

Fieldwalking at Whirlow Hall Farm, Sheffield, 2011



ARS Ltd Report 2011/61
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Compiled by:
Jessika Sheppy
Archaeological Research Services Ltd
Angel House
Portland Square
Bakewell
DE45 1HB

Checked by:
Dr. Clive Waddington
Tel: 01629 814540
Fax: 01629 814657
admin@archaeologicalresearchservices.com
www.archaeologicalresearchservices.com



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CONTENTS

Executive Summary	4
1. INTRODUCTION.....	5
1.1 SCOPE OF WORK.....	5
1.2 LOCATION AND GEOLOGY.....	5
3. FIELDWALKING	8
3.1. Field One.....	8
3.2. Field Two	9
4. SPECIALIST REPORTS.....	13
4.1. Lithics	13
4.2. Pottery	19
4.3. Clay Pipe.....	23
5. DISCUSSION.....	25
6. PUBLICITY, CONFIDENTIALITY AND COPYRIGHT.....	25
7. STATEMENT OF INDEMNITY.....	25
8. ACKNOWLEDGEMENTS.....	26
9. REFERENCES	26

List of figures

Figure 1. Site location.....	6
Figure 2. Map of Whirlow Hall Farm showing the fields walked.....	7
Figure 3. Volunteers fieldwalking in Field 1.	8
Figure 4. Volunteers fieldwalking across Field 2 looking south.....	10
Figure 5. Map of Field 1 showing the location and spread of finds.....	11
Figure 6. Map of Field 2 showing the location and spread of finds.....	12
Figure 7. two Mesolithic flint microblade cores.....	14
Figure 8. A recycled heavily patinated and abraded core that may be of Late Upper Palaeolithic origin.....	14
Figure 9. Dark grey local chert including a Mesolithic platform core and a variety of blade and blade segments.....	15
Figure 10. A variety of utilised Mesolithic blades from Field 2.	17
Figure 11. Scrapers and scraper fragments with shallow and unifacial retouch, likely to be of Beaker period date, found in Fields 1 and 2.....	17

Executive Summary

The Whirlow Hall Farm Trust received a Heritage Lottery Grant to undertake a programme of heritage research and archaeological investigations into the history of Whirlow Hall Farm. The project comprised a professionally-led programme by Archaeological Research Services Ltd of training, participation, learning activities and public engagement. Part of the project involved carrying out a non-intrusive fieldwalking exercise over two fields to identify any finds located within the plough soil. A number of volunteers assisted in the collection and surveying of finds, as well as the post excavation tasks of cleaning and cataloguing finds.

Whirlow Hall Farm is situated on the edge of Sheffield, South Yorkshire, approximately 8km to the south-west of the city centre (NGR SK 31233 83177). The farm extends to some 55ha (138 acres) and occupies a site which generally slopes from north to south. Each field is named individually, the fieldwalking being carried out within two fields; Long and Barley.

The fields were found to contain a large amount of finds spread across each field. Although the finds included much post-medieval material, namely clay pipe fragments and ceramics, Field 1 was found to contain 14 lithics and Field 2 was found to contain 60. The spread of the lithics in Field 2 was of particular interest as it was of predominantly Mesolithic date and the material, although having moved downslope as a result of ploughing, is within close proximity to the edge of the Limb Valley which is a deeply incised valley that forms a natural routeway on to the gritstone moors which fringe Sheffield on its western side. It is likely that Mesolithic occupation of this area was related to its strategic position that allowed movement of animals from the lower lying ground of the Sheaf valley on to the uplands to be monitored. Being reliant on hunting, gathering and fishing strategies, these early hunting groups would have found the elevated position on the edge of the Limb Valley an attractive locale for hunting expeditions, and possibly also settlement.

1. INTRODUCTION

1.1 SCOPE OF WORK

- 1.1.1 The Whirlow Hall Farm Trust received a Heritage Lottery Grant to undertake a programme of heritage research and archaeological investigations into the history of Whirlow Hall Farm. The project comprised a professionally-led programme of training, participation, learning activities and public engagement. The Trust invited local schools, community groups, volunteers and visitors to participate in a range of activities to help record the buildings and discover and record the history of Whirlow Hall Farm.
- 1.1.2 Part of the project involved carrying out a non-intrusive fieldwalking survey over two fields in order to identify any finds located within the plough soil.

1.2 LOCATION AND GEOLOGY

- 1.2.1 Whirlow Hall farm is situated on the edge of the city of Sheffield, South Yorkshire, approximately 8km to the south west of the city centre (NGR SK 31233 83177 (centre)) (Figure 1). The farm extends to some 55ha (138 acres) and occupies a site which generally slopes from north to south.
- 1.2.2 The underlying geology consists of Rough Rock Sandstone, which is a coarse-grained feldspathic sandstone. There are no recorded superficial deposits (bgs.ac.uk/opengeoscience). The soils are classified as freely draining slightly acid loamy soils (landis.org.uk/soilscapes).

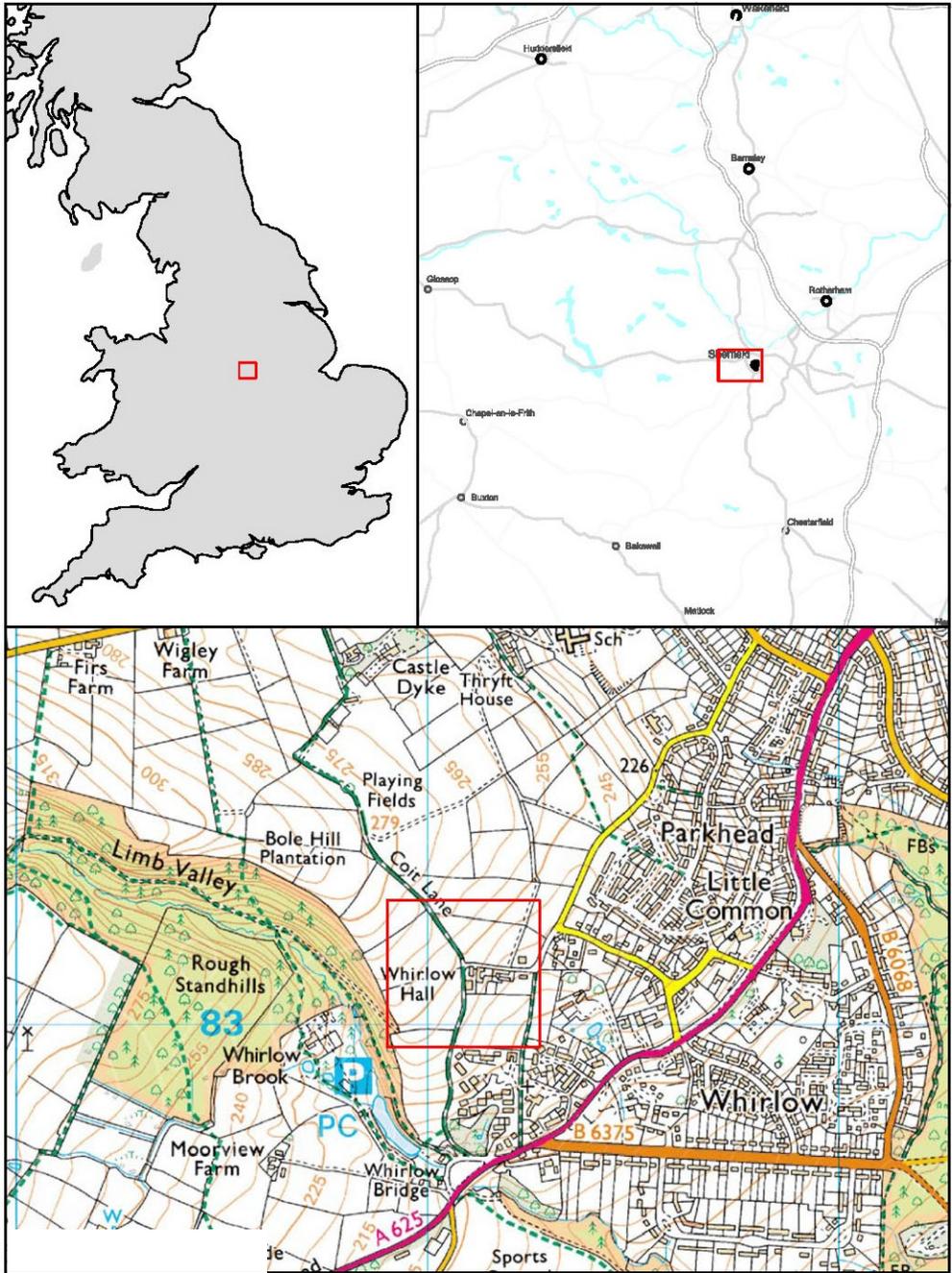


Figure 1. Site location.

Figure 2. Map of Whirlow Hall Farm showing the fields walked.

3. FIELDWALKING

Results of the field walking

A programme of field walking was carried out in two fields to search the plough soil for artefacts (Figure. 2). The fields were walked a short time after ploughing to give the best visibility of the ground. The fields were walked by volunteers at 1m intervals to get 100 per cent coverage of the ground.

