

A MESOLITHIC SURFACE COLLECTION FROM HARRY HUT, CHUNAL MOOR, CHARLESWORTH, DERBYSHIRE

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In the course of the North Derbyshire Archaeological Survey compiled for the North Derbyshire Archaeological Trust, many previously unrecorded archaeological collections were recognised and recorded (Hart, 1981). One such collection was amassed over the last five years from an erosion patch on Chunal Moor, Charlesworth. It consists entirely of lithic material and is of considerable importance for the Mesolithic of northwest Derbyshire. The site was first recognised in 1974 by G. Taylor, J. Smith, D. Winterbottom and C. Wright whilst conducting a field survey of the boundaries and land of Basingwerk Abbey, and they collected the flint and chert material.

SITE LOCATION (CRH)

The site is located at c. 1425 feet O.D. on a false crest on the eastern flank of Harry Hut (Fig. 1), which overlooks a large saucer-shaped basin that is surrounded to the south by hillslopes (SK 04629078). To the north the steep dissected escarpment of Shaw Moor plunges down into the Glossop basin.

The high moorland has extensive sphagnum mosses, heather and cotton-grass hollows and is composed of shale grit rocks. The peat blanket averages a thickness of three feet, but is being rapidly eroded on the summits. Peat is currently being washed down covering the site, and in turn is being recolonised by heather and moorland bog plants.

The flint artefacts found on the surface in the erosion patch were recovered from an exposed area of 50 metres east/west by 25 metres north/south; only occasionally were flints found south of this area. The size and apparent homogeneity of this artefactual assemblage make it a very useful one for the purposes of typological comparisons with others from the South Pennines.

THE FLINT INDUSTRY (SJP)

The lithic assemblage consists of 1,083 pieces which can be divided into a number of groups as follows:

Black chert (68). This is the local fine quality chert of the limestone.

Miscellaneous 'opaque' cherts (111). This group includes a range of Pennine cherts probably from a variety of sources.

Foreign flint (118). This group includes material from various 'foreign' sources. Some of the material appears to be the brown erratic flint of the east coast, but I have also included Yorkshire/Lincolnshire wolds flint within this group.

Local 'flinty' chert (785: patinated—413; unpatinated—372). This material is the local limestone chert and is of very poor quality. It is patinated with a heavy rough surface.

The material is a surface collection, but even the smaller pieces have been retained (down to 0.5 cms) and the assemblage therefore warrants full analysis, although there is still likely to have been a certain degree of bias in selection towards the larger and more visible pieces.

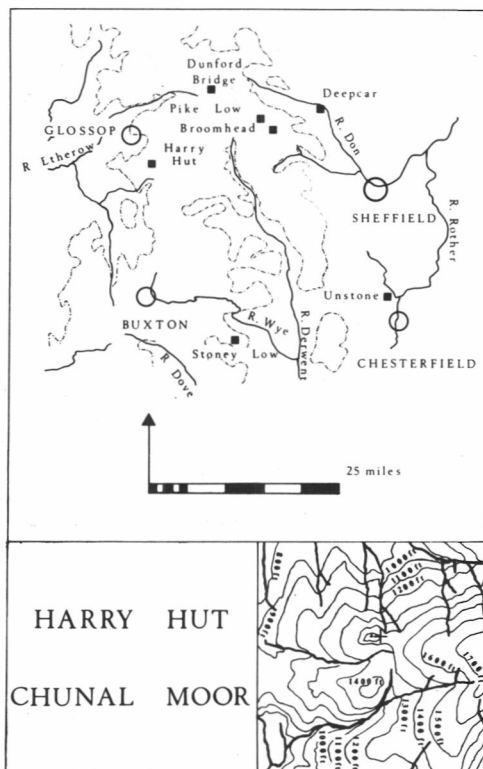


Fig. 1 The location of Harry Hut, Chunal Moor, Derbyshire, showing modern towns (open circles) and important mesolithic sites (filled squares). Inset map is two miles square.

The lithic report is divided into three sections. In the first I discuss the differential use of various lithic materials; in the second I analyse the industrial content of the assemblage; and in the third I suggest the affinities and chronology of the industry.

