Prehistoric material from sites near Slines Oaks and Worms Heath, Chelsham

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Surface scatters of prehistoric cultural flint material from the Chelsham area are examined and seen to be typical of the crude flintwork that occurs on the chalk downs in Surrey and other counties. The large number of core tools present allow the variety of these artefacts to be considered.

Introduction

In recent years much cultural flint material has been recovered from the surface of fields in the Slines Oaks/Worms Heath area of Chelsham by Messrs R Williams and D Scully who have submitted specimens to various international colloquia/authorities on prehistoric art. This paper takes no account of that aspect of their potential. The collections amassed are quite large and much of the material, some of it marked, has been returned to the fields from which it came. Part of the remainder has been presented to the East Surrey Museum, Caterham, where it has been catalogued by Roy Scott, Michael Russell, Lesley Ketteringham and subsequently by the remaining authors.

The material as it exists in the museum trays is clearly a biased assemblage, consisting predominantly of larger pieces. No small flakes, blades or spalls are present and consequently any microlithic element is virtually missing. The importance of the collection however would appear to rest in the large number of core tools recovered, many of them crude in nature, that can be compared generally with much of the 'Campignian' material found elsewhere on the North Downs. Even though the material is from the surface, it provides an opportunity to illustrate the wide range of material that comes from these sites.

The collection comes from a number of flint scatters that lie in fields to the east of Warlingham, around the area known as Worms Heath. The attraction here was probably a deposit of disturbed Blackheath Beds which overlie the Clay-with-flints at this point and which would provide a well-drained soil in contrast to the immediate surroundings. Cutting through these deposits to the Middle Chalk are a number of steep-sided coombes, presumably the result of ancient headwaters of the river Wandle and which probably contain deep deposits of colluvium derived from the slopes around Worms Heath.

The landscape can be expected to have suffered much damage during the late prehistoric and historic periods commencing with its initial deforestation perhaps during the Iron Age (MacPhail & Scaife 1987, 47) and subsequent erosion of any loess covering (Catt 1978, 14), followed by centuries of ploughing and quarrying. As a result any early sites are unlikely to remain extant or visible and are probably disturbed below the surface. Surface artefacts however need not have travelled too far from their original context and will provide a general indication of the location of prehistoric activities.

A number of well known sites exist in the vicinity, amongst which the 'hut circles' on Worms Heath are pre-eminent (Johnston & Wright 1903, 32–4). The area has been heavily quarried during the 19th and 20th centuries and it has been suggested that they are in fact remnants of early, perhaps Roman, quarrying activities (Crawford 1953, 105). Immediately to the south is the Bronze Age enclosure at Nore Hill (Skelton 1987) and half a mile to the north, the medieval earthwork in Henley Wood. Chance finds from Worms Heath include a bronze palstave, Roman coins, and a medieval iron spearhead (Farley 1973, 12–14) while excavations close to the pond at Slines Oak produced stratified Mesolithic flintwork.

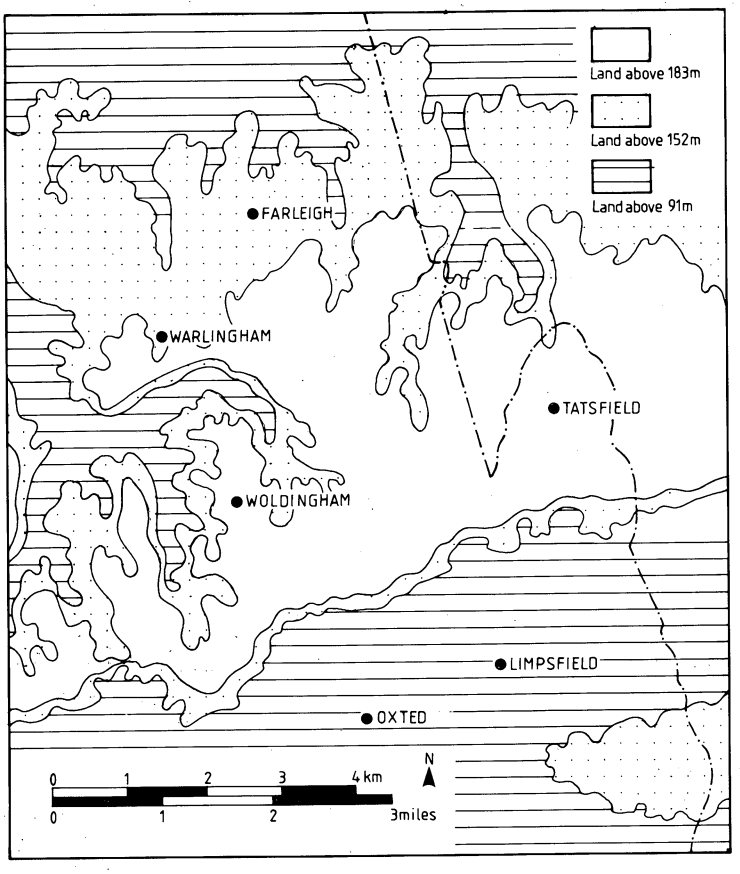

Fig 1. Slines Oaks and Worms Heath, location map of the area

The Sites (figs 1, 2)

A number of concentrations of flintwork are suggested and Mr Williams highlighted three main areas.