3.1. Field One

- 3.1.1 Field 1 or 'Long Field' covered an area of 1.5 hectares and was located to the north of the farm buildings past the show field. The field was accessed by a public footpath that runs along the bottom of the field near the greenhouses and education centre. The elevation of the field was approximately 255m OD. The field had been ploughed several weeks prior and had just been sown. This had given the soil time to weather down and with overcast conditions and some dampness this gave ideal visibility. The top half of the field and a small section to the north-east were not walked due to these areas being used to grow vegetables. The field sloped north-west to south-east with the flattest part of the field being in the upper north-west area (Figure. 3).



Figure 3. Volunteers fieldwalking in Field 1.

- 3.1.2 The finds produced from Field 1 totalled 1111 artefacts and were spread across the field. The finds were concentrated at the lower part of the field near the gate and footpath. This is unlikely to reflect a genuine cluster of artefacts but is rather due to the movement of the finds downslope as a result of ploughing thereby producing a concentration of material towards the base of the slope (see model of artefact scatter displacement in Waddington 2009). The finds thinned out

towards the top (north-west) of the field. The majority of the finds were clay pipe stems and bowls and post-medieval pottery, although a single sherd of medieval pottery was found (956) and some of the clay pipe bowls were found to date from the 17th century (1061 and 1053).

- 3.1.3 One of the clay pipe stems (320) was of interest as it had been purposely ground down; a process linked with using the stem as a piece of chalk for drawing. Other stems recorded being used in this way in the Sheffield area come from an excavation of a cutlers grinding wheel pit where people were clearly grinding down the stems on the wheel (Suzie White pers comm.). The find provides an insight into how people would have relaxed and used their spare time. Suzie White suggests the stem found in Field 1 could have been used as part of a children's game (See specialist report 4.3). It is also interesting to note that nine slate writing styluses were discovered during the fieldwalking; three in Field 1 (808,923 and 1034) and six in Field 2 (1151, 1288, 1294, 1296, 1315, 1318), further adding to the picture of people writing, drawing or playing in their spare time.
- 3.1.4 The finds from Field 1 contained 14 lithic artefacts, most were found to be located on the high ground to the north-west of the field (See Lithic Report 4.1 below for details), although there is little diagnostic material in this small assemblage.
- 3.1.5 The consistent spread and density of the finds is consistent with intensive post-medieval farming; most likely the process of manuring which involved spreading items such as broken clay pipe and pottery, along with animal waste, to aid drainage and fertilise the ground. The lithics are not likely to have been brought in from elsewhere as part of the manuring process and are therefore likely to represent prehistoric activity at Whirlow Hall Farm.

3.2 Field Two

- 3.2.1 Field 2, or 'Barley Field', covered an area of 2.2 hectares and was located north-east of the farm buildings. The field was accessed from Coit Lane and will be used for growing turnips. The elevation of the field was approximately 275m OD. The field sloped north-west to south-east; with the south-western part being slightly lower. The field had been deep-ploughed a week earlier and no crops had been sown meaning visibility was good.
- 3.2.2 The finds produced from Field 2 totalled 224 and were spread across the field with a concentration towards the south-western section. The density of clay pipe and pottery was less than that found in Field 1. A single sherd of medieval pottery was found (1163), a 17th century clay pipe bowl (1293) and a 19th century decorated clay pipe bowl that had been imported from France (1325).
- 3.2.3 A total of 60 lithic artefacts were discovered in Field 2. They were mostly discovered in the western half of the field which is the side closest to the edge of the Limb Valley. There was a density of lithic and other finds towards to base of the slope in the south-western corner as that was the lowest point of the field (See Lithic Report 4.1 below for details). This is unlikely to reflect a genuine cluster of artefacts but is rather due to the movement of the finds downslope as a result of ploughing (see above). However, there is unlikely to have been much

lateral movement of the lithics and so their position probably reflects a concentration of activity in the upper north-west area of the field where the ground is more level and from which the lithics further down the slope have probably derived.



Figure 4. Volunteers fieldwalking across Field 2 looking south.

Figure 5. Map of Field 1 showing the location and spread of finds.

Figure 6. Map of Field 2 showing the location and spread of finds.

4. SPECIALIST REPORTS

4.1. Lithics

Clive Waddington

Introduction

A total of 74 lithics were retrieved from the fieldwalking, of which 14 were retrieved from 'Long' field (Field 1) and 60 from 'Barley' field (Field 2). Table 1 below shows the breakdown of lithic types by field. All finds were accurately located on a plan using a total station and each lithic was washed and bagged according to their survey point number. A full catalogue with details of each individual lithic was produced. Measurements are given for complete pieces only in accordance with lithic recording conventions (Saville 1980). Cores have only their two longest measurements recorded. Although the assemblage of lithic material is of a moderate size, a significant proportion of these pieces (35.6%) are formal tools or utilised pieces, many of which are chronologically diagnostic of the Mesolithic period, with only a few pieces of Neolithic and Early Bronze Age date.

Chronology

Most of the assemblage would appear to sit comfortably in the Mesolithic as evidenced by the concern for blade production, many with triangular sections and being small and narrow, and the occurrence of microblade cores and two abruptly retouched scrapers. They are considered to most likely date from the period *c.*10,000-6500 cal BC. One scraper is particularly interesting (Find no. 76 from Field 2) as this scraper has been made by flaking an already very heavily patinated and abraded flint core, implying that the core was produced much earlier in prehistory, perhaps in the earliest Mesolithic or even in the Late Upper Palaeolithic. This recycling of much earlier chipped flint material is a practice that has been noted in other areas of northern England, including in North Yorkshire, County Durham and Northumberland (Waddington 2004). There are two scrapers from Field 2 that are likely to be of Late Neolithic-Early Bronze Age date (*c.*3000-1800 cal BC) on account of the size and shape of the flakes on which they are made and also the presence of shallow retouch. A classic thumbnail scraper, characteristic of the Beaker period (*c.*2400-1800 cal BC), was retrieved from Field 1.



Figure 7. two Mesolithic flint microblade cores.



Figure 8. A recycled heavily patinated and abraded core that may be of Late Upper Palaeolithic origin.

Distribution

The distribution of the lithics reveals a degree of patterning. The material is concentrated in the south-western part of Field 1 and the western part of Field 2. In the south-west corner of Field 1 there is a small cluster of four finds (1085, 1083, 1086, and 1038). In Field 2 the finds are more abundant and spread across the field but show a clear concentration on the western side, which is closest to the edge of the Limb Valley. Gravity has moved the finds downslope causing them to be more clustered in the southern part of the field but the slope-catchment for this material implies that they originate from the upper north-west part of the field where the ground is also more level.

Raw Material

The lithic material is composed of flint (56 pieces) and a notable chert component (18 pieces). Although only 17 pieces could be ascribed a broad provenance it was revealing in that six flint pieces could be likely to be of glacial origin whilst 11 could be ascribed a nodular origin. Any flint found in this area has to have been imported and although glacial sources of flint are available from secondary source areas, such as in river gravels and tills, the nodular material must have come from chalk-bearing strata and the most likely source areas are the Yorkshire and Lincolnshire Wolds 55km away. The chert component is interesting as two types of chert can be identified; the first being a dark grey, homogeneous and relatively fine-grained type and the second being a coarser, light grey and less easily flaked type. Both types of chert can be found locally, a few kilometers to the west within the Limestone rocks of the Peak District. This suggests a self-reliant strategy for obtaining the chert material, whereas the flint may have been collected during long forays to the Wolds or alternatively may have arrived in the area via exchange networks. The recent discovery of Mesolithic chert quarrying at Fin Cop, 36km to the south-west in the Peak District, provides further support for the importance of Peak District chert for hunter-gatherer groups during the Mesolithic in this area.

The main colours of flints that could be characterised include 21 light grey, 15 medium grey, 12 dark grey, four white, two translucent and one orange-grey piece. The remaining five pieces could not be ascribed a colour due to them being burnt. The range of colours is likely to reflect a variety of different sources, although there can be much variation in flint colour, even within a single nodule. Much of the flint was of high purity with very few pieces being speckled.



Figure 9. Dark grey local chert including a Mesolithic platform core and a variety of blade and blade segments.

Flaking and Manufacture

The assemblage displays evidence for the use of both hard and soft hammer working on both the flint and chert, with most of the edge-trimming and retouch being unifacial, although there is much use of only very slightly modified blades and flakes, usually in the form of edge-trimming and/or only minimal retouch. The manufacturing tradition for Mesolithic material relies on a blade-based technology, that includes slender blades where possible, but also thicker stubby blades when the raw material dictates. Blades typically have a triangular section and the production and use of microblades is common. The cores in the assemblage are all of Mesolithic types and include platform cores and flakes used as cores, in all cases showing evidence for the production of microblades. Several rejuvenation flakes provide evidence for the curation of cores and this implies the careful husbanding of the flint so as to ensure no material is wasted. This indicates that flint was a valued resource and flaked with care. There are a few hinge fractures evident in the assemblage suggesting some flawed nodules and/or novice flaking.

Types

A range of tool types is present in the lithic assemblage and these are summarised in Table 1 below.

