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A Neolithic-Early Bronze Age Settlement at 3 Whitton Park,  
Milfield, Northumberland*Clive Waddington*

## ABSTRACT

*The Whitton Park site was excavated and fully recorded during late June-early July 2004 in advance of the construction of a house on the edge of Milfield village, Northumberland. The excavations revealed archaeological features which suggested the presence of a fairly substantial structure. Pottery finds indicated a Late Neolithic – Early Bronze Age date for the site and a radiocarbon determination returned a date of c. 2100 cal BC. Organic material showed that wheat was being grown in the vicinity of the site amongst a mixed woodland cover with identified species including oak, hazel, birch and alder. Other plants included grasses, clover and nettle, the latter being an indicator of disturbed ground, possibly for agriculture or grazing. A single flint flake and a chert flake were found together with some struck agate, including one bladelet and a core which suggested a Mesolithic presence on the site prior to the Neolithic/Early Bronze Age occupation.*

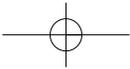
## INTRODUCTION AND BACKGROUND

The site of 3 Whitton Park is situated at the edge of Milfield village (NT 9355 3380) between an open field to the south and existing properties to the east, west and north (fig. 1). It comprises an area of disused ground with a grass cover. Although the ground rises at the west side of the plot the development area generally lies at 43.5 m above Ordnance Datum.

The site is situated within an archaeological landscape of national importance and lies on a raised fluvio-glacial sand and gravel terrace;

these landforms have been shown to be the most sensitive archaeological areas in the valley (Passmore *et al.* 2002). Indeed these terraces host the highest density of archaeological remains anywhere in the county with the majority dating from the Neolithic-Early Bronze Age and Early Medieval periods. The site lies adjacent to a prehistoric 'ritual landscape' which includes a series of henge and henge-related monuments, an avenue/drove-way, pit alignments, ring ditches and settlement sites (Harding 1981; Miket 1981, 1985; Waddington 1999). Some of these features are known to have been re-used in the Anglo-Saxon period (Scull and Harding 1990).

To the south-east of the development site, at a distance of 500 m, lies the Milfield South Henge (Harding 1981; Scull and Harding 1990) in a field that has produced one of the highest densities of surface lithic artefact scatters anywhere in the basin (Waddington 2001); these date to the Mesolithic, Neolithic and Early Bronze Age periods. The henge itself has been dated to the Late Neolithic-Early Bronze Age c. 2000 cal BC (Harding 1981) but also contained pagan burials belonging to the Early Medieval period (Scull and Harding 1990). Due east of the site, also at a distance of 500 m, are the remains of the royal Anglian township of Maelmin dating from the 7th and 8th centuries AD. This large crop-mark site includes the remains of many structures, a large hall and sunken-featured buildings, most of which are enclosed by a double palisade (Gates and O'Brien 1988). Both the henge and Maelmin sites are scheduled ancient monuments. The Neolithic 'avenue' or 'droveway' passes within 400 m of the site where it is crossed by the A697 road on its course towards the Meldon



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Fig 1 Location map



Burn to the east of Milfield village. The nearest known monument to the site, however, is a sub-circular enclosure, probably a late prehistoric palisaded site, that lies 200 m east, partly below the A697 trunk road next to the Meldon Burn.

An archaeological evaluation was carried out at 3 Whitton Park in June 1993 by Archaeological Services, University of Durham, that revealed a number of archaeological features cut into the natural sand and gravel substratum (ASUD 1993). The following report describes all the archaeology found on the site during the 2004 excavation while the 1993 evaluation is written up elsewhere (ASUD 1993).

### STRATIGRAPHY REPORT

The stratigraphy of the site consists of a topsoil ranging in thickness from 0.3 m to 0.5 m. Surviving intermittently across the site was evidence for a subsoil that measured between 0.01 m and 0.2 m in depth. Below this was the sand and gravel geological substratum. The soil overburden was thickest at the northern end of the site and most shallow to the south. The soil is a stony brown earth that has evidently been ploughed and the soil profile mixed, meaning that all archaeology within this horizon has become obliterated. It is likely that this area was under plough in medieval times given the proximity to Maelmin, and also the evidence for medieval fields on the site of the Maelmin Heritage Trail to the south-east of the site. The soil is well aerated and has many earthworms with root penetration taking place all the way through its profile. The only find to come out of the topsoil was an undiagnostic agate flake, whereas a patch of subsoil that had collected in a natural shallow hollow on the gravel surface produced a flint flake, a struck agate nodule and a broken agate bladelet that is likely to date from the Mesolithic.

A total of eight archaeological features were recorded in the 2004 excavation, most of which were postholes (figs. 2–6). Details of these features are summarised in Table 1.

