

THE LATE MESOLITHIC AND EARLY NEOLITHIC FLINT ASSEMBLAGES AT SANDWAY ROAD, LENHAM, KENT.

by Phil Harding

Introduction

A total of 11,014 pieces of worked flint were catalogued from the excavation in Area C at Sandway Road (Table 1); material which forms the main component of this specialist report, supplementing the description contained in Trevarthen (2006). An additional 141 pieces of worked flint were recovered from the watching briefs in Areas A and B (Table 2). The totals from Area C included 313 pieces (3%) from the unstratified colluvium, which may be mixed with later material. The stratified flint, of which 41% was chips (pieces less than 10mm), was recovered from all parts of the site, however three large concentrations, referred to as the Central Pit (558), South Spread (569) and North Spread (550), were excavated towards the east end of the site (Fig. 3). These areas, including flint from associated hollows within the South and North Spreads, where the quantities of flint were better preserved, accounted for 48%, 28% and 18% respectively of the total stratified worked flint from the excavation. The remaining stratified material, collected from 29 contexts across the site, was preserved in the weathering cones of hollows, including possible tree throws, pits and ditch sections.

Worked and burnt flint was more frequent in archaeological features and hollows within and around the main spreads at the east end of the excavation. However the density of worked flint, calculated from the excavated volume of spoil, showed virtually no differences from excavated features across the site, except for the Central Pit and hollow 574 in the north east, which were markedly higher.

The heaviest density of worked flint from the excavation lay in the centre of the Central Pit where a maximum 116 pieces of worked flint was recovered from a half metre square. Quantities of worked flint from the upper spit of the South Spread ranged from 52 pieces per 0.5 sq. m to 1 piece (mean 6.5) and in the North Spread from 90 pieces to 1 piece (mean 8.3). The overall density of material in the hollows/tree throws beyond the Central Pit was relatively low.

The stratified material from the three main spreads and their associated hollows was generally in mint condition and was almost entirely unpatinated although a few patinated artefacts were present. There was little technological difference in the assemblage or the retouched tool component, which included microliths, retouched tools and blade/lets indicating that it represented a single Mesolithic industry that was concentrated on the river terrace at the east end of the site. Groups of derived Mesolithic material were also recovered from sections cut through Middle Bronze Age ditches 537 and 555 at this end of the excavation.

It is conceivable that a few intrusive pieces, either material predating the introduction of agriculture or artefacts that have migrated down through the colluvium, are present. Diagnostic Early Neolithic artefacts comprised a flake from a ground flint axe, found in direct association with the Mesolithic flint from the Central Pit, and a leaf arrowhead from the South Spread. Fragments of Early to Late Neolithic pottery were also present in nine features across the site, however virtually all associated diagnostic flint work was of Mesolithic date, including blade/lets and microliths. It is safe to conclude that there appears to be no significant contamination by later flint work and that the pottery may be intrusive.

It is highly probable that the Mesolithic occupation surface, including the main concentrations, has been truncated. This may have resulted initially from ploughing before the deposition of the overlying colluvium or more recently from the removal of the colluvium by the mechanical excavator preceding the archaeological excavation. This would account for the clearly defined edges to some of the flint concentrations (Fig. 6), the enhanced quantities of flint in the hollows and relatively low densities elsewhere. There was also a thin scatter of flint on the lower western slopes, which may have resulted from the movement of plough soil down the shallow 1:60 gradient towards the west.

Vertical distribution

The artefacts from Sandway Road are all likely to have undergone vertical movement by bioturbation through the sand. Colcutt (1992) demonstrated that this material provides the least stable geology for the retention of artefacts *in situ*, particularly if the landscape is free of vegetation. Most of the flint from the South and North Spreads, outside the hollows, was recovered from the upper part of a zone 0.20 m deep, which may represent only the base of the truncated Mesolithic surface. Material from Rock Common, Sussex (Harding 2000), which was also on sand, was distributed vertically through 0.60 m of deposit. Material at Sandway Road underwent greater vertical movement in the Central Pit (Fig. 5) where artefacts were distributed through 0.30 m. Quantities in the upper spit (Table 3) ranged from 94 pieces to 1 piece (mean 29 pieces) per 0.5 sq. m collection unit. The density of flint increased to 116 from a single collection unit in the centre of the feature in the second spit, although the average towards the edges fell to 14 pieces per collection unit. Quantities of material, averages and numbers of collection units fell again at the base of the pit.

	Max	Mean	Collection units
550 North Spread 01	90	8	172
02	75	19	13
569 South Spread 01	52	6.5	327
02	13	3	57
558 Central Pit 01	94	29	11
02	116	14	8
03	14	4.5	3.5

Table 3: Vertical distribution of worked flint shown by maximum and mean quantities (with collection units) from North, South Spreads and Central Pit.

The differential vertical movement, where increased quantities of flint occur lower down the soil profile, was observed at both Rock Common, Sussex and Three Ways Wharf, Uxbridge (Lewis pers. comm.). It was attributed to the inability of soil processes to penetrate and redistribute dense accumulations of interlocking debitage. The distribution may also relate to the effects of gravity pulling material into the cone of the Central Pit. The frequency with which flint was found in the upper parts of all features suggests that they were already partially filled at the time of the Mesolithic activity, were consequently not man-made but were by-products of undulations in the underlying gravel or resulted from natural means, including tree throws.

Analysis of worked flint from hollows 151 and 158 in the South Spread (569), which were also excavated by spit, showed a similar proportional reduction in flint density towards the base of the hollow.

Colcutt (1992) argued that chips provided a reliable indicator of the effects of wind deflation or worm activity. The chip component, defined as pieces <10 mm long, was recovered by dry sieving all spoil from the South and North Spreads and the Central Pit through 4mm mesh. The chip component recovered by this method accounted for 42% of the stratified material from these features. In addition 25% of the south side of the Central Pit was processed through 1mm mesh to recover all microdebitage. Analysis of the residue contained within the 4-2mm mesh produced ten additional microliths, often broken, from 43 samples weighing 2,678g in the Central Pit. There were also seven microburins and five Krukowski microburins. Residue contained in the 1mm fraction comprised sand and was not sorted. Samples from nine other features produced 5,174g of residue, but only three microliths, of which two were from feature 167 adjacent to the Central Pit. These additional pieces, from the 4-2 mm mesh, are not shown in Table 1; no 2mm samples were taken from the area excavations in the North and South Spreads so that comparisons with the presence of material in the Central Pit are not possible. However the recovery of this extreme microdebitage from the Central Pit has highlighted that significant evidence for tool blank and implement manufacture can survive on this type of site. It also suggests that some of this flint is likely to be *in situ* and represents an area of intense activity although it cannot be discounted that some of the material may be dumped waste. The detailed sampling strategy confirmed that many diagnostic artefacts of microlith manufacture and retouch are irrecoverable by conventional excavation and can only be retrieved by sieving through an appropriately small sieve mesh.

