2	6	Utilitarian whiteware	1	Later 19 <sup>th</sup> C
B2	6	Modern glazed ware	1	Later 19 <sup>th</sup> C
B2	7	Coarseware	1	19 <sup>th</sup> C
B2	7	Modern yellow ware	1	19 <sup>th</sup> C
B2	8	Medieval cooking pot	2	13 <sup>th</sup> – 14 <sup>th</sup> C
B2	9	Modern glazed ware	1	Post 19 <sup>th</sup> C?
B2	U/S	Medieval jug sherd	1	13 <sup>th</sup> – 14 <sup>th</sup> C
B2	U/S	Medieval gritty ware	1	13 <sup>th</sup> – 15 <sup>th</sup> C
B2	U/S	Blackware mug	1	17 <sup>th</sup> C

## 7.5 Flints: A preliminary assessment (L. H. Barfield)

### 7.5.1 Area B2

Four scrapers, one serrated flake, one core and twenty five flakes are represented.

Contexts	SF number	type
sieving		scraper?
sieving		serrated flake
F100 (1002)		3 flakes
F100 (1052)		3 flakes
F100 (1052)	[2]	flake
F100 (1052)	[12]	scraper
F105 cleaning		2 flakes
F105 (1010)		9 flakes
F105.01 (1010)	[3]	scraper
F105.01 (1010)	[5]	core
F105.01 (1010)	[4]	flake
F105.04 (1014)	[6]	flake
F105.04 (1014)	[7]	flake
F105.06		flake
F108 (1013)		flake
F131 (1039)	[8]	flake
F138 (1085)		scraper
F142 (1091)	[9]	flake

### 7.5.2 Areas A1 and A 2

Two flakes

A1 sieving		flake
A2 sieving	[6]	flake

### 7.5.3 Raw materials

The raw material used is mostly pebble flint of varied consistency. Some of the cortex is rolled, whilst other pieces have natural, angular, patinated breaks suggesting a non-glacial source. The scrapers, however, are probably made on imported material and are to be seen as ready-made imports.

### 7.5.4 Scrapers

One scraper is on the end of a blade-like flake, two others are on large discoidal flakes. All are on probably imported flint. SF3 is an end scraper on a dark brown flint with a distinctively thick triple-banded cortex. F100 (1052) SF 12 is a mottled grey flint. F138 has a horse-shoe shape and is in a black flint with a white cortex, which suggests that it is from a chalk source (reminiscent of Brandon flint). A fourth piece with steep retouch is either a fragment of a scraper or a retouched knife. Both F100 and F138 have been

resharpened to produce an irregular step fractured edge in the former and an almost vertical face in the latter.

#### **7.5.5 Serrated flake**

One unworked thermal flake of the local brown stained gravel flint has a naturally sharp edge which has been regularly serrated and can be regarded as a functional tool.

#### **7.5.6 Core**

The core is on a flint flake with developed negative flake scar. It is probably a core specifically for the production of a thumb-nail scraper.

#### **7.5.7 Debitage**

The unworked flakes are mostly hard-hammer struck.

B2 (1014) SF 7 is a fragment of a blade-like flake which has been broken by a knapping action typical of gunflint production. It could thus be recent.

#### **7.5.8 Contexts**

The bulk of the flints came from the context of the Beaker burial and the surrounding ditch. Beaker burial F100 produced seven flakes and a scraper and the surrounding ditch no less than 15 flakes, a scraper and the core.

Since the material from the burial pit has a *terminus ante quem* of the burial, the pieces from the ditch would have been deposited at a later date, with a *terminus ante quem* of the final filling of the ditch. In all probability they all represent a roughly contemporary assemblage. The scraper SF 12 may have been a grave good associated with the burial.

#### **7.5.9 Dating**

Dating the assemblage on the evidence of scrapers alone is difficult. The large discoidal scrapers are a form found in the late Neolithic period, when there appears to have been a developed trade in scrapers, but they could also be later in date. The latter instance seems to have been the case for two of these scrapers, since from their depositional contexts they are either of Beaker date (F100), or later (F105).

The flake core, with a negative scar suggestive of thumbnail scraper, from the ditch fill (1010) also points to a Beaker date. Cores on flakes are also a Beaker feature found elsewhere in Europe (Furestier 2004).

### **7.6 Charred plant remains (Dr. James Greig)**

#### **7.6.1 Objectives**

Plant remains were investigated to obtain further evidence for the interpretation of the site and its surroundings at the time of its occupation.

### 7.6.2 *The site*

A number of features, such as pit fills and features where charcoal was recorded, were sampled during excavation and processed for the purpose of extracting plant remains. A selection of the resulting flots are assessed here.

### 7.6.3 *Samples*

11 flots, ranging in volume from c.10 – 820 ml were selected by the excavator as being suitable for assessment (Table 1).

### 7.6.4 *Laboratory work*

The samples had already been washed over in water to separate the lighter organic fraction, which was caught in a 500 µm sieve and dried. The samples were dry sorted under a x10 stereo microscope and the plant remains identified and checked with the writer's own reference collections. The results are listed in taxonomic order (Kent 1992) in Table 4.

### 7.6.5 *Results*

Most of the samples contained plant remains, but most of these were not charred. As the material did not seem to have been waterlogged, it suggested that these seeds were fairly modern, and had got into the rather loose sandy soil of the site, for example down through soil cracks, or by earthworm activity. *Fumaria* sp. (fumitory) and *Fallopia convolvulus* (black bindweed) are common weeds on light sandy soil, and *Polygonum aviculare* (knotgrass) on trodden places, so they might well be expected to grow on and around the site. A few other remains such as ?*Prunus* sp. (possible sloe), ?*Crataegus* sp. (hawthorn) and *Sambucus nigra* (elder) could represent hedgerow.

In the case of the seeds of *Chenopodium* (goosefoot) and *Atriplex* (orache), it was difficult to tell if some were ancient or modern because they are naturally black. Some of them were modern, as shown by the papery interiors, while others could have been charred, as they were dull black. The seeds of *Veronica hederifolia* (ivy-leaved speedwell) were also blackened, but were not charred. These are common weeds wherever there is open soil. There were some very fresh-looking probable *Trifolium* (clover) seeds in two samples. These clearly tell us nothing about the archaeological features of the site.

The only remains which were really charred, and therefore had a better chance of being of archaeological significance, were some possible *Vicia* (vetch), and some possible cereal grains together with a grass seed, and quantities of wood charcoal, which were large, in samples 1 and 29.

As prehistoric sites are scarce in this area, it is certainly worthwhile trying hard to recover any plant remains (Greig, in preparation), but those from Catholme so far seem disappointing. Possibly the ritual rather than domestic nature of the site did not cause many plant remains other than wood charcoal to become charred. It would probably be worthwhile to monitor at least some samples in case any prove to contain useful amounts of plant material.

### **7.6.6 Conclusions**

The eleven samples assessed contained very few charred remains which are likely to be ancient, and no further work on them is recommended. The most work that could be considered appropriate on other material from the site would be a quick assessment of the flots from any other samples which may have been processed, in case any of them contain worthwhile amounts of plant remains.

Table 4. Results from the flots. \* = charred remains

Sample	1	3	7	9	16	18	22	27	28	29	42
<b>Flot volume, ml</b>	240	120	20	50	<10	10	10	10	10	820	40
<b>Feature</b>	105.01	123	100	100	209	212	210	224	213	234	253
<b>Context</b>	1030	1041	1052	1002	2025	2028	2033	2046	2018	2061	2085
<i>Fumaria</i> sp. (fumitory)	3	10	2	13				1	6	3	3
? <i>Alnus glutinosa</i> (alder) catkin		1									
<i>Chenopodium</i> sp. (goosefoot)	4	7	26	16	6	10	6		9	3	5
<i>Atriplex</i> sp. (orache)		15	13	50					3		
<i>Montia fontana</i> ssp. <i>Minor</i> (blinks)			1				1				
<i>Stellaria media</i> (chickweed)			1								
<i>Silene</i> sp. (campion)				1							
<i>Polygonum</i> sp. (water-pepper)			1								
<i>Polygonum aviculare</i> (knotgrass)	2	6	2	1		1					
<i>Fallopia convolvulus</i> (black bindweed)			1			1	2				
<i>Brassica</i> sp. (cabbage family)				1							
<i>Rubus idaeus/fruticosus</i> (wild raspberry or bramble)				1							
<i>Prunus spinosa</i> (sloe) fruitstone fragment		1									
? <i>Crataegus</i> sp. (hawthorn) fruitstone fragment			1								
? <i>Trifolium</i> sp. (clover)					1						1
? <i>Vicia</i> sp. (vetch)*		2									
<i>Veronica hederifolia</i> (ivy-leaved speedwell)		9	1	3					1		
<i>Sambucus nigra</i> (elder)			1	1		1	1		1		
<i>Carex</i> subg <i>Carex</i> (sedge)							1				
? Cerealia * (possible cereals)	2	1									
Poaceae (grass) *			1								

## **7.7 Other finds (Erica Macey-Bracken)**

### **7.7.1 Ceramic Tile and Brick**

Eleven fragments that could be positively identified as tile were recovered from sieving. Most of these fragments had dense, well-fired fabrics of post-medieval or modern appearance, although no diagnostic pieces which could confirm this were recovered. One fragment of possible medieval tile was also recovered (U/S). This fragment had traces of glaze on one surface, and had a much coarser fabric containing large stone inclusions.

A total of 94 brick fragments were also recovered. The fabric of these fragments was of similar appearance to the most common tile fabric, and the small size of the fragments makes it entirely possible that some of the fragments are actually tile fragments. As with the tile, no diagnostic or datable fragments were recovered, although again it seems likely that the material is of post-medieval / modern date.

All the tile and brick fragments were small and quite abraded, and it seems likely that they were spread on the field as part of the manuring process.

### **7.7.2 Animal Bone (Emma Hancox)**

Four fragments of animal bone were recovered during sieving. This included part of a zygomatic arch from a sheep (A2, Sieving 3) and part of a longbone from a small animal (U/S). The other two fragments of bone were too small to be identified, although one (B2, Sieving 1) could clearly be seen to have been burnt.

### **7.7.3 Glass (Robert Bracken)**

The glass assemblage was of 20<sup>th</sup> century date, and included both bottle and window glass, as well as a possible fragment of glass slag (Area A2, Sieving1). All of the glass was very abraded, with smooth edges, and it seems likely that, as with the tile, the glass came to be in the topsoil as a result of the manuring process.

Green, clear and pale aqua vessel glass fragments were recovered from the site, with clear glass fragments dominating the assemblage. The clear glass pieces included a sherd from a milk bottle with the letters RE and A embossed on it (Area A2, Sieving 2), five sherds from a round bottles of mid-late 20<sup>th</sup> century date (Sieving 5; Area A2, Sieving 7; Area B2, Sieving 2; Area B2, Sieving 3; Area B2, Sieving 8), two base sherds from round bottles (Area A2, Sieving 8; Area B2, Sieving 3) of early – mid 20<sup>th</sup> century date, and a sherd from a clear mineral water bottle of probable early – mid 20<sup>th</sup> century date (Area B2, Sieving 6).

The green glass fragments included a fragment from an undated circular vessel (Area A2, Sieving 2), a fragment of mid – late 20<sup>th</sup> century bottle glass (Area A2, Sieving 3), two sherds of undatable bottle glass (Area B2, Sieving 6) and a sherd of dark green glass from the base of a beer or wine bottle of mid 20<sup>th</sup> century date.

Other vessel fragments from the site included a fragment of pale aqua glass from a bottle of “Ballys Balsalm”, a popular hair restoring tonic in the early – mid 20<sup>th</sup> century (Sieving 5), a sherd of brown glass from a jar of early – mid 20<sup>th</sup> century date and a sherd of clear glass with pink staining on the inside and outside. This sherd, probably from a drinking glass, was undatable.

Other glass recovered from the site included six sherds of 20<sup>th</sup> century clear window glass (Area A2, Sieving 3 x 3; Area B2, Sieving 3; Area B2, Sieving 6; Area B2, Sieving 7), a sherd of pale aqua window glass, also of 20<sup>th</sup> century date, and an undated sherd of clear glass slag.

#### **7.7.4 Iron**

Seven iron nails and four other iron fragments were recovered. The nails ranged in size from 32mm to 105mm, and were heavily covered in corrosion products. These nails were hand-made and of post-medieval date.

Other metal finds included a large iron staple, a twisted piece of iron that may have been part of a link in a chain, a thin, flat piece of iron of uncertain function and a long, thin rectangular piece of iron of modern appearance.

#### **7.7.5 Stone (identifications by Dr. Rob Ixer)**

Five fragments of stone were recovered from the site. None of the pieces were worked, and closer inspection of one of the pieces showed that it was a modern composite (Area A2, Sieving 10).

The other pieces of stone in the assemblage were a pale-coloured tufa or mortar (Area A2, Sieving 8), a small fragment of vesicular rhyolite from the drift (Area B2, Sieving 4), a natural, fine-grained silicious meta-mudstone (Area B2, Sieving 9) and a highly-polished fine-grained unworked flint.

#### **7.7.6 Other Finds**

Other finds from the site included two fragments of clay pipe stem of uncertain date (Area A2, Sieving 6; Area B2, Sieving 3) and a small fragment of metallic tap slag (Area A2, Sieving 9).

## **UPDATED PROJECT DESIGN**

### **8.1 The 2004 Catholme excavations**

The 2004 excavations at Catholme were designed primarily as a ground truthing exercise to investigate geophysical survey results and the geophysical properties of deposits. This aspect of the investigations is not explored further here. From a ‘conventional’ archaeological perspective, the results of the 2004 excavations and their potential for further analysis may be summarised as follows.

In Area B2 the primary phase of the ring ditch and its central burial with associated Beaker sherds are characteristic of the Late Neolithic/ Early Bronze Age periods. The re-cutting of the ring ditch and its modification cannot be ascribed to a clear phase of use but may be dated following work on the radiocarbon samples which were collected, and perhaps the charred plant remains from pit F123. There is scope for analysis and interpretation of the pattern of ritual use of the monument, based on the excavation results and comparison with monuments of similar type, both regionally and further afield. This structure is one of a number located in this landscape, several of which have been excavated, most notably in recent years at Whitemoor Haye (Coates 2002, Hewson forthcoming), and at the National Memorial Arboretum site (Hovey *et al* 1998). As noted in section 7.3.2 above, analysis and reconstruction of the Beaker vessel(s) and comparison with regional and national corpora will provide a further dimension to the understanding of this monument and its 'place' within the landscape.

The surviving remains of the 'woodhenge' in Area A2 cannot be securely dated until the radiocarbon samples are processed. The charcoal samples, which were recovered from a number of its post-pits, are very promising and should provide several dates. There are a total of some 225 post-pits in the monument as a whole, though only a fraction of these were exposed and subsequently excavated. In addition, the different depth of the pits is interesting and may arise as a consequence of each pit being dug to an appropriate depth in order to accommodate posts of differing heights. The layout of the structure as a whole, its potential purpose, its appearance and its role in the landscape are all of significant interest and require further research. An intriguing aspect of the layout of the monument is the way in which the post rings are 'staggered' such that a view into the central area of the monument would have been impossible from the outside, and obtaining access to this central area may have involved negotiating complex pathways. All these aspects of the monument demand exploration in the context of comparable monuments (e.g. Gibson 1998).

The series of large pits exposed in Area A1 is characteristic of Late Bronze Age – Early Iron Age pit alignments. Again, unfortunately there were no artefacts from which to derive more definitive dating. However, it is commonly the case that these structures tend to be artefact poor wherever they have been excavated, certainly in the local landscape (Coates 2002). Such alignments of large pits, which run throughout the local landscape are understood either to represent territorial boundaries or to divide the landscape for some ritual purpose. A detailed study of pit alignments with the aim of placing them in the context of their landscape and the monuments that existed prior to and contemporary with them has not been undertaken to date. Such a study would potentially be very informative.

The significant archaeological features in Area F1 proved to be the exposed arc of a very large ring ditch and two ditches which seemed to converge on it but in fact pre-date the ring ditch. The potential for further analysis of this monument is limited.

However, the greatest potential for the further study of these monuments lies not in dealing with each one individually but in the investigation of the whole in the context of

an evolving ritual landscape. Further, the complex of monuments focussing on Catholme can be compared to others throughout the country in terms of both its monumental components and landscape setting. In the Midlands such complexes are found at Aston on Trent, at Barford, Warwickshire, lying within a loop of the River Avon, and at Dorchester-on-Thames, Oxfordshire, lying within the confluence of the Thames and the River Thame. The well-studied complex at Maxey, Cambridgeshire, on a gravel island adjacent to the River Welland (Pryor & French 1985), offers some particularly intriguing parallels with the Catholme complex. Here too is found a juxtaposition of ring ditches, post circles, mortuary structures and other religious monuments. The complex has its origin in the Etton causewayed enclosure (Pryor 1998), which stands apart from the complex of later monuments in a similar fashion to the relationship between the Alrewas causewayed enclosure and the later monuments within the *Where Rivers Meet* study area.

## **8.2 Further specialist analysis required for Catholme 2004 excavations**

- Charcoal identification (R. Gale)
- Selection of samples for radiocarbon dating and submission for dating
- Further assessment and analysis of environmental samples (W. Smith)
- Lithics analysis and report (L. Barfield)
- Prehistoric ceramics analysis and report (A. Woodward)
- Ceramic petrology (R. Ixer)

## **8.3 Integration of Catholme 2004 results into the wider results of the *Where Rivers Meet* Project**

As described in the Introduction, the results of the 2004 excavations at Catholme will be integrated into a book which will provide a summary of the ‘archaeological outcomes’ of the *Where Rivers Meet* project. A publication synopsis for this book is provided in section 9 below. The book will draw not only on the results of the *Where Rivers Meet* research but also on the extensive – but very scattered – literature relating to the archaeology of the study area (‘Full Area’). A gazetteer of sites in the Full Area is provided in Appendix 1 to this report, a preliminary synthesis of the archaeology is provided in Appendix 2, and a bibliography of published and unpublished archaeological reports relating to the area is provided in Appendix 3. This information was compiled as part of the *Where Rivers Meet* project and will form a basis for the book.

## **9.0 PUBLICATION**

One aim of the publication is to ‘embed’ as seamlessly as possible the report on the 2004 excavations at Catholme in the context of the wider study of the *Where Rivers Meet* project. A second aim is to use the digital analyses and images created by the WRM project as the basis for many of the illustrations used in the book.

There will be three principal authors. Simon Buteux will have primary responsibility for the archaeological synthesis elements (Chapters 1, 3, 4 and 6-8), as well as overall editing. Dr Henry Chapman will have primary responsibility for the digital landscape analysis elements (Chapter 2 and portions of Chapters 3-8) and the generation of illustrations from these used throughout the book. Dr Mark Hewson will have primary responsibility for Chapter 4, the report on the 2004 excavations. However, the authors will work together to produce an integrated account, and will co-author Chapter 9.

Throughout the book the three principal authors will draw heavily on the work of others, as presented in the various reports generated by the Where Rivers Meet project, and will acknowledge joint authorship of appropriate sections (and undertake due consultation). However, in the interests of continuity and uniformity of style and approach, the principal authors will use their own words to describe this work. The only sections of the book written by other than the three principal authors will be the specialist contributions to Chapter 5 – reports on the flint, pottery, plant remains, wood charcoal and radiocarbon dating.

An overall aim of the book will be to produce a readable and well-illustrated account of the archaeology of the Trent-Tame interfluvium, and the techniques and archaeological results of the *Where Rivers Meet* project, of value to archaeologists and of interest to the more general reader. The book will also serve to highlight one of the achievements of the ALSF.

## **9.1. Publication synopsis:**

***Title: Where Rivers Meet. The Catholme Ceremonial Complex and the archaeology of Trent-Tame interfluvium, Staffordshire***

By Simon Buteux, Henry Chapman and Mark Hewson

With contributions by Kate Bain, Lawrence Barfield, Andy Currant, Neil Davis, Tim Evans, Rowena Gale, Emma Hancox, Andy Howard, Rob Ixer, David Jordan, Greg Sambrook-Smith, Danielle Schreve, Wendy Smith, Meg Watters, Steve Wilkes and Ann Woodward.