### DISCUSSION AND DATING (FIGS. 2–6)

Six of the features are post holes with evidence for fairly substantial timbers, which in the case of fill [29] suggests a timber with a diameter of 0.2 m. The post hole [22] included a ramp on its north-west side indicating that the timber had been carefully extracted at some point in time after use in the original structure. The fills of these post holes all contained large quantities of stone packing, and in some cases this included substantial stones such as those in fills [27], [21] and [13]. There was no evidence for *in-situ* burning in any of the pit fills or the surrounding gravel. These pits ([14], [22], [28], [30] and [48]) can be confidently interpreted as structural features, and given their proximity to each other and their triangular arrangement, they appear to form part of a small building. This leaves an outlying possible post hole [10] and a stakehole [20]. Pit [34] lies to the north of the triangular arrangement of post holes.

The contemporaneity of these various pit features is suggested by the fact that two of the triangular cluster contained the same type of pottery in their fills [21 and 27]. Furthermore, the fills all consisted of the same type of sandy silt material with packing stones and, in most cases, pieces of charred wood; this uniformity of deposit suggests that they all form part of the same phase of occupation at the site. The pottery sherds from [21] and [27] showed no signs of being specially placed but were, rather, found at haphazard angles towards the base of both pits; this suggests that they were either dropped in, or incidentally incorporated with, the filling of these post holes. Although there is therefore no evidence for ‘structured deposition’ this does not mean that these artefacts were not incorporated as part of a ritualised act of deposition when the structure was built. There is, however, no evidence to demonstrate this and therefore the pits are here interpreted as primarily structural features.

Dating of a single entity hazelnut shell sample recovered from within pit fill [27] returned an AMS date of  $3630 \pm 40$ bp (Beta-194560). At 2 sigma (95% confidence) this date calibrates to 2120–2090 cal BC and 2050–1890

Table 1 Summary of Excavated Archaeological Features

Context	Description	Max Dimensions (m.)	Max depth	Colour of fill	Texture of fill	Small Finds	C <sup>14</sup> Dates BP (uncal.)
<b>Post Hole</b>							
9	Possible Post Hole with small stone material in fill	0.46 m diameter	0.15 m	Brown-coloured fill 7.5YR 3/2	Sandy silt with many small stones	Oak charcoal	
13	Post Hole with packing material	0.58 m diameter	0.26 m	Brown-coloured fill 7.5YR 3/3	Sandy silt with large and small stones, av. 0.1 m diameter	Alder charcoal	
21	Post Hole with ramp and a lot of stone packing material	0.58 m x 0.5 m with ramp giving total length of 1.3 m	0.27 m	Brown-coloured fill 7.5YR 3/2	Sandy silt with rounded stones av. 0.07 m diameter	1 body sherd Impressed Ware-related pottery, charcoal Hazel charcoal	
27	Post Hole with large stone packing at base plus small stone packing	0.6 m diameter	0.37 m	Brown-coloured fill 7.5YR 3/2	Sandy silt with rounded stones av. 0.08 m diameter	9 sherds Impressed Ware-related pottery, 1 chert flake.	3630±40bp
29	Post Hole with evidence for a post pipe impression at base measuring 0.2 m diameter	0.8 m x 0.59 m	0.17 m	Brown-coloured fill 7.5YR 3/3	Sandy silt with rounded stones and a large fire-reddened stone	Hazel charcoal Alder charcoal Beech charcoal	
47	Probable Post Hole	0.3 m	0.11 m	Brown-coloured fill 7.5YR 3/3	Sandy silt with many small stones		
<b>Stake Hole</b>							
19	Stake Hole with 'saucer' above	0.27 m x 0.26 m	0.25 m	Brown-coloured fill 7.5YR 3/4	Sandy silt with many small stones		
<b>Pit</b>							
33	Pit	0.65 m x 0.58 m	0.22 m	Brown-coloured fill 10.5YR 3/3	Sandy silt with small stones in fill	Birch and Hazel charcoal	

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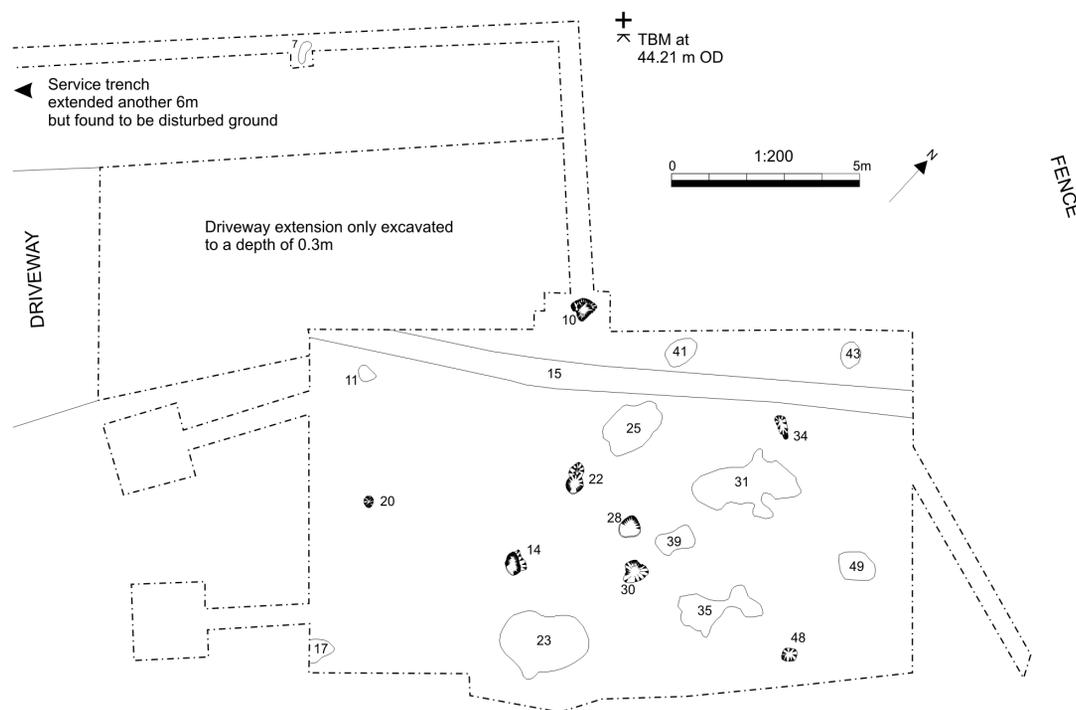