Horizontal distribution of worked flint

The composition of the principal groups of material from the three spreads is summarised and compared in Figure 8. This shows that the three concentrations contain broadly similar ratios of cores, flakes and blades and retouched tools.

Three concentrations of worked flint were present in the South Spread (Fig. 6). They comprised (Fig. 3) an oval cluster in the south, with a nucleus at the east end enhanced by hollow 151, a discontinuous arc of low-density clusters in the central part and a dense curve of increased values in the north. This concentration measured approximately 3 m radius, of which the north terminus coincided with feature 158.

A large concentration of worked flint extended from the east edge of the North Spread that probably represents a detached cluster/nucleus or a truncated continuation of the flint in the Central Pit. There were also smaller clusters of material to the north (of which both were associated with burnt flint, one very marked, the other more dispersed).

Some of the nucleated clusters of flint, particularly a small cluster in the centre of the North Spread, measured less than 1 m across which is of a similar size to that produced during flint working by a seated knapper. The inclusion of broken material, which is the type of material that is normally left lying at the place of manufacture and the presence of diagnostic artefacts from blank production suggests that this may indicate where knapping took place. However the ability to study the true extent of such areas has been reduced by truncation of the site and may explain why it has been impossible to refit material from any of the dense clusters.

Attempts were made to refit the 306 pieces of worked flint from hollow 151 at the south end of the South Spread and from four excavation units (1 square metre) in the overlying surface scatter (Fig. 4). No flake to flake or flake to core refits were possible although two fragments of a broken flake from a quadrant spit and two other pieces of a second broken flake from adjacent stratified spits from hollow 151 were

conjoined. Refitting was also attempted using 338 pieces, which excluded the chips, from 21 collection units that formed four of the largest individual concentrations of flint in the North and South Spreads (Fig. 4; Table 4). Seven hundred and fifty pieces of debitage and twenty one cores from the bulk excavation undertaken on the north side of the Central pit were also examined. No artefacts were conjoined from any of the squares although a number of pieces with similar cortex or surface markings were identified that were probably from the same nodule. The fact that refitting was impossible tends to confirm that the concentrations were probably truncated.

Spread	Square	Total pieces	Chips	Broken
South	1332	-	-	-
South	1333	50	20	20
South	1334	26	7	12
South	1433	47	21	16
South	1434	40	11	16
South	1533	19	10	4
South	1534	52	23	15
	Total	234	92	83
South	1527	48	33	5
South	1528	41	28	8
South	1627	21	17	3
South	1628	37	24	11
South	1629	27	3	16
South	1728	38	11	18
South	1729	39	15	7
	Total	251	131	68
South	2812	14	-	9
South	2813	-	-	-
South	2814	20	-	4
South	2912	-	-	-
South	2913	15	5	6
South	2914	27	7	15
	Total	76	12	34
North	2657	20	6	5
North	2658	22	-	13
North	2757	21	7	8
North	2758	22	6	8
	Total	85	19	34
North	3070	25	6	10
North	3071	33	6	12
North	3170	20	7	6
North	3171	27	17	7
	Total	105	36	35

Table 4: Number of pieces, chips and the frequency of broken pieces from the principal concentrations selected for refitting.

Distribution of human activity across the site

The distribution of burnt unworked flint, as plotted at 25 g intervals, (Fig. 6 upper) showed a number of significant discreet nucleated clusters of material of over 100g, up to 1 m across. These clusters were often related directly to the detailed distribution of worked flint (Fig 6 lower) and, in some cases, also to sub surface hollows. However the spatial patterns of worked and burnt flint did not always coincide precisely and were slightly offset, suggesting that the burnt material represented undisturbed hearths surrounded by flint knapping debris. Two nuclei of worked flint, less than 1 m apart, in hollow 151 and two others, only 2 m apart, within the Central Pit lay within broader spreads of burnt flint and may indicate sequential or revisited hearths. Areas of increased burnt flint also extended west from a large hearth in hollow 158 at the north end of the South Spread with another concentration in feature 167, west of the Central Pit. These areas coincide with increased quantities of worked, largely unburnt flint and may represent raking out of old hearths. There were no formal hearth-stones nor were there any concentrations of charcoal or burnt sand. The limited quantities make it unlikely that the more diffuse spreads have resulted from cooking or food processing.

There were also separate clusters of less heavily burnt flint of less than 100 g, some of which were of similar size and definition to the main hearths. These areas, some of which lay beyond any sub surface hollows, also often coincided with concentrations of increased flint working or microlith use. Their distribution and the associated flint assemblages suggest that they may represent small-scale fires related to industrial or domestic activities or were more heavily truncated fires that were not protected in sub surface hollows. Other areas, including a spread of material west of the Central Pit, are more diffuse and may represent former hearths, possibly from previous visits to the site, that have been spread or refuse from hearths that have been raked out and mixed with flint knapping debris.

Worked flint densities are frequently lower, but not entirely absent, between the hearths. These areas of low density flint work occasionally contain specific flint artefacts that contribute towards understanding the use of areas and activities between the hearths.

RAW MATERIAL

The assemblage was primarily made of nodular flint most of which is likely to have originated from the local Middle and Upper Chalk. The cortex is chalky, up to 3mm thick but elsewhere has weathered to a thin rind. It is frequently stained a dirty off-white suggesting that it was extracted from a secondary source probably local deposits of Head gravel. The flint ranges from high quality dark grey to black material, sometimes with patches of lighter, coarser grained inclusions, to even textured light grey flint, which appears to be of equally good flaking potential. Individual nodules often exhibit a range of colours and textures within a single nodule.

Fragments of Bullhead flint, which are characterised by a green stained cortex over an orange band were also present. This material is derived from beds of flint that are directly overlain by Thanet Sand or Woolwich and Reading Beds. The Thanet Sand occurs to the north of the North Downs, but is not found in the Weald, nor are there apparently Woolwich or Reading Beds locally in the Weald. This suggests that the

Mesolithic hunting groups may have included land across the North Downs in their territory. It is not possible to calculate how much Bullhead flint was used, as not all flint from this source has the green rind and the flint itself is usually indistinguishable from any other type of flint.

There are also fragments of bi-zoned or marbled flint, which is also native to the North Downs. This flint also needs to be found with its distinctive marbled surface to be identified.

A single core was made from a heavily battered beach cobble, although a few other fragments with gravel surfaces were also present.