### ***Chapter 1 Introduction***

- Introduction to the Where Rivers Meet project
- Aims and organisation of the book
- An outline history of quarrying and archaeological investigations at the confluence of the Trent and Tame

### ***Chapter 2 Studying ancient landscapes in the 21<sup>st</sup> century***

- A non-technical account of the techniques used by the project for landscape reconstruction, from aerial photography through to LiDAR and digital landscape reconstruction.

**Chapter 3**     *The Ice Age*

- The evolution of the river system from Pleistocene to early Holocene
- Late Pleistocene faunas (the Whitemoor Haye woolly rhino etc) and environment
- From hunters to farmers

**Chapter 4**     *A ceremonial landscape (Neolithic and earlier Bronze Age)*

- Earlier Neolithic settlement and causewayed enclosures
- Later Neolithic and Early Bronze Age monuments

**Chapter 5**     *The Catholme Ceremonial Complex (report on the 2004 excavations)*

- Integrated narrative of excavation results
- Specialist contributions (flints, pottery, plant remains, wood, radiocarbon dating)
- Discussion.

**Chapter 6**     *Farms and boundaries (later Bronze Age and Iron Age)*

- The evolution of the landscape in the first millennium BC
- The social and economic organisation of the farmsteads

**Chapter 7**     *The impact of Rome*

- Continuity and change in landscape organisation
- The social and economic impact of Romanisation

**Chapter 8**     *The Anglo-Saxon legacy*

- The background to Saxon settlement
- Continuity and change in landscape organisation
- Saxon cemeteries
- The Catholme Anglo-Saxon settlement

**Chapter 9**     *Where Rivers Meet*

- Overview of the physical and cultural evolution of the landscape
- River confluences as ‘special places’
- Future directions

## 9.2 Contributors to the publication

Kate Bain and Emma Hancox – Catholme 2004 excavations narrative  
Lawrence Barfield – Lithics report for Catholme 2004 excavations  
Andy Current and Danielle Schreve – Pleistocene mammalian remains from Whitemoor Haye  
Neil Davis and Greg Sambrook-Smith – Palaeofluvial analysis  
Tim Evans – Archaeological landscape analysis  
Rowena Gale – wood identification for Catholme 2004 excavations  
Andy Howard – geological context for Pleistocene mammalian remains from Whitemoor Haye  
Rob Ixer – Petrological analysis of pottery from Catholme 2004 excavations  
David Jordan – Geoarchaeology at Catholme  
Wendy Smith – analysis of plant remains from Catholme 2004 excavations  
Meg Watters – Geophysical survey at Catholme  
Steve Wilkes – LiDAR and digital landscape analysis  
Ann Woodward – report on pottery from Catholme 2004 excavations

## 9.3 Publication format

An estimate (see budget) has been received from Oxbow Books for a book with the following format:

144-page paperback, crown quarto (246 x 189mm), full colour gloss laminated cover and 8-page colour section.

## 10.0 TASK LIST

(The Task List should be read in conjunction with the Programme, provided as Appendix 4 to this report)

### Task Group 1: Complete analysis for 2004 excavations (Chapter 5)

<i>Task</i>	<i>Person</i>	<i>Days</i>
1. Charcoal identification	R. Gale	10
2. Radiocarbon dating	English Heritage -	
3. Further processing of environmental samples	D. Chuhan	10
4. Further assessment and analysis of enviro samples	W. Smith	10
5. Lithics analysis and report	L. Barfield	5
6. Prehistoric ceramics analysis and report	A. Woodward	5
7. Ceramic petrology	R. Ixer	5
8. Illustration of lithics and ceramics	N. Dodds	3

### Task Group 2: Draft report on 2004 excavations (Chapter 5)

9. Integrate archives/check phasing	M. Hewson	1
10. Phasing database	M. Hewson	1
11. Figure roughs for site narrative	M. Hewson	1
12. Draft figures for site narrative (plans)	N. Dodds	2
13. Draft of narrative	M. Hewson	3
14. Draft of discussion	M. Hewson	4
	S. Buteux	2
	H. Chapman	2

### Task Group 3: Drafting book chapters

15. Draft Chapter 1 (Introduction)	S. Buteux	3
16. Draft Chapter 2 (Landscape study)	H. Chapman	8
17. Draft Chapter 3 (Ice Age)	S. Buteux	5
18. Draft Chapter 4 (Neo/EBA)	S. Buteux	5
	H. Chapman	5
19. Draft Chapter 6 (LBA/IA)	S. Buteux	5
20. Draft Chapter 7 (RB)	S. Buteux	5
21. Draft Chapter 8 (Anglo-Saxon)	S. Buteux	5
22. Draft Chapter 9 (Overview)	S. Buteux	5
	H. Chapman	5
	M. Hewson	5

### Task Group 4: Generation of digital images for publication

23. Generation of images from digital sources	H. Chapman	15
24. Conversion/enhancement of images for publication	N. Dodds	10
25. Additional illustration (reconstruction)	N. Dodds	5

### Task Group 5: Refereeing, final editing, typesetting, archive and proof reading

26. Refereeing	English Heritage	1 month
26. Final editing	S. Buteux	5
	H. Chapman	5
	M. Hewson	5
27. Typesetting	Oxbow Books	2 months
28. Proof reading/correction (first and second proofs)	S. Buteux	5
	H. Chapman	5
	M. Hewson	5
29. Archive preparation and deposition	A. Forster	10

## Task Group 6: Research, liaison and management

30. Research and liaison	S. Buteux	5
	H. Chapman	5
	M. Hewson	5
31. Project management (incl. liaison with publishers)	M. Hewson	20

### **11.0 PROJECT MONITORING POINTS**

The following project monitoring points are proposed (see task list above and project programme)

1. **End June 2006:** Completion of all further analysis relating to the 2004 Catholme excavation, with the exclusion of the radiocarbon dates (Tasks 1 & 3-8). Completed first drafts of Chapters 1-3 of book.
2. **End October 2006:** Completion of first draft of Chapter 5 (Report on 2004 Catholme excavation, Tasks 9-14). Completed first drafts of Chapters 4-8 of book.
3. **End December 2006:** Completed draft of whole book, with radiocarbon determinations now integrated, ready for submission to publishers.
4. **End March 2007:** Corrected proofs ready to go to printers.

### **12.0 ACKNOWLEDGEMENTS (for 2004 excavations)**

Thanks are due to English Heritage who funded the project through the Aggregates Levy. Particular thanks are due to both Andy and Keith Mallaber, without whose constant co-operation and help the research could not have been carried out. Thanks also go to Andy Richmond and Gary Coates of Phoenix Consulting Archaeology Ltd. The remote sensing surveys were carried out by Kate Bain, Tim Evans, Emma Hancox, and Mark Kincey under the supervision of Meg Watters. The excavation was supervised by Kate Bain, Mary Duncan and Emma Hancox with the assistance of Richard Bacon, Dharminder Chuhan, Keith Hinton, Philip Mann and a team of students and staff from the University of Birmingham.

### 13.0 REFERENCES

- Coates, G. 2002. *A Prehistoric and Romano-British Landscape: Excavations at Whitemoor Haye Quarry, Staffordshire, 1997 – 1999*. Birmingham University Field Archaeology Unit Monograph Series 5. British Archaeological Reports, British Series 340, Archaeopress, Oxford.
- Gibson, A. 1998. *Stonehenge and Timber Circles*. Tempus, Stroud.
- Greig, J. (in preparation), “Priorities in Neolithic and Bronze Age Environmental Archaeology in the English Heritage West Midlands Region (Herefordshire, Shropshire, Staffordshire, Warwickshire, West Midlands, Worcestershire”. In P. Garwood (ed) *Undiscovered Country, West Midlands Framework Document for the Early Prehistoric Period*.
- Furestier, R. 2004. “Bell Beaker Lithic Industry: A Rediscovered Paradise?” In J. Czebreszuk (ed.) *Similar but different. Bell Beakers in Europe*, Poznan, 77-98.
- Hewson, M.P. (forthcoming), *A Prehistoric and Romano-British Landscape: Excavations at Whitemoor Haye Quarry, Staffordshire, 2000 – 2004*.
- Hovey, J, Hughes, G & Woodward, A. 1998. *Salvage recording of a test pit excavated on the site of a cropmarked ring ditch at the National Memorial Arboretum, Alrewas, Staffordshire*, BUFAU, Report 504.1.
- Hughes G. & Coates G. 1999. *An Archaeological Evaluation at Catholme, Barton under-Needwood, Staffordshire: Trial Trenching Phase*, BUFAU Report 620.2.
- Kent, D.H. 1992. *List of vascular plants of the British Isles*. Botanical Society of the British Isles, London.
- Losco Bradley, S and Kinsley, G. 2002. *Catholme; An Anglo-Saxon Settlement on the Trent Gravels in Staffordshire*. Trent and Peak Archaeology Unit, Nottingham.
- Neilson, C. 2002. *Archaeological Excavations at Barton Business Park, Barton-under-Needwood, Staffordshire 2001*, BUFAU Report 842.
- Prehistoric Ceramics Research Group, 1995. *The Study of Later Prehistoric Pottery: General Policies and Guidelines for Analysis and Publication*. Salisbury.
- Pryor, F.M.M. 1998. *Etton: Excavations at a Neolithic Causewayed Enclosure Near Maxy Cambridgeshire, 1982-7*. English Heritage Archaeological Report no. 18. London.
- Pryor, F.M.M. and French C.A.I 1985. *Archaeology and Environment in the Lower Welland Valley, East Anglian Archaeology* vol 27. Cambridge.

Vine, P.M. 1982. *The Neolithic and Bronze Age cultures of the Middle and Upper Trent Basin*, British Archaeological Reports, British Series 105, Oxford.

Wheeler, H. 1979. Excavation at Willington, Derbyshire, 1970-1972. *Derbyshire Archaeological Journal* 99: 58-220.

## APPENDIX 1

### AN ARCHAEOLOGICAL GAZETTEER OF THE WHERE RIVERS MEET STUDY AREA

This gazetteer is based on a survey of all documented archaeological interventions, both published and unpublished, that have taken place within the 72km<sup>2</sup> 'Full Area' of the Where Rivers' Meet Project.

The entries are organised by parish. Some sources have been included which do not fall within the Study Area but which contain information which may be considered directly relevant.

#### GLOSSARY OF ABBREVIATIONS

AP	Aerial Photograph/Photographic
SAM	Scheduled Ancient Monument
PRN	Primary Reference Number
SMR	Sites and Monuments Record
DMV	Deserted Medieval Village
EBA	Early Bronze Age
MBA	Middle Bronze Age
LBA	Late Bronze Age
EIA	Early Iron Age
MIA	Middle Iron Age
LIA	Late Iron Age
TVARC	Trent Valley Archaeological Rescue Committee

#### Alrewas

- 1. Department of the Environment, 1974. Alrewas.** Summary. SK 147 183. AP surveys showed cropmarks of enclosures covering c.2ha. The 1974 excavations (O'Brien, TVARC, 1974), examined some of the ditches of these enclosures and established that they had two phases of use. Postholes and foundation trenches were excavated and sherds indicating occupation from the 2<sup>nd</sup> and 3<sup>rd</sup> centuries AD were recovered.
- 2. Palmer, R. 1976. Alrewas.** Journal article. This discusses Neolithic causewayed enclosures (here, also termed interrupted ditch enclosures), in Britain. For reference, Plate 17 is an aerial view of the cropmark at Alrewas which is interpreted as a causewayed enclosure and Figure 13 illustrates it and another at nearby Mavsyn Ridware. These two sites were the northernmost known in Britain at this date.
- 3. Saracino, E.P 1990. Willowbrook Farm.** Evaluation. SK 1830 1525. Ring ditch. There was a 50.0m by 50.0m geophysical assessment first after which three trenches were opened. These measured 48.0m, 21.0m and 14.0m in length and were all 2.0m wide. The trenches were linked together across the ring ditch. The ditch measured 20.0m diameter with a depth of 0.50m at greatest. No artefacts were recovered from each of the exposed ditch sections. No features were observed within the interior of the barrow. There was evidence of severe plough damage overall.
- 4. Bartlett, A.D.H. 1991. Wychnor Estate.** Geophysical survey at SK 1515 ? Two fields were covered, one east of the village and one west. The site appears to lack substantial remains of ancient occupation – past settlement activity was considered unlikely.
- 5. Howlett, C.E 1991. Redland Readymix Site.** Evaluation. Geophysical survey & trial trenching. No archaeological remains were observed.

6. **Meeson, R 1991 Willowbrook Farm.** Evaluation. SK 1830 1524. Follow-up to Saracino 1990. This concerned the same ring ditch. A significant amount of attrition due to ploughing was similarly observed. The cropmark evidence as seen previously on AP was confirmed. No central interment/cremation survived. A 23.0m length of ditch was exposed, plus a sub-rectangular pit measuring c.2.5m–3.5m by 2.5m, and number of postholes. One flint core(?) of Neolithic/EBA date was recovered. Speculation that the postholes might belong to a structure pre-dating or broadly contemporary with the barrow was suggested.
7. **Saracino, E.P 1991. Willowbrook Farm.** Final version of above report. No additional/alternative interpretation.
8. **Hughes, E.G. 1992. Whitemoor Haye.** Evaluation. SK 1776 130. This followed an AP assessment and a geophysical survey. Twenty nine trenches (of varying sizes), were excavated in the non-scheduled area and there were three exposures in the scheduled area (of 400m<sup>2</sup> total). The results of the geophysical (gradiometer) survey proved disappointing with few anomalies of archaeological potential detected. The surveyed area covered 6ha and none of the known cropmarks were definitely located. It is possible that these had either been destroyed by ploughing, been incorrectly identified or had a low magnetic susceptibility. Trench 1 – there were several N-S ditches, associated with *PRN* 1392, no artefacts were recovered. Trench 2- there was a double ditched trackway with ditches 10.0m apart, orientated N-S, no artefacts were recovered. Trenches 4, 18 and 20 – three E-W ditches were exposed, which were associated with triple ditched system *PRN* 1368. There was one N-S ditch cutting it in trench 18 and a burnt pit in trench 20 but no artefacts in either. Trenches 13, 15 – shallow ditches here may have been associated with field system *PRN* 1357, no artefacts were recovered. Trench 17 – there were two N-S ditches, which correspond with a double ditched system observed on previous AP surveys, no artefacts were recovered. Trench 22 – a corner of enclosure ditch *PRN* 1370 was exposed, no artefacts were recovered. Trench 23 – there were two E-W ditches, which correspond with double ditched cropmark *PRN* 1369, no artefacts were recovered. Trench 27 – a ditch corresponding with enclosure *PRN* 1371 contained one sherd of 2<sup>nd</sup> century Romano-British pottery. Two intercutting graves, possibly Romano-British contained hobnails and poorly preserved bone. Trench 28 – this contained a N-S ditch from which EBA sherds were recovered, it corresponds with enclosure *PRN* 1376. Trench 31 in scheduled area *SAM* 200 – a ring ditch, from which two sherds of EBA pottery were recovered. There was a burnt clay and stone filled “hearth” at the centre from which one Iron Age sherd was recovered. In addition, a series of stake holes and pits were recorded. Trench 32 *SAM* 200 – a ditch corresponding with the cropmark enclosure. One Romano-British sherd was recovered. Trench 33 – a NW-SE ditch corresponding with trackway *PRN* 1359 was recorded. In addition, there were two possible ovens and a pit from which several sherds of Iron Age pottery were recovered.
9. **Palmer, R 1992. Whitemoor Haye.** AP results - Area 1 SK 178 132. double ditched track (*PRN* 1359); double pit alignment; trapezoidal enclosure (*PRN* 1392); ring ditch (*PRN* 1391?). Area 2 SK 182 140. Group of 5 ring ditches/hut circles and several rectilinear enclosures (*PRN* 1391). Area 3 SK 176 125. Double ditched track (*PRN* 1359) continues here; it meets E-W triple ditched system (*PRN* 1368); double ditched track (*PRN* 1369); numerous enclosures (including *PRN* 194, 1370, 1376, 1371, 4235, 1373, 1375, 1372/1378, 1374, 1362).
10. **Slee, D.W. 1994. Curborough Farm.** Curborough is a DMV (*PRN* 2089). Archaeological assessment noted that no SMR sites are within immediate area, though there are a number close by. There are cropmarks at SK 1390 1120 plus two medieval moated sites at Streethay (*PRN* 3547), and Curborough (*PRN* 3548).
11. **Bartlett, A.D.H 1995 Whitemoor Haye.** Geophysical survey. For the Lupton evaluation. This concludes that some of the cropmark enclosures on the SMR are likely to correspond with “substantial and largely intact subsurface features” in plot areas G4 and G5.

12. **Lupton, A 1995. Whitemoor Haye.** Evaluation. 1.5km south of Alrewas. Seventeen trenches were opened, orientated either N-S or E-W with a total area of 2400m<sup>2</sup>. Ten trenches exposed archaeological features. Few stratified artefacts were recovered from these trenches, with the exception of two linear features in B and AC. Trench B - 60+ sherds of at least 3 mid-late Neolithic vessels. Trench AC - 5 Prehistoric sherds from one vessel, from a linear feature equated with *PRN* 1374. In addition, there was evidence of a double-ditched trackway *PRN* 1391 in trench A. A ring ditch, one of a group of 5, *PRN* 1391 in trench B was not considered directly contemporary with the sherd filled linear feature. The other trenches contained a selection of linear features, remnants of ridge and furrow, pits and postholes.
  
13. **Richmond, A.D.W 1997 Whitemoor Haye.** Evaluation. SK 178 145. One trench was opened measuring 10m x 1m. No artefacts were recovered. The trench was on the extreme SE corner of Monument 220c located at the point where quarry conveyor belt impinges on the scheduled area.
  
14. **Bartlett, A.D.H. 1998. Whitemoor Haye.** Geophysical survey. Centred on SK 176 122. Three areas were surveyed by magnetometer. The site of the survey was on the west bank of the Tame, near Sittles Farm. Known cropmark enclosures were surveyed in two areas G7, G8. These were intact and detected in the survey.
  
15. **Hovey, J et al, 1998. National Memorial Arboretum.** Salvage recording. SK 1854 1460. This took place on the site of *SAM* 199 (*PRN* 193). The site is a multiple ring ditch consisting of several concentric circular features. Salvage recording of a test pit took place following the recovery of several sherds of prehistoric pottery, which was interpreted as a late example of Beaker Ware (2000-1800BC). All the spoil was sieved and the test pit reinstated. Seven more sherds of prehistoric date were recovered from the spoil along with several flint flakes and post medieval artefacts. Two sherds of Romano-British date and two flint flakes were recovered from a linear ditch feature recorded in the sections of the test pit.
  
16. **Coates, G. 1998. Whitemoor Haye. Excavation.** Areas A, B, C, F, R, S, T. Notable for the recovery of EBA Beaker burial (Area R). There was a LBA/Early Iron Age double pit alignment (Areas S, T) and three Iron Age enclosures and associated circular structures (Areas A, B, C). From these features a number of sherds of Middle Iron Age date were recovered, including 80 from a single storage jar. The features were located in the area of scheduled monument *SAM* 200. In addition, there was a rectilinear enclosure (Area S) and a Romano-British droveway of mid-late 2<sup>nd</sup> century A.D (Area B, T and F). Several Romano-British linear features ran across the enclosures in A and B.
  
17. **Coates, G. 1999b. Whitemoor Haye.** An overview of **Coates 1998** which synthesises work at Whitemoor Haye to date. This report incorporates the findings of a watching brief in which the Romano-British droveway noted above continued in areas A, B, S, T, and the double pit alignment in area T. A trapezoidal enclosure of undetermined date was also observed. No artefacts were recovered from its ditch. Several sherds of Iron Age date were also recovered from an irregular semi-circular ditched feature. It did not appear to be a plough-damaged hut circle, however. A pit which could not reasonably be associated with any other known features contained sherds of LBA/Early Iron Age date in its primary fill. In its most recent fill it contained sherds from at least five Iron Age vessels. Waterlogged plant remains included a number of species associated with arable land, farming on a light sandy soil. Most plants relate to a range of weedy and overgrown habitats, from dry land, through damp ground to wetland and aquatic conditions. There are four distinct periods of activity at Whitemoor Haye. EBA – “inhumation burial” and beaker vessel (area R); in addition, the recovery of sherds of Late Neolithic date from 1.5km to the north perhaps indicates an earlier or transitional date; LBA/EIA – pit alignments; MIA – enclosures and ring gullies; Romano-British – droveway c.2<sup>nd</sup> century AD which runs through a gap in the LBA/EIA pit alignment. There was also evidence of Romano-British ditches, perhaps of a rectangular enclosure.