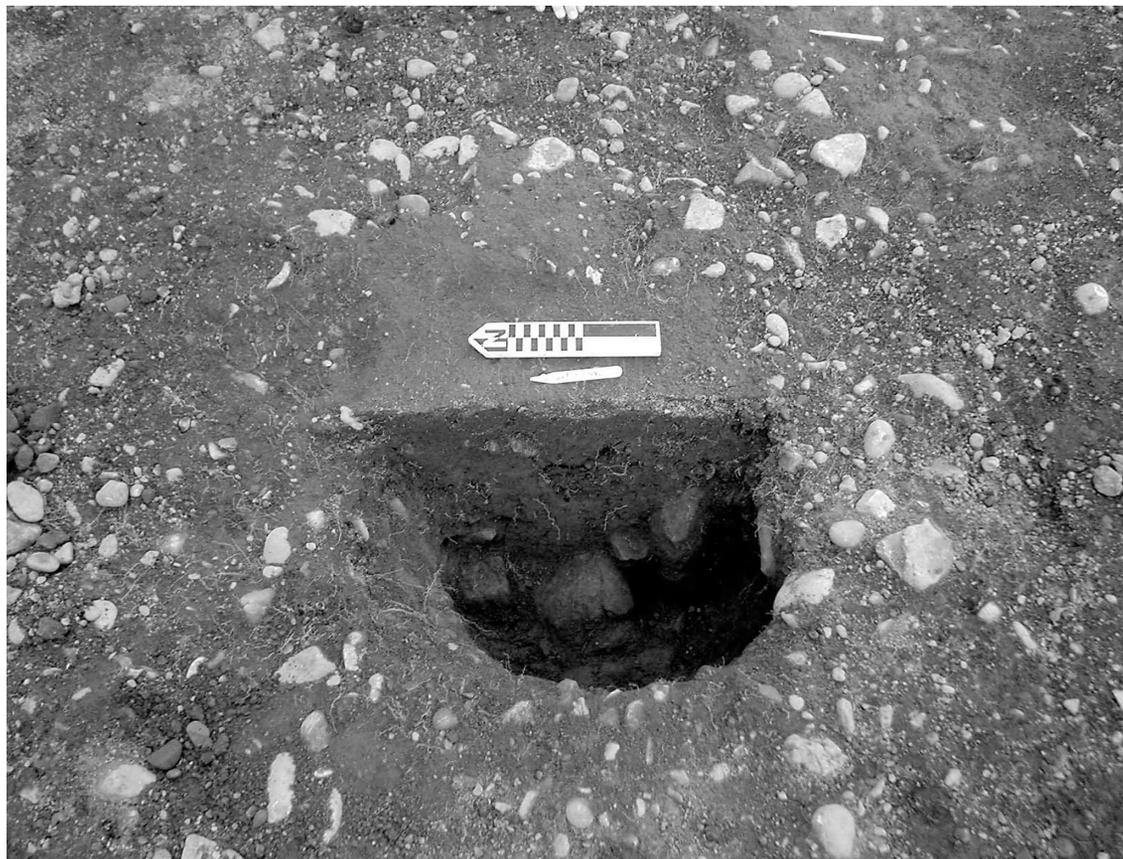
Fig. 2 Pre-excitation site plan.

cal BC. It had a  $^{13}\text{C}$  ratio of  $-25.9$ . This date places it in the period belonging to the late Neolithic or Early Bronze Age (depending on how the Early Bronze Age is defined) and thus contemporary with the use of the nearby Milfield henge monuments (see Harding 1981), as well as the production of the earliest metalwork and Beaker pottery. The physical proximity of this site to the Milfield South henge suggests that these two sites were no doubt related in some way. Perhaps the Whitton Park site was a seasonally-used settlement occupied when groups gathered at the henge monuments at certain time/s of the year to celebrate rituals and perform rites, or alternatively it may have formed a more permanent structure for a local farming group.