Differential use of resources

With this as with many other assemblages two considerations are likely to have been crucial determinants of the nature and composition of the industry: the distance of the site from the lithic resource and the flaking properties of the lithic resource. These two factors were clearly of significance at Harry Hut, Chunal Moor. Foreign flint is only likely to be moved long distances if it is of high quality. In the case of Chunal Moor, the best quality material had travelled the furthest and was the most heavily processed. The groups are characterised as follows:

Black chert (6% of total industry) There are no cores or trimmers on the site of this material and it is probably not worked locally. There is a single microburin, however (Fig. 3:24). The category has a high percentage of flakes and blades to débitage and a good representation in the implements, but there are no microliths.

Miscellaneous opaque cherts (10% of total industry) This group is very similar to the last and again there are no cores or trimmers. There is one microburin and a single microlith made from the material in this group.

Foreign flint (11% of total industry) Apart from one notched and possibly utilised trimmer there is no knapping debris in these materials on the site. There is a very high

proportion of flakes and blades to waste (72%) and almost a third of the material is in the form of blades; blade production indicates greater care in production than flakes. It has by far the largest proportion of implements (16%) and most of the site's microliths (76%). Clearly this flint was the most valuable material at the site (of the best quality, and brought the greatest distance), and therefore was used for the better tools and treated with the greatest care.

Local cherts (73% of total industry) The material is being worked on the site. There are 12 cores and 8 trimmers in this material; there are also large amounts of general débitage. The flake/blade:waste ratio is low and only one microlith was made from this chert, which forms the bulk of the lithic material at the site.

Others. There is a single quartzite implement (a microlith, Fig. 4:45).

The histograms (Fig. 2) summarise the differences in resource use between the different cherts and flints. In each case the foreign flint is differentiated from the local chert, with the black and opaque chert falling between the two extremes. This matches well with the biasing factors of distance travelled and flaking quality suggested at the beginning of this section.

Most of the flakes and blades fall between 1.1 and 1.3 cms long, but the local chert blades are rather larger than the rest. There are also some larger flakes/blades in foreign flint, but not in either of the other chert materials. The other histograms indicate that the foreign flints have the highest blade:flake ratio (on weight and number counts), blade and flake:waste ratios, and implement:non-implement ratios, and that the local cherts are the lowest. This means that either more care was taken in the production of foreign flint types or only fine/finished forms were taken to this site.

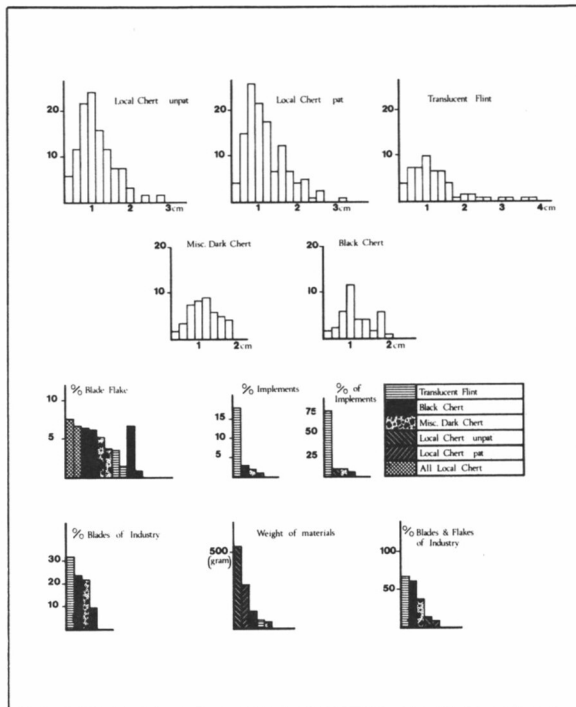


Fig. 2 The lithic resources at Harry Hut, Chunal Moor. The upper two rows show histograms of flake and blade sizes; the lower two rows show various categories of resource use. The local chert has been divided into unpatinated (unpat) and patinated (pat).