18. **Coates, G. 2000. Recycling Unit, Alrewas Quarry.** Evaluation. SK 179 148. This followed a geophysical survey the results of which were largely negative. Cropmarks recorded in an AP survey indicated a possible cursus monument (SAM ST 220b), amongst other potential features. Fifteen trenches of 15.0m x 2.0m, were excavated to test these cropmarks. With the exception of a number of medieval and post-medieval plough furrows little of archaeological significance was recorded in any of the trenches. No evidence of the cursus or other archaeological features was recovered. The cursus has not been identified elsewhere either, apart from as a cropmark.
19. **Neilson, C. 2000. Whitemoor Haye.** Excavation. Areas D, E, G, & H. SK 180 130. All four lay within the area of SAM 200. Area G contained a variety of Prehistoric features. The earliest of these was a curvilinear enclosure ditch. There were also three east-west aligned ditches which appeared to respect the line of a Prehistoric droveway, recorded as a cropmark. It may be that these formed the banks of the droveway itself although none produced artefacts from which to date them. This feature continued into Area E. One of the ditches which were tentatively associated with the droveway produced the only Prehistoric sherds (three), of the season. These date to the Neolithic/Bronze Age. One other Prehistoric feature was exposed in Area D. This proved to be a length of ditch with a terminal, also recorded previously as a cropmark. Again, this is interpreted as an integral part of a droveway with perhaps an entrance at the terminal.

The Romano-British period is represented in all four areas. In Area H, which was centred on cropmarks delineating a triple-ditched enclosure, excavation revealed it was most likely a pastoral installation, rather than one of defensive function. There was no evidence to demonstrate the primacy of any one of the ditches in the triple formation. Though it may be that additional ditches were added over time in order to enclose more land. A significant amount of Romano-British pottery was recovered, deriving primarily from regional and locally made cooking vessels. A single-ditched enclosure, also in Area H was exposed. It extended up to the Prehistoric droveway which it may well have utilised. A lack of cropmarks to the east of Area H may well be due to the build up of alluvial deposits. In Area G three ditches may be the remnant of Romano-British hedge boundaries. There was also evidence of the Romano-British droveway which had been identified in previous seasons in Areas A, B and T. It is a suspicion that the droveway may have afforded passage between two fordable points on the River Tame.

In all four areas features of medieval and post-medieval periods were revealed. A ditch aligned northwest-southeast in Area D may have been the earliest of these. The lack of artefactual evidence made it difficult to be more specific.

20. **Neilson, C. 2001. Whitemoor Haye.** Excavation. Area P. SK 180 130. This excavation revealed the remains of a Bronze Age ring ditch with a truncated central cremation feature. It did, however, produce very few artefacts. The ring ditch was c.10.0m in diameter, with a U-shaped profile in section, a width of 1.0m and a maximum depth of 0.33m. Ten sections were excavated but no artefacts were recovered. An ovoid pit feature, centrally located, with a deposit of bone fragments in a charcoal rich fill was excavated. The pit was c.1.42m wide and c.0.33m deep.

In association with the excavation a salvage recording task and watching brief was carried out to the north of Area P. A cremation burial in a pot was recovered. It had been buried in a small pit, c.0.45m in diameter. One other potential cremation pit was excavated but contained no artefacts and only residual amounts of burnt clay. A series of linear features were associated with the Romano-British droveway ditches, and also a possible enclosure all of which had been observed as cropmarks. Other linear features and postholes were considered to be probably either medieval - post medieval, or of natural origin.

21. **Martin, H. 2001. Whitemoor Haye.** Watching Brief. SK 180 130. Two ring ditches, one cut by the other, had a number of sections excavated through them. Two cremation pits were located roughly centrally in the later of the two ring ditch features. The first of these pits measured c.0.44m in diameter and contained fragments of human bone. The second pit measured c.0.35m in

diameter and contained a cremation urn inside which were human bone fragments. An ovoid feature, 0.9m wide and 0.5m deep, not clearly associated with the ring ditches, contained a large number of prehistoric sherds and other finds. To the north of the ring ditches a feature which may have been an inhumation was excavated. This contained an *in situ* broken pot, a large concentration of charcoal, burnt bone and prehistoric pottery. A series of pits was also investigated, several of which contained sherds of prehistoric date, and in one instance an almost complete pot and fragments of burnt bone. Several other assorted features produced sherds of prehistoric date, fragments of burnt bone and worked flint.

21. **Martin, H & Burrows, B. 2002. Whitemoor Haye.** Watching Brief. SK 180 130. An enclosure ditch, a ring gully, a linear ditch and a number of pits were observed and partially excavated as a salvage recording exercise. The fills of the enclosure ditch were to a great extent waterlogged and exhibited evidence of re-cutting. No artefacts were recovered. The ring gully, c.17.0m in diameter had an east facing entrance. A large number of prehistoric sherds were recovered from the northeastern terminal. The linear feature and the pits produced no datable finds.
22. **Coates, G. 2002. Whitemoor Haye.** Excavations 1997-1999. SK 180 130. This source brings together the excavations, evaluations and watching briefs which took place over the course of three years in seven areas. It sheds light on the late Neolithic and EBA ritual area in the north of the site, characterised by barrows and possible Beaker burials, and the area to the south where agricultural activities are evident in the Iron Age and Romano-British periods, themselves characterised by enclosures and hut circles. Neolithic/EBA activity was recorded in the form of two ring ditches, pits and gullies in the north of the concession. These were associated with Middle Neolithic and EBA pottery. Radiocarbon dates for charred plant remains from a pit in Area R provided Early Neolithic dates, the earliest so far for activity at Whitemoor Haye. The earliest artefacts are the Middle Neolithic Peterborough Ware vessel sherds from evaluation trench B. In addition, over the course of the three years parts of two Beaker vessels have been recovered, a rare occurrence in the Trent valley. It was clear from their excavation that both had initially been deposited in a broken condition. Iron Age activity is represented by a variety of linear boundaries, pit alignments and three enclosures. Each of the enclosures had within it evidence of structures, specifically ring gullies, pits and postholes. These were most likely to be small farmsteads, maintained by pastoral and arable agriculture. Romano-British activity was characterised by the extensive droveway that crossed the site from north to south and by enclosures in Areas A and S and associated boundary ditch systems. The droveway may have been dug in the 1<sup>st</sup> - 2<sup>nd</sup> centuries AD and a similar one at Fisherwick is likely to have its origin in the early 2<sup>nd</sup> century date itself. The enclosures are thought to have provided a pastoral use, stock corralling perhaps. In general land use is quite comparable in the Romano-British period to that in the Iron Age.
23. **Buteux, S. 2003. Whitemoor Haye. Woolly Rhino.** This was discovered by chance during gravel extraction operations at Whitemoor Haye quarry in the western region of the site. Further fragments of the skeleton were subsequently recovered under more rigorous conditions and rich organic deposits, with the well-preserved remains of plant macro-fossils and beetles were associated with the findspot. The animal was probably buried as a frozen carcass, a suspicion based on the exceptional preservation of the remains. Closer investigation of the site also produced fragmentary remains from a second woolly rhino and a mammoth. Other animal remains from the surface exposed subsequent to gravel extraction comprised a wolf limb bone, a horse femur and a shed reindeer antler.
24. **Hewson, M. 2004. Whitemoor Haye.** Excavation (in 2002). SK 180 130. Three areas, I, J, K. Excavation in Area I exposed the southern half of a ring ditch, of c.21.0m in diameter. Five sections were dug through the ditch, which demonstrated that it had been re-cut at least once. The ditch survived only to a depth of up to c.0.35m and was c.0.4m wide. The re-cut fill contained several sherds of a collared urn of the EBA. The original cut of the ditch survived to a depth of up to 0.7m and had a width of c.1.55m. The fill contained one sherd of EBA date. A ditch

terminal suggested a potential entrance, and a circular cut feature close to this terminal contained the remnants of a cremation with bone fragments. Other features included a sub-circular cut in the interior of the ring ditch which contained sherds from a collared urn again, dating to the EBA, a curvilinear feature, which also contained further sherds of this type and a sub-circular feature with fragments of burnt bone, which may have been a second cremation. In Area J excavation exposed part of the ditch system for a large rectangular enclosure. Part of the northern ditch was truncated by a pit measuring some 8.0m by 6.0m which attained a depth of 2.1m. The uppermost fill contained one sherd dating to the 2<sup>nd</sup> - 3<sup>rd</sup> century AD. The enclosure ditch itself was sectioned in several places. This demonstrated that it had been re-cut, with this re-cut surviving to a depth of up to 0.5m with a width of up to 2.0m. The fill of the re-cut contained a number of sherds dating to the MIA, along with some residual Bronze Age artefacts. The primary ditch which had a width of up to 3.0m and a depth of up to 1.25m contained only one sherd, of EBA date. There was another, earlier enclosure ditch internal to the above described feature, the fill of which contained a large quantity of EBA sherds. A ring gully was exposed inside the earlier of the enclosures which measured c.12.0m in diameter and contained an Iron Age sherd, although appearing to respect the possible entrance of the enclosure. It also contained potential postholes within its interior. A number of other postholes and pits were excavated within the enclosures and further sherds of EBA date were recovered. Area K provided evidence of a further ring gully of c.9.5m in diameter which contained a number posthole features in its interior, though contained no datable artefacts. Other undated linear features may equate with droveway evidence recorded in previous excavations in other areas.

25. **Ramsey, E. 2004. Whitemoor Haye.** Excavation (in 2003). SK180 130. Three areas L, M and N. Areas L and M lie within the confines of SAM 200 and area N lies partially within it. Area L measured 40.0m by 40.0m. A series of N-S ditches and two truncated pits were exposed. With the exception of a number of flint flakes the remaining artefacts were of post medieval origin. It is likely therefore that these features are of quite recent origin. Area M revealed features representing a number of phases of occupation, based at present primarily on stratigraphic relationships. The earliest phase comprised an enclosure ditch surviving to a depth of 0.35m with a width of 0.65m. Parts of a possible ring ditch or ring gully and the remains of a linear ditch were excavated within the interior of the enclosure. In addition, a number of small, shallow sub-circular pits were excavated, one exhibiting burning and containing a significant amount of charcoal. Sherds were recovered from the enclosure ditch, one of the interior ditches and one pit. A length of a separate enclosure ditch was located to the north of the first. Within its interior there was part of another ring ditch and five pits, several of which exhibited signs of burning. Sherds were recovered from the enclosure ditch. In the second phase an enclosure ditch aligned similarly to one of the earlier enclosures, although more substantial, was excavated. It had been re-cut at some time and sherds were recovered from the primary ditch. In phase three a series of linear features were identified. Sherds were recovered from several of these. In phase four two N-S aligned ditches were sample excavated. Sherds were recovered from both. Several other linear and pit features remained unphased. Sherds were recovered from one pit and one of the linear features. The exposure of area N revealed a number of shallow linear features, none of which contained artefacts.

## Barton-under-Needwood

### Catholme (Farm)

26. **Losco-Bradley, S. 1984. Catholme.** An Anglo-Saxon settlement was originally suspected as a result of an AP survey, which identified three apparent *grubenhäuser*. After excavation two of these proved to be natural phenomena. It is stated that rural domestic occupation ceased there before the Norman Conquest. Dating of the settlement is based mainly on radiocarbon dates, rather than sherd identification. The date range spans, with one exception, from 200AD - 1120AD. It is thought that when considered in the light of associated material culture that a Romano-British origin is unlikely. Similarly, that occupation would have ceased by the early tenth century. The Catholme settlement would have been located c.800m to the east Ryknild

Street, the Roman road, from Wall to Derby, and would have been close the river Trent and Needwood Forest. Occupation at Catholme is divided into 6 phases, though only the first five are detailed. These lasted a total of three to four centuries of continuous occupation.

Phase 1 - fifteen structures, including three *grubenhäuser* aligned with an early ditch system and a large central enclosure, with the largest of the structures inside it. There was a lot of open space within the settlement, perhaps with fields enclosed between the settlement and the river.

Phase 2 – the central enclosure was extended to both south and east. Enclosed fields by the river were extended to the south where a new farm complex was built. Another farm was added to the north. Formalisation and hardening of the earlier pattern occurred and *grubenhäuser* increased to at least six.

Phase 3 - a new farm complex was added in the northwest plus two new *grubenhäuser*, though in general buildings were repaired and replaced.

Phase 4 - settlement form began to break down, with buildings constructed outside of, and over the top of former boundaries and the central enclosed area. These new structures were associated with fences.

Phase 5 - the former enclosure system disappeared. Groups of buildings were linked by fences and yards or paddocks. The old central holding, now two units was about all that remained of the former settlement. A new type of building appeared, to replace the former type which had employed the posthole method of construction. This new type had planks set in trenches for the long walls, with posts at each end. At the end of the phase the principal central building disappeared, after three centuries of occupation.

27. **Jones AE 1992** Evaluation. SK 1935 1671. One exposure of 153m<sup>2</sup>. No artefacts were recovered. There was a modern field drain and possible stakehole only and no other significant archaeology.
28. **Staffs County Council, 1994**. Salvage recording. Catholme Weir. Numerous posts were exposed due to floodwater, there were given a date based on dendrochronological assessment of 1730-1780AD.
29. **Coates G. 1999a**. Watching Brief. SK 1960 1680. No archaeological features or deposits were observed.
30. **Cox, C. 1999**. AP assessment. There were three pit alignments, two of which converged to form a double pit alignment. Little else of archaeological significance was observed, with the exception of ill-defined features which may subsequently prove to be pits and ditches.
31. **Hancocks A. & Coates G. 1999**. Fieldwalking/surface collection. SK 1940 1670. This covered a 20ha area. Two items of humanly struck flint were recovered which were not closely datable. One sherd 12<sup>th</sup>/13<sup>th</sup> century medieval pot was recovered. The remainder of the artefacts were post medieval.
32. **Hughes G. & Coates G. 1999a**. Evaluation. SK 1960 1680. 22 trenches were excavated. Evidence of E-W linear features were located in trench 2 between SAM 256 and SAM 215 but no artefacts were recovered. These features could date either to ridge and furrow agriculture or to activity associated with the monuments. Trench 4 had a series of pits, two of which may have related to the double pit alignment orientated E-W to the northwest of SAM 215. Trench 14 contained a 2.0m diameter pit thought to have been a part of the alignment of pits orientated E-W to the south of SAM 256. Trenches 19 and 21 contained in total three pits thought to have been a part of the alignment orientated NE-SW to the north of SAM 215. There was also a similarly orientated linear feature in trench 19. It is considered that such pit alignments may relate to late prehistoric land divisions. Trench 22 contained a linear feature orientated NW-SE which may

have been part of the southern boundary of the monument complex. It contained 1 sherd of “possible prehistoric pot”.

33. **Richmond, A. 1999d.** Summarises Hughes & Coates 1999a.
34. **Losco-Bradley, S. & Kinsley, G. 2002.** Excavation. The final report from the Catholme Anglo-Saxon settlement excavation of the late 1970s – early 1980s. The phasing of the settlement was reviewed and the following results were obtained. This later version was less conjectural than previous examples. The majority of the area of the settlement remains unphased, with structures scattered throughout the area. The structures of the earliest phases are focused primarily at the centre of the settlement, surrounded by a contemporaneous enclosure ditch. There are also two outlying structures of these phases to the west. A “later” phase was also closely focused on the central part of the settlement. This had spread slightly to the south too, as the southern section of the enclosure ditch was re-dug, perhaps in order to create more space. Two new structures also appeared in the northern and northwestern parts of the settlements whilst the western area continued to be occupied. The final phase, is termed by the authors, “long-lived” (multi-phase). Primarily this records a number of trackways to the east and west of the settlement.

**The Wychnor Cemetery** – this is discussed in the context of the Catholme excavation. This site lay c.500m southwest of the excavation. It was discovered in 1899 by workmen digging a sand-pit. Two urns were dug up at a depth of about 4ft. No bones were recovered although a number of other artefacts were associated with the urns. Further finds were made at an unspecified date including, as late as 1926, part of a brooch with a fragment of human jaw. Artefacts date from the late 5<sup>th</sup> century, through the 6<sup>th</sup> century and possibly the early 7<sup>th</sup>.

### **Fatholme (Farm)**

35. **Cox, C. 1998. Fatholme Farm.** AP assessment. Centred on SK 2017. Prehistoric features – five ring ditches, a possible double ditched enclosure, three single pit alignments, a double pit alignment, and two rectilinear enclosures with a possible hut circle/stock pen in one. There are numerous other ditch features and pitting to the east of the area which may relate to storage facilities. In addition, there are a number of “sinuous” natural features. Medieval features – presence of ridge and furrow overlying earlier features.
36. **Johnson, S. 1998. Fieldwalking.** Centred on SK 2050 1780. This failed to identify any concentrations of artefacts, or other indicators of significant past activity.
37. **Martin, A.L. 1998.** Desk-Based Assessment. Centred on SK2017. There are five known sites of interest within the assessment area. All of these are known from cropmark evidence. Assessment took the form of evidence derived by site inspection, archived material and the rectification of APs. Neolithic features - Possible causewayed enclosures at Alrewas and Mavesyn Ridware, a possible cursus at Catholme and a ring ditch and trackway at Willowbrook Farm. Bronze Age features - ring ditches at Fatholme Farm, Tucklesholme Farm and its vicinity, and around Willowbrook Farm. Iron Age features - hillfort at Borough Hill. AP surveys have also revealed extensive field systems in the area, especially at Fisherwick. Romano-British features - Tucklesholme Farm revealed pits with a large assemblage of domestic wares. Some linear features and enclosures were considered to be of the period. Anglo-Saxon - settlement and cemeteries, Catholme, Wychnor, Tucklesholme, Barton, and Walton station.
38. **Coates G. & Hughes G. 1999.** Excavation. SK 2050 1780. Three areas totalling c.3000m<sup>2</sup> were exposed in order to examine a prehistoric pit alignment and part of an enclosure (*PRN* 1455). Both features were thought to date to the later prehistoric period though sherds from the Late Neolithic/EBA indicate an earlier phase of activity too. This work follows on from an evaluation (Hughes & Coates 1999b).

Area A – this contained a curvilinear ditch aligned NW-SE having dimensions of 1.1m – 1.8m width and up to 0.5m depth. One sherd of possibly late Neolithic pottery, and a fragment of fired clay were recovered. A pit of c.1.4m diameter and 0.45m deep contained two fragments of

probable EBA pottery. There was also an undated posthole and a number of post-medieval features.

Area B – this contained part of the ditch exposed in Area A. Two fragments of pottery, one Middle-Late Iron Age, one Bronze Age/Iron Age were recovered.

Area C – This contained part of the ditch exposed in Areas A and B. No pottery or other dating evidence was recovered. The ditch cut the pit alignment, however, so clearly postdates it. In total seven pits were excavated in the pit alignment. These comprised a single row of bowl shaped pits about 1.0m diameter, and up to 0.7m deep. Most of these had two fills. One sherd of the later Neolithic or EBA was recovered. It was suggested that the pit in Area A was the earliest feature, followed by the pit alignment and then the enclosure. Sherds of earlier date within the pit alignment and ditch features are thought likely to be residual.

39. **Hughes G & Coates G 1999b.** Evaluation. SK 2050 1780. Fourteen trenches were excavated. A group of pits and linear ditches to the west of the farm appear to confirm the presence of a pit alignment and rectilinear enclosure, as recorded in the AP survey (*PRN* 1455). One sherd of prehistoric pottery was recovered. Trenches 1-6 were to the north of the farm and 10-12 were to its south and bar a few shallow linear features all were devoid of archaeology. There were two pits in trench 7 and one in trench 13. Each c.1.0m diameter and up to 0.5m deep. These were all orientated NW-SE, equitable with the pit alignment observed on the AP survey. Two ditches, one in trench 8 and one in trench 9, probably correspond with the west and north sides of the rectilinear enclosure observed in the AP survey. A sherd of prehistoric pottery was recovered from the ditch in trench 9. The whole area was also crossed with linear features associated with ploughing, orientated NW-SE.
40. **Richmond, A. 1999d.** Summarises Hughes & Coates 1999b.