The presence of cord-impressed pottery in two of the pits is of considerable interest. Firstly, finding this type of material in association with what appears to be a settlement site

provides information on the type of sites on which this type of pottery may be found in northern England. Secondly, since this radiocarbon date is too late compared to Impressed Ware pottery *sensu stricto*, it supports the view that this pottery is a related form but with poorly-executed decoration, the techniques of which can also be found in the earlier Impressed Ware tradition. The other feature that relates this pottery to Impressed Ware is its fabric type and thickness; in the absence of any other defining feature this means that it is perhaps best labelled as Impressed Ware-related pottery. Other findspots for true Impressed Ware pottery in Northumberland include those from Allendale, Alnwick, Crookham, Elsdon, Kylloe Crags, Redscar Bridge, Thirlings, Whitton Hill, Woodbridge Farm and Yeavinger Palace site (Waddington 2000).

The site as a whole is interpreted as some kind of settlement site on the basis of the



*Fig. 3 Half-section through post hole fill [27] from which most of the impressed ware pottery was recovered.*

evidence for a structure, the presence of pottery sherds, charred wood and wheat grains (see macrofossil report below). Although the number of surviving wheat grains is small, this is common for Neolithic-Early Bronze Age deposits in this region (Huntley and Stallibrass 1995). The presence of this material implies domestic activity at, or close to, the site. In addition the remarkable structural similarity to the remains from the Neolithic site near Bolam Lake (see Waddington and Davies 2002) provides further support for this interpretation. The Bolam Lake site also had a triangular arrangement of post holes for similar sized posts. In addition, not only is the shape and form of the post holes similar but the overall

size is also very similar. In the case of the 3 Whitton Park site the triangular arrangement of post holes has a maximum length of *c.* 8 m and maximum width of *c.* 3.2 m. This compares with similar measurements of *c.* 10 m and *c.* 3.8 m from the Bolam Lake posthole triangle. The Bolam Lake site was able to be confidently interpreted as a settlement site as it had evidence for a structure, together with an external cooking area, and downwind of the structure were a series of intercutting rubbish pits that contained large quantities of domestic debris including broken flints, pottery, charred material and in one case a broken stone axe head. One of the pits had been lined, presumably for a storage use prior to being used to

dispose of domestic debris. A non-defensive hurdle fence appears to have been positioned around the site suggesting it may have been used by a herding group; however, the direct contemporaneity of all these features was assumed rather than demonstrated. If both of these sites are indeed short-term settlement sites then the wide range in dates, from the Early Neolithic in the case of Bolam Lake to the early Bronze Age in the case of 3 Whitton Park, implies that these type of settlements were used over a considerable period of time.

Parallels have been drawn between the Bolam Lake site and those Neolithic structures recognised at Thirlings (see Waddington and Davies 2002), and together with this latest information from Milfield village, these suggest the occurrence of triangular and trapezoidal timber-framed structures being used in this period. However, we must be cautious of assuming a universal Neolithic-Early Bronze Age settlement pattern on this meagre evidence as patterns of residency may have taken many different forms responding to the contrasting

landscapes of Northumberland and such different demands as day-to-day living, logistical journeys, gatherings of the wider social group and ritual/ceremonial occasions.

### GENERAL CONCLUSIONS

The non-monumental scale of the structure implies that occupation was relatively short-lived, being perhaps measurable in tens of years, or a lifetime, but unlikely to be any longer. The duration of occupation may have been even shorter, involving just a short-term occupation event, but this cannot be demonstrated on the basis of the present evidence. The users of this site appear to have been engaged in growing wheat, producing pottery and stone tools. The presence of Impressed Ware-related pottery supports the Late Neolithic-Early Bronze Age date for the site of *c.* 2100 BC. This date indicates that the site was contemporaneous with the use of the Milfield henge sites.

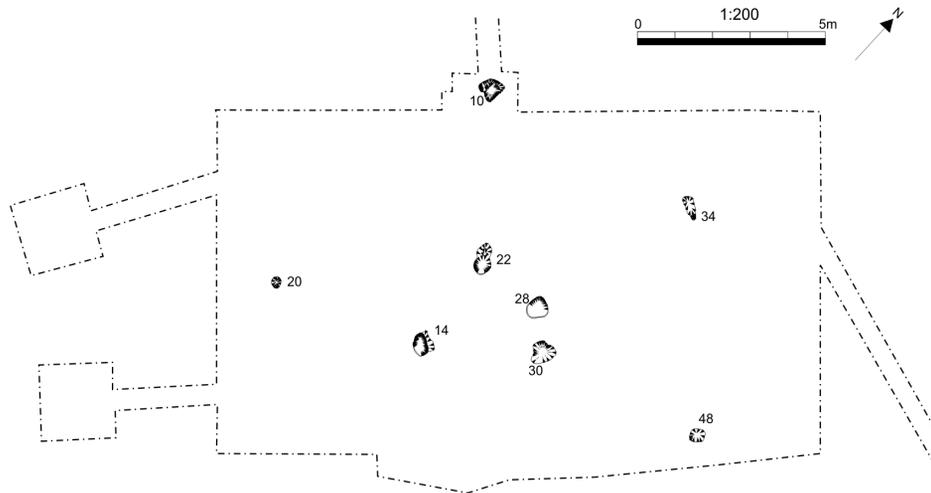
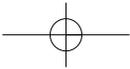


Fig. 4 Plan showing excavated archaeological features.