<i>Blades</i>	<i>Weight/gm</i>	<i>Broken/ snapped</i>	<i>With cortex</i>	<i>Total</i>		
Black chert	2.9	8	—	16		
Foreign Flint	8.1	18	—	23		
Opaque cherts	6.0	20	—	23		
Local cherts	27.0	51	—	73		
				135		
<i>Flakes</i>						
Black chert	7.1	16	1	29		
Foreign Flint	30.1	21	6	43		
Opaque cherts	11.2	15	—	34		
Local cherts	65.5	89	4	226		
				332		
<i>Chippings</i>						
Black chert	112.6			20		
Foreign Flint	17.2			33		
Opaque cherts	28.2			51		
Local cherts	749.3			458		
				562		
<i>Tools, cores, etc.</i>						
	<i>Black chert</i>	<i>Foreign flint</i>	<i>Opaque cherts</i>	<i>Local cherts</i>	<i>Quartz</i>	<i>Total</i>
Cores	—	—	—	12	—	12
Trimmers	—	1	—	8	—	9
Retouched	2	2	1	3	—	8
Microburins	1	—	1	—	—	2
Scrapers	—	—	—	2	—	2
Microliths	—	16	1	3	1	21
						54

Table 1 Comparison of lithic resources used for blades, flakes and waste chippings

Table 1 gives full details of these patterns. I would suggest that the large amount of local chert waste would indicate that most stages of production were carried out at this site. The local cherts were of such poor quality that they were brought to the site in large quantities for working. Very little waste of imported material occurs on the site and it seems likely that more care was taken in production, but more certainly that some early stages of production took place elsewhere, perhaps nearer the sources. Sixteen out of 118 foreign flint items are microliths and a large quantity of waste would be produced in the manufacture of such items. This waste material is absent from the site. Thus there is a basic dichotomy between locally available material and imported resources and it dominates the whole character of the industry described here.

The industry

The site has an industry typical of the later Pennine Mesolithic (see below), with few characteristic implements except microliths (Fig. 4). There are few microburins, which probably means that microliths were not normally manufactured here. The ratio of 21:2 microliths to microburins is lower than at almost any other Pennine mesolithic site (cf. Dunford Bridge: Radley *et al.*, 1974). Both microburins have a right hand notch (Fig. 3:23-4). There are also a few retouched flakes and blades and two poorly worked scrapers. There are twelve cores (Fig. 3:1-12) from the site, mostly of simple form (all