The presence of processing tools, such as the various retouched, edge-trimmed and utilised blades and the scrapers indicate a wide range of processing activities, which are usually taken as an indicator of settlement sites (Schofield 1991; 1994). The presence of the scrapers suggests that hide-working was an important activity. The presence of end scrapers is notable but the precise use of these scrapers can only be speculated upon at present, though it is possible that these pieces were geared to a very specific processing task. The presence of cores reveals that flint knapping took place on the site and the presence of debitage from various stages in the core reduction sequence indicates that curation of lithic material took place. The lack of microliths, so far, implies that hunting and fishing activities took place away from these two particular locales.

Type	Field 1	Field 2	Total
Cores	3	5	8
Rejuvenation flakes		4	4
Flakes	7	15	22
Blades		18	18
Utilised Blades		4	4
Edge-Trimmed Blade		4	4
Retouched Blades	1	2	3
Retouched Flakes	2	2	4
Scrapers	1	6	6

Total	14	60	74

Table 1. Summary of lithic types.



Figure 10. A variety of utilised Mesolithic blades from Field 2.



Figure 11. Scrapers and scraper fragments with shallow and unifacial retouch, likely to be of Beaker period date, found in Fields 1 and 2.

Discussion

The area around Whirlow Hall Farm has evidently formed a focus for Mesolithic activity, and particularly on the higher ground close to the eastern top of the valley side that overlooks the steep-sided valley containing the Limb Brook. The Limb Valley provides a natural routeway for both animals and humans and gives access from the head of the Sheaf valley on to the high moorlands above. By being located on the lip of the eastern valley side groups would have been sheltered from the prevailing westerly winds while also being strategically located to monitor and control access up and down the valley. This would have afforded many opportunities to take a variety of animals, such as red and roe deer, wild pig and so forth, as well as to trap fish in the Limb Brook and take nesting birds from the rich woodland that would have mantled much of this area. Activities that took place in and around the site included the flaking of flint and chert. Trips across the landscape to the Limestone areas of the Peak District where chert would have been available can be envisaged. The Limb Brook would have provided ready access to freshwater, whilst the area where the main flint scatters were located in Field 2 would have been relatively freely draining. The abundance of foodstuffs available in this general location must have been an important draw as animals will have been attracted to water in the Limb Brook, whilst fish, fowl and birdlife will have been easily taken. Furthermore, the plant foods and vegetation within and above the Limb Valley would have provided important sources of food, building materials and possibly even clothing.

The Late Neolithic – Early Bronze Age material from the site is not large, but given that such material is not as common in fieldwalking assemblages as Mesolithic material the presence is nonetheless important. The name ‘Whir low’ includes the suffix ‘low’ which is a local word of Anglo-Saxon origin often used to refer to hilltops with ancient burial mounds on top of them. Other local examples include Ringinglow, Arbor Low and ‘The Low’ at Chelmorton. The implication is that there was probably a burial mound in the vicinity of Whirlow and typically cairns and burial mounds are characteristic of the Neolithic-Early Bronze Age periods. Thumbnail scrapers are occasionally found in Beaker period burials, which date within the Late Neolithic-Early Bronze Age transition, and therefore could have come from long-since ploughed-out burials. Alternatively the small assemblage of material from this period may hint at early farming settlement in this area of Whirlow Hall Farm.

Further fieldwalking and test pitting should assist in understanding Stone Age and Early Bronze Age activity around the Whirlow Hall Farm area and add further important insights and help understand the patterning and location of activities by the very earliest inhabitants of the area.

4.2. Pottery

Chris Cumberpatch

Introduction

The pottery assemblage from a fieldwalking programme at Whirlow Hall Farm was examined by the author on 19th June 2011. The following is a summary of the salient features of the assemblage, highlighting the occurrence of pottery in four broad periods, defined below. The survey was carried out by teams of volunteers and a 100% collection policy was employed. This is a highly desirable strategy as it precludes the discard of misidentified sherds before they can be positively identified. In general terms discard, when judged permissible, should always take place *after* the assemblage has been examined by an appropriately experienced specialist and never before. Examples of misidentification even amongst professional field archaeologists are so common as to render on-site discard policies unwise.

Catalogue (Field 1)

In order to structure the discussion the pottery sherds were briefly examined and allocated to one of four broad chronological groups. Inevitably these represent a degree of simplification and some types, particularly utilitarian wares, span more than one period but for the purposes of this rapid assessment they serve to indicate the general chronological distribution of the pottery.

Medieval pottery (c.1066 – c.1450)

Only one sherd of medieval pottery was identified, find number 956. This was the rim of a bowl, green glazed internally, in a coarse quartz tempered gritty fabric of an unidentified but probably local type. It can be dated to the 14th to 15th century.

Post-medieval pottery (c.1450 – c.1720)

Only one sherd or early modern pottery was definitely identified (find number 1078), a heavily abraded sherd of Redware of probable 17th century date. It may be that some of the utilitarian wares assigned to the early modern period could also belong to this period but on balance they were insufficiently diagnostic to be positively identified and so have been allocated to the following period.

Early modern pottery (c.1720 – c.1840)

The early modern group included Creamware (c.1740 – c.1820), Pearlware (c.1780 – c.1840), Edged ware (late 18th to early 19th century), 18th century stoneware (including mugs and tankards), Yellow Glazed Coarseware, Brown Glazed Coarseware, Late Blackware, Slipware and Mottled ware. The dating of Brown Glazed Coarseware poses a number of problems and it is not impossible that some of the sherds of this type assigned to the following period are slightly earlier and vice versa. At present no detailed studies of this long-lived and important group of wares exists and in the absence of a reliable type series judgements on date have to be made on a subjective basis.

Recent pottery (c.1840 – present day)

The largest group in the assemblage as a whole dates to the period between c. 1840 and the present day. The range of material included Brown Salt Glazed Stoneware, Brown Glazed Coarseware, Whiteware (plain and transfer printed), Cane Coloured ware (plain and slip banded), bone china, figurine fragments and small quantities of other types. The character of the assemblage was broadly domestic but some categories, notably stoneware bottles and flagons appear to be under-represented in comparison with excavated assemblages. The degree of variability in assemblages of this date and the lack of attention currently paid to processes of site formation and taphonomy make it difficult to establish the range of variability that should be expected in such assemblages and consequently the significance of such variability.

Two items of specific note were identified; a pot disc of unidentified type (find number 832) and part of a pot lid bearing the transfer printed image of a bear (find number 988), probably indicating that the jar contained hair grease made from the rendered carcasses of Siberian bears, a popular male cosmetic in the 19th century.

Date range	Find numbers
c.1066 - c.1450	956
c.1450 - c.1720	1078
c.1720 - c.1840	1096, 276, 716, 1112, 112, 314, 39, 24, 492, 243, 20, 124, 311, 420, 763, 255, 966, 155, 693, 474, 924, 635, 475, 1032, 274, 622, 786, 1110, 399, 580, (?)947, 418, 611, 897, 486, 663, 804, 457, 859, 646, 967, (?)1077, 928, 823, 961, 1015, 945, 985, 694, 657, 949, 653, 1076, 331, 789, 562, 995, 1019, 62, (?)996, 479, 324, 798, 867, 774, 606, 272, 119, 384, 903,
c.1840 - present day	1042, 855, 370, 685, 870, 678, 591, 752, 266, 332, 28, 134, 519, 160, 252, 304, 301, 189, 218, 94, 63, 253, 316, 19, 275, 258, 135, 43, 251, 686, 307, 397, 19, 134, 163, 74, 99, 59, 247, 317, 44, 64, 440, 35, 46, 642, 605, 205, 188, 809, 246, 313, 136, 1103, 33, 172, 88, 309, 972, 273, 805, 192, 68, 297, 25, 21, 306, 300, 278, 321, 225, 888, 257, 131, 92, 983, 704, 485, 721, 800, 523, 296, 237, 563, 468, 36, 4, 150, 104, 78, 298, 472, 40, 80, 692, 545, 609, 1059, 919, 162, 232, 54, 250, 171, 200, 241, 261, 209, 530, 91, 73, 1065, 1041, 863, 156, 152, 101, 240, 67, 48, 1095, 268, 898, 305, 683, 970, 869, 751, 971, 1013, 775, 369, 636, 421, 376, 857, 407, 899, 711, 330, 951, 872, 588, 639, 1024, 355, 623, 754, 539, 940, 417, 954, 414, 38, 350, 630, 976, 777, 450, 893, 569, 908, 722, 1016, 506, 770, 764, 484, 830, 660, 385, 994, 771, 979, 864, 1100, 1033, 669, 337, 659, 579, 354, 596, 449, 968, 944, 861, 434, 1079, 1006, 989, 1009, 1018, 1021, 1035, 1046, 446, 910, 677, 875, 368, 973, 592, 86, 439, 668, 1068, 70, 916, 396, 841, 586, 965, 590, 531, 930, 957, 1087, 1014, 640, 1039, 729, 943, 760, 750, 1090, 405, 732, 958, 1102, 675, 998, 878, 93, 952, 892, 896, 902, 906
	1063, 220, 885,
	832 - undated pot disc,
	988 - pot lid - Siberian Bear's grease; C19th

Table 2: Summary of pottery finds in Field 2

Catalogue (Field 2)

Medieval pottery (c.1066 – c.1450)

Only one sherd of medieval type pottery was identified, find number 1163. This was a fragment of an unidentified late medieval or early post-medieval type with a very hard, fine dark red fabric containing abundant fine quartz grit. Sparse purple glaze was present externally with thin mottled green glaze internally. A date range in the 15th to early 16th century is suggested by the characteristics of the sherd.