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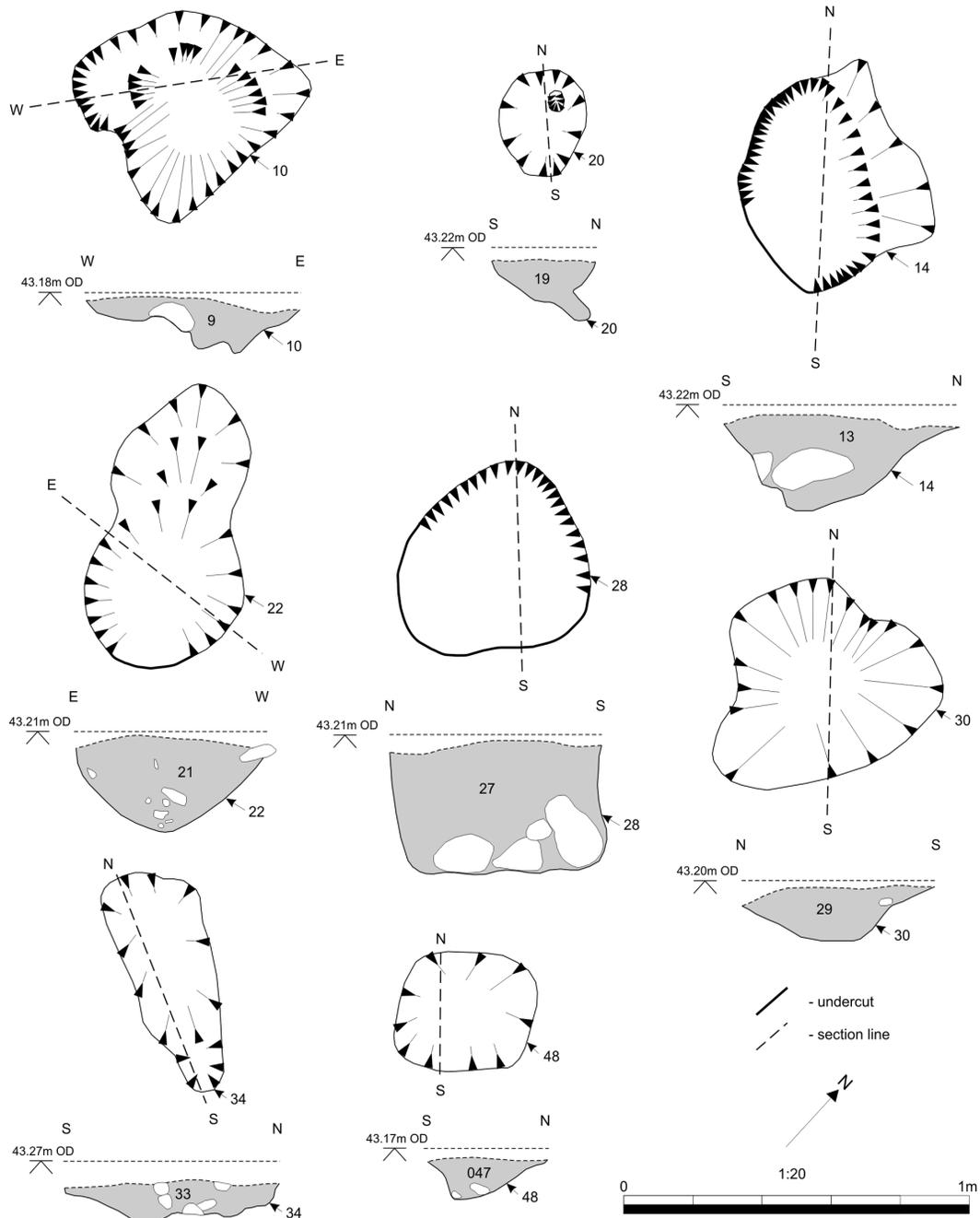


Fig. 5 Plans and sections of all excavated archaeological features.



*Fig. 6 Excavators standing in the triangular arrangement of posts with the nearest figure standing in the possible outlying post hole [10].*

## SPECIALIST REPORTS

### LITHICS

*Clive Waddington*

A total of six lithics were recovered from the Whitton Plot 3 excavations in Milfield village. These consisted of one piece of flint, one of chert and four of agate. Only two were from archaeological features (find numbers 4 and 5) while the other four were from the overlying topsoil and subsoil horizons. None of the pieces are particularly diagnostic although the small agate core (5) and the broken bladelet (6) are indicative of microlith-size pieces implying the presence of Mesolithic activity in this area.