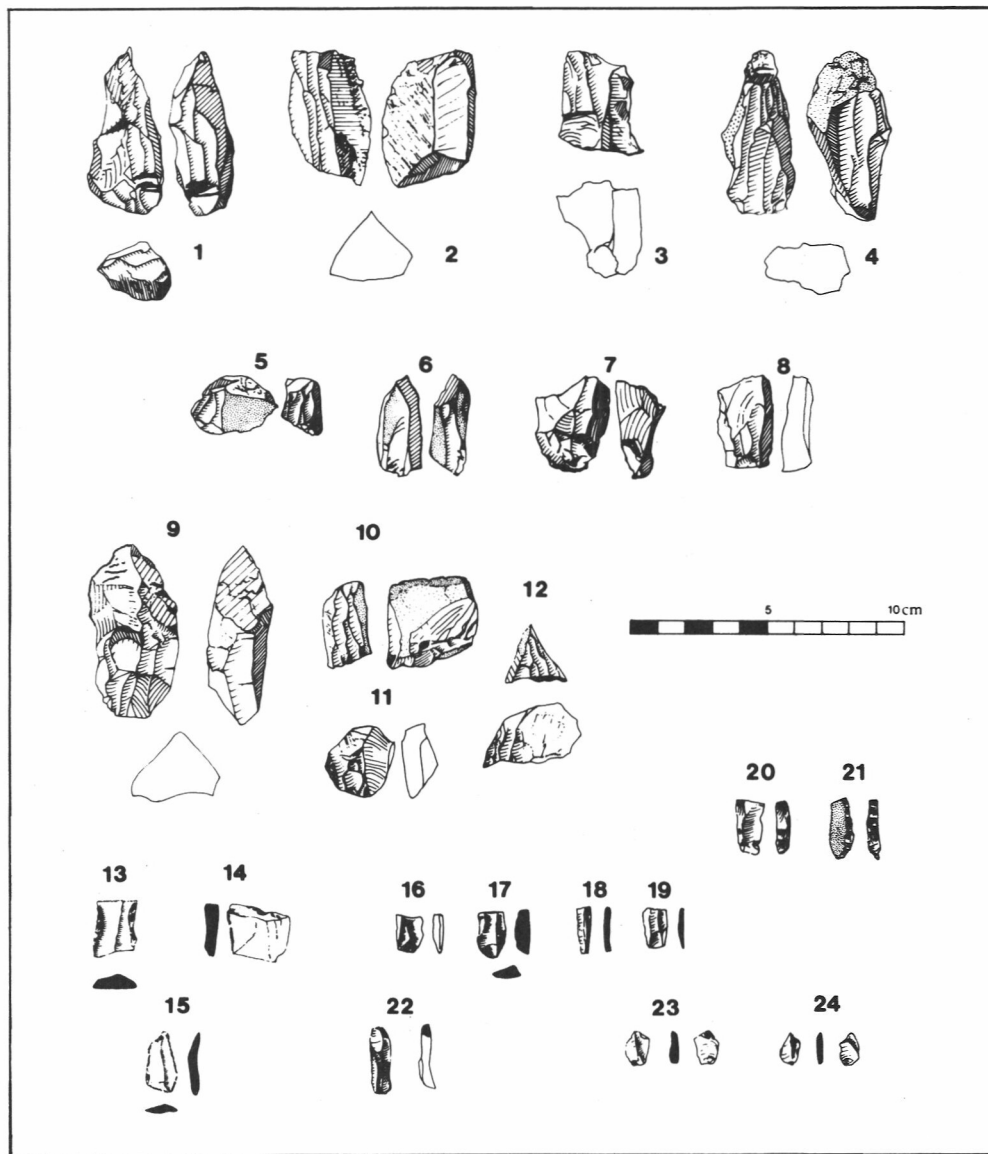


Fig. 3 The lithic industry at Harry Hut: 1-12, cores; 13-15, retouched blades; 16-19, snapped blades; 20-21, trimmers; 22, blade; 23, 24, microburins.

have single platforms with less than 50% circumference use, except in two cases) and nine trimmers (Fig. 3:20-21). The various components of the industry are shown in Table 2.

Dating and relationships of the Clunal Moor site

The industry, being a surface collection, may or may not be a coherent group. However, general indications suggest that the site contains a basically unified assemblage.