Post-medieval pottery (c.1450 – c.1720)

No post-medieval pottery was identified in the assemblage.

Early modern pottery (c.1720 – c.1840)

A small group of sherds was identified as of early modern date (find numbers 1128, 1129, 1154, 1194, 1287 and 1228). These were predominantly utilitarian wares (Brown and Yellow Glazed Coarseware, Redware and Brown Glazed Fineware) but also included a sherd of Pearlware (Find number 1194).

Recent pottery (c.1840 – present day)

The largest group in the assemblage as a whole dates to the period between c. 1840 and the present day. The range of material included Brown Salt Glazed Stoneware, Brown Glazed Coarseware, Whiteware (plain and transfer printed), Cane Coloured ware (plain and slip banded), bone china, figurine fragments and small quantities of other types. The character of the assemblage was broadly domestic in character. The degree of variability in assemblages of this date and the lack of attention currently paid to processes of site formation and taphonomy make it difficult to establish the range of variability that should be expected in such assemblages and consequently the significance of such variability.

A number of items of specific note were identified and are listed in the accompanying catalogue with brief descriptions. These included a figurine and the head of a toy soldier, a sherd of porcelain, possibly a Chinese import (although the precise identification of imported wares as opposed to European copies of such vessels is difficult), the tube handle from a stoneware saucepan and a pot disc made from a sherd of green glazed stoneware.

Crucible fragments

The assemblage included three fragments from crucibles, probably used for iron or steel manufacture (Find numbers 1168, 1316 and 1169). Crucible fragments and other waste products from the iron and steel industry were used as building material, particularly for ‘crozzle’ walls and for surfacing roads and tracks. It is possible that such a mechanism was responsible for the presence of these fragments in Field 2.

Date range	Find numbers
c.1066 - c.1450	1163
c.1450 - c.1720	
c.1720 - c.1840	1129, 1194, 1128, 1287, 1154, 1228

c.1840 - present day	1257, 1237, 1157, 1148, 1254, 1192, 1194, 1185, 1330, 1182, 1173, 1123, 1246, 1206, 1245, 1265, 1120, 1199, 1174, 1142, 1159, 1276, 1139, 1162, 1214, 1327, 1125, 1300, 1188, 1225, 1203, 1178, 1130, 1193, 1114, 1187, 1189, 1204, 1137, 1284, 1113, 1179, 1166, 1131, 1212, 1175, 1171, 1122, 1273, 1158, 1244, 1176, 1243, 1156, 1133, 1164, 1208, 1304, 1215, 1201, 1190, 1198, 1306, 1157, 1121, 1220, 1124, 1126, 1115, 1152, 1301, 1167, 1240, 1136, 1279, 1172, 1160
Crucible	1168, 1316, 1169,
Undated	1135, 1127, 1241,
Notes	1219; head of toy soldier 1189; porcelain, possible import 1207; stoneware tube saucepan handle 1255; stoneware pot disc 1250; figurine

Table 2: Summary of pottery finds in Field 2

Discussion

It is common for the presence of early modern and recent pottery from agricultural land to be attributed to the practice of spreading domestic waste onto fields in order to improve fertility. This practice, which seems to have been linked with notions of ‘improvement’ current from the 18th century onwards is poorly documented and to date there have been few detailed studies drawing the archaeological and historical evidence together. Documentary evidence indicates that animal blood from the shambles in Sheffield was sold to farmers in Lincolnshire for use as a fertiliser (then, as now, blood and bonemeal were known to be beneficial to crops) but whether other types of waste also moved over such distances requires further investigation. Waste, including domestic waste, certainly had a market value and it seems likely that this was, in part at least connected with its potential as a fertiliser. It would be of considerable interest and some value to extend this work to consider the movement of waste from towns with a view to charting, as far as possible, the patterns of distribution of urban waste in rural areas. This would provide a valuable complement to the further investigation of the use of solid waste in urban areas as landfill and a raw material of the building industry (Cumberpatch 2005).

Further work

If no further work is planned on this assemblage, then it might make a useful teaching assemblage for amateur and voluntary groups undertaking fieldwalking surveys in the area as it contains a reasonable cross-section of the types of wares encountered in the course of such surveys.

4.3. Clay Pipe

Susie White

Field 1

A very large group of clay tobacco pipes the vast majority of which are plain stems of mixed C17th, C18th and C19th date.

Earliest bowls from the site are 1061 (c1610-1630) and 1053 (c1640-1660).

Most of the bowl fragments are C19th and many of them are plain spur forms. There are a number of mould-decorated fragments that are typical of both the C19th and the Sheffield area. These include:-

Leaf Decorated seams – 61, 148 (finely executed), 193, 377, 424, 445, 882, 934, and 1098 (very crude)

Fluted bowls – common in the C19th ranging from quite wide flutes or scallops in the early C19th through to fine flutes in the later C19th – 77 (very crude), 703, 790 (possibly a spurless short-stemmed “cutty” pipe), 801 (short bar shaped flutes; pipe also appears to have leaf-decorated seams) and 978.

Basket Weave – 689

Other decoration includes – moulded milling (428); floral motifs on both the bowl and onto the stem (745 and 697); large leaves around the base of the bowl (895); Flutes spurs (1037); “twig” like spurs (1040 and 1051 – both of which were produced in the same mould).

720 – Glazed mouthpiece, most likely to be late C18th or early C19th.

Other mouthpieces include – 107; 674 (nipple type mouthpiece from a short-stemmed “cutty” pipe); 774 and 866 (both with pale yellow/green glaze); 894

969 – marked stem with the name McDOUGALL / GLASGOW. This stem is made from red clay.

1000 – another fragment in red clay, this time plain. Could be part of the same pipe.

320 – a stem with a ground end. Ground ends sometimes occur when the pipe has been broken and the end is ground smooth so the pipe can continue to be smoked. But it also occurs when the pipe stem has been used like a piece of chalk to draw or doodle. This produced a series of sharp facettes at one, or both ends. This particular fragment looks like it has been used to draw – possible to keep score in a child’s game.

Field 2

Small group of clay tobacco pipes, mainly plain C19th stems and C19th bowl fragments.

1236 – earlier looking stem, possibly C17th and may be contemporary with bowl 1293.

1256 – C19th bowl with a small acorn as a spur. The bowl would almost certainly have also been in the form of an acorn.

1270 – C19th bowl with traces of leaf-decorated seams.

1293 – earliest looking bowl from Field 2 – a spur form c1660-1680.

1323 – C19th bowl with leaf-decorated seams, traces of fine flutes that would have covered the bowl originally, and a moulded flower motif on the sides of the spur.

1325 – C19th bowl, almost certainly French. Decorated with grape vines and with a “grotesque” masque, similar to Bacchus/Green Man. May originally have had traces of coloured enamel, although none survives.

5. DISCUSSION

- 5.1 The fieldwalking of two fields at Whirlow Hall Farm recovered a total of 1335 finds. These were predominately of post-medieval and early modern date but there is an important assemblage of early prehistoric lithic material, particularly from Field 2. The clay pipe and ceramics are consistent with intensive farming practices where items such as broken clay pipe and pottery were added to the manure prior to it being spread on the fields. The finds collected therefore may not be indicative of the archaeology of the evaluated fields as a large majority of them could have been brought in and deposited from another location.
- 5.2 Despite this, the finds are interesting in that they indicate activity over a long period from the prehistoric to the modern day. Given that the farm has evidence for having been farmed from the post-medieval period onwards it seems unlikely that all of the finds discovered were brought in from elsewhere. In particular, the early clay pipe bowls or the medieval pottery sherds may not have been part of the post-medieval manuring process and may be representative of finds from Whirlow Hall Farm. Unfortunately, it is impossible to identify which finds these may have been as they are all mixed together in the fields.
- 5.3 The lithic artefacts recovered from Fields 1 and 2 are unlikely to have been part of the manuring deposit and are more likely to represent prehistoric activity at Whirlow Hall Farm. The location of the finds in Field 2 are of particular interest given their proximity to the edge of the Limb Valley where access by both humans and animals up and down the Limb Valley could have been monitored and controlled.
- 5.4 In conclusion, the fieldwalking exercise has been highly successful in characterising earlier phases of use of the Whirlow Hall Farm and has produced the earliest evidence so far for human activity on the site. The Mesolithic activity represented by the lithic scatter could go back as far as around 10,000 BC and the re-use of an earlier heavily abraded and recorticated core suggests this piece may even be of Late Upper Palaeolithic (ie. the last Ice Age) origin. It has also shed light on the use of the fields during the post-medieval and early modern periods. The clay pipe and pottery will form a varied assemblage that could be used for future educational use at farm.