FINDS ANALYSIS

Mesolithic

Cores

The core component with the associated blades and bladelets indicates that the industry is principally geared to the production of blanks, particularly bladelets, for conversion to microliths. There were 72 cores from the site, of which 14 were from the unstratified colluvium. Fifty four of the remaining unbroken cores were examined in more detail. Figure 8) lists 47 cores from the three main spreads, which accompany 1,644 blades and bladelets, a ratio of 1:35. If the flake component is added to the calculation the ratio of cores to waste material rises to 1:108, which suggests that cores are largely underrepresented.

The results have shown that 30 of the cores were intended for the production of bladelets (Fig. 7: 1-6), which provided blanks for conversion into microliths. However bladelets were not essential for the manufacture of microliths. Small flakes could be and according to some of the microburins were also used. The overwhelming predominance of microliths in the assemblage reduced the need for large cores or blanks. Core length, measured as the length of the flaking face, showed that the cores ranged from 13 – 70 (mean 38) mm long, although most of the remnant blade/let scars did not extend the entire length of the core. Core weights ranged from 5 – 149 (mean 46) g.

Nineteen of all cores were classified as having been made on nodules (Fig 7: 1-2), some of which may have been quartered, 14 were made on large flakes (Fig 7: 3-4) and 11 on thermally fractured fragments. The use of flakes and fragments is not altogether surprising. They provided ideal core material that required less preparation for the manufacture of microlith blanks. No large hammers were found during the excavation, nor were there large quantities of debitage, such as might be produced when nodules are quartered. This suggests that core blanks may have been prepared at the flint source, where the waste was left behind and only usable pieces taken away.

The blanks for cores made on flakes were often characterised by very pronounced points of percussion suggesting that they were struck from the parent nodule with some force. These flake blanks were frequently chunky using the ventral surface as a striking platform to produce a core that resembled a large scraper. Only rarely was the edge of the flake used as a guiding ridge to remove burin spall-like bladelets. One example was identified of small bladelets that were removed from a crested blade (Fig 7: 5). Some of the smaller cores showed no preparation, using an opportunistic ridge to remove a few bladelets until the core was rejected.

Most cores were initially prepared with one striking platform, made by flaking or by adopting any suitable surface; opposed striking platforms could be added later. Additional striking platforms were sometimes added by rotating the core and utilising previously unused ridges, including former striking platform edges, which resulted in

'crested' rejuvenation flakes. A limited number of crested pieces were found which showed that unifacial creasting was occasionally used to straighten the guiding ridge before the initial blade/let was removed or to reshape the front of the core. Striking platforms could be maintained or modified by the removal of a rejuvenation tablet.

The rejected cores indicate that they were often abandoned at a point at which, with additional trimming, it was perfectly possible to continue bladelet production. The fact that these pieces were discarded suggests that only sufficient bladelets were produced to manufacture microliths as required and that the core was abandoned with the promise that additional supplies of raw material were always available. Abandoned cores could, in any case, be reclaimed and reused if campsites were revisited seasonally.

There were also two larger well made cores with a glossy surface texture that may be earlier. One was an opposed platform blade core from the colluvium and the other a single platform blade core with a crested base from hollow 181.

Cores were found with all the concentrations of flint in the three spreads (Fig. 12). However as indicated above the ratio of classifiable cores to flakes suggests that cores were underrepresented on the site. Some concentrations of flaking were accompanied by cores that were located towards the edges of the greatest densities of waste material, as in the north of the North Spread and the central part of the South Spread. This phenomenon is characteristic of the instinctive action to allow the small flakes and blades to 'drop' but to 'toss' the larger pieces further away. A small nucleated group of flint in the central part of the North Spread contained two cores, two crested pieces and rejuvenation flakes, but no microburins, which suggests that it may also represent a residual spread of *in situ* flaking that resulted from blank manufacture. However the large concentration of flaking debris at the north end of the South Spread contained only two classifiable cores. The ratio of core material to flaking waste, 1:24, only becomes more credible if broken core and unclassifiable fragments of debitage, including thermal fractures, are included in the totals. This, to some extent, enhances the interpretation of the concentration at the north part of the South Spread as one primarily used for blank manufacture and microlith production.

No meaningful core distributions could be detected in the Central Pit.

Blades and bladelets

A sample of 58 unbroken blades and 52 bladelets from the area of the Central Pit that was excavated as context 72 were subjected to metrical analysis. These pieces were taken to provide a representative sample of tool and microlith blanks. The results indicated that 87 pieces measured less than 40 mm long, which is in accord with the mean length of the cores. Thirty two bladelets were less than 20 mm long.

A large amount of material lacks the clearly defined cones of percussion and conchoidal rings suggesting that soft hammers were used for flaking; however it is most probable that flint hammers were employed. Three small flint cores were found with small areas of hammering, which is consistent with them having been used as percussors. One of these areas was cortical, which could mimic the effects of soft hammer percussion (Ohnuma and Bergman, 1982). A short programme of unrecorded experimental replication during the post excavation work showed that bladelets with almost identical percussion features to those found at Sandway Road could be produced using a restrained blow with a flint hammer.

The blades and bladelets retain virtually no cortex, which indicates that core preparation had been completed by the time the core was ready for blank production. Platform abrasion was used to remove overhang from the edge of the core to

strengthen it and allow the blow to be placed near the edge of the striking platform. This resulted in a relatively high frequency of linear, crushed, punctiform or narrow plain butts. An attempt was made to assess the success rate of blank production. This was based on the presence of blades and bladelets with straight, regular dorsal ridges and parallel edges that implied previous blade/let removals. The results suggested that approximately half of both blades and bladelets were removed in this way. The remainder showed irregular ridges and had probably been removed from cores with flaking surfaces that were covered by flake scars. This suggests that cores were frequently trimmed to maintain a flaking surface capable of maintaining blade/let production.

Apart from a slight increase in blade density in the central part of the South Spread there was no significant variation in the distribution of blades, to indicate areas of use, and other waste material.

Flakes

A sample of 103 unbroken waste flakes from the Central Pit was analysed, which showed that 84% measured less than 40 mm long. A similar proportion from the sample retained less than 50% cortical cover. A broad assessment of the entire collection classified only 4% of all flakes, blades and bladelets as primary pieces with near total cortical cover. The two sets of results tend to reaffirm the relatively low frequency of cortex and support the theory that flakes were removed during routine trimming of cores that were not prepared on site. Platform abrasion was less widely used on the flakes than on the blades and bladelets.

