Fieldwalking at Whirlow Hall Farm, Sheffield, 2016

Time Travellers fieldwalking over ‘Grass’ field

ARS Ltd Report 2016/83
June 2016

Compiled by:
Clive Waddington
Archaeological Research Services Ltd
Angel House
Portland Square
Bakewell
DE45 1HB

Checked by:
Robin Holgate
Tel: 01629 814540
Fax: 01629 814657
admin@archaeologicalresearchservices.com
www.archaeologicalresearchservices.com
Fieldwalking at Whirlow Hall Farm, Sheffield, 2016

ARS Ltd Report 2016/83
June 2016
Archaeological Research Services Ltd

CONTENTS
EXECUTIVE SUMMARY ........................................................................................................ 4
INTRODUCTION ..................................................................................................................... 5
LOCATION AND GEOLOGY ................................................................................................. 5
METHODOLOGY ................................................................................................................... 5
RESULTS .............................................................................................................................. 6
Grass .................................................................................................................................. Error! Bookmark not defined.
Silverdale ............................................................................................................................ 11
Midden ................................................................................................................................. 13
Barley ................................................................................................................................... 16
LITHICS ................................................................................................................................. 17
DISCUSSION ........................................................................................................................ Error! Bookmark not defined.3
PUBLICITY, CONFIDENTIALITY AND COPYRIGHT ......................................................... 244
STATEMENT OF INDEMNITY ......................................................................................... 244
ACKNOWLEDGEMENTS ................................................................................................. 244
REFERENCES .................................................................................................................... 244

© ARS Ltd 2016
Executive Summary

The Time Travellers commissioned Archaeological Research Services Ltd (ARS Ltd) to supervise a fieldwalking programme at Whirlow Hall Farm following on from a preliminary fieldwalking exercise that ARS Ltd had previously run at the farm in 2011. The work comprised a professionally-led programme of training, participation, learning activities and public engagement. The 2016 fieldwalking was undertaken over four fields, one of which had been previously walked in 2011. The selection of fields was based upon the availability of ploughed areas following the farming requirements of Whirlow Hall Farm. Volunteers were provided with a classroom learning workshop on fieldwalking prior to the on-site practical sessions when the fields were walked. All finds were accurately surveyed and georeferenced.

The fieldwalking results are reported in this report and in the Discussion section the results are combined with those from the 2011 survey to allow for a broader summary and integration of the results. The 2016 fieldwalking focused on the recovery of chipped stone artefacts as the lithic assemblage could shed important information on the early prehistory of Whirlow Farm and its environs. Ceramics were selectively collected if they were considered to be medieval or older in date. The abundance of post-medieval pottery sherds and clay pipe fragments resulting from manuring the ground and farming activities respectively were considered to add little new information over and above that collected from the 2011 survey and so this material was not collected.

The fields walked in 2016 were found to contain significant finds of lithic material and particularly in Grass field which has produced the highest density of lithics per hectare so far anywhere on the farm. The material from the 2016 survey includes a Late Upper Palaeolithic piece, together with much Mesolithic material from all the fields and Neolithic material and a Beaker period barbed and tanged arrowhead from Grass field. Over the course of the 2011 and 2016 surveys a total of 198 lithics were recovered, of which 123 were from the 2016 fieldwalking survey.

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 of Whirlow Hall Farm an attractive locale for hunting expeditions, and possibly also settlement. The evidence for Neolithic activity in Grass field suggests early farming groups were also attracted to this upland locale and the fresh condition of many of the Neolithic pieces could suggest that truncated remains of buried Neolithic features such as pits and structural remains could potentially survive below ground in Grass field. The Beaker period material recovered from the fieldwalking could potentially come from ploughed out Beaker graves where such flints are sometimes found as grave goods accompanying burials.
INTRODUCTION
The Time Travellers received a Heritage Lottery Grant to support the project ‘Discovering our lost Iron Age and Roman Heritage’ which aims to record important archaeological remains at Whirlow Hall farm whilst also training the community archaeology group and other volunteers, societies, and local schools in archaeological techniques and making this information widely available to the public. The fieldwalking component follows on from a preliminary fieldwalking study that took place in 2011 that examined two fields and which has previously been reported (Sheppy 2011). This document reports the results of the 2016 survey and then summarises and considers the combined results from both surveys in the Discussion section. This project comprised a professionally-led programme of training, participation, learning activities and public engagement.