### Other Sites in the Parish

41. **Hughes, E.G. 1990. Tucklesholme Farm.** Evaluation. SK 210 188. Previously a gradiometer survey had detected two potential ring ditch anomalies (Jones 1990). Two 2.0m x 40.0m trenches were excavated plus one area of 6.0m x 20.0m and a second area of 3.0m x 17.0m. In Area 1 there was only evidence of medieval ridge and furrow. In Area 2, sections of a ring ditch, previously partially excavated in 1975 by TVARC, were exposed and excavated. The ditch survived to 3.0m wide and to a depth of 1.7m and had a V-shaped profile. Burnt daub and one flint flake was recovered from it. The ring ditch feature comprised an outer ditch with two inner ditches, these inner ditches were only 0.6m wide and 0.15m deep. There was a possible post setting in the section of the innermost ditch. It is possible that the inner ditches may be post trenches for palisades or stake circles. In addition, there were two linear ditches west of the ring ditch. These had no artefacts and no apparent relationship to ring ditch.
42. **Jones A.E. 1990. Tucklesholme Farm.** Geophysical survey. SK 210 188. This was focussed on two ring ditches recorded in previous AP surveys. The southern one *PRN* 1447 was partially excavated in 1975. This was 28.0m in diameter with a depth of 1.6m. It enclosed two concentric shallow inner ditches. The northernmost ditch *PRN* 1451 was yet to be excavated. The gradiometer survey detected anomalies equitable with both ring ditch features and two linear features close to the southernmost ring ditch.
43. **Hughes, E.G. 1990-91. Tucklesholme Farm.** Excavation. SK 210 188. Extension of the previously excavated area to encompass the whole of the ring ditch which was partially exposed in the evaluation (Hughes 1990). The ditch proved to measure between 29.0m - 31.0m in diameter. It measured 2.6m-3.5m in width and survived to a depth of 1.7m. No further artefacts were recovered from the ditch sections. No other postholes were identified in either of the inner ditches. A pit, external to the ring ditch measuring 2.0m x 1.25m by 0.55m deep, showed evidence of burning at its base. Its fills included one with a lot of charcoal, tiny fragments of burnt bone, and elements of burnt timbers perhaps from a box or basket. Associated cobbles also

- showed evidence of burning. The suspicion is that the pit is a remnant of a cremation burial/preparation. As a result of radiocarbon dating 5<sup>th</sup> century AD dates were obtained. For reference, a pit in the centre of the ring ditch measuring 2.0m x 1.2m had previously been discovered and excavated in 1975.
44. **Ferris, I. & Buteux, S. 1992. Tucklesholme Farm.** Evaluation. SK 210 188. This was located adjacent to the site of an 1851 ballast pit where Anglo-Saxon cemetery remains were discovered. Six trenches were excavated, following an inconclusive resistivity survey in order to assess whether cemetery remains could be further located, and to assess a series of cropmarks. A circular feature and a bifurcating gully were possibly to be associated with the cropmark plan. Two sherds of Romano-British pottery, and a flint flake, all from a gully were the sum total of recovered finds. In general, there was clearly severe truncation by the plough.
  45. **Hughes, E.G. 1993. Barton Turn Marina.** Evaluation. SK 197 182. This followed a geophysical survey. A group of linear and circular cropmarks were recorded on previous AP surveys (*PRN* 1471). In total fourteen trenches were excavated. No traces of the circular cropmark features were exposed in the trenches. A number of linear features were observed but proved not to be significant. They were understood as former field boundaries. Nothing further of significance was observed in the other trenches.
  46. **Deegan, A. & Cox, C. 1995. Barton-under-Needwood.** AP Assessment. Fields centring on SK 208188. This covered an area located between the Trent & Mersey canal and the Derby to Birmingham railway, in an area thought to be the focus of a number of Bronze Age funerary monuments, prehistoric linear ditches and enclosures. The area is also overlain by traces of medieval agricultural practice. A ring ditch at SK 2083 1872 was truncated by the railway. Another ring ditch at SK 2093 1887, showed faint traces of possible internal features. Possible Iron Age settlement and land-use features seen as linears and enclosures could be seen. No conclusive traces of the cursus and pit alignment as recorded on the SMR were observed. These features were considered likely to be field boundaries associated with the rectilinear enclosure at SK 2074 1875. Other ditches, pits and enclosures lie to the north of this enclosure, though do not have any clear association. There was a possible ring ditch at SK 2077 1876, which was mostly masked by deeper soil. Extensive reversed S-shaped ridge and furrow cultivation was observed.
  47. **Wait, G.A. 1995. Tucklesholme Farm.** Fieldwalk – proved uninformative. Evaluation. Twelve trenches were excavated with a total area of 600m<sup>2</sup>. There were some small additions to trenches also. Trench 1 – there were two N-S aligned ditches, two additional linear features and a curvilinear feature, no artefacts were recovered. Trench 2 – there were two linear features from which one worked flint was recovered dating to the Neolithic/Bronze Age. A circular feature, which remained unexcavated contained badly weathered sherds (unidentified in report). The speculation was that this feature may have been a cremation. One sherd of Roman date(?) was recovered from the surface of subsoil. Trench 3 - ditches associated with a long, narrow rectilinear enclosure were exposed. A Roman sherd from the fill of a ditch pre-dating this enclosure was also recovered. A pit and two postholes were also excavated, the latter contained two medieval sherds. Trench 4 – there were two undated ditches and gully. Trench 5 – there was a broad u-shaped ditch 1.30m wide. APs and a geophysical survey suggested that there was a double ring ditch at this location. Trench 7 – there were two E-W aligned ditches, which were also picked up on AP survey and geophysical survey. No artefacts were recovered from these. In addition, a post-medieval hedge line was observed. Trench 8 – there were two arcs of a ring-ditch plotted from rectified APs and the geophysical survey. In addition, an unexcavated linear ditch was exposed. Both AP and geophysical survey had suggested there may be a double ring ditch here. The inner ditch is thought to have been that which was excavated. Trench 6 and 9 – no archaeological features were located. Trenches 5 and 8 located elements of two Bronze Age ring ditches located by AP within scheduled monument *SAM222*. The suggestion is that many of the “field boundary” type ditches in the area of the evaluation could be interpreted as Romano-British in date. No Anglo-Saxon artefacts were recovered although the site of Anglo-Saxon cremations

- (PRN 917) is located only 450m to the south. It was clear that ploughing has caused severe truncation.
48. **Richmond, A. 1999a.** Catholme. Desk-Based Assessment. SK 195 169. This was a useful assessment of the area carried out prior to the quarrying of a 40ha area. It covers an area of relatively densely scattered (potential) archaeological features primarily recorded by AP survey as cropmarks. The landscape around Catholme particularly forms part of a broader pattern of ancient settlement present within the river valleys of the region. The “ritual landscape” of the Neolithic and Early Bronze Age has a focus at Catholme situated at the confluence of the Trent and Tame rivers. The Catholme “ceremonial complex” comprises at least three hengiform monuments, a possible cursus and several round barrows. These are largely protected as Scheduled Ancient Monuments, though have suffered badly from plough truncation. SAM 256 consists of a sub-circular enclosure c.45.0m x 35.0m, formed of four concentric rings of postholes or pits. It appears to be in the *Woodhenge* tradition. Outside the scheduled area, further ring ditches, pit alignments and a second possible cursus complete the Catholme complex. The three scheduled monuments in the Catholme area are: SAM 256 – at SK 1950 1678 Late Neolithic/Early Bronze Age, as described above. SAM 215 – at SK 1950 1678, a cropmark of a circular enclosure, possibly a barrow, with associated radiating pits and a section of a pit alignment to its north. It has been speculated that it may be a second radiate henge. SAM 216 – at SK 1935 1701, a cropmark of circular enclosures and a possible cursus monument. Primarily it is these three monuments that define the extent and form of the “ritual complex”. This source discusses in total, twenty entries in the Sites and Monuments Record. Primarily these are recorded as cropmarks, but include the course of the Roman road, Ryknild Street, a find spot of two Romano-British period coins and a Saxon settlement (see Losco-Bradley).
49. **Richmond, A. 1999b.** Catholme. SK 200 159. This is for a proposed area of quarrying covering an area of 64ha itself split into three areas. Area I, of 40ha contains vestigial remains of ridge and furrow agriculture, two parallel linear features and a single ring ditch. Area II, of 14ha, has a group of hummocks thought to be the remains of post medieval quarrying and a number of rectangular and linear cropmarks, perhaps the southern extension of the Anglo-Saxon settlement of Catholme. There is also an early medieval cemetery located here, which was discovered in 1899. This may well have been contemporaneous with the Saxon settlement at Catholme. 250.0m to the south one other Saxon burial was discovered in 1926. Area III, of 10ha, has no SMR entries and no evidence of cropmarks either. There may be masking by alluvial deposits in this location. Another zone Area IV is not part of this phase of planning having previously gained approval. It has an area of c.115ha. There is a dense arrangement of linear and enclosure features on the gravel terrace in the western part of the area. Area V has already been quarried. The Anglo-Saxon settlement of Catholme was destroyed, along with three ring ditches and a beaker burial. A ring ditch with at least seven circuits of ditch east of the railway at Fatholme, was excavated prior to destruction. This contained sherds of Beaker, Grooved, and Peterborough ware. Linear features, pit alignments, ring ditch cropmarks and sub-rectangular enclosures with internal features were recorded in AP surveys but did not get excavated prior to destruction.
50. **Richmond, A. 1999f.** Catholme. SK 195 169. This source, despite having a focus on the east side of the railway, is laid out in similar fashion to the above (Richmond 1999a).
51. **Webster, M & Hindmarch, E. 2000. Barton Quarry.** Evaluation. Centred on SK 200 159. Fifty six trenches were opened, following a Desk-Based Assessment (Richmond 1999b,c) and a gradiometer survey, of an area covering 5.2ha. This was of limited value although a variety of ditch and pit features were evident. Trench 23 – 26 revealed a number of ditches, pits and postholes. Trench 23 – one sherd of Romano-British pottery and one of Iron Age – Saxon(?) pottery were recovered from features in this trench. Trench 25 – two sherds of Romano-British pottery dating to the 2<sup>nd</sup> – 4<sup>th</sup> century(?), one sherd of 2<sup>nd</sup> – 3<sup>rd</sup> century date and three sherds from a 1<sup>st</sup> – 3<sup>rd</sup> century bowl were recovered. Trench 51 – a small assemblage of Romano-British sherds dating to the 2<sup>nd</sup> – 3<sup>rd</sup> century were recovered. Trench 52 – several Romano-British sherds were recovered dating to the 2<sup>nd</sup> – 3<sup>rd</sup> century. Trench 54 – a moderate assemblage of 25 Romano-

- British sherds was recovered from a 2<sup>nd</sup> – 4<sup>th</sup> century bowl and 3<sup>rd</sup> century mortarium. Trench 55 – 3 sherds of Romano-British date, were recovered. In addition, a series of environmental samples were floated. These were consistent with an alluvial forest environment, damp and marshy with clearings. None provided direct evidence of anthropogenic influence.
52. **Bartlett, A.D.H. 2001. Barton Business Park.** Geophysical survey. Coverage of c.4ha. Area 1 showed the greatest potential archaeological significance with pit-like features in close association with a ring ditch, which itself was not detected but is shown on the AP surveys of the region (*PRN* 1476). The other 6 areas surveyed were not at all convincing, indicating little of the evidence deriving from the AP surveys.
  53. **Patrick, C. et al, 2001. Barton Business Park.** Evaluation. SK 2050 1780. Fourteen trenches were excavated with a total area of 1240m<sup>2</sup>. Trench 1 contained elements of a Bronze Age ring ditch (*PRN* 1476). The ditch measured 1.4m wide and 0.5m deep. No dateable artefacts were recovered. Trench 11 contained an Iron Age pit alignment orientated E-W (*PRN* 1472 and *PRN* 1455). A series of 6 bowl-shaped, circular pits were excavated measuring 1.2m - 1.7m in diameter and 0.4m - 0.7m deep. One sherd of Iron Age pottery was recovered from one pit fill. Interestingly, a second pit alignment recorded on AP survey was located where predicted, in trench 4. Trench 8 contained a sub-circular pit and a U-shaped ditch, undated but possibly prehistoric. Some potentially archaeological pits and linear features, in trench 12 were excavated but nothing datable was recovered. The other trenches proved not to contain significant remains.
  54. **Martin, H. 2002. Barton & Walton Level Crossing.** Watching Brief. SK 2080 1865. No archaeological features of significance were observed.
  55. **Neilson, C. 2002. Barton Business Park.** Excavation. SK 2050 1780. Two areas were excavated and a watching brief was maintained. Area A exposed a complete ring ditch (*PRN* 1476), located in a previous trial trench evaluation (Patrick, C. et al, 2001). It contained heavily truncated remains of a central cremation with evidence of cremated bone fragments and small lumps of charcoal. There were no dateable artefacts. It was 20.0m in diameter and the ditch showed evidence of re-cutting. No artefacts were recovered from any excavated sections. The ring ditch also cut an earlier boundary line. A series of bowl shaped pits in an E-W alignment pre-date the ring ditch. This is clear where the ditch cuts one of the series of pits. In addition, the survival of the other pits through the diameter of the ring ditch, may have been the result of being beneath the original barrow mound. Area B exposed seventeen pits, part of a pit alignment located in trial trench evaluation (as above). This was part of a larger E-W alignment. These pits varied in depth from 0.25m - 0.8m and had diameters of 1.6m - 1.8m. No artefacts were recovered. Area C was targeted for a watching brief. No evidence of early quarrying activity was observed. A N-S orientated pit alignment (undated), was exposed. Another area failed to locate any significant archaeology.
  56. **Hewson, M. 2003. Barton Quarry.** Watching Brief. SK 200 155. The watching brief concerned the monitoring of a topsoil stripping operation. This revealed two features of significance. A small surface feature containing fragments of burnt bone and charcoal and a linear alignment, c5.0m in length, of eight wooden piles orientated toward a heavily waterlogged deposit associated with a former course of the river Trent.

### Dunstall/Tatenhill

57. **Cane, J. & Jones, A.E. 1989, Newbold Farm.** Evaluation. SK 203 194. Three trenches were excavated in order to investigate a large double ditched enclosure and a series of three circular enclosures revealed as cropmarks. A resistivity survey took place in five other areas also. Trench 1 and 2 located one part of the enclosure. Together these trenches formed a T-shape. One sherd of possible prehistoric (Iron Age?) pottery was recovered from the fill of a shallow pit c.1.0m in diameter. Trench 3 was located across two of the circular features. In the fill of the larger of two

ditch sections heat cracked pebbles were recovered, though no datable artefacts were found. The geophysical survey only revealed a number of ill-defined linear and sub-circular features.

58. **Gaffney, C.F. & Ovendon, S.M. 1991, Newbold Farm.** Geophysical survey. SK 198 200. A complex set of cropmarks had been recorded in previous AP surveys. Notably, scheduled D-shaped enclosure (*SAM 221*) was included in this geophysical survey. The magnetometry survey picked up none of the cropmarks. The resistivity survey located the D-shaped enclosure and a few other ditches. Of seven areas tested, areas one, three and five may have had ditch features; area two a series of small archaeological features, and area seven (the scheduled area), clear evidence of linear low resistances in the form of an enclosure.
59. **Hughes, G. 1992. Newbold Quarry.** Evaluation. SK 198 200. A geophysical survey had taken place in advance of trial trenching (Gaffney & Ovendon 1991). Of seventeen trenches outside the scheduled area, one contained a linear ditch feature from which several Romano-British sherds and tile fragments were recovered. A number of the other trenches revealed shallow ditch features which had the appearance of two distinct field systems, possibly late prehistoric to Romano-British in date. In addition, there was evidence of ridge and furrow cultivation. No other artefacts were recovered. Thirteen trenches were located in the scheduled area. The D-shaped enclosure *PRN 206 (SAM 221)*, was not evident at all and may be wrongly interpreted as such. Overall, however, it was possible to identify two periods of agricultural activity. It may be that since the most recent AP survey took place ploughing has further truncated the archaeology.
60. **Jones, H. 2000, Newbold Quarry.** Desktop assessment. Centred on SK 204 208. This included a walkover survey. AP evidence for the general environs indicated substantial cropmark evidence, prehistoric – Roman enclosures plus possible prehistoric funerary monuments. The walkover also indicated there may be survival of possible medieval land divisions. It was the view that the study area “contains significant potential survivals of the medieval layout” and “should be viewed ...as an historic landscape of considerable local significance”.
61. **Bain, K. & Richmond, A. 2002, Newbold Quarry.** Watching Brief. SK 198 200. This took place on monument *SAM 221*, a D-shaped enclosure. A topsoil strip of the whole monument revealed only remains of ridge and furrow cultivation, aligned NW-SE, no enclosure ditches were observed at all.

## Edingale

62. **Network Archaeology Ltd 1997. Near Edingale.** Fieldwalking, Field reconnaissance, Geophysical survey. This followed a Desk-Based Assessment by Oxford Archaeological Unit. The work occurred in advance of the construction of a pipeline from Drakelow Power Station (outside focus area), to SK 2118 1372 near Edingale. The route bisects ridge and furrow at a number of locations. The artefact assemblage comprised 22 flints and 7 sherds, mostly from alongside Coton Road. The flint derived from the Late Mesolithic to Neolithic/Bronze Age. One sherd was of 1<sup>st</sup> – 2<sup>nd</sup> century AD, one of 3<sup>rd</sup> century AD and the rest were medieval.

## ELFORD

63. **Meeson, R. & Wardle, C. 1989. St Peter's.** Evaluation. SK 185 106. Subsiding floor in the Stanley Chapel. A vault was suspected but none found.
64. **Nash, A.F. 2001. Elford Park Farm.** Watching Brief. SK 1899 1226. No significant archaeology.
65. **Meeson, R. 2002. St Peter's.** Watching Brief. SK 185 106. 3.0m x 3.0m trench. Nothing observed other than redeposited human bones.

66. **Appleton-Fox, N. & Nash, A.F. 2003. Howard Primary School.** Watching Brief. SK 1886 1059. No archaeologically significant artefacts recovered.

## FISHERWICK

67. **Miles, H. 1968.** Excavation. SK 184 103. The site, a Romano-British farmstead was discovered by J. Pickering in as part of an AP survey of the Tame and Trent gravels. Other sites of similar morphology were recorded at Kings Bromley, Alrewas, and Barton-under-Needwood. Romano-British features included a droveway, huts, a series of enclosures and field boundaries. The site is located near a ford across the river Tame which last appears on maps in 1809. There are in fact two droveways, one was excavated, one was not, and both of these lead towards the ford. The earliest Romano-British occupation was apparently a D-shaped enclosure and hut with accompanying ditches and pits. It was felt that the droveway was constructed subsequently, with the main laying out of the site. At this stage the settlement consisted of a number of D-shaped enclosures with several huts and associated boundaries. It is suggested that the enclosures would have provided for stock rearing and control, possibly of cattle and horses. The main phase of occupation is dated to the 2<sup>nd</sup> century AD lasting into the 3<sup>rd</sup> century. There was also evidence of Neolithic activity. Three sherds were recovered from a pit feature. These were the first to be recovered in Staffordshire and may be assigned to the Mortlake category.
68. **Smith, C.A. 1976.** Excavation. SK 178 082, in field 8817. This work established that a pattern of cropmarks was caused by ice-wedge casts formed during the Pleistocene period. In addition, a posthole structure and hand-made pottery, recovered from a curvilinear gully and two postholes was dated to the late 2<sup>nd</sup> millennium BC, Middle Bronze Age.
69. **Smith, C. 1979.** Excavation. SK 187 083. Rescue excavations at four sites. The author notes that excavations of a DMV in the parish (Tymore), took place in 1971 but were never published. The first evidence came in the form of a AP survey in 1960. This recorded a series of enclosures SK 183 098. The site was quarried away in 1973 following only the barest minimum of salvage recording. This work recovered sherds dating to the Iron Age. It appears that although the enclosures may well have been abandoned by the end of the Iron Age, some field boundaries and at least one ditched trackway remained in use into the 2<sup>nd</sup> - 3<sup>rd</sup> centuries AD.