The working of agate, chert and quartz is typically associated with Mesolithic stone working traditions in north Northumberland (Waddington 2004, 31). As none of the pieces are formal tools (with the possible exception of (6)), little can be stated with regard to functionality and the type of activities that took place on the site. With the exception of the single piece of flint the other materials can all be obtained locally and, as such, indicate a reliance on locally available materials for the production of stone tools – although this observation is probably only relevant to the Mesolithic activity. It is likely that the

Mesolithic-type pieces from the pit features are residual and have become incorporated into the fill of what are likely to be Neolithic features. Apart from find (3) which belongs to the primary stage of the reduction sequence all the other pieces appear to have resulted from the secondary stages of the reduction sequence. Measurements are not given for broken pieces.

1. A small translucent agate flake that appears to have been chipped off the base of a core – presumably as a rejuvenation flake to create a new platform to work from. It has maximum length, width and thickness measurements of 7 mm, 10.5 mm and 8.5 mm. From context [1] – topsoil.
2. A small light grey flint flake with broken tip. Undiagnostic. From context [31] – subsoil spread.
3. A small translucent agate nodule that has had a single flake detached from it, probably as a test piece. It has maximum length, width and thickness measurements of 25 mm, 12.5 mm and 12 mm. From context [31] – subsoil spread.
4. A broken blue-grey chert flake that has been chipped off a prepared core, probably as a rejuvenation flake. Undiagnostic. From context [27] – post pit fill.
5. A small red-grey agate core that has been used to produce small blade blanks of microlithic size. The core has maximum length, width and thickness measurements of 24 mm, 16 mm and 12.5 mm. From context [13] – post pit fill.
6. A small, broken, red agate bladelet segment with parallel sides and triangular section typical of later Mesolithic microliths and bladelet tools in the region. There is evidence for some possible wear along one of the blade edges. From context [31] – subsoil spread.

### POTTERY (FIG. 7)

#### *Clive Waddington*

A total of ten sherds of pottery were recovered from the excavation, nine of which came from pit fill [27] and one from the adjacent pit fill [21]. The single sherd from pit fill [21] was directly analogous to a group of decorated sherds in pit fill [27] and could even be from the same vessel. The pottery is all hand made with

the coil fractures indicating how the pots were made. At least two vessels are represented as witnessed by the two distinctive fabrics. All have coarse angular grits (opening agents) and have been fired on an open bonfire. At least one of the vessels represented had a narrow diameter flat base. The sole rim sherd from the cord-decorated vessel has a similarly decorated bevelled rim top. The decoration present on the pottery fragments includes fingernail impressions and cord impressions. This style of impressed decoration, the flat base, rounded bodies, carinations and the pottery fabric suggest that the ceramics belong to a later Neolithic–Early Bronze Age tradition related to Impressed Wares. The associated radiocarbon date of *c.* 2100 BC (see above) provides a rare date for sherds related to the Impressed Ware tradition in northern England. The cord-impressed vessel with the internally decorated bevelled rim could belong to the Meldon Bridge Impressed-Ware sub-style (Gibson and Woods 1997, 208–9; Speak and Burgess 1999) or possibly (though less likely) be a part of a food vessel type pot. Impressed Ware pottery is known from the vicinity of this site with finds having been found near Redscar Bridge and Crookham (Miket 1976), Thirlings (Miket 1987), Yeavering (Hope-Taylor 1977 and Ferrell 1990) and most recently at Woodbridge Farm on the site of Cheviot quarry (Waddington 2000). It remains unknown whether these types of vessels were flat or round-based, and unfortunately in this case the flat base is from another vessel that cannot be assigned to this sub-style on the basis of the surviving sherds. The pieces did not appear to be specially placed in either of the pits, but were rather found at haphazard angles towards the base of each of the fills suggesting that they had been tossed in, or incidentally incorporated, with the filling of the post holes. It is likely that they date from close to the post hole construction event as it is unlikely that the sherds would survive long if they had been incorporated into the surrounding soil as a result of some earlier event on the site. The pottery is in a relatively fresh and unweathered state indicating that at the time of their incorporation into the pits