The microliths are the main comparative form normally used for dating mesolithic

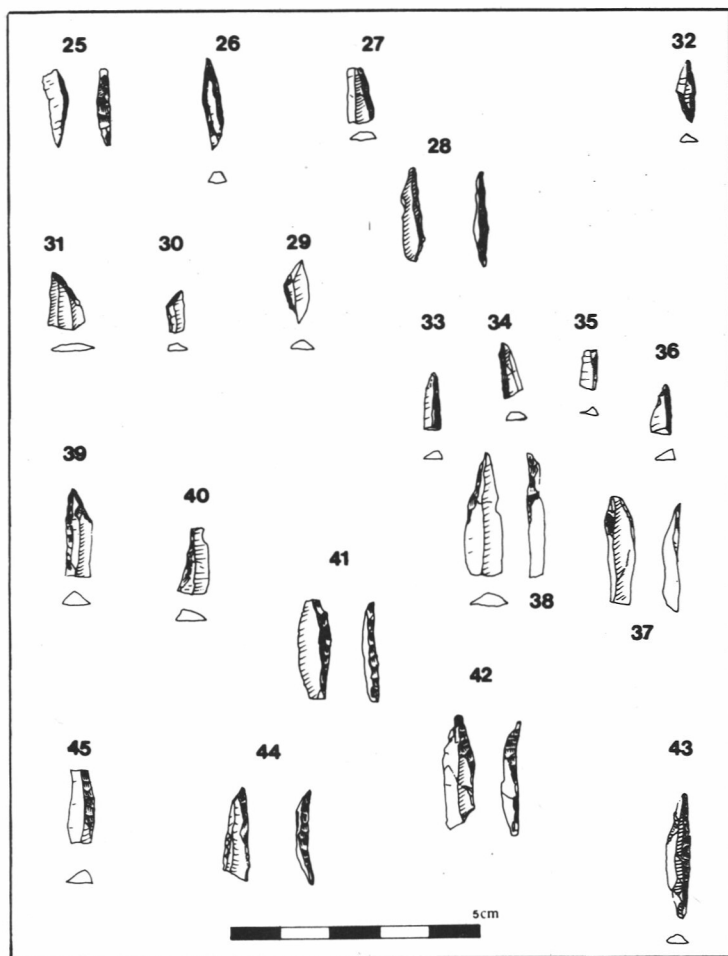


Fig. 4 The lithic industry at Harry Hut, showing microlith types: 25–30, scalene triangles; 31, 33–36, broken rods; 32, ultra-narrow tranchet; 37, 38, obliquely blunted points; 39–45, rods.

	<i>Nos.</i>	<i>%</i>	<i>Weight/gm</i>	<i>%</i>
Blades	135	12.5	44.0	3.2
Flakes	332	30.7	113.9	8.5
Chippings	562	51.9	907.3	67.8
Cores	12	1.1	246.8	18.4
Trimmers	9	0.8	6.7	0.5
Retouched blades	7	0.6	15.0	1.1
Scrapers	2	0.2	—	—
Microburins	2	0.2	0.4	0.03
Microliths (Rods—12; scalene triangles—6; obliquely blunted—2; ultra-narrow tranchet—1)	21	1.9	3.7	0.3

Table 2 Typological summary of the Harry Hut assemblage

industries. Nineteen of these (rods, scalene triangles and the ultra-narrow tranchet) are characteristic narrow blade geometric forms (Clark, 1932, 1933; Radley *et al.*, 1974) typical of the Pennines (cf. Manby, 1963). The low number of scrapers and the low percentage of imported flint (Jacobi, 1978; P. Mellars *pers. comm.*) would also suggest a late narrow blade industry. There are two obliquely blunted points which are normal for the earlier broad blade industries of the region, but both are heavily patinated, contrasting with the rest of the industry and may be from an earlier phase of the site. They are common at sites like Deepcar (Radley and Mellars, 1964). The site can be closely compared with the late mesolithic site at Dunford Bridge (Radley *et al.*, 1974) in terms of tool percentages, waste, etc. The broad clumsy flakes are also typical of late industries (Pitts and Jacobi, 1979).

Mellars (1976) has constructed a simple and attractive model of Pennine site typologies involving seasonal movements and the hunting of red deer. This has a basic division between lowland winter 'home bases' (with large population groups and large site areas) and upland summer sites high in the Pennines (with small populations and small site areas). The Harry Hut site would fit well within the latter group: like most of the Pennine sites of the period it seems to be a small temporary camp with large scale use of local materials, very few implements except microliths, and a very small number of scrapers.

The narrow blade industries are now well dated (Switsur and Jacobi, 1975), placing the Harry Hut site in the 6th millennium B.C. or later.

CONCLUSIONS

The Chunal Moor lithic assemblage appears to represent a coherent group even though it is a surface collection. It is a later mesolithic site of the geometric microlith type. There is a marked differential use of the various lithic resources, probably related to the distance from source and the flaking properties of the different materials. There is a clear dichotomy between, on the one hand, the local resources which are of low quality and are worked on the site, and, on the other, imported high quality lithic material which has been initially prepared elsewhere. The site can be placed within an increasing group of high Pennine sites of the sixth to fourth millennia B.C.

ACKNOWLEDGEMENTS

We would like to thank Dr. P. A. Mellars of Sheffield University for helpful comments in the preparation of this paper, and G. Taylor, J. Smith, D. Winterbottom and C. Wright for their help and co-operation. The illustrations were kindly drawn for us by Ms. L. Murray. This work forms part of the North Derbyshire Archaeological Trust survey.

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