LOCATION AND GEOLOGY
Whirlow Hall Farm is situated on the edge of Sheffield 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 and which enjoys for the most part a south or southeast-facing aspect.

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).

METHODOLOGY
The archaeological fieldwalking survey was undertaken across four arable fields which were all walked after ploughing, with the exception to the first walk of Grass which was also walked prior to ploughing. Time was allowed for the field surfaces to weather in order to improve visibility of artefacts lying on the surface. Records of the walk of each field were made on a pro-forma recording sheet.

The survey was undertaken at close-spaced intervals with walkers spaced 2m apart. This provides a c.100% surface coverage on the basis that each person observes the ground 1m either side of their transect and that the field in question is walked when there is bare soil. The fields were walked in straight lines perpendicular to a baseline and off-sets set out across the fields with ranging poles and tapes prior to walking (see Passmore and Waddington 2009, 76 and 77 for more detailed methodology).

The field boundaries and each find spot was individually surveyed with a survey grade Leica GPS unit with an accuracy of >0.6m. This allowed each field and all finds spots to be accurately georeferenced and related directly to the Ordnance Survey grid.
Each find was marked by a cane inserted into the ground with a flag. Each find was then assessed by a specialist in the field and those finds retained were then surveyed and bagged with the corresponding survey point/find number written on the bag and kept for cataloguing and identification.

Each field was characterised according to slope type (morphometric mapping) so that each find spot could be ascribed to the type of slope on which it was found. The slope unit categories were based on those devised for fieldwalking projects elsewhere in England (Waddington 1999, 45-6), which were abstracted from standard slope types identified by Butzer (1982, 58). This facilitated consideration of any taphonomic processes that may have affected the observed distribution of surface artefact scatters and their subsequent interpretation as geomorphic processes operating on different slope units may affect artefact distribution and retrieval in different ways (Waddington 1999, 85-91). These processes were taken into account before meaningful inferences were made.

A catalogue of all finds was produced noting type, date, measurements and material etc. for the various finds. This detailed catalogue is incorporated with the project archive although a summary has been tabulated by field and is included within the Discussion section. The fieldwalking targeted lithic artefact recovery as the preliminary fieldwalking in 2011 had shown abundant quantities of post-medieval ceramic and clay pipe fragments across the Whirlow fields and it was considered that collecting further quantities of the latter material would add little to the fact that ‘middening’ with nightsoil from Sheffield was taking place. The lithic scatters, on the other hand, have the potential to add important new information on the Stone Age and Early Bronze Age around Sheffield.

All aspects of the archaeological fieldwalking survey followed the Chartered Institute for Archaeologists’ Code of Conduct (CIfA 2014a) and the Standard and guidance: Archaeological field evaluation (CIfA 2014b). A risk assessment was undertaken before commencement of the work and health and safety requirements were followed at all times.

RESULTS

A programme of fieldwalking was carried out over four fields to search the field surface for artefacts (Figure 2). One OF the fields, Grass, was walked twice because the first walk was undertaken after harvesting but prior to ploughing when opportunities for fieldwalking were limited. The visibility on this occasion was very poor. An opportunity arose to re-walk this field when it was decided to plough it and so the field was walked a second time about a week after it had been ploughed. The fields Silverdale and Midden were walked after ploughing in optimal conditions. The east side of Barley was also walked as only this part of the field was ploughed and this adds a small amount of additional data for this field as this is one of the fields that was walked in full in 2011.
Figure 1. Site location.
Grass
Field 3 or ‘Grass’ extends over an area of c.1.5 ha. and is located to the west of the ‘The Barn’ residential unit. The elevation of the field ranged from 260m OD at its east end to 265m OD at the western end. The field was walked twice: once prior to ploughing but after having been cropped and once after ploughing when the soil was bare. The field is rectangular in shape and slopes gently from west down to east. Given the gentle slope character of the field the artefacts are unlikely to have been displaced far from their original point of discard and can therefore be described as being ‘near situ’. The first walk was undertaken in overcast and wet weather which assisted with visibility of surface artefacts whilst the second walk took place in drier and brighter weather which hindered visibility.