6. PUBLICITY, CONFIDENTIALITY AND COPYRIGHT

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8. ACKNOWLEDGEMENTS

- 8.1 Archaeological Research Services Ltd would like to thank all staff and volunteers at Whirlow Hall Farm for their help and assistance. Particular thanks are due to Richard Aldis and those volunteers who both assisted and helped to carry out the fieldwalking survey.

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Fieldwalking at Whirlow Hall Farm, Sheffield, 2011

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CONTENTS

Executive Summary	4
1. INTRODUCTION.....	5
1.1 SCOPE OF WORK.....	5
1.2 LOCATION AND GEOLOGY.....	5
3. FIELDWALKING	8
3.1. Field One.....	8
3.2. Field Two	9
4. SPECIALIST REPORTS.....	13
4.1. Lithics	13
4.2. Pottery	19
4.3. Clay Pipe.....	23
5. DISCUSSION.....	25
6. PUBLICITY, CONFIDENTIALITY AND COPYRIGHT.....	25
7. STATEMENT OF INDEMNITY.....	25
8. ACKNOWLEDGEMENTS.....	26
9. REFERENCES	26

List of figures

Figure 1. Site location.....	6
Figure 2. Map of Whirlow Hall Farm showing the fields walked.....	7
Figure 3. Volunteers fieldwalking in Field 1.	8
Figure 4. Volunteers fieldwalking across Field 2 looking south.....	10
Figure 5. Map of Field 1 showing the location and spread of finds.....	11
Figure 6. Map of Field 2 showing the location and spread of finds.....	12
Figure 7. two Mesolithic flint microblade cores.....	14
Figure 8. A recycled heavily patinated and abraded core that may be of Late Upper Palaeolithic origin.....	14
Figure 9. Dark grey local chert including a Mesolithic platform core and a variety of blade and blade segments.....	15
Figure 10. A variety of utilised Mesolithic blades from Field 2.	17
Figure 11. Scrapers and scraper fragments with shallow and unifacial retouch, likely to be of Beaker period date, found in Fields 1 and 2.....	17

Executive Summary

The Whirlow Hall Farm Trust received a Heritage Lottery Grant to undertake a programme of heritage research and archaeological investigations into the history of Whirlow Hall Farm. The project comprised a professionally-led programme by Archaeological Research Services Ltd of training, participation, learning activities and public engagement. Part of the project involved carrying out a non-intrusive fieldwalking exercise over two fields to identify any finds located within the plough soil. A number of volunteers assisted in the collection and surveying of finds, as well as the post excavation tasks of cleaning and cataloguing finds.

Whirlow Hall Farm is situated on the edge of Sheffield, South Yorkshire, approximately 8km to the south-west of the city centre (NGR SK 31233 83177). The farm extends to some 55ha (138 acres) and occupies a site which generally slopes from north to south. Each field is named individually, the fieldwalking being carried out within two fields; Long and Barley.

The fields were found to contain a large amount of finds spread across each field. Although the finds included much post-medieval material, namely clay pipe fragments and ceramics, Field 1 was found to contain 14 lithics and Field 2 was found to contain 60. The spread of the lithics in Field 2 was of particular interest as it was of predominantly Mesolithic date and the material, although having moved downslope as a result of ploughing, is within close proximity to the edge of the Limb Valley which is a deeply incised valley that forms a natural routeway on to the gritstone moors which fringe Sheffield on its western side. It is likely that Mesolithic occupation of this area was related to its strategic position that allowed movement of animals from the lower lying ground of the Sheaf valley on to the uplands to be monitored. Being reliant on hunting, gathering and fishing strategies, these early hunting groups would have found the elevated position on the edge of the Limb Valley an attractive locale for hunting expeditions, and possibly also settlement.

1. INTRODUCTION

1.1 SCOPE OF WORK

- 1.1.1 The Whirlow Hall Farm Trust received a Heritage Lottery Grant to undertake a programme of heritage research and archaeological investigations into the history of Whirlow Hall Farm. The project comprised a professionally-led programme of training, participation, learning activities and public engagement. The Trust invited local schools, community groups, volunteers and visitors to participate in a range of activities to help record the buildings and discover and record the history of Whirlow Hall Farm.
- 1.1.2 Part of the project involved carrying out a non-intrusive fieldwalking survey over two fields in order to identify any finds located within the plough soil.

1.2 LOCATION AND GEOLOGY

- 1.2.1 Whirlow Hall farm is situated on the edge of the city of Sheffield, South Yorkshire, approximately 8km to the south west of the city centre (NGR SK 31233 83177 (centre)) (Figure 1). The farm extends to some 55ha (138 acres) and occupies a site which generally slopes from north to south.
- 1.2.2 The underlying geology consists of Rough Rock Sandstone, which is a coarse-grained feldspathic sandstone. There are no recorded superficial deposits (bgs.ac.uk/opengeoscience). The soils are classified as freely draining slightly acid loamy soils (landis.org.uk/soilscapes).

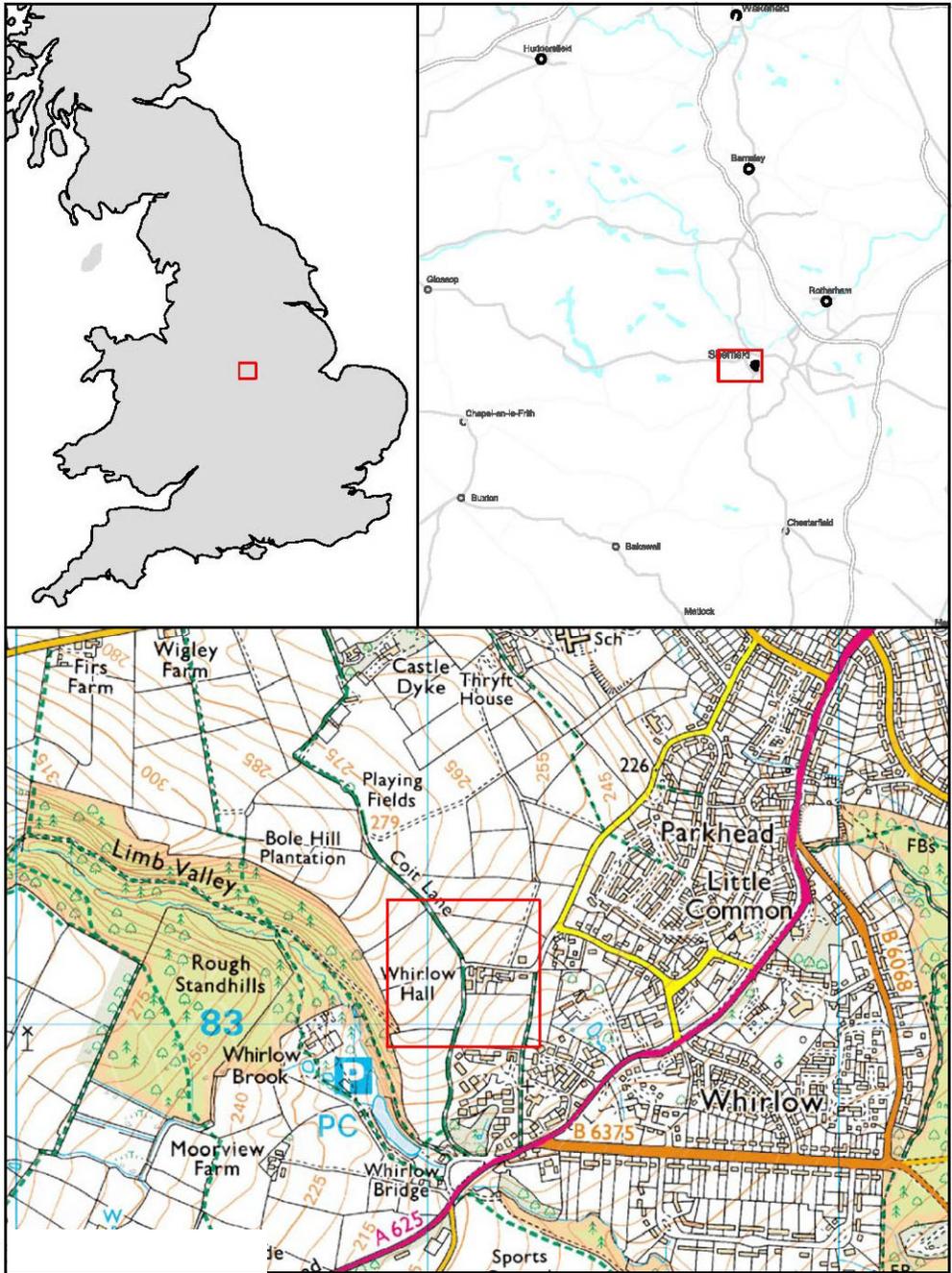


Figure 1. Site location.

Figure 2. Map of Whirlow Hall Farm showing the fields walked.

3. FIELDWALKING

Results of the field walking

A programme of field walking was carried out in two fields to search the plough soil for artefacts (Figure. 2). The fields were walked a short time after ploughing to give the best visibility of the ground. The fields were walked by volunteers at 1m intervals to get 100 per cent coverage of the ground.