Excavation at SK 187 082. The AP survey suggested an Iron Age farmstead defined as a rectangular enclosure, c.52.0m x 48.0m in area with a 3.0m wide ditch. This site was quarried away in 1976, subsequent to phases of excavation. It was fieldwalked first with a small selection of post-medieval, medieval and Iron Age sherds recovered. A basic geophysical survey was attempted and no anomalies were recorded. Subsequent to excavation the entrance, in essence the only gap in the ditch, was revealed, on the eastern side, as defined in APs. The ditch sections averaged c.1.65m in depth. Radiocarbon dating indicated that the primary ditch was dug in a period spanning the 4<sup>th</sup> - 2<sup>nd</sup> centuries BC. Sherds, animal bone and waterlogged wood were also recovered from the primary ditch fills. Two further re-cutting phases occurred. The second contained artefacts within its fills, whilst the third had none. It is suggested that the enclosure had been abandoned by this phase. Romano-British artefacts indicate that the former enclosure area had become a part of cultivated land by the 1<sup>st</sup> - 2<sup>nd</sup> centuries AD. The entrance to the enclosure appears to have incorporated possibly two gateways on the inner and outer perimeters. The interior contained a group of ring gullies (ring-groove structures), denoting structures of c.9.5m - 11.0m in diameter, with entrances to the southeast side. This first phase of occupation ante-dated the enclosure. A few sherds of Iron Age date were recovered from this phase. Radiocarbon dates place this phase between the 4<sup>th</sup> - 2<sup>nd</sup> centuries BC. After an unspecified interval, the second phase of occupation saw the cutting of the enclosure ditch and the imposition of round structures defined as "of the ring ditch type". It is suggested that this did not follow on in a simple evolutionary fashion from the previous phase. This is considered to be the main episode of occupation, however, with recovered artefacts and radiocarbon dates placing it between the 3<sup>rd</sup> century BC and 1<sup>st</sup> century AD. The last phase of activity occurs in the medieval period when the remains of a sunken hut were exposed dating perhaps to the 13<sup>th</sup> century.

Excavation at SK 187 083. This took the form of a series of salvage cleaning operations subsequent to topsoil stripping. It identified a rectangular enclosure, c. 60.0m x 44.0m in area, and a series of field boundaries. The entrance to this enclosure appeared to be on the north side. It is suggested that a series of three phases of activity are represented at this location and that these are all likely to have been associated with the settlement at SK 187 082, c.100m to the south.

Excavation at SK 187 080. This was located in the area of the Elford Quarry and investigated an enclosure and related features c.200m south of the settlement at SK 187 082. These had been recorded during AP surveys both in the year of excavation and previous years. The enclosure ditch was identified and sectioned, and measured c. 2.5m wide by c.1.1m deep. The ditch proved to be three sided, as recorded in the AP survey. It is suggested that the northern side was delineated by a forerunner of the Leasow Brook which is in the immediate vicinity. Any evidence of habitation internal to the enclosure ditch was destroyed by quarrying prior to investigation. There were perhaps two phases of activity associated with the enclosure, indicated by re-cutting of the ditch and the addition of supplementary ditch features. The primary enclosure appears to have had an entrance on the west side and possibly one to the southeast too. Sherdage from the enclosure ditch was dated to the Iron Age, between the 4<sup>th</sup> and 2<sup>nd</sup> centuries BC.

### **Fradley**

70. **Field, N & Tann, G 1995, Fradley Park.** DBA and Walkover survey. No evidence of significant archaeology.
71. **Coates, G. & Hancox, E. 2002.** DBA. SK 1440 1200. The results of this assessment showed that despite the proximity of extensive archaeology on the river terraces and the location of the Roman road, there was no evidence of significant archaeology in the study area.

### **Harlaston**

72. **Countryside Planning & Management, 1990. Manor Farm.** DBA. SK 214 110. This provides a summary of the origins of the name of Harlaston and of the development of the moated manor within the context of medieval rural/agricultural development.
73. **Johnson, C. 1991. Manor Farm.** SK 214 110. Evaluation. Ten trenches were opened. Shaw in 18<sup>th</sup> century noted that the Manor was moated. There was evidence of medieval buildings in SE corner of the moat platform. These survive as wall foundations, floor levels and pits. Pits contained sherds of 12<sup>th</sup> – 14<sup>th</sup> century date. This fits with documentary evidence for a 12th century occupation.
74. **Barber, A. 1995, Manor Farm.** SK 214 110. Watching Brief. *PRN 949*. This took place within the bounds of a square-moated platform, c.100m wide, to the west of the village of Harlaston. Sandstone wall footings 0.4m wide were observed. These belonged to a building probably dating to the medieval period due to its alignment with the moat. One sherd of 13<sup>th</sup> century pottery was recovered from an associated surface. It was apparent that the building had walls added to it later on. No dating evidence was recovered from the clay upcast derived from construction of the moat. No evidence of a fourth side to the moat was observed. It may be that the moat was unfinished, or was a three-sided example.
75. **Barber, A. 1995, Manor Farm.** SK 214 110. This source reviewed the work of the evaluation and watching brief previously carried out. It remains unresolved whether the moat ever had a fourth side. The artefacts suggest a manorial complex occupied from the 13th century onwards to the present day.

### **WYCHNOR**

76. **Leahy, K. 1979. Gravel Pit** – chance find. SK 195156. An Anglo-Saxon brooch found by chance in 1926. This gravel pit is the site of a known Anglo-Saxon cemetery, where in 1899 two urns and a number of artefacts were discovered. A fragment of a human jaw was the only other item found in association with the brooch in 1926.
77. **Litherland, S. 2000a, Church Cottage.** Watching brief. SK 177 162. This site lies within the DMV. Two drainage gullies were exposed during foundation trenching. No dateable artefacts were recovered from either gully. Two similar, though differently aligned gullies were exposed during the Mather evaluation one of which contained sherds of 13<sup>th</sup>-14<sup>th</sup> century pottery. Most likely these related to medieval agricultural activity.
78. **Mather, L-A. 2000, Near Church Cottage.** Evaluation. SK 177 162. Within the DMV. One trench was excavated measuring 5.0m x 2.0m. Two linear gullies were sectioned. These contained medieval sherds mostly from single vessel, ranging from 13<sup>th</sup> – 14<sup>th</sup> century to 14<sup>th</sup> – 15<sup>th</sup> century. These gullies may be associated with a former trackway or with field boundaries.
79. **Litherland, S. 2000b, Church Cottage.** Watching brief. SK 177 162. On the same property as the previous watching brief (Litherland 2000a). This discovered only a well of Victorian date, brick-lined and c10.0m deep.
80. **Cuttler, R.T.H. 2001. Cunnery Farm.** Watching brief. SK 178 162. Lies within the DMV of Wychnor. An undated E-W aligned ditch was observed. This was on the same alignment as evidence of ridge & furrow and may be associated with it. Two sherds of pottery were recovered, one likely to be Bronze Age in origin, the other possibly prehistoric, both probably re-deposited.
81. **Coates, G. 2003, Wychnor Park. SK 156 175.** This comprised a walkover survey of 4.33ha. Nothing visible of standing earthworks was observed and nothing archaeologically significant was in evidence. The SMR indicates the area was within an 18<sup>th</sup> century, landscaped park.
82. **Meeson, R 2003, Hill Farm.** Buildings Assessment. The farm is located in the western part of the DMV of Wychnor. The village is recorded in Domesday 1086 as held by Robert of Stafford.

### Yoxall

83. **Frost, P. 2002. Hadley St.** Evaluation. Two trenches measuring 10m x 2m. Only post medieval artefacts were recovered. The location of the bypass west of Yoxall was also fieldwalked with a selection of post medieval artefacts being recovered.

### WALTON-ON-TRENT (Derbyshire)

84. **Challis, A.J. & Harding, D.W. 1975.** SK 209 174. Borough Hill. This Iron Age hillfort site comprises a defensive hill-top of c.3ha overlooking the river Trent to its immediate west. It is a scheduled monument, number 29916. The Derbyshire SMR entry for the site records that “earthworks are evident between Old Hall and Borough Hill Farm but their original plan cannot be determined.”. Human remains have been found in association with the site at an undefined location at Borough Hill Farm. It is described as univallate although there is also a mention of two further probable outer defensive works.

### *Outside the Immediate Study Area*

#### HAMSTALL RIDWARE

85. **Meeson, R. 1991.** Moat Field. A series of five 1m<sup>2</sup> test pits were opened. Medieval sherds recovered ranging from 13<sup>th</sup> – 14<sup>th</sup> century; 11<sup>th</sup> – 12<sup>th</sup> century; 11<sup>th</sup> – 13<sup>th</sup> century were recovered.

## KING'S BROMLEY

86. **Hughes, E.G. 1990.** A513. Evaluation. SK 134 166. Two trenches were located in order to assess nature of cropmarks from APs, which showed up a potential double pit alignment. These exposed a series of modern plough marks and two linear features, which could possibly be remnant ridge and furrow. There was no evidence of pit alignments. This was despite both a resistivity and a gradiometer survey of the area, which had indicated anomalies.
87. **Ferris, I. 1992.** Echills farm. Evaluation. SK 1035 1682. This followed a geophysical survey using primarily resistivity methods and re-plotted APs. A total of eleven trenches were excavated. Trench 1, 40.0m long was positioned to locate a ring ditch observed as a cropmark and highlighted in the geophysical survey. A V-shaped, recut ditch c.4.8m wide was exposed and sectioned. There was evidence of charred stumps of *in situ* posts in postholes and on the surface associated with these postholes concentrations of charcoal representing horizontal spars or branches. These features were located within the ring ditch. The suspicion is that these were the remains of a funerary structure, burnt either deliberately or accidentally. No artefacts were recovered from *in situ* contexts. Trench 9 also revealed the remains of a truncated ring ditch. This was a single phase ditch with no evidence of a central feature, perhaps due to the fact that the barrow had been ploughed down to the natural gravels. The remainder of the trenches provided little evidence of archaeology.

## General Interest

88. **Bate, P.V. & Palliser, D.M. 1971.** This source discusses lost villages in Staffordshire. It lists a number of sites including several which fall inside the current study area. It appears from the study that there is a concentration of suspected lost villages around the confluence of the rivers and immediately to its south.
89. **Gaffney, V. & Hughes, G. 1993. Southeast Stafford Gravels.** Lower Palaeolithic and Acheulian artefacts have been discovered outside the area (Shotton 1973; Cane & Cane 1987). Mesolithic artefacts are restricted to chance finds outside the area too (Hodder 1982). There is more evidence of Neolithic settlement within the focus area (see relevant sources above). The Bronze Age is well represented although defining phases of settlement is problematic. The Iron Age is similarly well represented in terms of field systems though artefacts are not common. For the Bronze Age – Romano-British settlement and Anglo-Saxon – medieval periods see the relevant sources above. This source provides a useful overview of the general area of the River Tame/Trent confluence. Although it is relevant only up to 1992.
90. **Smith, C.A. 1980. Overview of parishes of Alrewas, Fisherwick and Whittington.** This source provides a useful summary of the sources available for a detailed study of the names parishes. It is based on cartographic sources, documents, APs, place-names, botany and archaeological interventions. From these sources a regression through time is depicted on maps for four periods. Mid 18<sup>th</sup> century AD; c.1300 AD; c.200 AD and c.1<sup>st</sup> century AD and 1<sup>st</sup> millennium BC. There is a map of a more speculative nature for the landscape prior to the 1<sup>st</sup> millennium BC.
91. **Smith, C. 1978. Summary of Iron Age landscape on Trent gravels.** The author described the area as "a relatively even scatter of enclosed homesteads and perhaps unenclosed round houses each surrounded by a group of hedged and ditched fields". These settlements were connected by ditched and hedged trackways. The main emphasis was on horse and cattle rearing although arable farming was important too. This system was thought to have continued successfully throughout the Romano-British period and possibly into the Middle Ages. The author suggests that the development of permanent field boundaries is a major distinguishing mark of the Iron Age when compared with the Bronze Age or Neolithic.

- 92. Whimster, R. 1989. Trent Valley survey area.** Routine surveillance of the area has occurred since 1946. Firstly, until the 1960s, by J.K. St Joseph on behalf of Cambridge University and then by the RCHME and by J. Pickering and D. Riley. The author notes that "The gravel terraces of the Trent reveal a complicated sequence of horizontally and vertically associated cropmark features packed tightly along narrow bands of sensitive soil on either side of the river". The Trent valley survey focussed on an area of 150km<sup>2</sup>, to the north of Newark-on-Trent where cropmark sites seemed most abundant and complicated.

## APPENDIX 2

### ARCHAEOLOGICAL SYNTHESIS

#### THE PLEISTOCENE LANDSCAPE

The landscape of the Study Area has been principally shaped by the activities of the Trent and Tame rivers during the last (Devensian) glaciation, which peaked around 20,000 years ago. Each spring the melting ice and snow swelled the rivers, and the flood waters deposited the extensive sands and gravels which characterise the area. The resulting terrace is about 2km wide, and has been extensively quarried in recent years. In the winter months the river would have been frozen for much of the time, forming a shallow braided river wetland, with fewer active channels.

At Whitemoor Haye, the Mercia Mudstone bedrock, incised with fossiliferous former river channels, is overlaid by sand and gravel deposits up to 6m in depth. These form two principal stratigraphic units, the 'Lower Sands' (c. 2m thick) and the 'Upper Gravels', 3-4m thick (Howard 2003). Put simply, these two units represent deposition by a river system of increasing energy. The Lower Sands were deposited in conditions of increasing cold and a relatively low-energy river system, while the Upper Gravels were deposited in perhaps full glacial conditions and a high-energy river system. However this simple distinction masks complex variation, apparent in the geological sections, and primarily related to climatic fluctuation.

Sedimentological evidence (Howard 2003) indicates that the Lower Sands were deposited in a braided river system in a series of broad shallow channels. The variability of palaeocurrent direction suggests that flow was frequently switching between braided channels each flood season. Organic remains and more extensive clay drapes suggest that there were periods of quiescence and areas of braidplain where finer-grained sediments were deposited. Examples of frozen sediment (mudballs) within these sandy channels and frozen sediment contacts suggest that the River Tame was probably operating under a periglacial climatic regime.

The Upper Gravels were also deposited under braided river conditions, although sediment supply had become coarser, presumably reflecting the onset of full glacial conditions. The gravels were deposited as a series of large bars within a braided river system with sandy units aggraded over the bar top (during periods of high discharge) or within secondary (slough) channels flowing around the bar edges. Periglacial processes were still important within this environment, as demonstrated by the evidence of local ground ice features.

At Whitemoor Haye (Buteux 2003) extraction of the gravels has revealed glimpses of shallow river channels scoured into the Mercia Mudstone bedrock and overlain by the sands and gravels. Organic deposits in these channels containing a rich assemblage of plant and insect remains, together with associated mammalian remains, allow a picture to be built up of the environment immediately prior to the main deposition of sands and gravels. The mammalian assemblage, together with preliminary results of OSL dating, suggest a date towards the end of MIS 3 (50-25 ka), a time of rapidly fluctuating climate but generally increasing cold heading towards the Late Glacial Maximum (LGM) around 20 ka.

The most spectacular element of the mammalian assemblage (Currant and Schreve 2003) is the partial skeleton of a woolly rhinoceros (*Coelodonta antiquitatis*), comprising most of the front half of the animal. The partial skeleton was recovered by a digger driver working for the Lafarge Whitemoor Haye Quarry, Mr Ray Davies, during normal quarrying operations in September 2002. The extraordinary preservation of the woolly rhino partial skeleton – a find of exceptional palaeontological importance – is most likely to be due to rapid burial of a probably frozen carcass. Other mammalian finds from the locality comprise the remains of at least three further woolly rhinos, mainly represented by skulls, and bones of woolly mammoth (*Mammuthus primigenius*), horse (*Equus ferus*), reindeer (*Rangifer tarandus*), bison (*Bison priscus*) and wolf (cf. *Canis lupus*).

This range of mammals evokes an image of the 'mammoth steppe', with herds of large herbivores and the more solitary rhino drawn to the rich grazing grounds along the banks of the highly braided river system. The insect and plant remains add detail and texture to this image. The diverse range of insects, predominantly beetles (Coope and Smith 2003), includes a large number of species that are associated today with high Arctic tundra or Alpine conditions. They suggest a July mean temperature of around 10 degrees centigrade and a January mean temperature as low as -15 degrees. As a whole, the beetle assemblage points to the existence of tundra scrub with sandy and gravelly ground, with the water beetles indicative of slow-flowing and usually vegetated waters. The wide range of *Aphodius* dung beetles confirms the presence of a large number of animals populating the landscape, more directly inferred from the mammalian remains.

The plant macrofossils and pollen remains complement the picture derived from the mammalian and insect remains. These suggest a tundra-type vegetation consisting of dwarf arctic-alpine plants. An open landscape with dwarf tree or shrub species, predominantly birch, along the water courses is indicated, while adjacent to the river was broken grassland.

No archaeological remains have been reported in association with this Pleistocene landscape. Although mammoth, horse, bison and reindeer were all extensively exploited by ice age populations, and the banks of the Trent/Tame at this time would represent ideal hunting grounds, it may be that the conditions represented by the faunal and floral remains were simply too severe for human occupation. However, as noted earlier, the period c. 35 ka to 25 ka, which is likely to be the general period into which the environmental material should be placed, was a period of rapidly (often millennial-scale) fluctuating climate, with numerous comparatively warm episodes (the so-called 'Dansgaard-Oeschger interstadial events') indicated by ice core data (Grootes *et al.* 1993). Given this variation, and the possible 'ebb and flow' of human populations that may have accompanied it, there is no *a priori* reason why humans should have been entirely absent, and discoveries of Palaeolithic material are a real possibility for the future within the wider Pleistocene landscape of the Study Area. In this context it should be noted that the geological indications are that deposits of the type found at Whitemoor Haye could be widespread within the Study Area (Howard 2003). This is of particular interest because the period in question witnessed the crucial but still very poorly understood transition from Neanderthals to modern humans.

Preliminary study of the geological sequence at Whitemoor Haye (Howard 2003) together with palaeofluvial analysis undertaken as part of the Where Rivers Meet project (Davies 2004), allows some reconstruction of the subsequent history of the river system through to the end of the Pleistocene (c. 10 ka). This is the period during which the majority of the sands and gravels within the Study Area were deposited.

Throughout this sequence of river deposits, which shaped the modern-day landscape, archaeological remains are absent and conditions were certainly too severe for human occupation. However, with the climatic amelioration that marked the end of the Pleistocene, conditions became once again suitable for human occupation. This marks both the beginning of the Holocene and the beginning of the remarkable sequence of archaeological remains which characterise the Study Area.

## MESOLITHIC

As the climate warmed the discharge of the rivers diminished (Davies 2004). With a reduction in sediment supply the width of the active fluvial system narrowed and there was a transition from a braided system to a single thread stream with incision below the level of the Devensian deposits. It was at this point that the current river system comprising two distinct rivers, the Trent and the Tame, came into existence. The Trent now flowed from the west into the Study Area, before flowing in a northeast direction to the east of Alrewas. Bars and islands can be seen on aerial photographs, suggesting that the fluvial system was anastomosing but the lateral mobility of the system was more restricted, due to vegetation pinning the banks down, and the channels more stable.

Likewise the Tame was also a multi-channel system, acting as a tributary to the Trent, but was even more restricted by a reduced discharge and was less laterally mobile than the Trent. Further division of the

drainage area occurred at Elford, 5 km south of the Study Area, where the River Mease had also been separated and was acting as tributary of the River Tame.

As the anastomosing river systems continued to mature, certain channels became the dominant water discharge routes. This led to the abandonment of some of the former braided channels, which quickly became colonised by reed swamp and then alder carr, and stabilised by roots. In fact, much of the floodplain was becoming vegetated. This vegetation served to further stabilise the fluvial system, making it less easy for channel switching and the development of further braiding. Gradually the river systems adopted a more anastomosed multi-channel form, with each of the channels being relatively stable entities, separated by vegetation-stabilised islands where peat and mature soils developed. Only during extreme flood events did the islands become submerged.

This river environment would have provided rich resources for Mesolithic hunter-gatherer bands, but at present direct evidence is very slight. Around the Study Area occasional finds of struck flints have been made, either in the course of systematic fieldwalking or as chance finds, but no significant concentrations. Mesolithic activity is most likely to have taken place in the river floodplain itself, where it will either have been destroyed by later fluvial activity or will be buried under alluvial silt deposits. However, excavation in 1979 at Bower Farm near Rugeley, to the west of the Study Area, provides some indication of the potential (Cane and Cane 1987). This is a cave or rock shelter near the Trent, which produced over 250 struck flints including flakes and tools of later Mesolithic type associated with blackened sand and burnt pebbles. The high tool/flake ratio has led to the interpretation of the site as a seasonal hunting-camp.