The first walk of Grass produced 34 lithics. The second walk of Grass produced 46 lithics, 2 pieces of pottery and a copper alloy coin. The combined totals for Grass were 80 lithics, two pieces of medieval pot and one copper alloy coin that could not be identified. Of the lithics 50 were flint and 30 were chert making this a high density area of the farm for chipped stone tools. Concentrations of material can be noted in the central part of the field as well as in the north-east part of the field and in the western corner of the field. The lithics included cores (7), flakes (43), blades (5) and chips (4) as well as retouched flake (1), edge-trimmed blades (7) and edge-trimmed flakes (3), utilised blades (2) and utilised flake (1), scrapers (6) and a fine example of a barbed and tanged arrowhead (1).
The lithics from this field show clear Mesolithic, Neolithic and, in the case of the arrowhead, Beaker period dates. The assemblage is therefore a palimpsest that has accumulated as a result of repeated activity in this locale over several millennia. The Mesolithic material includes several multi-platform and micro-cores with small, narrow parallel-sided blade removal scars. There are also Mesolithic scrapers and blades, some of the latter being retouched or edge-trimmed. The Neolithic material includes several edge-trimmed blades that can be differentiated from the Mesolithic material on account of them being much broader and having non-triangular sections. The barbed and tanged arrowhead, although one barb is completely broken off and the other survives only in part, testifies to Beaker period activity at the western end of the field. The field occupies the eastern flank of a ridge line and so benefits from the prevailing south-westerly winds blowing over the top of the ridge which provides some shelter on this, its eastern flank. Without surrounding tree cover this locale would otherwise command significant views to the south and east over and down the Sheaf Valley towards Sheffield.
Silverdale
Field 4 or ‘Silverdale’ extends over an area of c.1.0 ha. and is located to the east side of the farm to the south-east of the ‘The Barn’ residential unit. The field is sub-rectangular in shape and slopes steeply from west down to east. The elevation of the field ranged from 232m OD on its east edge to 241m OD on its western edge. The field was walked once after ploughing when the soil was bare. Given the steep slope character of the field the artefacts are likely to have been displaced significantly from their original point of discard and therefore those flints found on the surface of the field can be considered ‘in-transit’ and will have originated from a locale further up the slope catchment upon which they are situated. The movement of sediment was confirmed by the presence of a negative lynchet at the top of the field (west edge) and a positive lynchet having built up at the footslope at the base of the field (east edge). The walk was undertaken in overcast and wet weather which assisted with visibility of surface artefacts.

The walk produced 11 lithics and four ceramic sherds. Of the 11 lithics 9 were flint and 2 were chert. The four small ceramic sherds are likely to be of medieval date with one piece being ‘Green Glaze’ pottery. Most of the material is concentrated in the central south-east half of the field. The lithics included cores (3), flakes (6) and blades (2). The cores are multi-platform and have small narrow blade removal scars present consistent with Mesolithic microlith production and the blades are also of Mesolithic type.

Figure 5. Volunteers embarking on the walk of Silverdale field.
Midden
Field 5, or ‘Midden’ field, covered an area of 2.3 ha. and was located on the west side of the farm bordering the steep-sided valley of the Limb Brook to the west and being bordered by Fenney Lane to the east. The field is sub-rectangular in shape and has a medium slope running from north down to south. The elevation of the field ranges from 265m OD on its higher northern edge to 255m OD on its lower southern edge. The field was walked once after ploughing when the soil was bare. Given the medium slope character of the field the artefacts are likely to have been displaced to some extent from their original point of discard and therefore many of the flints found on the surface of the field can be considered ‘in-transit’ and will have originated from a locale further towards the top of the field, although some on more level areas of the field are likely to be in a ‘near situ’ position. The movement of sediment was confirmed by the presence of a negative lynchet at the top of the field (see Figure 7) and a positive lynchet having built up at the footslope at the base of the field (southern edge). The walk was undertaken in bright weather which partially hindered visibility of surface artefacts.