TOOL DEBITAGE

Microburins

The 228 microburins occurred in almost exactly identical numbers to microliths. Their presence indicates the importance of this standardised technique for removing the ends of blanks in the production of microliths on the site. There were 150 successful proximal microburins (67%), most of which were notched on the left edge (Clark 1934) and 35 distal microburins (16%), with the notch on the right. The consistent position of the notch is thought to indicate right handedness among the Mesolithic population. Ten notched bladelets (4%) and 19 pieces (8%), which had snapped across the notch represented failed microburin removals. There were two double microburins with a microburin facet at each end. Some microburins appear to have been removed from flakes rather than bladelets and indicate a degree of flexibility in selecting blanks for microlith manufacture.

The greatest concentration of microburins lay within the Central Pit, where 142 (62%) were found (Fig. 9A). Microburins were absent from the southern part of the South Spread but were common in the main concentration of flint working in the north of the area. However the distribution of microburins extended southwards beyond the concentration of flaking debris and may indicate a specific area where microliths were manufactured but used elsewhere. There were distinct similarities in the distribution of microburins in the North Spread where groups occurred to the north and the south of the spread. These groups broadly coincided with the location of flint working concentrations and microliths, but were frequently found towards the outer edges of the concentrations.

There were virtually no microburins in areas beyond the North and South Spreads or the Central Pit. This may have resulted from the excavation of features by individual contexts, which were unsieved with the consequent loss of small objects.

TOOLS

The retouched tool component accounted for 3% of the total flint assemblage, which was distributed equally between the three spreads. Most of the tools came from the Central Pit with smaller quantities from the North and South Spreads. Microliths accounted for between 64% and 72% of the retouched material, however Table 1 also shows that there is a consistently low frequency of scrapers, piercers, burins and microdenticulates across the site. Just as the distribution of microburins showed variations from the distribution of waste material so there are significant variations in the distributions of microliths and between individual types. The microliths were the only retouched tool type to be sufficiently numerous to indicate areas of specific activity. There is an almost total absence of retouched tools, apart from microliths, in the central and southern parts of the South Spread.

MICROLITHS

The 223 microliths from the site formed the largest class of the retouched tool assemblage, accounting for 67% of all retouched material. There were 10 microliths from the colluvium, which were excluded from the classifications and distributions of the material. All microliths were classified according to Clarke's (1934) typology. The results showed that 44% were of geometric (D) form (Fig 7: 15-36) with 18% obliquely blunted points (A) (Fig. 7: 7-9) or backed (B) (Fig. 7: 10-13) microliths. Seventy six (36%) microliths were unclassified, sixty of which were broken. Of the geometric forms the most prevalent types were classes D1 (triangles) (Fig. 7: 15-24) and D2 (crescentic/convex backed pieces) (Fig. 7: 25-34) with 34% D1b (scalene triangles). Eleven microliths were considered to have broken in manufacture. There is a strong correlation between the distribution of these microliths (Fig. 9B), including other broken microliths (Fig. 9C) and the distribution of microburins. Only three microliths were burnt.

The obliquely blunted (A) and backed (B) microliths appear to have been made using the microburin technique, one microlith of each type showed a clear microburin facet that had not been removed by retouch. These two groups of microliths show the greatest dimensions of any microliths from the excavation with a maximum length of 32 mm (mean 22 mm); however they displayed the greatest degree of size variability in any of the microlith classes (Fig. 11). Most of the scalene triangles (D1) also terminated in an oblique truncation, which undoubtedly resulted from the microburin technique. The geometric and crescent microliths were consistently more standardised in both size (Fig. 11) and shape, especially the crescents, which as at Rock Common were of 'thumb-nail' size. There were relatively similar numbers of microliths and microburins from the excavation. Retouch was generally abrupt, which is typical of that produced by resting the blank on an anvil. Three microliths, including a C type, and an unclassified piece terminated in a Krukowski microburin facet, which is also typical of anvil retouch.

The greatest density of microliths coincides with the main concentration of flint in the Central Pit (Fig. 9D). The volume of material and the bulk totals that are shown from the north half, which was excavated by context makes it difficult to detect subtle variations in the distribution of material. The distribution of all microliths shows that there are slightly enhanced values towards the south east, a trend which is repeated for most individual categories of material. However the distribution of broken microliths, including those that were classed as having been broken in manufacture show a slightly displaced grouping to the north.

The distribution of microliths in the South and North Spreads (Fig. 9D) is also similar to the overall distribution of worked flint but there are also a number of interesting, detectable variations in microlith type, which may be related to specific use and activity. Microliths occurred in three areas of the South Spread; the hearth to the south, a band of material in the centre, where there is no evidence for a major hearth or large scale flint working but adjacent to a spread of microburins, and an arc of material in the north. Obliquely blunted pieces and backed types (A and B) were absent from the southern part of the South Spread but were present in small numbers in the east part of the central area and more commonly in the north (Fig. 10A). Scalene triangles (D1) were confined to the central area (Fig. 10C) while crescentic microliths (D2) were found (Fig. 10D) in all three areas. None of the discreet scatters of microliths were tightly clustered as might be expected from a decomposed composite tool. This suggests either that material might have been spread, that microliths were used individually, for example as drill bits, or that this is evidence of repair of composite tools. Either way the variations in the distributions of different microliths types are likely to be related to the function of individual microlith types.

Microliths were scarcer in the north spread (Fig. 9D) and were principally clustered around the large area of burnt and worked flint, adjacent to the Central Pit. There were dispersed microliths further to the north, which were isolated from or respected the main nuclei of waste in that area. These pieces did not cluster around areas of burnt flint. The distribution of individual microlith types (Figs. 10A-D) showed types A, B and D coexisting in the area of most dense flint-work, while crescents (D2) were found to the north and triangles (D1) were not.

Microliths were sparsely distributed in areas beyond the three main spreads but included two scalene triangles from feature 102 to the east, of which one with a possible impact fracture was burnt.

SCRAPERS

The 14 pieces listed as scrapers form 4% of the retouched component; however five of them were from the unstratified colluvium. These end scrapers are of variable quality. Many show edge damage consistent with ploughing and may not be Mesolithic. One other end scraper was found in medieval feature 503 at the north end of the excavation and may also be unrelated to the Mesolithic activity.

The nine scrapers found in association with Mesolithic material (Fig. 13) included three from the Central Pit, with one each from the North Spread, a tree throw in the South Spread, tree throws 566 and 546 and one from hollow 150. Two of the blanks were broken, although whether this was subsequent to the manufacture of the implement is difficult to assess and a third had a broken blade. Only five of these tools had been manufactured using regular, direct abrupt flaking (Fig. 7: 37-9), the remainder showed only marginal retouch, some of which may have been accidental or have resulted from use. The overall impression is that scraping activities, traditionally associated with skin processing, did not play a significant role at the site.