#### **THE EARLIER NEOLITHIC**

The earlier Neolithic perhaps sees the beginning of the creation of a cultural landscape at the Trent/Tame interfluvium. As is common in lowland landscapes in England, the evidence of Neolithic settlement is slight, and the cultural landscape is primarily defined by monuments, which, by the later Neolithic at least, form a major ritual complex focussed on the Trent/Tame interfluvium.

Two possible causewayed enclosures have been identified from aerial photography to the west of the Study Area, at Alrewas and Mavesyn Ridware in the Trent valley (Palmer 1976; Hodder 1982; Barber, forthcoming). That at Alrewas lies just outside the Study Area and that at Mavesyn Ridware just 6km further west. Both monuments are closely comparable in terms of size, form and situation. Each has three close-set ditch circuits and both encompass a maximum area of 4.15ha. Both sites are under the plough, neither has been excavated and fieldwalking of both sites yielded no finds (Palmer 1976, 184).

For a long time these two possible causewayed enclosures were considered the most northerly outliers of what was viewed as a primarily southern phenomenon. However, identification of definite and possible sites in Anglesey, the Isle of Man, Northern Ireland, the Lake District and Scotland (Oswald *et al* 2001) suggests that this isolation is more apparent than real. Nevertheless, excavation elsewhere has shown that despite broadly similar constructional techniques, causewayed enclosures form a very diverse group (Barber, forthcoming) and therefore little can be deduced of the function and significance of the two Staffordshire examples without excavation.

#### **THE LATER NEOLITHIC AND EARLIER BRONZE AGE**

It is in this period that the cultural landscape at the confluence of the Trent and Tame takes shape in a form that is more tangible archaeologically. Numerous monuments have been identified from aerial photography and fairly extensive excavation has taken place, almost all in the context of quarrying.

The focus of this landscape would appear to lie at Catholme Farm on the extensive river terrace immediately to the north of the confluence of the two rivers. The cluster of monuments here has been termed the 'Catholme Ceremonial Complex', but further monuments spread out to the west and south up the valleys of the Trent and Tame, making the Catholme complex a focus for a more diffuse ritual landscape.

The types of monuments represented are extremely diverse, and although in the literature and the SMR they tend to fall mainly into the categories of 'cursus', 'hengiform monument' and 'ring ditch', these categories mask a great deal of variation. The extent of this variation has been borne out by excavation, which has also revealed much more complexity in the Later Neolithic/Early Bronze Age landscape than is suggested by the cropmark evidence alone.

The identification of a ceremonial complex at Catholme Farm is based primarily on the identification of three monuments of presumed ceremonial function in close proximity to one another. These monuments have been identified from aerial photography and have been subject to intensive geophysical survey as part of the Where Rivers Meet project (Watters 2004), but no excavation has taken place. The identification and dating of the monuments is therefore based on morphological criteria. The easternmost of the monuments (SMR 1397; SAM 256) might be described as being in the *Woodhenge* tradition. It is sub-circular, approximately 45 by 35 metres, and comprises five concentric circles of pits or postholes enclosing a central open space of 22 by 15 metres. The pits or postholes are arranged in 36 radial lines. There is no evidence of a surrounding ditch.

About 200m to the west, immediately adjacent to Catholme Farm, is a second potential ceremonial monument (SMR 203; SAM 215). This comprises a ring ditch with six lines of pits or postholes radiating from it, forming what might be described as a 'sunburst' pattern. At least as represented in the aerial photographs, the lines of pits are unevenly spaced and of different lengths. On its northern side the aerial photographs show two possible concentric ditches partly surrounding the monument. However, these features only survive as an arc comprising about one quarter of a full circle and the nature of the cropmarks, which are somewhat diffuse, indicate that these features may not be archaeological; they are possibly geological in origin.

About 100m west again, is a subrectangular enclosure (SMR 1477) which has been interpreted as a possibly representing a small cursus monument of a type also recognised in the valley of the Warwickshire Avon. The western end of the enclosure is slightly curved, but unfortunately to the east the monument is crossed by Catholme Lane and does not reappear in the cropmarks on the east side of the lane.

This group of monuments – the possible cursus and two which can be loosely described as 'hengiform' – is delimited to the north and south by two well defined pit-alignments (respectively SMR 1478 and 1479) running east to west and forming a 'corridor' 200-250 metres wide, which contains the monuments. For a stretch, the northernmost of these two pit-alignments (SMR 1478) was doubled up to form a double pit alignment. Today, this 'corridor' is closed by the A38 road and Trent & Mersey Canal at its western end and by the railway at its eastern end. However the southern of the two pit-alignments (SMR 1479) reappears on the east side of the railway before disappearing into the alluvial silts of the Trent valley. In antiquity, therefore, it is likely that the corridor opened onto the river valley.

Without excavation it is, of course, uncertain that these monuments were contemporary, and the pit-alignments in particular may represent later landscape divisions (Bronze Age to Iron Age) which nevertheless appear to have respected the ritual monuments. In 1999 a series of 22 evaluation trenches was excavated in the area of this 'ritual complex' in advance of possible development (Hughes and Coates 1999a). The trenches were located outside the areas protected by scheduling, so did not investigate the monuments themselves. Pits belonging to the two pit-alignments were, however, exposed and sample excavated but no dating evidence was obtained.

The Catholme monuments just described appear to form the focus of a wider 'ritual landscape' extending to the northeast and west along the valley of the Trent, and to the south along the valley of the Tame. The most easily recognised component of this landscape is a large number of ring ditches, generally interpreted as the ploughed out remains of Bronze Age round barrows, together with a few such barrows still surviving as earthworks. There are more than 90 examples of such ring ditches/barrows within the Study Area. On a regional scale, this forms the most significant lowland concentration of known and probable barrows in the middle and upper Trent basin (Vine 1982, 289: Map AF).

However, the term 'ring ditch' covers a wide range of features of varying size and complexity, some of which are unlikely to be round barrows. Both aerial photography and excavation, on the limited number occasions it has taken place, show the potential complexity and variability of these monuments. A small number of 'ring ditch' monuments are both larger and more complex than the norm, and these more substantial monuments may form ritual foci similar to the Catholme monuments. Two such monuments are located to the south of Catholme Farm. About 400m south of Catholme Farm is a large sub-circular enclosure (SMR 202) defined by a ditch, about 60m in diameter. There are traces of a possible outer ditch. A pair of ditches radiate out from the ring ditch towards the east, suggesting a 'funnel-like' approach. Intensive geophysical surveys carried out as part of the Where Rivers Meet project (Watters 2004) have revealed this monument with considerable clarity and have suggested internal complexity.

Further south again, in what is now the National Memorial Arboretum, is a large multiple ring ditch (Hughes and Hovey 2002). The monument lies adjacent to the Tame, just south of its confluence with the Trent (SMR 193; SAM 199). Aerial photography (Leicester Museum 3325/6 and 3364/14) indicates a monument consisting of four concentric circles of ditches or pits, together with a pit centrally positioned within the monument. The SMR entry refers to the monument as a possible henge. A test pit was dug just outside the monument, but accidentally within the scheduled area, by engineers working on behalf of the Arboretum in 1996. This uncovered a large fragment and three sherds of a late Beaker. Subsequent archaeological investigation of the disturbance and sieving of the soil in 1997 produced a further seven sherds, allowing reconstruction of the (incomplete) vessel (Woodward 2002, fig 34).

At Fatholme, to the north of the Catholme monuments, a large multiple ring ditch with at least seven ditch circuits was excavated prior to destruction by quarrying (Losco-Bradley 1984; Richmond 1999b). This monument produced sherds of Peterborough ware, Grooved ware and Beaker.

It is possible that these more complex monuments form part of a pattern of fairly regularly-spaced 'ritual foci' within the wider Late Neolithic/Early Bronze Age landscape at the confluence of the Trent and the Tame. Three smaller ring ditches are clustered around the large ring ditch (SMR 202) just to the south of Catholme Farm, and there may have been a similar clustering around the Arboretum site, although this area of the landscape was quarried away without archaeological investigation.

A number of the ring ditches/barrows within the Study Area have been excavated or partially excavated. The principal examples will be described from north to south. At Tucklesholme Farm, on the edge of the gravel terrace above the River Trent, to the northwest of Walton-on-Trent, two possible ring ditches had been located by aerial photography (SMR 1447). The two ring ditches were evaluated by means of geophysical survey and trial trenching in 1990 in advance of proposals for sand and gravel quarrying. The results of the geophysical survey (Jones 1990) were inconclusive. Evaluation by means of trial trenching of the northern suspected ring ditch failed to locate this putative monument, but revealed instead features interpreted as medieval ridge-and-furrow (Hughes 1990). The southern ring ditch, however, was successfully located and partially defined. The monument had already been previously partially excavated, including the central feature, by the Trent Valley Archaeological Rescue Committee in 1975. The evaluation led onto area excavation in 1991, with three-quarters of the monument being stripped and recorded in plan (Hughes 1991). The monument comprised a ring ditch 29-31m in diameter, between 2.6 and 3.5m in width, with a V-shaped profile and surviving to a depth of 1.7m. Within the ring ditch were two shallow inner concentric ditches, interpreted as post trenches. No evidence of a burial was found in the central feature, which had been part excavated in 1975. The only small find in direct association with the monument was a flint flake from the ring ditch. External to the ring ditch was a sub-rectangular pit, 20.0m x 1.25m by 0.55m deep, showing evidence of burning in the base. Its fills included substantial quantities of charcoal, tiny fragments of burnt bone, and elements of burnt wood, perhaps from a box or basket. Associated cobbles also showed evidence of burning. Radiocarbon dating of charcoal from this feature indicated a date in the 5<sup>th</sup> century AD. This raises the question of whether the whole monument is of post-Roman date, or whether a prehistoric monument had retained significance as a locus for burial and ritual into the post-Roman period.

At Barton Business Park, a complete ring ditch (SMR 1476) was excavated in 2001, in advance of industrial development and following extensive evaluation of the area (Neilson 2002). The single ring

ditch was 20m in diameter and showed evidence of re-cutting. The ring ditch contained heavily truncated remains of a central cremation with evidence of cremated bone fragments and small lumps of charcoal. There were no datable artefacts in association with the monument. However, a series of bowl-shaped pits on an east-west alignment pre-dated the ring ditch and appear to form part of an early boundary. The monument lies amongst a cluster of ring ditches and possible ring ditches just to the north of the principal monuments of the Catholme Ceremonial Complex.

At Willowbrook Farm, to the south of the Catholme complex and to the south of the Trent, a ring ditch (SMR 1467) was extensively evaluated (Saracino 1990; 1991; Meeson 1991). The ring ditch measured c. 20m in diameter with a maximum surviving depth of 0.50m. No central interment/cremation survived. One flint core(?) of Neolithic/Early Bronze Age date was recovered. An interesting feature of the excavation was evidence for a possible pre-barrow structure of post/stake holes (Meeson 1991). This may be related to the evidence for the pre-barrow pit-alignment at Barton Business Park (above) and also to groups of postholes cut by several Bronze Age ring-ditches at Fatholme to the north, uncovered during Losco-Bradley's excavations in the mid 1980s. (At the time of writing, few details are available on the Fatholme excavations.)

South from Willowbrook Farm, progressing down the west side of the Tame, is the large multiple ring ditch at the National Memorial Arboretum, already described. The next stretch of gravels down this side of the Tame runs through the Lafarge Whitemoor Haye Quarry, which has been subject to ongoing evaluation and excavation since the 1990s as extraction has progressed. Several ring ditches have been investigated, and the excavations have also uncovered a range of other Neolithic/Early Bronze Age features and ceramics.

The most northerly of these investigations, just to the south of the National Memorial Arboretum, focussed on Area P (Neilson 2001; Martin 2001), where three ring ditches have been identified by aerial photography. Excavations in Area P in 2001 revealed a ring ditch c. 10m in diameter, with a U-shaped profile, a width of c 1.m and a maximum depth of 0.33m. An ovoid pit feature, centrally located, with a deposit of bone fragments in a charcoal rich fill was excavated. The pit was c.1.42m wide and c.0.33m deep.

In association with the excavation a salvage recording task and watching brief was carried out around Area P. Two further ring ditches, one cut by the other, were excavated. Two cremation pits were located roughly centrally in the later of the two ring ditch features. The first of these pits measured c.0.44m in diameter and contained fragments of human bone. The second pit measured c.0.35m in diameter and contained a cremation urn inside which were human bone fragments. An ovoid feature, 0.9m wide and 0.5m deep, not clearly associated with the ring ditches, contained a large number of prehistoric sherds and other finds. To the north of the ring ditches a feature which may have been an inhumation was excavated. This contained an *in situ* broken pot, a large concentration of charcoal, burnt bone and prehistoric pottery. A inurned cremation burial was also recovered. It had been buried in a small pit, c.0.45m in diameter. One other potential cremation pit was excavated but contained no artefacts and only residual amounts of burnt clay. A series of pits was also investigated, several of which contained sherds of prehistoric date, and in one instance an almost complete pot and fragments of burnt bone. Several other assorted features produced sherds of prehistoric date, fragments of burnt bone and worked flint. Taken together, these feature represent intensive burial and ritual activity at this locality.

An evaluation trench dug in 1995 (Tempus Reparatum Trench B) revealed features which should be considered as belonging to this group. The trench partially exposed a ring ditch, while an adjacent pit or gully contained fragments of four Middle Neolithic Peterborough Ware vessels (Coates 2002).

About 500m south of Area P at Whitemoor Haye is Area R. Excavation here in 1997/1998 failed to locate surviving remains of a ring ditch identified from aerial photography. However, an oval pit, possibly cut into the base of the ring ditch, contained a large portion from a Beaker vessel (Coates 2002). The pit may represent a Beaker inhumation burial, although no traces of human remains survived.

Further south again within Whitemoor Haye Quarry, excavations in 2002 (Areas I, J and K) uncovered further ring ditches and earlier prehistoric material (Hewson 2004). Excavation in Area I exposed the

southern half of a ring ditch, of c.21.0m in diameter. Five sections were dug through the ditch, which demonstrated that it had been re-cut at least once. The ditch survived only to a depth of up to c.0.35m and was c.0.4m wide. The re-cut fill contained several sherds of a Collared Urn of the Early Bronze Age. The original cut of the ditch survived to a depth of up to 0.7m and had a width of c.1.55m. The fill contained one sherd of Early Bronze Age date. A ditch terminal suggested a potential entrance, and a circular cut feature close to this terminal contained the remnants of a cremation with bone fragments. Other features included a sub-circular cut in the interior of the ring ditch which contained sherds from a Collared Urn, again dating to the Early Bronze Age, a curvilinear feature, which also contained further sherds of this type and a sub-circular feature with fragments of burnt bone, which may have been a second cremation.

The results of the excavations at Whitemoor Haye have only been fully analysed up to the end of the 1998 season (Coates 2002). The bulk of the Neolithic/Early Bronze Age remains have been recovered in subsequent seasons and only preliminary results are currently available. However, cumulatively these excavations, which have involved only limited sampling of the landscape, indicate a high level of activity during the later Neolithic and Early Bronze Age. Further ceramics and flint artefacts of this period have been recovered in the context of excavations of monuments primarily of a later date, sometimes associated with pits or pit clusters.

A discovery of this nature was associated with one of the earliest excavations to be carried out in the Study Area, at Fisherwick (to the south of Whitemoor Haye) in 1968 (Miles 1969). Here a cluster of pits and postholes, tentatively interpreted as a house, were uncovered in the course of the excavation of a Romano-British farmstead. These features produced Neolithic worked flints, including end scrapers and a discoidal knife, as well as sherds of a Peterborough Ware vessel in the Mortlake style.

#### **THE EVOLUTION OF THE NEOLITHIC AND EARLY BRONZE AGE LANDSCAPE**

By the time of the commencement of Neolithic activity the wider landscape of the Trent/Tame confluence would have become largely wooded. Carbonised wood from a pit in Area R at Whitemoor Haye can possibly be interpreted in the context of the clearance of this woodland. Radiocarbon dating of this material produced a date within the earlier Neolithic (Coates 2002). The species included oak and pine, and hazelnuts were also identified. This evidence indicates that primary forest occurred nearby and the native pine has survived within this Neolithic wildwood. However, hazel is found more commonly on the edges of woodland, and it may be that some tree felling had taken place, and that the groups of early monuments thus stood in clearings. A Neolithic Group VI Langdale stone axe found just west of the modern buildings of Whitemoor Haye (SMR 1352) serves as a reminder of the felling of trees, as well as hinting at the complex network of forest pathways that would have led to this important place, located where tributary rivers flowed into one of the major water courses of lowland Britain.

The central monument in this landscape in the earlier Neolithic was probably the large causewayed enclosure just to the west of Alrewas. In the later Neolithic the focus may have shifted slightly – a pattern repeated elsewhere – to a series of ‘hengiform’ structures located close to the floodplain of the rivers. The architecture of the later Neolithic and Early Bronze Age monuments ranged along the valleys of the Trent and the Tame at their confluence defies easy classification, and terms such as ‘henge’, ‘multiple ring ditch’ and ‘ring ditch’ encompass a diverse range of monuments that should probably not be shoehorned into fixed ‘types’, and certainly any sharp distinctions between sites classified as ‘ritual’, ‘funerary’ and ‘domestic’ would be misleading. The cropmark and excavated evidence point to a unifying element of the architecture being a monumental use of timber in various configurations. Another common feature is the development of formal monuments such as ring ditches/barrows at locales with evidence for earlier activity represented by pits and postholes forming less obviously structured – to the modern eye – patterns and associated with depositions of flintwork and ceramics.

The complex of monuments focussing on Catholme can be compared to others throughout the country in terms of both its monumental components and landscape setting. In the Midlands such complexes are found at Aston on Trent, at Barford, Warwickshire, lying within a loop of the River Avon (Loveday 1989), and at Dorchester-on-Thames, Oxfordshire, lying within the confluence of the Thames and the River Thame (Loveday 1999, fig. 5.2). The well-studied complex at Maxey, Cambridgeshire, on a gravel island

adjacent to the River Welland (Pryor 1985, fig. 15), offers some particularly intriguing parallels with the Catholme complex. Here too is found a juxtaposition of ring ditches, post circles, mortuary structures and other religious monuments. The complex has its origin in the Etton causewayed enclosure, which stands apart from the complex of later monuments in a similar fashion to the relationship between the Alrewas causewayed enclosure and the later monuments within the Where Rivers Meet Study Area.

In the Study Area, we have already noted that particularly large or complex monuments appear to be spaced at intervals along the river valleys, and also that there is some evidence for east-west orientated land boundaries (pit-alignments) dividing the landscape into segments 'opening' onto the river valleys. Some of these boundaries may post-date the monuments, but nevertheless it is possible to view the Late Neolithic and Early Bronze Age landscape as highly structured, dominated both by the monuments of the ancestors – highly visible everywhere – and by the river.

### **DIVIDING THE LAND**

One of the most conspicuous features of the cropmarks within the Study Area is the existence of major linear boundaries, represented both by pit-alignments and by continuous ditches.

There are over twenty examples of pit-alignments within the Study Area, from Tucklesholme Farm in the north to Whitemoor Haye in the south. The predominant, but not exclusive, trend of these pit alignments is broadly east-west, and they effectively divide the landscape into a series of blocks along the river, with boundaries perpendicular to the river. The two very distinct pit-alignments which mark off the 'Catholme Ceremonial Complex' have already been noted. The northernmost of these alignments includes a stretch of 'double-row' pit-alignment, and such double row alignments are also found to the south at Whitemoor Haye. One of these double-row alignments at Whitemoor Haye (Area S) seems to serve to divide the area to the north, where intensive evidence of Neolithic and Early Bronze Age ritual evidence was found – forming part of the wider concentration of ritual activity around the confluence of the rivers – from the area to the south, where the pattern of Iron Age 'farmstead' enclosures is much more prominent, occupying the southern two-thirds of the Whitemoor Haye quarry area and continuing south into Fisherwick. Thus, on the broad landscape level within the Study Area, one may envisage a coarse division between an 'ancestral landscape of the dead' around the confluence of the rivers and a 'landscape of the living' to the south (and perhaps to the north also, although here the data is more scanty). This division is not clear-cut, however, and even if valid it will obscure both chronological and spatial complexity.