The walk produced 21 lithics and a single small ceramic sherd that may be Samian Ware pottery of Roman date. Of the lithics 17 were flint and 4 were chert. The material can be noted as being fairly evenly spread across the field although there are gaps down the lower western and eastern edges of the field (Figure 8). The lithics included cores (2), flakes (11) and chips (2) as well as a knife (1), burins (2), an edge-trimmed blade (1), a utilised blade (1) and a retouched flake (1). The lithic material includes a significant find in the form of the blade (Figure 11) which is of probable Late Upper Palaeolithic date, being quite large and thick blade retouched to form a knife and being heavily patinated. The two burins are of Mesolithic date as are the utilised blade and edge-trimmed blade.

Figure 7. View looking west along the boundary between Barley (right) and Midden (left) fields showing positive lynchet development on the Barley side which is higher up, and a slight negative lynchet on the Midden side which is lower down.
Barley

Field 2, or ‘Barley’ field, extends over an area of 2.2 hectares, although only 0.5 ha. had been ploughed in a strip running along its eastern edge and was available for fieldwalking (Figure 8). This field had been fieldwalked in its entirety in 2011 and this provided an opportunity to access the eastern part of the field for further survey in 2016. The field adjoins Midden field which lies to the south of it and is bordered to the west by the steep valley of the Lim Brook and to the east by Fenney Lane. The field is sub-rectangular in shape and has a medium slope running from north down to south. The elevation of the field ranges from 276m OD on its higher northern edge to 265m OD on its lower southern edge. Given the medium slope character of the field the artefacts are likely to have been displaced to some extent from their original point of discard and therefore many of the flints found on the surface of the field can be considered ‘in-transit’ and will have originated from a locale further towards the top of the field, although some on more level areas of the field are likely to be in a ‘near situ’ position. The movement of sediment was confirmed by the presence of a negative lynchet at the top of the field (see Figure 7) and a positive lynchet having built up at the footslope at the base of the field (southern edge). The walk was undertaken in bright weather which partially hindered visibility of surface artefacts.

The walk produced 11 lithics and one ceramic marble. Of the lithics 5 were flint and 6 were chert making this quite a high density area of the farm for chipped stone tools given that only a small area was walked. This is in addition to the 60 lithics recovered from this field when it was walked once in its entirety during 2011. The lithics from the 2016 survey included cores (3), flakes (5), edge-trimmed flakes (2) and a retouched blade (1). The material that was diagnostic was all Mesolithic in character as evidenced by the narrow parallel-sided blade forms and blade removal scars.

A 60 lithic artefacts discovered in Field 2 during the 2011 survey showed a concentration in the western half of the field 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 was considered unlikely to reflect a genuine cluster of artefacts, instead being due to the movement of artefacts downslope as a result of gravity and ploughing. However, there is unlikely to have been much lateral movement of the 2011 lithics across the slope 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 9. Volunteers examining the surface of Barley field.

Figure 10. Volunteers examining the surface of Barley field.
LITHICS

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 numbers by field and Table 2 shows the breakdown of lithic types by field. All finds were accurately located on field plans and each lithic was washed and bagged according to its 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 (198 pieces from the two fieldwalking surveys in 2011 and 2016), a significant proportion of these pieces (38.4%) are formal tools or utilised pieces making it an informative assemblage.