BURINS

Three angle burins accounted for 1% of the tool assemblage. One was found in tree throw 158, in the South Spread, with two others from the North Spread (Fig. 13). They were all made on flakes, approximately 30 mm long and 20 mm wide. Two burins, of which one was burnt and broken, were made on concave distal truncations (Fig. 7: 40-1). The third burin showed small dihedral removals at the tip, which may have resulted from use.

PIERCERS

Six tools were classified as piercers (Fig. 7: 42-4), which accounted for 2% of the tool assemblage. Four implements were found in the Central Pit with two from an excavated grid square, immediately to the west, in the North Spread (Fig. 13). One implement was made on a blade (broken) and one on a bladelet. The remainder was made on thin flakes that averaged 20 – 30 mm long, 18 mm wide and 3 mm thick. Tips were formed by oblique truncations with lateral, marginal, direct retouch at the distal end to form a narrow tapering, asymmetrical tip, of which one was absent.

MICRODENTICULATES/SAWS

Seven flakes and blades with serrated edges were found on the site (Fig. 7: 45-6; Fig. 13), which accounted for 2% of the retouched tool assemblage. They were more frequently made on long flakes or blades, averaging 54 mm long and often on slightly concave edges. None showed any distinctive gloss.

TRUNCATED BLADES AND FLAKES

Eleven truncated blades and five flakes were found on the excavation (Fig. 7: 48-9; Fig. 13). Retouch was direct and was predominantly used at the distal end (13 examples) to create an oblique truncation (14 examples). One proximal truncation on the end of a large crested blade and a distal truncated blade showed additional marginal retouch that extended onto the adjacent edge. The tips of these implements were worn and crushed suggesting that they had been used as piercers on a durable material.

MISCELLANEOUS RETOUCHE BLADES AND FLAKES

Twenty-one other blades and bladelets were listed with varying quantities of unclassifiable retouch (Fig. 7: 47; Fig. 13). The total included some broken bladelet fragments that may have been microliths broken in manufacture. Twenty four flakes were also listed with miscellaneous retouch of which seven were probably unfinished broken microliths. None of this material is diagnostic.

USE WEAR and UTILISATION

No systematic analysis or high-powered magnification was undertaken to examine material for use wear or utilisation. This decision resulted from the context, soil type and excavation techniques used to recover material; however five flakes and five blades did exhibit continuous lengths of edge 'retouch'/damage that was visible to the naked eye and through a hand lens. The flaking was unsystematic and marginal, which is inconsistent with deliberate retouch and is more likely to be a by-product of use. Two refitting fragments of a broken flake with edge damage were found in the flint concentration at the south end of the North Spread. The number of pieces with this form of retouch was too small to reconstruct the distribution or range of activities that may have been undertaken or of the materials processed. However it is likely that in a stone using technology almost any blades, bladelets and flakes with short straight edges were considered usable.

MISCELLANEOUS TOOLS

A tranchet axe sharpening flake was found in Middle Bronze Age ditch 555. It was made of grey flint and was removed from an axe approximately 40 mm across. The former edge, which had also been produced by a tranchet blow, showed unifacial

damage from probable use. No demonstrable flakes of axe manufacture or thinning were identified at the site, although it is possible that some are present but remain unidentified. Tranchet axes are frequently represented by no more than sharpening flakes on Mesolithic sites on the Lower Greensand, the axes having been retained for further use as the group moved to a fresh site.

A possible chisel arrowhead, approximately 20 mm square and 3 mm thick, was also found in Middle Bronze Age ditch 555. These arrowheads are found in the Mesolithic but are also typical of Late Neolithic industries.

A number of notched flakes and blades were recorded; some, including an example from the Central Pit, undoubtedly resulted from failed microburin technique. However others, including a 'Clactonian' notch and three other flaked notches from elsewhere on the site suggest that notches were deliberately made at the site.

Two retouched implements confirmed that limited Neolithic activity was present on the site. A small flake from the edge of a ground flint implement was found in Middle Bronze Age ditch 555 and a broken leaf arrowhead from hollow 568. It measured 35 mm long and was made with covering retouch across the dorsal surface of the blank and invasive flaking on the ventral surface. The tip was absent and may have been broken during manufacture or by impact. A flake from the same context showed patterning within the flint which was similar to that present on the arrowhead.

AREAS A and B

The 141 pieces of worked flint from the watching briefs in Areas A and B (Table 2) was collected from colluvium and 18 contexts excavated through archaeological features. Most of the material is unstratified or forms the secondary fills of archaeological features. A small amount of flint was found in association with pottery of X date.

Unretouched flakes formed the largest category; primarily robust pieces such as might be expected to survive plough soil movement. There was very little material of similar size and condition to that recovered from the Mesolithic spread in Area C; however samples taken from features indicate that micro-debitage was present including two chips typical of those produced during tool/scrapper manufacture from contexts 63 and 69. Technologically the flakes frequently showed traces of platform abrasion on the platform edge and characteristics of hard hammer percussion. The retouched tool component comprised a tranchet axe sharpening flake (context 20), a geometric microlith (context 34), a flake knife (context 11) and a relatively well made end scrapper on a broad flake (context 80). There was also one flake with miscellaneous retouch.

DISCUSSION

The excavations at Sandway Road have shown that truncated Mesolithic occupation extended across an area of at least 45 m by 20 m (900 sq m) along the gravel terrace. It has been possible to define better-preserved more intense, and possibly specialised, activity areas. Occupation diminished westwards towards the edge of the terrace and to the south but may well have continued northwards beyond the limits of the excavation. It is quite likely that the site formed part of a clearly defined territory, although it is difficult to assess whether, as from sites elsewhere in the British Isles (Young 1998, Healy *et al.* 1992) the site was occupied on more than one occasion. There is no evidence from the main spreads and hollows that overlapping, superimposed areas of occupation were present and beyond these residual spreads any evidence has been truncated.

Reynier (2001), in an assessment of work at Sandway Road, pointed out that there was limited evidence for Later Mesolithic activity from Kent and south east England with sites dominated by scalene micro triangle and 'rod' microliths. The excavations at Sandway Road in contrast had produced abnormally large numbers of convex backed points ('crescents'). The analysis of the entire excavated assemblage has confirmed the exceptionally large numbers of microliths on the site particularly crescents and triangles. However the total can be paralleled by the excavation of a Middle-Late Mesolithic assemblage containing Horsham points at Rock Common, West Sussex (Harding 2000), where 631 microliths were also dominated by crescents. The number of microliths, particularly broken (both in use and manufacture), from the two sites, where all sediment was sieved through 4 mm mesh, would have been larger had all sediment been sieved through 2mm mesh. The initial analysis from Sandway Road identified 60 broken microliths, of which 11 were considered to have broken in manufacture. These pieces often correlated with the spread of microburins and were frequently associated with other broken microliths that may also have been broken in manufacture. However the distribution of broken microliths may well represent pieces of composite implements that had snapped in use and been returned to a 'workshop', still in the handle, for repair.