It is difficult to envisage what sort of effective physical boundary, if any, pit-alignments might have formed, and it is surely correct to emphasise the primarily symbolic nature of the boundaries formed by these alignments (e.g. Pollard 1996). It was perhaps the symbolic act of the initial digging of these pit-alignments which carried the most significance, in some cases periodically reinforced by recutting. If this is the case, it may not be too far wide of the mark to assume that the double alignments carried double significance.

Within the Study Area, pit-alignments have been most extensively sampled at Whitemoor Haye and Catholme, with lesser sampling elsewhere, mostly in the context of evaluation trenching. Dating evidence has not frequently been forthcoming, and most of the alignments remain effectively undated. Two of the pits sampled in the northernmost alignment at Whitemoor Haye (Area S), however, produced a small collection of Iron Age sherds, and a single sherd plus a granite rubber, respectively. Immediately to the north of this double alignment a cluster of pits was uncovered, one of which contained another substantial deposit of sherds from a single Middle Iron Age jar. This deposits are strongly suggestive of deliberate or 'structured' deposition, presumably as part of the rites involved with the marking of the boundary (or in this case, the re-marking of the boundary, as the material came from re-cuts).

The stretch of pit-alignment which has been most intensively investigated, however, is at Catholme, where a boundary was examined in the course of the excavation of the Anglo-Saxon settlement (Losco-Bradley and Kinsley, 2002). This boundary ran not east-west but broadly north-south, where it marked the edge of the terrace overlooking the River Trent. In a broader perspective, this boundary can be seen as part of the series of boundaries which divide up the land around the Catholme Ceremonial Complex. A 90m stretch of

the boundary was excavated, and it turned out to be a long-lived and complex feature with several periods of renewal. In brief, the boundary began in the prehistoric period (although direct dating evidence was only provided by three small sherds of not very diagnostic handmade pottery), and comprised 'a pit-alignment, an apparent bank, and a post-line, replaced and redefined by a series of ditches with approximately the same extent and alignment into the Anglo-Saxon period' (Losco-Bradley and Kinsley 2002, 15).

The longevity of the Catholme boundary serves to emphasise the apparent significance of these major landscape divisions. One possible context for the establishment of these boundaries, which is most in accord with such dating evidence as there is, is a formalisation of the landscape in the Late Bronze Age and earlier Iron Age. However, this does not preclude the possibility that the alignments reinforced earlier divisions marked in different, less archaeologically visible ways, nor that the pit-alignments themselves had earlier origins. This earlier origin is suggested by the apparent relationship between the boundaries and the Late Neolithic/Early Bronze Age ritual landscape.

The other type of boundary clearly apparent in the aerial photographs is the continuous ditched boundary. These occur either as single- or, occasionally, multiple-ditched boundaries and can, on morphological grounds be divided into two broad groups – major landscape boundaries and lesser field divisions, trackways, etc. It is not always easy to distinguish the two, but the major triple-ditched boundary at Whitemoor Haye clearly falls into the former category; it is probably Iron Age in date. The lesser divisions seem to be generally later in date, and form part of the creation of an 'enclosed landscape' in the Middle Iron Age.

#### **ENCLOSING THE LAND: THE IRON AGE**

The excavation of three enclosures and associated field systems at Fisherwick in the 1970s (Smith 1979) allowed a three-stage scheme of activity to be proposed, spanning the Iron Age and Roman periods (Smith 1979, 90):

- “Period 1: identified only at site SK187082 and represented by a probably unenclosed settlement of ring-groove houses without associated field boundaries; a mainly open landscape.
- Period 2: enclosed settlements of ring-ditch houses possibly with mud walls and the adjoining land enclosed by a system of field boundaries that became increasingly complex; a partially enclosed landscape.
- Period 3: the abandonment of the enclosed settlements but the continuance, at least in part, of their field systems.”

At Fisherwick, the ceramic and radiocarbon evidence suggested that Period 2 could be broadly dated to the 4<sup>th</sup> to 1<sup>st</sup> centuries BC, thus Middle and Late Iron Age, while Period 3 was Roman, continuing into the 2<sup>nd</sup> and 3<sup>rd</sup> centuries AD. Period 1 is undated, but is by implication earlier Iron Age. This basic scheme can be used as a framework for discussion of the Iron Age and Roman period evidence from the Study Area as a whole.

An apparently unenclosed settlement (Period 1?) was excavated at Catholme, underlying the later Anglo-Saxon settlement. It comprised at least eight roundhouses, mainly of post-ring type, but including one of post-in-slot type, and several four- and six-post structures (Losco-Bradley and Kinsley 2002, 15; the pre-Saxon phases at Catholme have not been fully published at the time of writing and information is scant).

Such unenclosed settlement has yet to be recognised at Whitemoor Haye, where the sole clear evidence of earlier Iron Age activity is provided by a single isolated pit, the lower fill of which contained sherds from three Late Bronze Age/Early Iron Age vessels (Coates 2002, 34).

The sparseness of evidence for Late Bronze Age/Early Iron Age settlement (and the attribution of the enclosed roundhouses at Fisherwick and Catholme to this period is only conjectural) in the Study Area is part of a wider, national pattern. Enclosed settlements of the Middle Iron Age are much more common, both in the Study Area and further a field. Given the generality of this pattern, a real growth of population in the Middle Iron Age may be reasonably inferred, with the enclosure of settlements and the creation of relatively well-defined field systems a part of this pattern.

In the Study Area, the most extensive evidence for enclosed Iron Age settlements is provided by the ongoing excavations at Whitemoor Haye and by the 1970s excavations at Fisherwick. To date, only the excavations up to 1999 at Whitemoor Haye have been fully published (Coates 2002). These excavations revealed two principal Iron Age enclosures, of rectilinear form, measuring 50m by 38m and about 70m by 70m. These enclosures contained roundhouses, defined by their eaves-drip ditches, four in the smaller enclosure and six in the larger enclosure. The size of the roundhouses varies considerably, from about 13m in diameter down to about 7m in diameter (in terms of floor area these are big differences). The roundhouses seem to occur in pairs, one large and one small, perhaps representing a combination of house and ancillary structure used for stock, crafts or storage. Although stratigraphic relationships are largely lacking and dating evidence is slight, it is unlikely that all these structures were in use at once; the excavator suggests the pairs of structures replaced each other over time (Coates 2002, 85).

These rectilinear enclosures are best interpreted as farmsteads. The size of the enclosure ditches do not suggest a serious defensive intent, and the enclosures probably combined the functions of symbolic boundary, stock control and drainage; the lower fills of some of the ditches showed signs of waterlogging. The entrances of both the enclosures and the roundhouses face eastwards, a common pattern in the Iron Age, and perhaps of cosmological significance.

Further large rectangular enclosures containing roundhouses have been excavated at Whitemoor Haye since 1999 (e.g. Hewson 2004, reporting on excavations in 2002) and fill out the pattern. Other elements in the landscape at Whitemoor Haye include smaller, slighter enclosures of curvilinear form, but also incorporating roundhouses, and irregular enclosures without clear evidence for structures, which may be associated with stock control.

At Whitemoor Haye the evidence suggests that by the Late Iron Age the farmsteads were no longer occupied and this period appears to have witnessed another reorganisation of the landscape, which continued into the Roman period. Some of the enclosures seem to have been abandoned altogether, while others were adapted to different uses. At one of the enclosures, for example, four large pits were excavated into the silted up enclosure ditch, and were repeatedly redefined or cleared out. A substantial assemblage of plant macrofossil and insect remains from the waterlogged fills of one of these pits indicated that it probably served as a watering hole for cattle.

The landscape at Whitemoor Haye during the Iron Age included areas of woodland and open grazing, along with marshy areas towards the River Tame. This type of terrain provided the raw materials to support a broad range of agricultural activity, accompanied by the hunting of wild animals and, no doubt, fishing in the River Tame. The direct evidence at Whitemoor Haye precludes any assessment of the relative importance of animal husbandry and the crop cultivation in the farming regime. Evidence of crop processing is provided in the form of chaff and weed seeds but the survival of animal bone was very poor. Indirectly, however, features such as the watering holes and (later) droveways suggests that cattle husbandry was a major element in the economy, the importance of which may have grown through time.

At Fisherwick, to the south of Whitemoor Haye, the pattern of enclosures and field systems is very similar – not surprisingly as the two ‘sites’ form part of a continuous landscape. Two farmstead enclosures were partially excavated here in the 1970s (Smith 1979), along with small-scale sampling of elements of the field systems, including two smaller, probably non-settlement, enclosures. The principal sub-rectangular farmstead enclosure excavated at Fisherwick (SK 187082) was comparable in size and layout to the smaller of the two enclosures at Whitemoor Haye, and contained a pair of roundhouses, one of which was excavated.

A particularly important aspect of the Fisherwick excavations was the attention paid to economic and environmental reconstruction. Although the preservation of animal bone was poor – only 63 identifiable fragments – it was at least possible to identify the species present. These were dominated by cattle (44 fragments) and also comprised pig (8 fragments), horse (7), sheep/goat (3) and deer (1). The evidence provided by waterlogged deposits in the ditches (some of which clearly held water throughout the year) was more important, and included plant macrofossils, pollen and insects. Particularly significant was the presence of waterlogged wood, which included a rare collection of wooden artefacts, including ‘pieces of structural timber, a spade or paddle, a pointed stake, a carefully carved peg, a scraper, a toggle for fastening clothing, and a pointed shaft, perhaps an arrow’ (Smith 1979, 99). The wood and seed remains from the enclosure ditch also allowed reconstruction of the probable composition of the hedge that must have surmounted the bank accompanying the ditch. This appears to have been a layed thorn hedge, including such common hedgerow plants as hawthorn, blackthorn, elder, willow, alder and bramble.

The plant macrofossil, pollen and insect remains, also enabled reconstruction of the immediate and wider environment. The beetle remains from the enclosure ditch confirmed that it was water filled, and included dung beetles associated with large herbivores. The pollen spectrum indicates that by the later Iron Age the woodland ecosystem that would have developed in the early Holocene had been almost completely replaced by one in which grassland and arable predominated:

“Of the 35% of the Fisherwick pollen that came from tree species only 5% came from oak (*Quercus* sp), elm (*Ulmus* sp) and lime (*Tilia cordata*), the main components of the primeval forest. This indicates that the vicinity of the Iron Age farms had been largely cleared and true forest may have survived only at a distance, perhaps on the sloping flanks of the valley. The remainder of the arboreal pollen came from trees which would form secondary woodland or grow in hedges.” (Smith 1979, 95).

It is reasonable to extrapolate this pattern to the wider Study Area.

Taking the insect, seed and pollen evidence together, it was concluded that the fields immediately adjoining the settlement were enclosed pastures or meadows, grazed by cattle and horses, with arable fields beyond. The rearing of livestock was felt to be the dominant element in the economy but ‘an arable element is attested by a 5% record of *Cerealia* pollen, finds of both saddle and rotary querns and impressions of threshed emmer and spelt spikelets identified in oven daub’ (Smith 1979, 101).

At Fisherwick, as at Whitemoor Haye, it appeared that the settlement was abandoned in the later Iron Age, although the system of enclosures, fields and droveways continued into the Roman period.

Taken together, the excavations at Fisherwick and Whitemoor Haye represent a substantial sample of the Iron Age landscape, and suggest a pattern of small farmsteads giving little indication of a settlement hierarchy. The only element that does suggest a possibly more complex social organisation is the hillfort at Borough Hill, near Walton-on-Trent on the east side of the River Trent (Challis and Harding 1975). This hillfort comprises a defensive hill-top of c.3ha overlooking the river Trent to its immediate west. The Derbyshire SMR entry for the site records that ‘earthworks are evident between Old Hall and Borough Hill Farm but their original plan cannot be determined’. It is described as univallate, although there is also a mention of two further probable outer defensive works.

#### **CONTINUITY AND CHANGE: THE ROMAN PERIOD**

The nearest Roman urban centre, Letocetum (Wall) lies just to the southwest of the Study Area. It was occupied during the Claudian period, possibly by the XIVth Legion prior to their move to Wroxeter (Webster 1975). The later settlement’s defences, which cover 2.4ha, are not well dated, although Webster (1975, 78) suggested that the settlement was a late ‘burgus’ under Constantius Chlorus. Although there has been a suggestion that Wall may have been a late Roman civitas capital, there is no evidence that the civilian settlement served as a major market or service centre following its early military occupation (Crickmore 1984, 47). On present evidence the Study Area would appear to fall between the Cornovii and

the Corieltavi, with the border possibly following the line of Rykniel Street (Webster 1975; Todd 1991), which runs through the Study Area.

The obvious impact of Rome in the Study Area is slight, and essentially comprises Rykniel Street itself and the consumption of Romano-British styles of pottery. Generally speaking the pottery is made up of locally-traded wares such as Derbyshire products, along with regionally-marketed Severn Valley wares and Black-Burnished wares from Dorset. Imports occur at very low levels, mainly comprising fragments of amphora and samian. There is only one possible villa site in the Study Area, suggested by large quantities of finds including tesserae discovered during fieldwalking (SMR 1710).

At Whitemoor Haye, the evidence of Romano-British activity across the site follows a similar pattern to the previous Iron Age activity. Two rectilinear enclosures were excavated, one appended to a droveway. The evidence suggests that the enclosures were principally designed for the management of stock, although evidence of crop processing is present also. The droveway was a major feature of the Romano-British landscape, running broadly north-south, parallel to the river to the east and Rykniel Street to the west, and presumably servicing a number of farms. This droveway was marked by a pair of ditches, but perhaps followed the line of a much earlier routeway as excavation showed that one of the pit-alignments respected the line of the droveway, as did the layout of the Iron Age enclosures.

Pottery and artefacts from the ditches of the Roman period enclosures suggests cooking and food storage, but evidence of actual structures was lacking. It may be that these structures were less substantial than those of the Iron Age, which certainly seems to be the case at Fisherwick.

At Fisherwick, a Romano-British farmstead was excavated in the 1960s (Miles 1969). It was located to the north of the Iron Age settlement described above, and lay close to a ford across the River Tame. The Romano-British features comprised a droveway – leading to the ford – huts and a series of enclosures and field boundaries. The huts, four of which were excavated, seemed insubstantial affairs, marked by depressions, slight gullies and post holes. This, and the general paucity of finds, suggested to the excavator that the huts may have been only seasonally occupied. The small enclosures and pens suggested that the farmstead was mainly concerned with stock rearing. To the excavator the ‘evidence from Fisherwick at least suggests a group of poor people, either slaves or nominal freemen, working on the land of a richer master’ (Miles 1969, 11).

Whether this is the case or not, the evidence from both Fisherwick and Whitemoor Haye suggests two contrasting elements in the development of the landscape. First there is the creation or elaboration of a landscape of enclosures and droveways, often defined by substantial ditches, which points to an economy dominated by stock-rearing and organised on a large scale. Second there is the generally low level of material culture and insubstantial structures pointing to a somewhat impoverished peasantry. The contrast between an increased level of farming production, to service the needs of the new dispensation, and depressed social status and well-being may, indeed, have been the principal impact of Romanisation in the Study Area.

Evidence of Roman period activity, similar to that recorded at Whitemoor Haye and Fisherwick, is scattered across the Study Area, taking the form, largely, of ceramic finds from fieldwalking or from trial excavations. At Catholme to the north, an interesting proposal was made on the basis of fieldwalking results in the fields adjacent to the site of the Anglo-Saxon settlement. The fields (A-C) contain cropmark evidence of boundaries and enclosures typical of the Iron Age and Roman periods. The combined evidence from excavation, fieldwalking and air-photographs might ‘be taken to indicate a single shifting settlement drifting north-east along the gravel terrace from at least the third to the ninth centuries, commencing with Romano-British occupation in fields A-C at least down to the early fourth century, early Anglo-Saxon settlement and cemetery continuing in field C, with continuing maintenance of the terrace-edge boundary, and a mid-late-Anglo-Saxon settlement in the excavated area’ (Losco-Bradley and Kinsley 2002, 123).

## THE ANGLO-SAXON LANDSCAPE

The evidence for the Anglo-Saxon period in the Study Area is dominated by the excavation of the 7<sup>th</sup>-9<sup>th</sup> century settlement at Catholme (Losco-Bradley and Kinsley 2002). Catholme is one of very few early medieval rural settlements in England to be excavated on a large scale, making it a site of national importance. It is exceptional in several respects, including its long-lived stability, its layout and its organisation around a system of enclosures and trackways. Sixty-five buildings were excavated, which cannot unfortunately be easily divided into well-defined phases, perhaps representing only about half of the settlement, which clearly extended into unexcavated areas to the southwest, west and northwest. The only contemporary settlement to have been excavated in the vicinity is at Willington in Derbyshire (Wheeler 1979), some fourteen miles away, but this excavation was on a much smaller scale.

The Study Area lies at the extreme western limit of Germanic influence in Britain and the Catholme excavations raise a number of key questions, including the ethnic affinities of the community and the question of continuity from earlier periods.

Apart from a handful of chance finds, the only other material in the Study Area which provides some context for the Anglo-Saxon settlement are two cemeteries, both discovered in the 19<sup>th</sup> century as a consequence of quarrying, and both poorly understood, essentially represented by reported and surviving finds. The Wychnor cemetery (Kinsley 2002, 23-27) lay just 500m southwest of the settlement at Catholme, strongly suggesting a relationship between the two, even if the finds from the cemetery – brooches, spearheads, shield-bosses and pottery vessels – suggest a date (6<sup>th</sup>, possibly early 7<sup>th</sup>, centuries) perhaps slightly earlier than the settlement. This connection is strengthened by the Anglo-Saxon pottery found in fieldwalking to the southwest of the excavated area, thus closing the spatial gap between cemetery and settlement. Further north, at Tucklesholme, several urns containing human bones and associated with metal knives were found when a ballast pit was dug in 1851 (VCH 1968, 204); it has been suggested that these might indicate the existence of an Anglo-Saxon cemetery. Interestingly, a possible cremation burial was excavated nearby in 1991 and dated by radiocarbon to the 5<sup>th</sup> century AD. It lay just outside a ring-ditch, the primary monument being assumed to be of prehistoric date (Hughes 1991).

## APPENDIX 3

### BIBLIOGRAPHY FOR *WHERE RIVERS MEET* STUDY AREA

Derived from:

SMR, BUFAU Reports (Pub'/unpub'), External published sources, external unpublished sources.

#### A

Aberg, F.A. (ed) 1978 Medieval Moated Sites, CBA Research Report 17, London, Council for British Archaeology

Appleton-Fox, N. & Nash, A.F. 2003 Howard Primary School, Elford, Staffordshire: A Report on an Archaeological Watching Brief, Marches Archaeology, Series 295

#### B

Bain, K. 2002, Scheduled Ancient Monument ST No. 221, Newbold Quarry, Barton under Needwood, Staffordshire: An Archaeological Watching Brief, BUFAU Report 974

Bain, K. & Richmond, A. 2002, Report on an Archaeological Watching Brief: Scheduled Ancient Monument ST 221, Newbold Quarry, Staffordshire, Report PC183b, Phoenix Consulting Archaeology

Barber, A. 1995, Archaeological Fieldwork at Manor Farm, Harlaston, Staffordshire: A Preliminary Report, Cotswold Archaeological Trust, Report No. 94220

Barber, A. 1995, The Moated Site of Manor Farm, Harlaston: Evaluation, and Excavation, 1991-1994, Staffordshire Archaeological and Historical Society Transactions, Vol. 36, 21-29

Barrow, G. 1919, The geology of the country around Lichfield, including the northern parts of the south Staffordshire and Warwickshire coalfields, Memoirs of the Geological Survey, England and Wales, London, H.M.S.O

Bartlett, A.D.H. 1991, Wychnor Estate, Alrewas, Staffordshire: Report on an Archaeogeophysical Evaluation 1991, Bartlett-Clark Consultancy

Bartlett, A.D.H. 1995, Whitemoor Haye, Alrewas, Staffordshire: Report on Archaeogeophysical Survey, Bartlett-Clark Consultancy

Bartlett, A.D.H. 1998, Whitemoor Haye, Alrewas, Staffordshire: Report on Archaeogeophysical Survey, Bartlett-Clark Consultancy

Bartlett, A.D.H. 1999, Catholme Farm, Staffordshire, Report on Archaeogeophysical Survey, Bartlett-Clark Consultancy

Bartlett, A.D.H. 1999, Fatholme Farm, Staffordshire, Report on Archaeogeophysical Survey. Bartlett-Clark Consultancy

Bartlett, A.D.H. 2001, Barton Business Park, Staffordshire. Report on Archaeogeophysical Survey 2001, Bartlett-Clark Consultancy

Bate, P.V & Palliser, D.M 1971, Lost Village Sites, Transactions of the South Staffordshire Archaeological and Historical Society, Vol.12, 36

Birmingham and Midland Institute, Archaeology Section 1884, Transactions, Excavations and Report, Vol. 12, 111

Bradley, R. 1992, "The Gravels and British Prehistory from the Neolithic to the Early Iron Age". In: Fulford, M & Nichols, E. (eds), Developing Landscapes of Lowland Britain. The Archaeology of British Gravels: A review, Society of Antiquaries Occasional Papers, Vol.14, 15-22, London.