<table>
<thead>
<tr>
<th>Field</th>
<th>NGR (centre)</th>
<th>Dominant Slope Type</th>
<th>Topographic Zone</th>
<th>Field Size (ha)</th>
<th>Total No. Lithics (actual)</th>
<th>Count per ha.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Long</td>
<td>SK 3120 8330</td>
<td>Medium</td>
<td>Sandstone Upland</td>
<td>1.5</td>
<td>14</td>
<td>9.3</td>
</tr>
<tr>
<td>2. Barley</td>
<td>SK 3085 8325</td>
<td>Medium</td>
<td>Sandstone Upland</td>
<td>2.2</td>
<td>72</td>
<td>32.7</td>
</tr>
<tr>
<td>3. Grass</td>
<td>SK 3105 8373</td>
<td>Gentle</td>
<td>Sandstone Upland</td>
<td>1.5</td>
<td>80</td>
<td>53.3</td>
</tr>
<tr>
<td>4. Silverdale</td>
<td>SK 3135 8380</td>
<td>Steep</td>
<td>Sandstone Upland</td>
<td>1.0</td>
<td>11</td>
<td>11.0</td>
</tr>
<tr>
<td>5. Midden</td>
<td>SK 3095 8315</td>
<td>Medium</td>
<td>Sandstone Upland</td>
<td>2.3</td>
<td>21</td>
<td>9.1</td>
</tr>
</tbody>
</table>

Table 1. Summary of lithic counts and densities per hectare by field.

Most of the assemblage sits 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 blade and microblade cores typically of multi-platform type together with several abruptly retouched scrapers and end scrapers, two burins and other retouched and utilised blade tools (Figures 12 and 13). They are considered to most likely date from the period c.10,000-4000 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). The evidence for a Late Upper Palaeolithic presence is also confirmed by the discovery of a knife made on a thick blade from Midden field which is heavily patinated and is of Late Upper Palaeolithic form (Figure 11). Several retouched blades are of Neolithic date (Figure 14) and notably come from Grass field. 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 from Long field and a barbed and tanged arrowhead from Grass field are characteristic of the Beaker period (c.2400-1800 cal BC).
Figure 11. A patinated knife made on a thick blade of likely Late Upper Palaeolithic date.

Figure 12. A selection of Mesolithic pieces including a core, various blade forms and a burin from the 2016 survey.
Figure 13. Two Mesolithic abrupt scrapers from the 2016 survey.

Figure 14. A selection of Neolithic blades and retouched blades from the 2016 survey, note their broader dimensions, freshness, and non-triangular sections compared to the Mesolithic material.
Figure 15. A broken barbed and tanged arrowhead from Grass field.

Figure 16. A small marble found in Barley field.
Distribution
The distribution of the lithics reveals a degree of patterning. Typical counts per hectare across northern England for medium density fields is around 10 – 12 lithics per hectare. The extremely high density per hectare count for Grass field (53.3/ha) shows that this area forms a genuine foci for Mesolithic, Neolithic and possibly Beaker period activity. This field is also composed of a gentle slope surface which means these lithics will have experienced only limited movement since their initial discard which means greater reliance can be given to this observed concentration being a genuine pattern. The material in this field is concentrated around its centre and at either end of its north-western long edge (Figure 4). There is also a very high density in Barley field (32.7/ha) and although some of this material will be in-transit it is so high that it shows a clear high density of prehistoric activity in this locale. The other three fields all have medium densities of material, although occupying medium and steep slopes much of the material in these fields will be in-transit and will have moved from original positions of discard higher up the slope catchment, which in this case will mean from the upper part of each of these fields.

Raw Material
The lithic material is composed mostly of flint (138 pieces) and a notable chert component (60 pieces). Although only 39 pieces could be ascribed a broad provenance it was revealing in that 17 flint pieces could be likely to be of glacial origin whilst 22 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 kilometres 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 light grey, medium grey, dark grey, white, translucent and orange-grey pieces. Several pieces could not be ascribed a colour due to them being burnt or heavily patinated. 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.

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 2 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. Although no microliths have so far been found by the fieldwalking survey, microliths have been found in the topsoil and as residual flints in the Iron Age and Roman deposits excavated in Hall field.