The excavation indicated that large parts of the Mesolithic site at Sandway Road have undoubtedly been truncated over much of its extent at some time in the past. However the basal parts of the truncated soil profile have been preserved in sub surface hollows, including some that may represent tree throw features. These remnants displayed variations in the distributions and composition of types of artefacts and are sufficiently distinct to suggest that they reflect where specific activities took place, circumstances that are all too rarely preserved on Mesolithic sites. As such they provide some evidence to make it possible to speculate about how the campsite may have been organised. The most clearly defined areas are sufficiently discrete to suggest that the distributions reflect a single phase of activity, although it is most probable that the area did form part of a territory that was colonised and systematically revisited on a regular basis

The greatest density of artefacts was recovered from the Central Pit, an area that was perversely too small and the quantity of material too great to allow the identification of individual areas of activity. If such areas existed their presence has undoubtedly been obscured by the sheer quantity of other, possibly superimposed, material around them and by the possible effects of trample across the area. The value of the spatial data from the feature was, in any case, reduced by the fact that the northern half was excavated as a single context and systematic excavation using a grid was only adopted in the southern half. Artefact distributions for most categories of material showed that the greatest quantities lay towards the centre of the feature, where the depth of deposit was greater and material may have migrated down-slope from the rim of the feature. What is unclear is just how large this spread of material in the Central Pit may have been? It is possible that it extended to the dense concentration at the south end of the North Spread, in which case the duration of occupation and number of participants required to create such a large quantity of material may have been relatively large. Spatial analysis and artefact composition of an Early Mesolithic worked stone assemblage at Thatcham, Berkshire (Harding 2003) identified two clusters of material. One was relatively structured, including chips, with clusters of cores, flakes and blade/lets with microliths and microburins. This area was regarded as one incorporating tool manufacture, microlith production and repair of hunting equipment. The other cluster, by contrast, lacked microdebitage and contained broken cores and

fragments, which suggested that this area might have represented a refuse dump. This conclusion was, to some extent, supported by accumulations of disarticulated animal bones.

The material in the Central Pit at Sandway Road contained microdebitage, which suggested that at least some of the material was likely to be *in situ*. There is a possibility that the larger material may also be *in situ* or it may just as easily have been dumped. The interpretation of activity at the site as a whole and especially in this area is made more difficult by the absence of bone and other organic material. This component did not survive at Sandway Road but is likely to have constituted a significant part of the evidence at the site. It is possible that this area combined attributes of both tool manufacture and rubbish disposal, marking an area that was set aside to allow the remainder of the camp to remain largely uncluttered.

The most valuable areas for reconstructing where specific activities may have taken place lay in the North and South Spreads (Fig. 14) where small clusters of stone artefacts, separated by 'blank' areas, could be detected. Inevitably study has concentrated on areas where stone tools are present; however the 'blank' areas may have contained equally significant activities for which no evidence survives, provided open space between individual hearths or retained natural vegetation. Potential activities that could be identified mostly related to blank production, the conversion of bladelets to microliths using the microburin technique and microlith use or discard, possibly in the repair of hunting equipment. This interpretation provides only a relatively narrow range of activities, maintains the interpretation of microliths as projectile points and the primary function of the site as a hunting camp and does not make provision for scraping activities traditionally taken to include hide processing. The composition of the assemblage is, in any case, heavily biased towards the manufacture and use of microliths indicating a relatively narrow range of activities.

Artefact distributions were thinner and more easily defined in the South and North Spreads compared with the Central Pit; the broad picture suggests that occupation as represented by stone tool use may have been more intensive in the South Spread. There are areas of burnt flint within the North and South Spreads that have been interpreted as hearths, which are surrounded by scatters of worked flint. One such hearth in the North Spread had no microliths or microburins and probably indicates where flaking took place. Elsewhere this flaking waste was mixed with microburins or microliths indicating that multiple tasks were undertaken there. Isolated areas where microburins or microliths were found almost exclusively suggested that tool blanks were sometimes moved from the flaking area and that the microliths themselves were also transported across the site to areas of use or tool repair. These included discrete areas where scalene triangles and crescents were identified that were in themselves different from scatters of backed microliths indicating that it is possible to discern where microliths of differing types appear to have been used. None of the other specific tool types occurred in sufficient quantities to provide useful indications of where other activities including scraping, cutting or detailed leather working may have taken place.

The composition of the microlith component is equally balanced between triangular and crescentic microliths suggesting that they were of similar importance. Their varying distribution suggests that they may have served totally unrelated functions, which may or may not have been related to hunting. Hafted microliths from the wetlands of Europe have demonstrated that microliths were used in composite projectile points, although none have currently been recorded from Britain. David (1998) described two groups of closely associated microliths, comprising 16 backed

'rod' type microliths and 15 scalene triangles, from Seamer Carr, North Yorkshire. There was nothing to show whether they represented two heavily armed or several more lightly set composite tools. He concluded that although there was a strong possibility that some microliths were used as projectile points that it was still not possible to demonstrate that all microliths were used in this way. Grace (1992) analysed 6 microliths from 4 sq m excavated principally from the northern contexts at Thatcham, an area which included a number of geometric microliths, for microwear. He found no evidence to show that this limited assemblage had been used as composite projectile points but concluded that they had functioned as piercing and boring tips. Use wear studies undertaken on a sample of flakes and blades from the site showed a high frequency of use of unretouched edges as cutting implements, especially on soft, primarily vegetable, material with relatively little evidence of butchery. The extraordinarily large number of microliths of different types from Sandway Road, which were not sampled at the excavation for microwear, has indicated that they can be found in separate areas of an excavation and leads to the conclusion that they were probably used for different functions. It is equally likely that, as at Thatcham, many of the unretouched flakes and blades were also used but showed no visible evidence or edge damage.

The quantity of worked flint and the large number of microliths that survive is likely to reflect the size of the population and their duration at the site. The total assemblage of 11,000 pieces includes debitage, chips and broken material and could be produced by a small group of knappers in a relatively short space of time. However the level of surface truncation and density of material in the Central Pit suggests that this is a minimum number with more material irretrievably destroyed or dispersed. The recorded spread of activity along the terrace also indicates a sizeable group of people. In addition the skills and population required to manufacture the apparently large number of microliths, involving core preparation, appropriate blank production, manufacture, inclusion into composite heads and use implies a greater number of people who require food and shelter. This suggests that although the site was never permanent that it was more than a simple stop over and may have served a group of people as a base camp for several days.