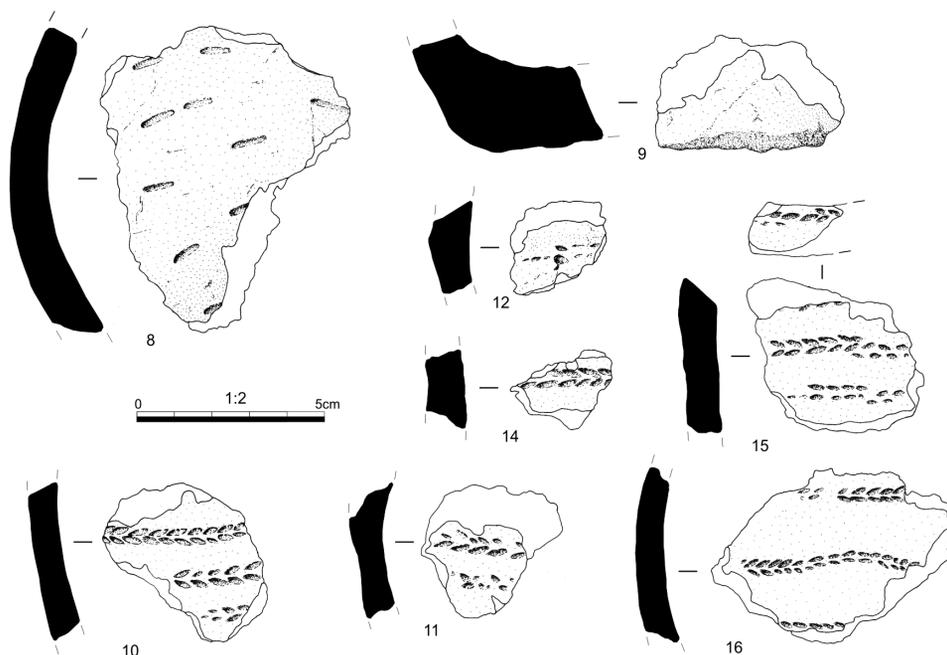


Fig. 7 Pottery. Sherds 8 and 9 are from the same vessel. Sherds 10–12 and 14–16 are from the same vessel. All sherds are from pit fill 27, except sherd 16 which is from pit fill 21.

they had not long been out of use. The presence of these ceramic fragments in posthole fills implies domestic occupation at this site.

#### Pit Fill (27)

7. A small body sherd from a thick-walled vessel measuring up to 22 mm thick. It is made from a coarse fabric containing angular grits. It has a reddened exterior and a dark grey-black inner fabric indicating an uneven firing process where it has been fired in an open bonfire. There are traces of fingernail impression decoration on the exterior surface and a crack along the line of a join indicating it was from a coil-made pot. This body sherd is from an area near the base of a vessel as it curves towards a base.
8. A large body sherd from thick-walled vessel, almost certainly from the same one as [7], measuring up to 11 mm thick. It is also made from a coarse fabric containing angular grits. It has a reddened exterior and a dark grey-black inner fabric. There are a series of fingernail impression decorations on the outer surface

similar to those on [7]. This body sherd is from an area near the base of a vessel as it curves towards a base.

9. A base sherd from a pot with a projected base diameter of *c.* 100 mm although this is clearly a narrow base for what was a much larger vessel. It is thick-walled measuring up to 24 mm thick. It has a reddened exterior and a dark grey-black inner fabric and is likely to be from the same vessel as sherds [7] and [8].
10. A small body sherd from a fairly thick-walled vessel measuring up to 9 mm thick. It is made from a coarse buff-coloured fabric that has been evenly fired throughout. The fabric contains very coarse angular grits made from crushed rock and this gives the pot surface a rough texture, particularly on the inside of the vessel. The exterior surface has been smoothed and parallel rows of cord impressions applied horizontally around the pot. Three rows of cord impressions are visible on this sherd.
11. A small body sherd from the same vessel as [10] measuring up to 10.5 mm thick. In this case as it includes a slight carination. It is made from the same coarse buff-coloured fabric that has

been evenly fired. Two parallel rows of horizontal cord impressions can be seen on the surface of this pot.

12. A small body sherd from the same vessel as [10] and [11] measuring up to 10.5 mm thick. In this case as it includes a slight carination. It is made from the same coarse buff-coloured fabric that has been evenly fired. A single row of horizontal cord impressions can be seen on the surface of this pot.
13. A small body sherd from the same thick-walled vessel as [7], [8] and [9] measuring up to 14 mm thick. It is made from a coarse fabric containing angular grits. It has a reddened exterior and a dark grey-black inner fabric. There is a single fingernail impression, or possibly a short length of twisted cord, decoration on the exterior surface.
14. A small body sherd from the same vessel as [10], [11] and [12] measuring up to 10 mm thick. It is made from the same coarse buff-coloured fabric that has been evenly fired. A single row of horizontal cord impressions can be seen on the surface of this pot.
15. A rim sherd from the same vessel as [10], [11], [12] and [14] measuring up to 9 mm thick through the body of the vessel and 12.5 mm thick through the internally bevelled rim. It is made from the same coarse buff-coloured fabric as the other sherds and has been evenly fired. Two rows of horizontal cord impressions can be seen on the outer surface of this pot together with a single row along the inside bevel of the rim. This is a characteristic typical on the Meldon-Bridge Impressed Ware sub-style (Gibson and Woods 1997).

#### Pit Fill (21)

16. A good-sized body sherd from the same vessel as [10], [11], [12], [14] and [15] measuring up to 12 mm thick. It is made from the same coarse buff-coloured fabric that has been evenly fired. The sherd has broken along a fracture line along one of its sides indicating it was made using the coil method. Three rows of horizontal cord impressions can be seen on the surface of this pot. As this sherd is almost certainly from the same vessel as the cord-impressed pot in pit fill 27 it links the construction of the two post-pits and surrounding structure. This is significant as it means that the dating of pit fill 27 is not an isolated anomaly within the group of pit features evident on the site.

## BOTANICAL MACROFOSSILS AND CHARCOAL

*Jacqui Cotton*

### Introduction and Methods

Flots from two contexts, both posthole fills, have been assessed to determine the presence of archaeobotanical remains and evaluate the potential of the remains to produce socio-economic or palaeoenvironmental data. Charcoal samples from four contexts, three post hole fills and one pit/post hole fill, have been identified to evaluate if the remains are suitable for radiometric dating.