<table>
<thead>
<tr>
<th>Type</th>
<th>Field 1 Long</th>
<th>Field 2 Barley</th>
<th>Field 3 Grass</th>
<th>Field 4 Silverdale</th>
<th>Field 5 Midden</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cores</td>
<td>3</td>
<td>8</td>
<td>7</td>
<td>3</td>
<td>2</td>
<td>23</td>
</tr>
<tr>
<td>Rejuvenation flakes</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>Blades</td>
<td>7</td>
<td>20</td>
<td>43</td>
<td>6</td>
<td>11</td>
<td>87</td>
</tr>
<tr>
<td>Blades</td>
<td>18</td>
<td>5</td>
<td>2</td>
<td></td>
<td></td>
<td>25</td>
</tr>
<tr>
<td>Chips</td>
<td>4</td>
<td>2</td>
<td>2</td>
<td></td>
<td></td>
<td>6</td>
</tr>
<tr>
<td>Utilised Blades</td>
<td>4</td>
<td>2</td>
<td>1</td>
<td></td>
<td></td>
<td>7</td>
</tr>
<tr>
<td>Utilised Flakes</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Edge-Trimmed Blade</td>
<td>4</td>
<td>7</td>
<td>1</td>
<td></td>
<td></td>
<td>12</td>
</tr>
<tr>
<td>Edge-Trimmed Flake</td>
<td>1</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>Retouched Blades</td>
<td>1</td>
<td>5</td>
<td></td>
<td></td>
<td></td>
<td>6</td>
</tr>
<tr>
<td>Retouched Flakes</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td></td>
<td></td>
<td>6</td>
</tr>
<tr>
<td>Scrapers</td>
<td>1</td>
<td>6</td>
<td>6</td>
<td></td>
<td></td>
<td>13</td>
</tr>
<tr>
<td>Burins</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Barbed &amp; Tanged Arrow</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Knife</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>14</strong></td>
<td><strong>72</strong></td>
<td><strong>80</strong></td>
<td><strong>11</strong></td>
<td><strong>21</strong></td>
<td><strong>198</strong></td>
</tr>
</tbody>
</table>

Table 2. Summary of lithic types by field.
DISCUSSION
The fieldwalking survey has been useful as it has extended evidence for human activity on the site as far back in time as the Late Upper Palaeolithic c. 15,000 or so years ago. It has documented clear evidence for Mesolithic hunter-gatherer-fisher activity (c. 10,000 – 4000 cal BC), and perhaps occupation, around the farm, together with Neolithic activity (c. 4000 – 2400 cal BC) in Grass field and some occasional evidence for Beaker period (c. 2400 – 1800 cal BC) activity. The area around Whirlow Hall Farm has evidently formed a focus for Mesolithic activity, and particularly on the higher ground close to the top of the steep east valley side of the Limb Brook and on the sheltered plateau of Grass field. 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. In both locales groups would have been sheltered from the prevailing westerly winds while also being strategically located to monitor and control access up and down the Limb valley and the ridge leading up to Ringinglow. 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 form 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 Grass and Barley 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, 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 Neolithic and Beaker period 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 ‘Whirlow’ 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. The concentration of Neolithic material in Grass field is significant and suggests that buried Neolithic remains such as truncated pits and possibly structural remains could survive within this field. Barbed and tanged arrowheads and 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.

Extending the fieldwalking survey to cover a more substantial part of Whirlow Hall Farm is an important priority for future work as the work undertaken to date has
shown the potential of this technique to yield informative and important results that fill in a large swathe of history for the farm and its environs. It has also demonstrated the ability to identify concentrations of material dating to particular periods and this could be helpful in targeting future geophysical survey, and evaluation excavation trenches to find out if buried remains belonging to these early periods are located on the site. Further fieldwalking should assist in enhancing understanding of the Stone Age and Early Bronze Age activity around the Whirlow Hall Farm.

PUBLICITY, CONFIDENTIALITY AND COPYRIGHT
Any publicity will be handled by the client.

Archaeological Research Services Ltd will retain the copyright of all documentary and photographic material under the Copyright, Designs and Patent Act (1988).

STATEMENT OF INDEMNITY
All statements and opinions contained within this report arising from the works undertaken are offered in good faith and compiled according to professional standards. No responsibility can be accepted by the author/s of the report for any errors of fact or opinion resulting from data supplied by any third party, or for loss or other consequence arising from decisions or actions made upon the basis of facts or opinions expressed in any such report(s), howsoever such facts and opinions may have been derived.

ACKNOWLEDGEMENTS
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.

REFERENCES