If the site at Sandway Road was used for an extended period of time it is inevitable that some form of shelter would have been necessary. It has become increasingly apparent that Mesolithic open-air sites may have included some form of shelter or temporary roofed structures. Archaeological evidence for these structures is rare, but better-preserved examples at Mount Sandel (Woodman 1985), Howick, Northumberland and East Barns, East Lothian (Selkirk 2003) were of approximately 6m diameter. These Mesolithic structures were frequently defined by areas of low density flint debris, where occupation areas were kept free from waste. This is a recurrent feature in modern ethnographic stone using cultures of New Guinea (Sillitoe and Hardy 2003). Tool production was undertaken elsewhere, possibly around specific hearth areas. Conversely the structure at Howick (Selkirk 2003) contained 13,000 pieces of worked flint in stratified occupation debris inside the structure, which suggested prolonged or repeated habitation. No evidence of post or stake holes was preserved in the sandy terrace surface at Sandway Road. The distribution of worked and burnt flint at Sandway Road also failed to produce sufficient open space or convincing distributions to accommodate any structure with a diameter of 6m, if all areas of burnt flint were considered or the occupation was of one phase.

A recurring feature of the excavated surface area at Sandway Road was the frequency of sub surface hollows. These features were evenly distributed across the entire site

and showed no preference for the lower valley slopes or the terrace area. Many contained relatively large quantities of worked and burnt flint, especially in the areas of the Mesolithic activity. These features may, in some cases be geological; however most were considered to represent tree throw features. They have been described in some detail (MacPhail 1987; MacPhail and Goldberg 1990) as circular or 'D' shaped features marked by a deeper crescent-shaped pit on one side. Evans (*et al* 1999) concentrated on the deposition of material in them in the Early Neolithic arguing that these fallen trees would have been highly visible. As such they may have acted as markers in an otherwise deeply wooded environment that could be revisited by a group within a defined territory. Objects required for reuse could be cached for use in subsequent visits. They observed that a fallen tree also created a ready made clearing that could be utilised without the need to fell any standing trees. In addition they reassessed the evidence for Mesolithic 'pit dwellings' at Farnham as described and interpreted by Clark and Rankine (1939). Evans (*et al* 1999) considered that these dwellings were undoubtedly tree throw pits; however they questioned whether large concentrations of artefacts adjoining the tree hollows might not in fact indicate that the upturned stumps, where they were still extant, had been incorporated into a temporary shelter/dwelling. Inevitably only a selection of trees may have been used in this way.

A detailed examination of the hollows/tree throws at Sandway Road showed that the most clearly defined examples in the area of the Mesolithic material were aligned east to west. Hollows 565 and 158, at the edge of the South Spread, were both approximately 3.5 m wide and faced north, suggesting that trees had fallen in that direction. It is impossible to say whether this is likely to have occurred over an extended period of time or whether it represents an example of the 'domino' effect. The hollows were frequently marked by large concentrations of burnt flint with deposits of occupation debris to the south, although it is impossible to be certain whether similar material existed to the north beyond the extent of the spread. The overall quantity and distribution of material to the south of hollow 158 was arranged in an arc of material to the west, with knapping debris and microburins. The orientation of hollows 151 and 552 was less clear. There is no data available to show which species of trees were present at Sandway Road, although it is more likely that the soils favoured the acid loving varieties, creating a relatively open 'dry' oak environment (Mellars and Rheinhardt 1978) with birch and pine. These species are relatively stable but may be susceptible to wind blow when they are found on sandy soil, conditions that prevailed, especially at the margins, in the South and North Spreads at Sandway Road. Any fallen trees may have supplied the only available natural shelter in what may have been a relatively open landscape. The associated worked flint was found in the upper fills of the hollows/tree throws at Sandway Road, suggesting that although the trees had fallen previously some degree of silting, possibly from the exposed root bole, had already taken place. The presence of isolated Early Neolithic artefacts may indicate prolonged use of the site, certainly until the area was covered by thick deposits of colluvium.

The relatively low level distribution of material from the areas of the watching brief suggests that occupation did not initially spread to the east, or that material had been dispersed, possibly down-slope. The contrasting density of Mesolithic material on the gravel terrace in Area C with that in Areas A and B and elsewhere in Area C, confirms the preferred use of the terrace for Mesolithic occupation. The single microlith from Area B is of the same form and date as the majority of the microliths from the terrace area; the tranchet axe sharpening flake and a bladelet core are

similarly likely to be of Mesolithic date and suggest peripheral activity, beyond the main area of occupation. Most of the flakes were undiagnostic, but included a relatively high frequency of pieces with traces of platform abrasion. This technique is more frequent in the Neolithic period, which accords well with the evidence of the pottery. The scraper would also not be out of place in a Neolithic context. It is possible that this implies that the Neolithic activity occupied the higher land beyond the terrace, where evidence of tool manufacture represented by retouch chips was present.

Attempts have been made (Barton 1992) to assess site function by examining tool diversity between selected Early – Middle Mesolithic sites and their location in the surrounding landscape. Barton defined sites containing a restricted tool component, principally (oblique) microliths, end scrapers and microdenticulates as high ground hunting camps where game movements could be monitored, microliths produced and hunting equipment serviced. The restricted tool kit implied that a limited range of other activities was also taking place. These sites often included tranchet axe sharpening flakes, although the axes were seldom present having been removed to the next camp. Barton contrasted the hunting camps with low lying river side locations, which were characterised by a wider array of activities and a more diverse tool kit, including burins, axes/adzes and drill bits. The composition of the Sandway Road tool assemblage (Fig. 15), with its high dependence on microliths, is almost identical to that at Rock Common, West Sussex (Harding 2000). It also compares well with other Middle-Late Mesolithic sites at West Heath, Hampstead, (Collins and Lorimer 1989) and Hermitage, High Hurstwood (Jacobi and Tebbutt 1981). These sites were considered to represent relatively 'high level' hunting camps. Their retouched tool assemblages contrast with Early Mesolithic 'low level' river side assemblages at Star Carr, Yorkshire (Clark 1954), Thatcham, Berkshire (Wymer 1962), Broxbourne, Hertfordshire (Reynier unpublished) and Three Ways Wharf, Uxbridge, Middlesex (Lewis forthcoming) and a Late Mesolithic site on the A34, Berkshire (Bellamy 2000). Microliths are less frequent at these sites and the tool component is broader implying a more diverse range of activities. Using this model the microlith component places Sandway Road firmly with other 'high level' hunting camps; however this conclusion is somewhat at variance with its location on a slight river valley terrace that does not lie on a commanding topographical location. It is highly probable that the camp lay in a relatively wooded valley, a position that might otherwise cause it to be included as a 'low level' home base. The occupation of the terrace deposits at Sandway Road and exploitation of the local drainage pattern can be paralleled at both Harrietsham and Hollingbourne immediately to the west of Sandway Road (Fig. 2). Concentrations of Mesolithic material have been found at these locations that broadly coincide with small tributary streams that flow south from the spring line at the base of the Chalk towards their confluence with the River Len. These tributary streams provided a ready water supply for both hunters and prey in an otherwise well drained landscape, access to the Chalk scarp where fresh flint might be exploited and communication routes to valleys of the northern dip slope. More specifically the site of Sandway Road is located close to the watershed of the Rivers Len and Great Stour, which rises from a spring approximately 1km east of Sandway Road. This would have provided equally easy access to the east and west. The Mesolithic industry at Sandway Road lay beneath a considerable thickness of colluvium. It is conceivable that other sites in a similar location await discovery along the tributary valleys crossing the Folkstone Beds.