3.1. Field One

- 3.1.1 Field 1 or 'Long Field' covered an area of 1.5 hectares and was located to the north of the farm buildings past the show field. The field was accessed by a public footpath that runs along the bottom of the field near the greenhouses and education centre. The elevation of the field was approximately 255m OD. The field had been ploughed several weeks prior and had just been sown. This had given the soil time to weather down and with overcast conditions and some dampness this gave ideal visibility. The top half of the field and a small section to the north-east were not walked due to these areas being used to grow vegetables. The field sloped north-west to south-east with the flattest part of the field being in the upper north-west area (Figure. 3).



Figure 3. Volunteers fieldwalking in Field 1.

- 3.1.2 The finds produced from Field 1 totalled 1111 artefacts and were spread across the field. The finds were concentrated at the lower part of the field near the gate and footpath. This is unlikely to reflect a genuine cluster of artefacts but is rather due to the movement of the finds downslope as a result of ploughing thereby producing a concentration of material towards the base of the slope (see model of artefact scatter displacement in Waddington 2009). The finds thinned out

towards the top (north-west) of the field. The majority of the finds were clay pipe stems and bowls and post-medieval pottery, although a single sherd of medieval pottery was found (956) and some of the clay pipe bowls were found to date from the 17th century (1061 and 1053).

- 3.1.3 One of the clay pipe stems (320) was of interest as it had been purposely ground down; a process linked with using the stem as a piece of chalk for drawing. Other stems recorded being used in this way in the Sheffield area come from an excavation of a cutlers grinding wheel pit where people were clearly grinding down the stems on the wheel (Suzie White pers comm.). The find provides an insight into how people would have relaxed and used their spare time. Suzie White suggests the stem found in Field 1 could have been used as part of a children's game (See specialist report 4.3). It is also interesting to note that nine slate writing styluses were discovered during the fieldwalking; three in Field 1 (808,923 and 1034) and six in Field 2 (1151, 1288, 1294, 1296, 1315, 1318), further adding to the picture of people writing, drawing or playing in their spare time.
- 3.1.4 The finds from Field 1 contained 14 lithic artefacts, most were found to be located on the high ground to the north-west of the field (See Lithic Report 4.1 below for details), although there is little diagnostic material in this small assemblage.
- 3.1.5 The consistent spread and density of the finds is consistent with intensive post-medieval farming; most likely the process of manuring which involved spreading items such as broken clay pipe and pottery, along with animal waste, to aid drainage and fertilise the ground. The lithics are not likely to have been brought in from elsewhere as part of the manuring process and are therefore likely to represent prehistoric activity at Whirlow Hall Farm.

3.2 Field Two

- 3.2.1 Field 2, or 'Barley Field', covered an area of 2.2 hectares and was located north-east of the farm buildings. The field was accessed from Coit Lane and will be used for growing turnips. The elevation of the field was approximately 275m OD. The field sloped north-west to south-east; with the south-western part being slightly lower. The field had been deep-ploughed a week earlier and no crops had been sown meaning visibility was good.
- 3.2.2 The finds produced from Field 2 totalled 224 and were spread across the field with a concentration towards the south-western section. The density of clay pipe and pottery was less than that found in Field 1. A single sherd of medieval pottery was found (1163), a 17th century clay pipe bowl (1293) and a 19th century decorated clay pipe bowl that had been imported from France (1325).
- 3.2.3 A total of 60 lithic artefacts were discovered in Field 2. They were mostly discovered in the western half of the field which is the side closest to the edge of the Limb Valley. There was a density of lithic and other finds towards to base of the slope in the south-western corner as that was the lowest point of the field (See Lithic Report 4.1 below for details). This is unlikely to reflect a genuine cluster of artefacts but is rather due to the movement of the finds downslope as a result of ploughing (see above). However, there is unlikely to have been much

lateral movement of the lithics and so their position probably reflects a concentration of activity in the upper north-west area of the field where the ground is more level and from which the lithics further down the slope have probably derived.



Figure 4. Volunteers fieldwalking across Field 2 looking south.

Figure 5. Map of Field 1 showing the location and spread of finds.

Figure 6. Map of Field 2 showing the location and spread of finds.

4. SPECIALIST REPORTS

4.1. Lithics

Clive Waddington

Introduction

A total of 74 lithics were retrieved from the fieldwalking, of which 14 were retrieved from 'Long' field (Field 1) and 60 from 'Barley' field (Field 2). Table 1 below shows the breakdown of lithic types by field. All finds were accurately located on a plan using a total station and each lithic was washed and bagged according to their survey point number. A full catalogue with details of each individual lithic was produced. Measurements are given for complete pieces only in accordance with lithic recording conventions (Saville 1980). Cores have only their two longest measurements recorded. Although the assemblage of lithic material is of a moderate size, a significant proportion of these pieces (35.6%) are formal tools or utilised pieces, many of which are chronologically diagnostic of the Mesolithic period, with only a few pieces of Neolithic and Early Bronze Age date.

Chronology

Most of the assemblage would appear to sit comfortably in the Mesolithic as evidenced by the concern for blade production, many with triangular sections and being small and narrow, and the occurrence of microblade cores and two abruptly retouched scrapers. They are considered to most likely date from the period *c.*10,000-6500 cal BC. One scraper is particularly interesting (Find no. 76 from Field 2) as this scraper has been made by flaking an already very heavily patinated and abraded flint core, implying that the core was produced much earlier in prehistory, perhaps in the earliest Mesolithic or even in the Late Upper Palaeolithic. This recycling of much earlier chipped flint material is a practice that has been noted in other areas of northern England, including in North Yorkshire, County Durham and Northumberland (Waddington 2004). There are two scrapers from Field 2 that are likely to be of Late Neolithic-Early Bronze Age date (*c.*3000-1800 cal BC) on account of the size and shape of the flakes on which they are made and also the presence of shallow retouch. A classic thumbnail scraper, characteristic of the Beaker period (*c.*2400-1800 cal BC), was retrieved from Field 1.



Figure 7. two Mesolithic flint microblade cores.



Figure 8. A recycled heavily patinated and abraded core that may be of Late Upper Palaeolithic origin.

Distribution

The distribution of the lithics reveals a degree of patterning. The material is concentrated in the south-western part of Field 1 and the western part of Field 2. In the south-west corner of Field 1 there is a small cluster of four finds (1085, 1083, 1086, and 1038). In Field 2 the finds are more abundant and spread across the field but show a clear concentration on the western side, which is closest to the edge of the Limb Valley. Gravity has moved the finds downslope causing them to be more clustered in the southern part of the field but the slope-catchment for this material implies that they originate from the upper north-west part of the field where the ground is also more level.

Raw Material

The lithic material is composed of flint (56 pieces) and a notable chert component (18 pieces). Although only 17 pieces could be ascribed a broad provenance it was revealing in that six flint pieces could be likely to be of glacial origin whilst 11 could be ascribed a nodular origin. Any flint found in this area has to have been imported and although glacial sources of flint are available from secondary source areas, such as in river gravels and tills, the nodular material must have come from chalk-bearing strata and the most likely source areas are the Yorkshire and Lincolnshire Wolds 55km away. The chert component is interesting as two types of chert can be identified; the first being a dark grey, homogeneous and relatively fine-grained type and the second being a coarser, light grey and less easily flaked type. Both types of chert can be found locally, a few kilometers to the west within the Limestone rocks of the Peak District. This suggests a self-reliant strategy for obtaining the chert material, whereas the flint may have been collected during long forays to the Wolds or alternatively may have arrived in the area via exchange networks. The recent discovery of Mesolithic chert quarrying at Fin Cop, 36km to the south-west in the Peak District, provides further support for the importance of Peak District chert for hunter-gatherer groups during the Mesolithic in this area.

The main colours of flints that could be characterised include 21 light grey, 15 medium grey, 12 dark grey, four white, two translucent and one orange-grey piece. The remaining five pieces could not be ascribed a colour due to them being burnt. The range of colours is likely to reflect a variety of different sources, although there can be much variation in flint colour, even within a single nodule. Much of the flint was of high purity with very few pieces being speckled.



Figure 9. Dark grey local chert including a Mesolithic platform core and a variety of blade and blade segments.

Flaking and Manufacture

The assemblage displays evidence for the use of both hard and soft hammer working on both the flint and chert, with most of the edge-trimming and retouch being unifacial, although there is much use of only very slightly modified blades and flakes, usually in the form of edge-trimming and/or only minimal retouch. The manufacturing tradition for Mesolithic material relies on a blade-based technology, that includes slender blades where possible, but also thicker stubby blades when the raw material dictates. Blades typically have a triangular section and the production and use of microblades is common. The cores in the assemblage are all of Mesolithic types and include platform cores and flakes used as cores, in all cases showing evidence for the production of microblades. Several rejuvenation flakes provide evidence for the curation of cores and this implies the careful husbanding of the flint so as to ensure no material is wasted. This indicates that flint was a valued resource and flaked with care. There are a few hinge fractures evident in the assemblage suggesting some flawed nodules and/or novice flaking.

Types

A range of tool types is present in the lithic assemblage and these are summarised in Table 1 below.

