

**FIELDWALKING AT THE THORNBOROUGH
MONUMENT COMPLEX, NORTH
YORKSHIRE**

**DR JAN HARDING & MR BEN JOHNSON
SCHOOL OF HISTORICAL STUDIES
UNIVERSITY OF NEWCASTLE**

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ABSTRACT

The report describes a programme of fieldwalking at the Thornborough monument complex, North Yorkshire, in August and September 2003. Work was undertaken to provide further evidence of prehistoric activity in previously unexplored parts of the landscape, to further develop the understanding of the relationship between the 'sacred' monument complex and its surrounding 'profane' landscape. Major themes are the chronological development of occupation patterns, the use of different environmental zones, and the long-term relationship between the monuments and settlement sites. The model derived can be developed to assist in the study of other Neolithic and Bronze Age 'sacred landscapes'.

1. INTRODUCTION

1.1 Location, topography and geology

The area discussed is based between SE2677-3282 and focused around the Neolithic-early Bronze Age monument complex at SE285795 (centred), which comprises three large henges, a definite cursus and a possible cursus, a 'long mortuary enclosure', at least fourteen round barrows, two double pit alignments, contemporary settlement and other features or finds of archaeological significance (Fig. 1). These sites are described in Harding & Johnson (2003).

The topography of the landscape is largely flat or gently undulates between 35 and 45 metres OD (Fig. 2). However, it does rise steeply to the west, between the villages of West Tanfield and Well, to a height of over 135 metres. The River Ure lies to the south-west. The soils are typical brown earths, with calcareous brown earths to the west, and alluvial gley soils to the north. The drift geology is predominantly undifferentiated fluvio-glacial terrace deposits, with undifferentiated river terrace deposits around the River Ure and isolated pockets of till and peat to the west and north respectively. The solid geology comprises Lower Magnesian Limestone to the west, Middle Marl through the central areas, and Upper Magnesian Limestone to the east.

All the monuments lie on the fluvio-glacial terrace deposits along a slight north-south decline towards the River Ure. The primary foci of the monument complex are the three massive henges built 0.75 kilometres apart, along a north-west to south-east axis. There would also appear to be contemporary settlement areas, significantly separated from the complex, either by distance or by variations in the local topography.

2. BACKGROUND

2.1 Archaeological history

The Vale of Mowbray Neolithic Landscape Project (VMNLP) completed a programme of widespaced surface collection across a total of thirty-six fields and identified a complex and changing pattern of settlement during the Mesolithic, Neolithic and Bronze Age. The overall lithic distribution enables the division of the landscape into areas with 'low', 'medium' and 'high' density flint scatters, with four locations — Chapel Hill, Nosterfield quarry, Mire Barf Farm and an area adjacent to the River Ure, to the east of West Tanfield — revealing significant evidence for contemporary activity (fig. 3). As part of the ALSF Project the area around Chapel Hill, as well as a 'low' density scatter near the Central Henge, was further investigated by a programme of geophysical survey, total collection and test-pitting evaluation in August 2003 to assess the relationship between the surface lithic data, the plough horizon and any buried archaeological features (Harding and Johnson 2004d). Nosterfield quarry was the focus of archaeological evaluation, by Mike Griffiths and Associates, prior to gravel extraction. This work uncovered evidence for substantial and extensive Neolithic and Bronze Age domestic activity, characterised by scattered pit groups and hearths, and a grid of field boundaries, associated pit alignments, ring ditches, inhumation burials and cremations, all probably dating from the middle Bronze Age (Roe 2002).

2.2 Aims and objectives

This report focuses on a programme of widespaced fieldwalking undertaken as part of the ALSF Project. Its aim was to investigate previously unexplored parts of the monument complex's surrounding landscape to more fully characterize patterns of settlement and activity. Past surface collection has identified how the monuments were part of a more complex pattern of landuse. Prior to the construction of the later Neolithic henges the existence of discrete low density scatters indicate small short-term settlement across the landscape. During the later Neolithic and early Bronze Age, by contrast, scatters became larger and denser. It also appears that some areas were favoured above others. Most are located off the gravel plateau or at least 600 m from the nearest henge. This has led to the suggestion that a distinction was being made between the 'sacred' and the 'profane' (Harding 2000). Areas that have not previously been fieldwalked include: the limestone ridge immediately to the west of the complex; the flat expanse of upper fluvio-glacial terrace to the north-east and a flanking hillock of till; the gently sloping landscape immediately to the north of the terrace and the current Nosterfield Quarry; and much of the lower fluvio-glacial terrace to the south-east (fig. 4).