Beyond the immediate surroundings of Sandway Road the excavations have produced rare, relatively detailed and well preserved evidence of Late Mesolithic activity not only for Kent but elsewhere in the Weald. The distribution of Mesolithic material as compiled by Wymer (1977) is limited to a range of find spots that are clustered, as at Sandway Road, along the Lower Greensand. Occupation of the Weald Clay in the extreme south appears to have been avoided. Wymer recorded only 21 locations of Mesolithic activity within a band along the Greensand 20km west and 11km east of Sandway Road. Only six of these find spots were accurately provenanced, the remainder being general records allocated by parish. The total number of pieces amounted to approximately 1,869 artefacts of which 1,037 pieces were from a single site at Harrietsham 2.5km west of Sandway Road. Wymer's catalogue records principally tranchet axes or flakes and blades with only 18 microliths. These locations do little to illustrate the potential density of occupation of the Kentish Weald in the Mesolithic. Preliminary research for the CTRL (Oxford Archaeology 1994) revealed a previously unrecorded, but unconfirmed, large surface scatter of (?Late) Mesolithic flints, that was collected during field walking by Lord Monkton from the Lower Greensand (Site 1372 URL 1994). The assemblage, totalling 11,000 pieces, was apparently found approximately 250 m immediately south of the excavation site at Sandway Road and on the east bank of the same stream. A mixed collection of, similarly undocumented, Mesolithic and Neolithic worked flint was also reputedly found by Lord Monkton from adjacent fields on the west bank of the stream along the line of the M20 (Site 1371 URL 1994).

The Kent Sites and Monuments Record (TQ85SE12LB) also records concentrations of Mesolithic material at Park Wood Chicken Farm (Site 1072 URL 1994), Red House (Site 1073 URL 1994) and Harrison's Nursery (Site 1074 URL 1994) at Harrietsham approximately 2km west of Sandway Road (Fig.2).

There are no excavated assemblages from the immediate area of Sandway Road, however Late Mesolithic material has been found from north of the North Downs at Perry Wood, Selling (Woodcock 1975) and on the east Kent coast at Finglesham, Northbourne (Parfitt and Halliwell 1984). Additional excavated assemblages have been recovered from Priory Gardens, Orpington (Grey and Tyler 1991) and Well Hill, Chelsfield (Jones 1952) in Greater London, although none of these sites were located on the Folkestone Beds.

The distribution of surface material, although sparse, indicates that Mesolithic communities preferred the well drained sandy bands of geology that skirt the Chalk scarps. These deposits continue west around the edge of the Weald to the Greensand of Sussex and Surrey, which is well known as a centre of Mesolithic occupation on the Weald.

DATE

The site has been dated using both artefact typology and radio carbon determination. The scalene triangles and crescentic microliths are of consistent size, form, distribution within the site and method of production to indicate that the assemblage is of a single period lying in the Late Mesolithic (c. 6750-3550 BC). Three radio carbon determinations calculated from charred hazelnuts and seeds from the Central Pit cover the period from 8590-8090 cal BC (NZA 11934) to 1950-1690 cal BC (NZA 11936), with only one date of 5930-5660 cal BC (NZA 11935) falling within the expected period of the Late Mesolithic.

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CATALOGUE OF ILLUSTRATED FLINT

No	Context	Category	Description
1	184	Core	Single platform blade/let core
2	124	Core	Opposed platform blade/let core
3	355042	Core	Bladelet core on a flake
4	228	Core	Bladelet core on a flake
5	281401	Core	Bladelet core on a crested blade
6	177	Core	Flake/blade core
7	374841	Microlith	Obliquely blunted point (Clark's 1934 type A1)
8	316901	Microlith	Obliquely blunted point (A1)
9	103	Microlith	Obliquely blunted point (A1)
10	162901	Microlith	Blunted backed piece (B4)
11	197	Microlith	Blunted backed piece (B4)
12	203	Microlith	Blunted backed piece (B4)
13	235	Microlith	Blunted backed piece (B2)
14	384831	Microlith	Backed piece with basal truncation (C1)
15	131	Microlith	Scalene triangle (D1bii)
16	235	Microlith	Scalene triangle (D1bii)
17	364953	Microlith	Scalene triangle (D1bii)
18	374831	Microlith	Scalene triangle (D1bii)
19	375061	Microlith	Scalene triangle (D1bii)
20	375081	Microlith	Scalene triangle (D1bii)
21	385043	Microlith	Scalene triangle (D1bii)
22	395032	Microlith	Scalene triangle (D1bii)
23	395034	Microlith	Scalene triangle (D1bii)
24	395043	Microlith	Scalene triangle (D1bii)
25	177	Microlith	Crescent (D2aii)
26	185	Microlith	Crescent (D2aii)
27	135301	Microlith	Crescent (D2aii)
28	162901	Microlith	Crescent (D3)
29	172901	Microlith	Crescent (D2ai)
30	222101	Microlith	Lozenge (D3)
31	345034	Microlith	Crescent (D2aii)
32	355052	Microlith	Crescent (D2ai)
33	355054	Microlith	Crescent (D2aii)
34	384933	Microlith	Crescent (D2aii)
35	355031	Microlith	Lozenge (D3)
36	355033	Microlith	Lozenge (D3)
37	10	Scraper	End scraper on a flake
38	374972	Scraper	End scraper on a flake
39	73	Scraper	End scraper on a flake
40	274901	Burin	Angle burin on an oblique truncation
41	265801	Burin	Angle burin on a concave truncation
42	365044	Piercer	
43	285001	Piercer	

No	Context	Category	Description
44	385043	Piercer	
45	365043	Microdenticulate	
46	103	Microdenticulate	
47	275101	Retouched flake	Flake with edge retouch
48	117	Truncation	Flake with distal truncation
49	1172	Truncation	Flake with concave truncation