The presence of processing tools, such as the various retouched, edge-trimmed and utilised blades and the scrapers indicate a wide range of processing activities, which are usually taken as an indicator of settlement sites (Schofield 1991; 1994). The presence of the scrapers suggests that hide-working was an important activity. The presence of end scrapers is notable but the precise use of these scrapers can only be speculated upon at present, though it is possible that these pieces were geared to a very specific processing task. The presence of cores reveals that flint knapping took place on the site and the presence of debitage from various stages in the core reduction sequence indicates that curation of lithic material took place. The lack of microliths, so far, implies that hunting and fishing activities took place away from these two particular locales.

Type	Field 1	Field 2	Total
Cores	3	5	8
Rejuvenation flakes		4	4
Flakes	7	15	22
Blades		18	18
Utilised Blades		4	4
Edge-Trimmed Blade		4	4
Retouched Blades	1	2	3
Retouched Flakes	2	2	4
Scrapers	1	6	6

Total	14	60	74

Table 1. Summary of lithic types.



Figure 10. A variety of utilised Mesolithic blades from Field 2.



Figure 11. Scrapers and scraper fragments with shallow and unifacial retouch, likely to be of Beaker period date, found in Fields 1 and 2.

Discussion

The area around Whirlow Hall Farm has evidently formed a focus for Mesolithic activity, and particularly on the higher ground close to the eastern top of the valley side that overlooks the steep-sided valley containing the Limb Brook. The Limb Valley provides a natural routeway for both animals and humans and gives access from the head of the Sheaf valley on to the high moorlands above. By being located on the lip of the eastern valley side groups would have been sheltered from the prevailing westerly winds while also being strategically located to monitor and control access up and down the valley. This would have afforded many opportunities to take a variety of animals, such as red and roe deer, wild pig and so forth, as well as to trap fish in the Limb Brook and take nesting birds from the rich woodland that would have mantled much of this area. Activities that took place in and around the site included the flaking of flint and chert. Trips across the landscape to the Limestone areas of the Peak District where chert would have been available can be envisaged. The Limb Brook would have provided ready access to freshwater, whilst the area where the main flint scatters were located in Field 2 would have been relatively freely draining. The abundance of foodstuffs available in this general location must have been an important draw as animals will have been attracted to water in the Limb Brook, whilst fish, fowl and birdlife will have been easily taken. Furthermore, the plant foods and vegetation within and above the Limb Valley would have provided important sources of food, building materials and possibly even clothing.

The Late Neolithic – Early Bronze Age material from the site is not large, but given that such material is not as common in fieldwalking assemblages as Mesolithic material the presence is nonetheless important. The name ‘Whir low’ includes the suffix ‘low’ which is a local word of Anglo-Saxon origin often used to refer to hilltops with ancient burial mounds on top of them. Other local examples include Ringinglow, Arbor Low and ‘The Low’ at Chelmorton. The implication is that there was probably a burial mound in the vicinity of Whirlow and typically cairns and burial mounds are characteristic of the Neolithic-Early Bronze Age periods. Thumbnail scrapers are occasionally found in Beaker period burials, which date within the Late Neolithic-Early Bronze Age transition, and therefore could have come from long-since ploughed-out burials. Alternatively the small assemblage of material from this period may hint at early farming settlement in this area of Whirlow Hall Farm.

Further fieldwalking and test pitting should assist in understanding Stone Age and Early Bronze Age activity around the Whirlow Hall Farm area and add further important insights and help understand the patterning and location of activities by the very earliest inhabitants of the area.

4.2. Pottery

Chris Cumberpatch

Introduction

The pottery assemblage from a fieldwalking programme at Whirlow Hall Farm was examined by the author on 19th June 2011. The following is a summary of the salient features of the assemblage, highlighting the occurrence of pottery in four broad periods, defined below. The survey was carried out by teams of volunteers and a 100% collection policy was employed. This is a highly desirable strategy as it precludes the discard of misidentified sherds before they can be positively identified. In general terms discard, when judged permissible, should always take place *after* the assemblage has been examined by an appropriately experienced specialist and never before. Examples of misidentification even amongst professional field archaeologists are so common as to render on-site discard policies unwise.

Catalogue (Field 1)

In order to structure the discussion the pottery sherds were briefly examined and allocated to one of four broad chronological groups. Inevitably these represent a degree of simplification and some types, particularly utilitarian wares, span more than one period but for the purposes of this rapid assessment they serve to indicate the general chronological distribution of the pottery.

Medieval pottery (c.1066 – c.1450)

Only one sherd of medieval pottery was identified, find number 956. This was the rim of a bowl, green glazed internally, in a coarse quartz tempered gritty fabric of an unidentified but probably local type. It can be dated to the 14th to 15th century.

Post-medieval pottery (c.1450 – c.1720)

Only one sherd of early modern pottery was definitely identified (find number 1078), a heavily abraded sherd of Redware of probable 17th century date. It may be that some of the utilitarian wares assigned to the early modern period could also belong to this period but on balance they were insufficiently diagnostic to be positively identified and so have been allocated to the following period.

Early modern pottery (c.1720 – c.1840)

The early modern group included Creamware (c.1740 – c.1820), Pearlware (c.1780 – c.1840), Edged ware (late 18th to early 19th century), 18th century stoneware (including mugs and tankards), Yellow Glazed Coarseware, Brown Glazed Coarseware, Late Blackware, Slipware and Mottled ware. The dating of Brown Glazed Coarseware poses a number of problems and it is not impossible that some of the sherds of this type assigned to the following period are slightly earlier and vice versa. At present no detailed studies of this long-lived and important group of wares exists and in the absence of a reliable type series judgements on date have to be made on a subjective basis.

Recent pottery (c.1840 – present day)

The largest group in the assemblage as a whole dates to the period between c. 1840 and the present day. The range of material included Brown Salt Glazed Stoneware, Brown Glazed Coarseware, Whiteware (plain and transfer printed), Cane Coloured ware (plain and slip banded), bone china, figurine fragments and small quantities of other types. The character of the assemblage was broadly domestic but some categories, notably stoneware bottles and flagons appear to be under-represented in comparison with excavated assemblages. The degree of variability in assemblages of this date and the lack of attention currently paid to processes of site formation and taphonomy make it difficult to establish the range of variability that should be expected in such assemblages and consequently the significance of such variability.

Two items of specific note were identified; a pot disc of unidentified type (find number 832) and part of a pot lid bearing the transfer printed image of a bear (find number 988), probably indicating that the jar contained hair grease made from the rendered carcasses of Siberian bears, a popular male cosmetic in the 19th century.

Date range	Find numbers
c.1066 - c.1450	956
c.1450 - c.1720	1078
c.1720 - c.1840	1096, 276, 716, 1112, 112, 314, 39, 24, 492, 243, 20, 124, 311, 420, 763, 255, 966, 155, 693, 474, 924, 635, 475, 1032, 274, 622, 786, 1110, 399, 580, (?)947, 418, 611, 897, 486, 663, 804, 457, 859, 646, 967, (?)1077, 928, 823, 961, 1015, 945, 985, 694, 657, 949, 653, 1076, 331, 789, 562, 995, 1019, 62, (?)996, 479, 324, 798, 867, 774, 606, 272, 119, 384, 903,
c.1840 - present day	1042, 855, 370, 685, 870, 678, 591, 752, 266, 332, 28, 134, 519, 160, 252, 304, 301, 189, 218, 94, 63, 253, 316, 19, 275, 258, 135, 43, 251, 686, 307, 397, 19, 134, 163, 74, 99, 59, 247, 317, 44, 64, 440, 35, 46, 642, 605, 205, 188, 809, 246, 313, 136, 1103, 33, 172, 88, 309, 972, 273, 805, 192, 68, 297, 25, 21, 306, 300, 278, 321, 225, 888, 257, 131, 92, 983, 704, 485, 721, 800, 523, 296, 237, 563, 468, 36, 4, 150, 104, 78, 298, 472, 40, 80, 692, 545, 609, 1059, 919, 162, 232, 54, 250, 171, 200, 241, 261, 209, 530, 91, 73, 1065, 1041, 863, 156, 152, 101, 240, 67, 48, 1095, 268, 898, 305, 683, 970, 869, 751, 971, 1013, 775, 369, 636, 421, 376, 857, 407, 899, 711, 330, 951, 872, 588, 639, 1024, 355, 623, 754, 539, 940, 417, 954, 414, 38, 350, 630, 976, 777, 450, 893, 569, 908, 722, 1016, 506, 770, 764, 484, 830, 660, 385, 994, 771, 979, 864, 1100, 1033, 669, 337, 659, 579, 354, 596, 449, 968, 944, 861, 434, 1079, 1006, 989, 1009, 1018, 1021, 1035, 1046, 446, 910, 677, 875, 368, 973, 592, 86, 439, 668, 1068, 70, 916, 396, 841, 586, 965, 590, 531, 930, 957, 1087, 1014, 640, 1039, 729, 943, 760, 750, 1090, 405, 732, 958, 1102, 675, 998, 878, 93, 952, 892, 896, 902, 906
	1063, 220, 885,
	832 - undated pot disc,
	988 - pot lid - Siberian Bear's grease; C19th

Table 2: Summary of pottery finds in Field 2

Catalogue (Field 2)

Medieval pottery (c.1066 – c.1450)

Only one sherd of medieval type pottery was identified, find number 1163. This was a fragment of an unidentified late medieval or early post-medieval type with a very hard, fine dark red fabric containing abundant fine quartz grit. Sparse purple glaze was present externally with thin mottled green glaze internally. A date range in the 15th to early 16th century is suggested by the characteristics of the sherd.