The fieldwalking reported upon here was undertaken across some of these blank areas, making it possible to create a more detailed model of settlement and activity for the entire study area. Key themes include the chronological development of occupation patterns, the use of different environmental zones, and the long-term relationship between the monuments and settlement sites. The model can also be developed to assist in the study of other Neolithic and Bronze Age ‘sacred landscapes’.

2.3 Methodology

Fields were walked in 15 metre wide transects, as with all previous surface collection, providing a 13.3% coverage of the area walked as each walker was asked to inspect the ground a metre either side of them (Tolan-Smith 1997, 80). The number of lithics recovered can be transformed to a notional 100% by multiplying the collected figure per hectare by 7.5. To attempt to eliminate any bias caused by different individual recovery rates one in four of the transects were rewalked. The transects were laid out using tape measure, ranging rods and an optical square. All finds were marked and individually labelled, making the artefact the unit of analysis, rather than a grid square. Location data was taken using a Geotronics Geodimeter Total Station and data processed using Landscape Survey Systems v.8.2 and Autodesk Land Development Desktop. All data was referenced using a common survey network to the OS National Grid.

3. RESULTS

A total of 13 fields were walked, covering an area of 129.3 hectares (fig. 5). 165 lithics were recovered. The composition of the collection from each field is outlined in Table 1.

Field	Irregular waste		Cores		Core rejuvenation flakes		Flakes		Blades	Chips		Retouched		Totals
	Fl	Ch	Fl	Ch	Fl	Ch	Fl	Ch	Fl	Fl	Qu	Fl	Ch	
37			1	1			1	1						4
38			2		1		27	2	11	1	1	6		51
40			1				13	1	2			1		18
41			1				4		4			3		12
44							7		5			4		16
45	1		1				3	4	3	1		3		16
46	1	1			1	1	6	3				2		15
50	1		2				8		1			2	1	15
51	1					1	1					1		4
52			1		1		2	1	2	2		2		11
53							1					1	1	3
Totals	4	1	9	1	3	2	73	12	28	4	1	25	2	165

Table 1: Overall composition of lithic material (Key: Fl=flint; Ch=chert; Qu=Quartz)

The overall condition of the assemblage is poor, with almost ubiquitous plough damage and a high incidence of breakage. None of the material is from freshly disturbed contexts. The overall size of these artefacts is small, reflecting an almost exclusive use of raw material from gravels and till, but despite this, the high frequency of non-cortical flakes indicates little primary knapping took place in the areas discussed below, a conclusion in keeping with the analysis of previous fieldwalking material from the study area.

3.1 Field 37 (fig. 6a)

This field, 13.8 hectares in size, lies on the gravel terrace to the north of Thornborough village and immediately east of the monument complex. It is predominantly flat, although there is a very slight downward slope from north to south. No known significant archaeological features exist in this field. Four lithics were recovered including two flake cores (fig. 6a, 1;5) of Bronze Age date.

3.2 Field 38 (fig. 6b)

This field, 27.5 hectares in size, lies on the gravel terrace immediately north-east of the Central Henge. It is predominantly flat, with the slight ridge of the Three Hills Barrow Group (Harding and Johnson 2004b; 2004e) being the most prominent feature in the north-east corner of the field. The Central Henge lies to the south-west of this field. Fifty one lithics were recovered from this area including: an opposed platform blade core (fig. 6b, 45) of late Mesolithic date; a truncated retouched blade (fig. 6b, 12) of late Mesolithic date; a serrated blade (fig. 6b, 1) of Mesolithic or Neolithic date; a leaf shaped arrowhead (fig. 6b, 38) of early or middle Neolithic date; and a fragment from a possible flint 'chisel' (fig. 6b, 13) of late Neolithic date. The latter is a parallel-sided, plano-convex sectioned, bifacially-flaked piece similar to those found associated with Grooved Ware on the Yorkshire Wolds (Manby 1974).

3.3 Field 39 (fig. 7a)

This field, 8.7 hectares in size, lies on the interface between the till and alluvium to the north-east of the monument complex. It slopes steeply down from north to south (till), before flattening out at its southern end (alluvium). No known significant archaeological features exist in this field. No lithics were recovered.

3.4 Field 40 (fig. 8a)

This field, of which 9 hectares was walked (the southern and eastern parts already walked in a previous year as fields 25 and 22 respectively), lies on a ridge of till to the east of the monument complex. It slopes away from a central ridge to the north, west and most steeply to the east. No known significant archaeological features exist in this field. Eighteen lithics were recovered from this area, including a Bronze Age scraper formed on a thick flake by the steep removal of relatively few, large flakes (fig. 8a, 7).