Buteux, S. (Ed.), 2003, The Whitemoor Haye Woolly Rhino Site, Whitemoor Haye Quarry, Alrewas, Staffordshire, NGR: SK 173 127, BUFAU Report 1006

## C

Cane, J. & Jones, A. 1989, An Archaeological Evaluation at Newbold Farm, BUFAU Report 79

Challis, A.J. & Harding, D.W. 1975, Later Prehistory from the Trent to the Tyne, British Archaeological Reports 20, Oxford

Coates, G. 1998, Archaeological Excavations at Whitemoor Haye, Alrewas, Staffordshire: An Interim Report (DRAFT), BUFAU Report 495.01

Coates, G. 1999a, An Archaeological Watching Brief at Catholme, Barton-underNeedwood, Staffordshire, BUFAU Report 645

Coates, G. 1999b, Excavations at Whitemoor Haye Quarry, Alrewas, Staffordshire, 1997-1998: A Post-Excavation Assessment and Updated Project Design, BUFAU Report, 495.02

Coates, G. 2000, An Archaeological Evaluation on the Site of the Recycling unit, Alrewas Quarry, Staffordshire, BUFAU Report 702

Coates, G. 2002, A Prehistoric and Romano-British landscape: Excavations at Whitemoor Haye Quarry, Staffordshire, 1997-1999, Birmingham University Field Archaeology Unit Monograph Series 5, British Archaeological Reports, British Series 340, Oxford

Coates, G. & Hancox, E. 2002, Easthill farm, Fradley Park, Staffordshire: An Enhanced Archaeological Desk-Based Assessment. 2002, BUFAU Report 982

Coates, G. 2003, National Forest Planting Proposal for Wychnor Park, Staffordshire: A Brief Archaeological Assessment 2003, Birmingham Archaeology Report 1059

Coates, G. & Hughes G. 1999, The Excavation of a Prehistoric Pit Alignment and Enclosure at Fatholme Farm, Barton-under-Needwood, Staffordshire: An Interim Report. B.U.F.A.U. Report 630

Collis, J. (Ed) 1977, The Iron Age of Britain: A Review, Sheffield, University of Sheffield

Countryside Planning and Management, 1990, Manor Farm, Harlaston, Staffordshire: Stage 1 Archaeological Assessment, Cirencester

Cox, C. 1998, Fatholme Farm, Barton-under-Needwood, SK2017, Staffordshire, Aerial Photographic Assessment, Air Photo Services, Report No. APSLtd/9789/23

Cox C. 1999, Land at Catholme, Staffordshire: Aerial Photographic Assessment Archaeology, Air Photo Services Report No. 9900/01

Cuttler, R.T.H. 2001, Cunnery Farm, Wychnor, Staffordshire: An Archaeological Watching Brief 2001, BUFAU Report 818

## **D**

Deegan, A. & Cox, C. 1995, Barton-under-Needwood, SK2018, Staffordshire, Aerial Photographic Assessment, Air Photo Services

Department of the Environment, 1974, Archaeological Excavations 1974, HMSO, London

## **F**

Faull, M.L. (Ed.), 1984, Studies in Late Anglo-Saxon Settlement, Oxford University Department of External Studies, Oxford

Ferris, I. 1992, An Archaeological Evaluation at Echills Farm, Kings Bromley, Staffordshire, BUFAU Report 214

Ferris, I & Buteux, S. 1992, An Archaeological Evaluation at Tucklesholme Farm, Barton-under-Needwood, Staffordshire, BUFAU Report 190

Field, N & Tann, G 1995, Fradley Park Development, Lichfield, Staffordshire, Environmental Assessment, Archaeology and Heritage, Lindsey Archaeological Services

Fulford, M. 1992. 'Iron Age to Roman: a period of radical change on the gravels'. In: M. Fulford and E. Nichols (eds), Developing Landscapes of Lowland Britain. The Archaeology of the British Gravels: A Review, Society of Antiquaries Occasional Papers, 14, 23-38. London.

## **G**

Gaffney, C.F. & Ovendon, S.M. 1991, Report on Geophysical Survey, Newbold, Staffordshire, Report Number 91/59, Geophysical Surveys of Bradford

Gaffney V. and Hughes G. 1993, Settlement and Environment on the Southeast Staffordshire Gravels: New Approaches to a Threatened Resource, BUFAU Report 237

Gelling, M. 1992, The West Midlands in the early Middle Ages, Leicester

Gibson, A. (Ed.), 1989, Midlands Prehistory, British Archaeological Reports, British Series 204, Oxford

Greenslade, M.W. & Stuart, D.G. 1984, A History of Staffordshire, Phillimore & Co. Ltd, Chichester, 2nd Edition

Gunstone, A.J.H 1964, An archaeological gazetteer of Staffordshire I, chance finds and sites, excluding barrows and their contents, North Staffordshire Journal of Field Studies, Vol.4, 11-45

Gunstone, A.J.H 1965, An archaeological gazetteer of Staffordshire II, the Barrows, North Staffordshire Journal of Field Studies, Vol.5, 20-63

## **H**

Hancocks A. and Coates G. 1999, Catholme, Staffordshire, fieldwalking report (surface collection), BUFAU Report 620

Hodder, M.A. 1982, The prehistory of the Lichfield area, Transactions of the South Staffordshire Archaeological and Historical Society, Vol.12, 13-23

- Hewson, M. 2003, Barton Quarry, Barton under Needwood, Staffordshire: An Archaeological Watching Brief 2003, Birmingham Archaeology, Report 1105
- Hewson, M. 2004, Excavations at Whitemoor Haye Quarry 2002: Areas I, J, and K, a Draft Interim Report, Birmingham Archaeology
- Hovey, J, Hughes, G & Woodward, A 1998, Salvage recording of a test pit excavated on the site of a cropmarked ring ditch at the National Memorial Arboretum, Alrewas, Staffordshire, Interim Statement, BUFAU Report 504
- Hovey, J, Hughes, G & Woodward, A 1998, Salvage recording of a test pit excavated on the site of a cropmarked ring ditch at the National Memorial Arboretum, Alrewas, Staffordshire, BUFAU, Report 504.1
- Howlett, C.E 1991, An Archaeological Evaluation of Redland Readymix Site, Alrewas, Staffordshire (TR 31062.CDB), Tempus Reparatum Report
- Howlett, E. & Richmond, A 1997, Specifications for Post-Evaluative Archaeological Investigation: Whitemoor Haye, Alrewas, Staffordshire, Doc.P/104/B
- Hughes, E.G. 1990a, An archaeological evaluation of a ring-ditch at Tucklesholme Farm, Staffordshire, BUFAU Report 127
- Hughes, E.G. 1990b, King's Bromley, Staffordshire: An Archaeological Evaluation Alongside the A513, BUFAU Report 130
- Hughes, E.G. 1991a, The Excavation of a Ring-Ditch at Tucklesholme Farm, Barton-under-Needwood, Staffordshire, 1990-1991: An Interim report, BUFAU Report 163
- Hughes, G. 1991b, An Archaeological Evaluation at Newbold Gravel Pit, Barton- under-Needwood, Staffordshire, 1991-1992, BUFAU Report 197
- Hughes, G. 1992, An Archaeological Evaluation at Whitemoor Haye, Alrewas, Staffordshire 1992, BUFAU Report 231
- Hughes, E.G. 1993, Barton Turn Marina, Staffordshire, 1993: An Archaeological Evaluation, BUFAU Report 268
- Hughes G. & Coates G. 1999a, An Archaeological Evaluation at Fatholme, Barton-under-Needwood, Staffordshire: Trial trenching phase, BUFAU Report 620.1
- Hughes G. & Coates G. 1999b, An Archaeological Evaluation at Catholme, Barton-under-Needwood, Staffordshire: Trial Trenching Phase, BUFAU Report 620.2
- J**
- Johnson, C. 1991, Manor Farm, Harlaston, Staffordshire, Evaluation Excavation Report, Cotswold Archaeological Trust, Report No. 9162
- Johnson, S. 1999, Fieldwalking on Land at Fatholme Farm, Staffordshire, John Samuel Archaeological Consultants Report No. 573/99/02
- Jones, A.E. 1990, Tucklesholme, Staffordshire: A Geophysical Survey 1990. BUFAU Report 121
- Jones, A.E. 1992, Catholme, Staffordshire: An archaeological evaluation, BUFAU Report 209

Jones, H. 2000, Newbold Quarry, Tatenhill, Proposed Extension: Documentary Survey and Archaeological Assessment, Project 2634/TNQ, Trent and Peak Archaeological Unit

## **K**

Knight, D. and Howard, A.J. 1994, Archaeology and Alluvium in the Trent Valley, Trent and Peak Archaeological Unit

## **L**

Larkham, C. 1991, Moated Sites in South Staffordshire, in: Transactions of the South Staffordshire Archaeological and Historical Society, Vol. 24, 8-61

Leahy, K. 1979, Anglian Cruciform Brooches from Wychnor and Brizlincote near Burton upon Trent, Transactions of the South Staffordshire Archaeological and Historical Society, Vol.19, 5-11

Litherland, S. 2000a, Land Adjacent to Church Cottage, Wychnor, Staffordshire: An Archaeological Watching Brief, BUFAU Report 683.02

Litherland, S. 2000b, Church Cottage, Wychnor, Staffordshire: An Archaeological Watching Brief, BUFAU Report 683.03

Losco-Bradley, S. 1975, Trent Valley Archaeological Research Committee Report 8. In: Council for British Archaeology 1974, 3-34

Losco-Bradley, S. 1977b, Catholme 1973-1976, Current Archaeology, Vol.59, 358-359

Losco-Bradley, S. & Wheeler, H.M. 1984, "Anglo-Saxon settlement in the Trent Valley: some aspects". In: Faull, M.L. (ed.), Studies in late Anglo-Saxon settlement, Oxford, 101-114

Losco-Bradley, S. & Kinsley, G 2002, Catholme: An Anglo-Saxon settlement on the Trent gravels in Staffordshire, Nottinghamshire Studies in Archaeology Vol.3, Nottingham University Press

Lupton, A. 1995, Whitemoor Haye, Alrewas, Staffordshire, Archaeological Evaluation Report, unpublished Tempus Reparatum Report TR31102DFA

## **M**

Mather, L-A. 2000, Land Adjacent to Church Cottage, Wychnor, Staffordshire: An archaeological evaluation, BUFAU Report 683

Martin A. L. 1998, Report on an Archaeological Desk-Based Assessment of Land at Fatholme, Staffordshire, Gifford and Partners Ltd, Report no. B1488A.02R

Martin, H. 2001, An Archaeological Watching Brief and Salvage Recording at Whitemoor Haye, BUFAU Report 794

Martin, H. & Burrows, B. 2002, An Archaeological Watching Brief and Salvage Recording at Whitemoor Haye, BUFAU Report

Martin, H. 2002, Footbridge, Barton and Walton Level Crossing, Staffordshire 2002: An Archaeological Watching Brief, BUFAU Report 920

Meeson, R. 1991, Archaeological Evaluation, Moat Field, Hamstall Ridware, March 1991, Staffordshire County Council

- Meeson, R.A. 1991, Willowbrook Farm, Alrewas, Staffordshire: The Site of a Barrow and Possible Neolithic/Bronze Age Building, Department of Planning and Economic Development, Staffordshire County Council
- Meeson, R.A. 2002, St Peter's Church, Elford: Archaeological Watching Brief in the Churchyard, Staffordshire County Council
- Meeson, R. 2003, Hill Farm, Wychnor, Department of Planning and Economic Development, Staffordshire County Council
- Meeson, R. & Wardle, C 1989, Church of St Peter, Elford: Archaeological Evaluation, Staffordshire County Council
- Miles, H. 1969, Excavations at Fisherwick, Staffs, 1968 – a Romano-British farmstead and a Neolithic occupation site, Transactions of the South Staffordshire Archaeological and Historical Society, Vol. 10, 1-23
- Moffett, L. 1999, "Charred Plant Remains". In: Coates, G. (1999), Excavations at Whitemoor Haye Quarry, Alrewas, Staffordshire 1997-1998. A Post Excavation Assessment and Updated Project Design, BUFAU Report 495.01
- Molyneux, W. 1869, History of Burton on Trent, Burton on Trent
- N**
- Nash, A.F. 2001. Elford Park Farm, Elford, Staffordshire: A Report on an Archaeological Watching Brief, Marches Archaeology, Series 217
- Neilson, C. 2001, Archaeological Excavations at Whitemoor Haye Quarry, Alrewas, Staffordshire, Areas D, E, G, H. An Interim Report, BUFAU Report 704
- Neilson, C. 2001, Excavations at Whitemoor Haye, Staffordshire, 2001. A Draft Interim Report BUFAU Report 790
- Neilson, C. 2002, Archaeological Excavations At Barton Business Park, Barton-under-Needwood, Staffordshire 2001, BUFAU Report 842
- O**
- O'Brien, C. 1978, Land Settlement in Nottinghamshire and Lowland Derbyshire, Supplement to East Midlands Archaeological Bulletin
- O'Sullivan, J. 1899, Some Anglo-Saxon antiquities found at Wychnor, July 1899, Transactions of the Burton on Trent Natural History and Archaeological Society, Vol 4, part 2, 80-81.
- P**
- Palliser, D.M. 1976, The Staffordshire Landscape, Hodder and Stoughton Ltd, London
- Palmer, R. 1976, Interrupted Ditch Enclosures in Britain: The Use Aerial Photography for Comparative Studies, Proceedings of the Prehistoric Society, Vol.42, 161 186
- Palmer, R. 1992, Alrewas, Staffordshire: Aerial Photographic Assessment, Air Photo Services
- Patrick, C. Cherrington, R. & Coates, G. 2001, Archaeological trial trenching on the site of Barton Business Park, Barton-under-Needwood, Staffordshire 2001, BUFAU Report 800

## R

- Ramsey, E. 2004, Excavations at Whitemoor Haye Quarry 2003: Areas L, M, and N Staffordshire, 2001. A Draft Interim Report, Birmingham Archaeology
- Richmond, A.D.W. 1997, Monument 220C, Whitemoor Haye, Alrewas, Staffordshire, Phoenix Consulting, Report 213A
- Richmond A. 1999a, Catholme, Barton-under-Needwood, Staffordshire, an Archaeological Desk-Based Report, Phoenix Consulting report no. P229A
- Richmond A. 1999b, Written Scheme of Investigation for Archaeological Field Evaluation: Catholme, Barton-under-Needwood, Staffordshire, Phoenix Consulting, Report No. P229E
- Richmond A. 1999c, Written Scheme of Investigation for Trial Trenching: Fatholme, Barton-under-Needwood, Staffordshire, Phoenix Consulting, Report No. P138B
- Richmond, A. 1999d, Summary Report of an Archaeological Evaluation at Catholme and Fatholme Farm, Barton-under-Needwood, Staffordshire, Phoenix Consulting Report
- Richmond, A. 1999e, Preferred Economies: The Nature of the Subsistence Base Throughout Mainland Britain During Prehistory, BAR (British Series) 290
- Richmond, A. 1999f, Catholme (East of Railway), Barton-under-Needwood, Staffordshire, An Archaeological Desk Based Assessment, Phoenix Consulting, Report No. P231C
- Richmond, A. 2000a, Specification for Archaeological Evaluation: Barton Business Park, Barton-under-Needwood, Staffordshire, Phoenix Consulting, Report No. P138G
- Richmond, A. 2000b, Written Scheme of Investigation for Archaeological Field Evaluation: Barton Quarry (East of Railway), Barton-under-Needwood, Staffordshire, Phoenix Consulting, Report No. P231D
- Richmond, A. 2001, Written Scheme of Investigation for Archaeological Field Excavation and Watching Brief Action, Barton Business Park, Fatholme Farm, Barton-under-Needwood, Staffordshire, Phoenix Consulting, Report No. P138I
- Richmond, A. 2002, Report on a Programme of Archaeological Excavation: Barton Business Park, Barton-under-Needwood, Staffordshire, Phoenix Consulting, Report No. P138J

## S

- Saracino, E.P. 1990, Interim report: Archaeological Evaluations at Willowbrook Farm, Alrewas, Staffordshire (TR31032C-STALWF90), Tempus Reparatum Report
- Saracino, E.P. 1991, An Archaeological Assessment of Willowbrook Farm, Alrewas, Staffordshire, Tempus Reparatum Report
- Shotton, F.W. 1973, Two Lower Palaeolithic implements from Southeast Staffordshire, Transactions of the South Staffordshire Archaeological and Historical Society, Vol.14, 1-14
- Slee, D.W. 1994, Curborough Farm, Staffordshire: Archaeological Assessment, Staffordshire County Council
- Smith, C.A. 1974a, Fisherwick. In: Council for British Archaeology 1974

- Smith, C.A. (1976), Second report of excavations at Fisherwick, Staffs. 1973. Ice wedge casts and a Middle Bronze Age settlement, Transactions of the South Staffordshire Archaeological and Historical Society, Vol.16, 1-17
- Smith, C.A. 1977a, "The Valleys of the Tame and Middle Trent; Their Populations and Ecology During the Late 1st Millennium B.C.". In: J. Collis, The Iron Age of Britain: A Review, 51-61, Sheffield, University of Sheffield
- Smith, C.A. 1978, "The landscape and natural history of Iron Age settlement on the Trent gravels". In: B. Cunliffe & T. Rowley (Eds), Lowland Iron Age Communities in Europe, 91-102, British Archaeological Reports, S48
- Smith, C.A. 1979, Fisherwick: The reconstruction of an Iron Age landscape, British Archaeological Reports, British Series 61, Oxford
- Smith, C.A. 1980, The historical development of the landscape in the Parishes of Alrewas, Fisherwick and Whittington; a retrogressive analysis, Transactions of the South Staffordshire Archaeological & Historical Society, Vol.20, 1-14
- Smith, D.N. 1998, "An assessment of the insect remains from Whitemoor Haye, Alrewas, Staffordshire". In: Coates, G. Archaeological excavations at Whitemoor Haye, Alrewas, Staffordshire; an interim report, BUFAU Report 495.01
- Smith, W. 1999, "Assessment of the charred plant remains from Whitemoor Haye, Alrewas, Staffordshire". In: Coates, G. Excavations at Whitemoor Haye Quarry, Alrewas, Staffordshire 1997-1998. A post-excavation assessment and updated project design, BUFAU Report 495.02
- Staffordshire County Council 1994, Catholme Weir, Staffordshire, Department of Planning and Economic Development, S.C.C.
- Stebbing Shaw 1798, The History and Antiquities of Staffordshire
- T**
- The Victoria History of the Counties of England 1908, A History of the County of Staffordshire, Vol. I
- The Victoria History of the Counties of England, 1967, A History of the County of Staffordshire, Vol. II
- Trent and Peak Archaeological Trust 1985, Fatholme, Barton-under-Needwood, Staffordshire. Archive report
- U**
- Underhill, C.H. 1976, History of Burton on Trent, 2nd Edition, Burton upon Trent
- V**
- Vine, P.M. 1982, The Neolithic and Bronze Age cultures of the Middle and Upper Trent basin, British Archaeological Reports, British Series 105, Oxford
- W**
- Wait G.A. 1995, Draft Report on an Archaeological Evaluation at Tuckleholme Farm, Barton-under-Needwood, Staffordshire, Gifford and Partners, Report No. 6936:2R

Webster, M. & Hindmarch, E. 2000, Archaeological Evaluation of Land at Barton Quarry, Barton-under-Needwood, Staffordshire, June 2000, Northamptonshire Archaeology, Northamptonshire County Council

Whimster, R. 1989, The emerging past: Air photography and the buried landscape, London