Post-medieval pottery (c.1450 – c.1720)

No post-medieval pottery was identified in the assemblage.

Early modern pottery (c.1720 – c.1840)

A small group of sherds was identified as of early modern date (find numbers 1128, 1129, 1154, 1194, 1287 and 1228). These were predominantly utilitarian wares (Brown and Yellow Glazed Coarseware, Redware and Brown Glazed Fineware) but also included a sherd of Pearlware (Find number 1194).

Recent pottery (c.1840 – present day)

The largest group in the assemblage as a whole dates to the period between c. 1840 and the present day. The range of material included Brown Salt Glazed Stoneware, Brown Glazed Coarseware, Whiteware (plain and transfer printed), Cane Coloured ware (plain and slip banded), bone china, figurine fragments and small quantities of other types. The character of the assemblage was broadly domestic in character. The degree of variability in assemblages of this date and the lack of attention currently paid to processes of site formation and taphonomy make it difficult to establish the range of variability that should be expected in such assemblages and consequently the significance of such variability.

A number of items of specific note were identified and are listed in the accompanying catalogue with brief descriptions. These included a figurine and the head of a toy soldier, a sherd of porcelain, possibly a Chinese import (although the precise identification of imported wares as opposed to European copies of such vessels is difficult), the tube handle from a stoneware saucepan and a pot disc made from a sherd of green glazed stoneware.

Crucible fragments

The assemblage included three fragments from crucibles, probably used for iron or steel manufacture (Find numbers 1168, 1316 and 1169). Crucible fragments and other waste products from the iron and steel industry were used as building material, particularly for ‘crozzle’ walls and for surfacing roads and tracks. It is possible that such a mechanism was responsible for the presence of these fragments in Field 2.

Date range	Find numbers
c.1066 - c.1450	1163
c.1450 - c.1720	
c.1720 - c.1840	1129, 1194, 1128, 1287, 1154, 1228

c.1840 - present day	1257, 1237, 1157, 1148, 1254, 1192, 1194, 1185, 1330, 1182, 1173, 1123, 1246, 1206, 1245, 1265, 1120, 1199, 1174, 1142, 1159, 1276, 1139, 1162, 1214, 1327, 1125, 1300, 1188, 1225, 1203, 1178, 1130, 1193, 1114, 1187, 1189, 1204, 1137, 1284, 1113, 1179, 1166, 1131, 1212, 1175, 1171, 1122, 1273, 1158, 1244, 1176, 1243, 1156, 1133, 1164, 1208, 1304, 1215, 1201, 1190, 1198, 1306, 1157, 1121, 1220, 1124, 1126, 1115, 1152, 1301, 1167, 1240, 1136, 1279, 1172, 1160
Crucible	1168, 1316, 1169,
Undated	1135, 1127, 1241,
Notes	1219; head of toy soldier 1189; porcelain, possible import 1207; stoneware tube saucepan handle 1255; stoneware pot disc 1250; figurine

Table 2: Summary of pottery finds in Field 2

Discussion

It is common for the presence of early modern and recent pottery from agricultural land to be attributed to the practice of spreading domestic waste onto fields in order to improve fertility. This practice, which seems to have been linked with notions of ‘improvement’ current from the 18th century onwards is poorly documented and to date there have been few detailed studies drawing the archaeological and historical evidence together. Documentary evidence indicates that animal blood from the shambles in Sheffield was sold to farmers in Lincolnshire for use as a fertiliser (then, as now, blood and bonemeal were known to be beneficial to crops) but whether other types of waste also moved over such distances requires further investigation. Waste, including domestic waste, certainly had a market value and it seems likely that this was, in part at least connected with its potential as a fertiliser. It would be of considerable interest and some value to extend this work to consider the movement of waste from towns with a view to charting, as far as possible, the patterns of distribution of urban waste in rural areas. This would provide a valuable complement to the further investigation of the use of solid waste in urban areas as landfill and a raw material of the building industry (Cumberpatch 2005).

Further work

If no further work is planned on this assemblage, then it might make a useful teaching assemblage for amateur and voluntary groups undertaking fieldwalking surveys in the area as it contains a reasonable cross-section of the types of wares encountered in the course of such surveys.

4.3. Clay Pipe

Susie White

Field 1

A very large group of clay tobacco pipes the vast majority of which are plain stems of mixed C17th, C18th and C19th date.

Earliest bowls from the site are 1061 (c1610-1630) and 1053 (c1640-1660).

Most of the bowl fragments are C19th and many of them are plain spur forms. There are a number of mould-decorated fragments that are typical of both the C19th and the Sheffield area. These include:-

Leaf Decorated seams – 61, 148 (finely executed), 193, 377, 424, 445, 882, 934, and 1098 (very crude)

Fluted bowls – common in the C19th ranging from quite wide flutes or scallops in the early C19th through to fine flutes in the later C19th – 77 (very crude), 703, 790 (possibly a spurless short-stemmed “cutty” pipe), 801 (short bar shaped flutes; pipe also appears to have leaf-decorated seams) and 978.

Basket Weave – 689

Other decoration includes – moulded milling (428); floral motifs on both the bowl and onto the stem (745 and 697); large leaves around the base of the bowl (895); Flutes spurs (1037); “twig” like spurs (1040 and 1051 – both of which were produced in the same mould).

720 – Glazed mouthpiece, most likely to be late C18th or early C19th.

Other mouthpieces include – 107; 674 (nipple type mouthpiece from a short-stemmed “cutty” pipe); 774 and 866 (both with pale yellow/green glaze); 894

969 – marked stem with the name McDOUGALL / GLASGOW. This stem is made from red clay.

1000 – another fragment in red clay, this time plain. Could be part of the same pipe.

320 – a stem with a ground end. Ground ends sometimes occur when the pipe has been broken and the end is ground smooth so the pipe can continue to be smoked. But it also occurs when the pipe stem has been used like a piece of chalk to draw or doodle. This produced a series of sharp facets at one, or both ends. This particular fragment looks like it has been used to draw – possible to keep score in a child’s game.

Field 2

Small group of clay tobacco pipes, mainly plain C19th stems and C19th bowl fragments.

1236 – earlier looking stem, possibly C17th and may be contemporary with bowl 1293.

1256 – C19th bowl with a small acorn as a spur. The bowl would almost certainly have also been in the form of an acorn.

1270 – C19th bowl with traces of leaf-decorated seams.

1293 – earliest looking bowl from Field 2 – a spur form c1660-1680.

1323 – C19th bowl with leaf-decorated seams, traces of fine flutes that would have covered the bowl originally, and a moulded flower motif on the sides of the spur.

1325 – C19th bowl, almost certainly French. Decorated with grape vines and with a “grotesque” masque, similar to Bacchus/Green Man. May originally have had traces of coloured enamel, although none survives.

5. DISCUSSION

- 5.1 The fieldwalking of two fields at Whirlow Hall Farm recovered a total of 1335 finds. These were predominately of post-medieval and early modern date but there is an important assemblage of early prehistoric lithic material, particularly from Field 2. The clay pipe and ceramics are consistent with intensive farming practices where items such as broken clay pipe and pottery were added to the manure prior to it being spread on the fields. The finds collected therefore may not be indicative of the archaeology of the evaluated fields as a large majority of them could have been brought in and deposited from another location. Despite this, the finds are interesting in that they indicate activity over a long period from the prehistoric to the modern day. Given that the farm has evidence for having been farmed from the post-medieval period onwards it seems unlikely that all of the finds discovered were brought in from elsewhere. In particular, the early clay pipe bowls or the medieval pottery sherds may not have been part of the post-medieval manuring process and may be representative of finds from Whirlow Hall Farm. Unfortunately, it is impossible to identify which finds these may have been as they are all mixed together in the fields.
- 5.2 The lithic artefacts recovered from Fields 1 and 2 are unlikely to have been part of the manuring deposit and are more likely to represent prehistoric activity at Whirlow Hall Farm. The location of the finds in Field 2 are of particular interest given their proximity to the edge of the Limb Valley where access by both humans and animals up and down the Limb Valley could have been monitored and controlled.
- 5.3 In conclusion, the fieldwalking exercise has been highly successful in characterising earlier phases of use of the Whirlow Hall Farm and has produced the earliest evidence so far for human activity on the site. The Mesolithic activity represented by the lithic scatter could go back as far as around 10,000 BC and the re-use of an earlier heavily abraded and recorticated core suggests this piece may even be of Late Upper Palaeolithic (ie. the last Ice Age) origin. It has also shed light on the use of the fields during the post-medieval and early modern periods. The clay pipe and pottery will form a varied assemblage that could be used for future educational use at farm.

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