Previous fieldwalking in 1996 produced a fine example of a middle Neolithic chisel arrowhead and most significantly a distal fragment of a single edged sickle. The implement is manufactured on very high grade till flint, possesses a smooth orangey buff coloured cortex, is very slightly crescentic in plan and of convex section. It is probably of early to middle Neolithic date. The presence of such a piece is obviously indicative of agriculture. Heavy use wear is evident on the left edge but no characteristic sickle gloss is present. It is also apparent that over 70% of the (unbroken) material recovered from this field is tertiary.

3.5 Field 41 (fig. 7b)

This field, of which 5.1 hectares was walked (the western side having been walked in a previous year as Field 29), lies on the gravel terrace, with a small ridge of till intruding at its western edge. It slopes gently down from north to south. A triple-ditched round barrow of possible early Neolithic date is sited at its southern end. Twelve lithics were recovered from this area, including: a late Mesolithic microlith (fig. 7b, 4); a probable late Mesolithic opposed platform blade core (fig. 7b, 2); an early or middle Neolithic elongated scraper (fig. 7b, 6); and an oblique arrowhead of late Neolithic date (fig. 7b, 8). Previous fieldwalking recovered a number of sherds of Grimston Ware in the vicinity of the ploughed barrow ditches.

3.6 Field 43 (fig. 7c)

This field, 3.8 hectares in area, lies on the till ridge to the north-east of the monument complex. It is predominantly flat. No known significant archaeological features exist in this field. No lithics were recovered from this area.

3.7 Field 44 (fig. 9a)

This field, 4.5 hectares in area, lies on the lower Magnesium Limestone ridge to the west of the monument complex. It undulates gently in ridges running west to east, with a slight downward slope in the same direction. No known significant archaeological features exist in this field. Sixteen lithics were recovered from this area including: a serrated blade (fig. 9a, 16) of Mesolithic or Neolithic date; a possible awl (fig. 9a, 10); and a 'thumbnail' scraper of Beaker affinity (fig. 9a, 9).

3.8 Field 45 (fig. 9b)

This field, 6 hectares in area, lies on the lower Magnesium Limestone ridge to the west of the monument complex. It slopes moderately steeply downwards from west to east. No known significant archaeological features exist in this field. Sixteen lithics were recovered from this area including: a serrated blade (fig. 9b, 14) of Mesolithic or Neolithic date; a chisel arrowhead of early or middle Neolithic date (fig. 9b, 8); and an elongated scraper (fig. 9b, 6), also of early or middle Neolithic date.

3.9 Field 46 (fig. 9c)

This field, 4.5 hectares in area, lies on the lower Magnesium Limestone ridge to the west of the monument complex. It slopes moderately steeply downwards from west to east. No known significant archaeological features exist in this field. Fifteen lithics were recovered from this area including a probable fragment of coarse denticulate of Bronze Age date (fig. 9c, 10).

3.10 Field 50 (fig. 10)

This field, of which 24.2 hectares were walked (the south-western area having been walked in a previous year as Field 24), lies on the gravel terrace to the east-north-east of the monument complex. It is predominantly flat and is an area marked for future gravel extraction. No known significant archaeological features exist in this field. Fifteen lithics were recovered from this area including: a single platform blade core (fig. 10, 15) of Mesolithic or early Neolithic date; a microlith (fig. 10, 5) of late Mesolithic date; two elongated scrapers (fig. 10, 7; 13) of early or middle Neolithic date; and a Levallois-like core (fig. 10, 21) possibly intended to provide the blank for a chisel arrowhead, also of early or middle Neolithic date.

Previous fieldwalking in 1996 produced a serrated blade of late Neolithic or early Bronze Age date; and an end scraper of possible late Neolithic date. A small corner of this field, enclosed by a boundary, was also walked in 1996 as field 21. This produced three possible fragments of leaf shaped arrowheads of early Neolithic date; two end scrapers of possible late Neolithic date; and a fragment of a double edged flake knife of early Bronze Age date.

3.11 Field 51 (fig. 7d)

This field, 5 hectares in area, lies on the till ridge to the north of the monument complex. It is predominantly flat. No known significant archaeological features exist in this field. Four lithics were recovered from this area including a Neolithic end scraper (fig. 7d, 4).

3.12 Field 52 (fig. 8b)

This field, 4.6 hectares in area, lies on a till ridge east of the monument complex. It slopes from a central ridge to the west and more steeply to the east. No known significant archaeological features exist in this field. Eleven lithics were recovered from this area including a non-discoidal flake core (fig. 8b, 7) of Bronze Age date.

3.13 Field 53 (fig. 7e)

This field, 4.4 hectares in area, lies on a ridge of till to the east of the monument complex. It slopes gently down from east to west. No known significant archaeological features exist in this field. Three lithics were recovered from this area including a Bronze Age scraper formed on a thick flake by the steep removal of relatively few, large flakes (fig. 7e, 4).