The flots were scanned at x40 magnification for waterlogged and charred botanical remains. Plant macrofossils were identified by comparison with published and modern reference material. Total counts of the waterlogged and charred species preserved were recorded.

The charcoal was broken along the radial, tangential and transverse axes to analyse microscopic features. Each axes was analysed at high magnification and diagnostic anatomical features were compared with published (e.g. Brazier & Franklin 1961, Schweingruber 1978, Hather 2000) reference material.

### Results: Plant macrofossil remains

The results of the assessment of plant macrofossil remains from Contexts 21 and 27 are detailed in Table 2. Both flots were dominated by charcoal with a small presence of clinker and modern root material. The charcoal was generally well preserved suggesting *in-situ* deposition.

The flot from Context 21 contained a single charred wheat grain, while four charred wheat grains and seven degraded cereal grains were preserved in the flot from Context 27. The wheat grains were not well preserved therefore identification to species level was not possible. Moreover, the identification of wheat grains, especially those common to prehistoric contexts such as emmer and spelt, is problematic without the preservation of chaff that has clear

**Table 2** *Plant macrofossil results.*  
*(c) = cereal, (r) = ruderal, (x) = wide niche.*  
*Relative abundance is based on a scale from 1 (lowest) to 5 (highest).*

	Context 21	Context 27
<i>Volume of sample processed (l)</i>	40	40
<i>Volume of flot (ml)</i>	65	400
<i>Volume of flot assessed (ml)</i>	65	400
<i>Residue contents</i>		
<i>Flot matrix (relative abundance)</i>		
Charcoal	5	5
Clinker	1	1
Coarse sand	1	1
Modern roots	1	1
<i>Charred remains (total counts)</i>		
(c) <i>Cerealia</i> indeterminate		7
(c) <i>Triticum</i> spp. grain (wheat undiff.)	1	4
(r) <i>Galium</i> spp. (goosegrass)	1	
(r) <i>Polygonum</i> spp. (knotgrass)		1
<i>Waterlogged remains (total counts)</i>		
(r) <i>Chenopodium/Atriplex</i> spp. (orache)	5	9
(r) <i>Galeopsis tetrahit</i> (common hemp nettle)		1
(r) <i>Persicaria hydropiper</i> (waterpepper)		1
(r) <i>Stellaria media</i> (chickweed)		1
(x) <i>Trifolium</i> spp. (clover)		2

diagnostic features (Huntley and Stallibrass 1995).

The preservation of cereal grain suggests that the features were in the proximity to areas of domestic activity. However, as only small quantities of grain were present the features may not have been close to the location of cereal processing.

The small number of waterlogged seeds in the flots will not be contemporary to the contexts but will have been transported from higher in the soil profile by biological activity (e.g. worms, burrowing mammals).

### Results: Charcoal identification

Results of charcoal identification are detailed in Table 3. In Context 9, all four charcoal fragments were identified as oak. Oak has a high longevity therefore is not suitable for radiometric dating. Contexts 13, 29 and 33 contained alder and hazel, both of which have a short longevity and are therefore suitable for radiometric dating. One fragment in Context 33 could only be identified to family level as the wood was twisted and only a small number of diagnostic features could be noted. As this

Table 3 Charcoal identification results

Context	Species	Common name	Number of fragments	Suitable for radiometric dating?
Context 9	<i>Quercus</i> spp.	Oak	4	No
Context 13	<i>Alnus glutinosa</i>	Alder	2	Yes
Context 21	<i>Corylus avellana</i>	Hazel	2	Yes
Context 27	<i>Corylus avellana</i>	Hazel	4	Yes
ditto	<i>Fagus sylvatica</i>	Beech	1	Yes
ditto	<i>Alnus glutinosa</i>	Alder	1	Yes
Context 29	<i>Corylus avellana</i>	Hazel	1	Yes
ditto	Degraded	—	1	No
Context 33	<i>Corylus avellana</i>	Hazel	5	Yes
ditto	Betulaceae	Birch/Alder family	1	Yes
ditto	Degraded/clinker	—	2	No

fragment would, however, have been derived from a short lived species (birch or alder), it was suitable for radiometric dating. All of the charred plant macrofossils preserved in Contexts 21 and 27 were suitable for radiometric dating.

### Conclusions

The presence of charred cereal grain in Contexts 21 and 27 suggests that both were in proximity to domestic activity. The small number of grains and the absence of chaff limit the potential of the flots to produce socio-economic data and therefore further work on the material is not recommended.

The identification of charcoal determined the suitability of remains in Contexts 13, 29 and 33 for radiometric dating. Remains in Context 9 were not suitable for radiometric dating. The varied types of tree species identified by the charcoal fragments includes oak, hazel, alder and probably birch as well as, surprisingly for this far north, beech. This suggests that broad leaf deciduous woodland (oak and beech) existed in the area together with an understorey of smaller trees (hazel and birch), and in damper areas alder was present.

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