4. CONCLUSIONS

4.1 Assemblage chronology

Many of the diagnostic pieces, some 20% of the total assemblage, are of Mesolithic or early Neolithic date, and are predominantly from field 38, where comprise 29% of the assemblage. Production technology involved core preparation and controlled, sometimes soft hammer, flaking, giving high proportions of linear and punctiform butts, diffuse bulbs of percussion and feather terminations. These are all characteristic of Mesolithic and early Neolithic technologies and are rare in later periods. Late Neolithic and Bronze Age pieces comprise around 15% of the total assemblage, and are rare in the fields adjacent to the monument complex (fields 37, 38 and 41). Diagnostic tools comprise 16% of the total assemblage and of these 30% are Mesolithic, 33% early or Middle Neolithic and 37% later

Neolithic and early Bronze Age. The distribution is similar to that for other diagnostic pieces with Mesolithic and early Neolithic activity widespread across the landscape, but later Neolithic and early Bronze Age activity confined to distinct zones away from the monument complex.

The blade cores, serrated blade and leaf shaped arrowhead from the area adjacent to the Central Henge (Field 38) suggests that 'domestic activities were undertaken within this area prior to the construction of the complex, as well as along the Limestone ridge to the west (Fields 44 and 45) and areas of gravel and till to the south and east (Fields 41 and 50 respectively).

Material contemporary with the construction and use of the cursus monuments is limited and consists of a leaf shaped arrowhead, a chisel arrowhead and four elongated scrapers. The location of these finds is dispersed across the landscape, with the leaf shaped arrowhead being found close to the Cursus (Field 38) and the chisel arrowhead on the Limestone ridge to the west (Field 45). The scrapers are from the Limestone ridge (Field 45), and the gravel terrace to the south (Field 41) and north-east (Field 50) of the centre of what would become the complex.

Material contemporary with the henge monuments is scarce and, consistently with previous fieldwalking results, almost non-existent from the immediate vicinity of the monument complex. The only exceptions being the possible 'chisel' (Field 38), and an oblique arrowhead (Field 41), both very fine bifacially worked and presumably 'high class' artefacts. The only other fragments of later Neolithic or early Bronze Age material are a thumbnail scraper and possible fragment of denticulate from the Limestone ridge to the west (Fields 44 and 46 respectively), and two coarse scrapers from the till ridges to the east (Field 53).

4.2 Implications

These results, when combined with those from previous years, have provided a greater understanding of the use of the landscape around the monument complex, from the Mesolithic, prior to its construction, through to the early Bronze Age. Comparisons to other landscapes is problematic, as there are few examples of extensive fieldwalking projects in the proximity of monument complexes, particularly in northern England. Perhaps the closest correlation is with the Milfield Basin Archaeological Project (Waddington 1999) where 600 hectares were walked across a landscape which includes henge monuments, linear enclosures, pit alignments and barrow cemeteries. However, it is difficult to compare the variations in landscape use through time as the focus of analysis in the Milfield Basin was not the area in and around the monuments, as at Thornborough, but the different geomorphological zones.

The nature of the evidence at Thornborough is interesting as it appears that there is a widespread, but not intensive, use of much of the landscape throughout the Mesolithic and early Neolithic. With the construction of the first monuments, and the complex's subsequent development, this pattern changes to one of intensive use of specific locations, separated from the monuments either through distance or by varying topographic features. The area of activity at Chapel Hill can be seen to continue eastwards onto a further ridge of till, and possibly onto the east-facing slopes beyond. The limestone ridge to the west of the study area sees activity during the Mesolithic, Neolithic and early Bronze Age, where extensive views over the complex can be had, but at a significant distance. The gravel terrace to the north-east of the complex is curious. Whilst activity further west has been shown to be predominantly later Neolithic and Bronze Age, the material from this area, whilst apparently low in density, is almost exclusively earlier in date, presenting a problem for further investigation. The high percentage of tools makes this area even more intriguing. The recovery of material from the south-west corner of this field may well indicate the presence of buried Neolithic and Bronze Age features, as discovered during excavations in the Nosterfield Quarry.

4.5 Recommendations

The further investigation of the Limestone ridge and more undulating landscape to the east of Chapel Hill, as well as the low ridge at Upsland above Ladybridge, would effectively conclude the fieldwalking at Thornborough with one obvious exception. This is the extensive area of lower gravel terrace to the south of the Southern Henge. Previous, limited work has shown a low density of lithic material apart from a marked concentration near the River Ure, immediately to the east of West Tanfield. Additional fieldwalking, and potentially trial excavation, should be undertaken across this area to ascertain whether the absence of material is a true reflection of the surviving archaeology, or a

product of its masking by the deposition of alluvium from the varying courses of the River Ure. As mentioned above, the gravel terrace around Ladybridge is also worthy of further examination.

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