1 TQ 372 579
The field to the west of Slines Oaks. This is the main site, rich in lithic debris, and the presence of 'earthbanks' in the area was also noted. The pond at TQ 373 579 provides a focus and the majority of blade cores are described as coming from the area immediately south of this.

2 TQ 377 582
Fields of Chelsham Place Farm to the west of Worms Heath and south of Henley Wood were the sites of various scattered assemblages.

3 TQ 382 576
An area adjacent to the Limpsfield Road, to the south-east of Worms Heath and known to Mr Williams as 'the camp'. Amongst the collection are a number of artefacts from other nearby sites, Farleigh, Whistlers Wood, and Friths Wood.

The Material (Tables 1, 2, figs 3–8, Microfiche 2–7)

The collection catalogued by Roy Scott in 1981 amounted to 1,814 pieces, but this number excluded axes and other well retouched material, though the total included some 50 fossils and unworked nodules of unusual shape, and about 90 doubtful or unrecognisable items.

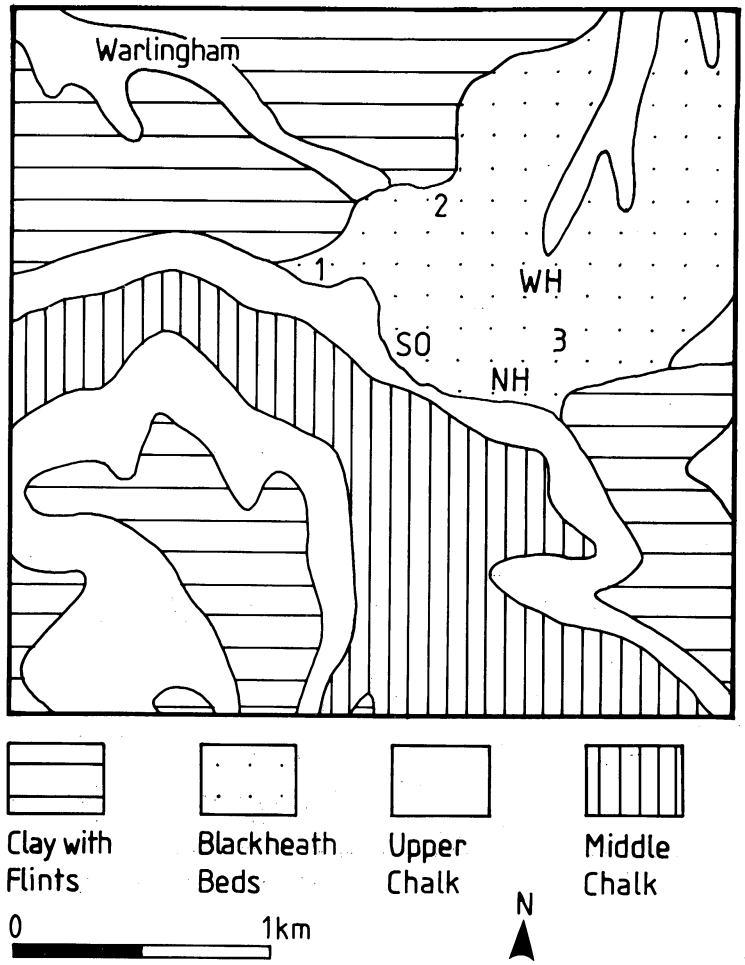

Fig 2. Slines Oaks and Worms Heath, detail of fig 1, showing the geology. 1, Fields to the west of Slines Oaks; 2, Chelsham Place Farm; 3, The 'camp'; SO - Slines Oaks; WH - Worms Heath; NH - Nore Hill

Of the remainder 323 were considered to be cores, 98 single platform, 99 double platform and 128 multi platform and there were larger numbers of scrapers. Fewer than 50 pieces were less than 3cm long.

MR and LK were able to look at the finds subsequently deposited at East Surrey Museum and were able to sort them into six separate sites, Slines Oaks general, Slines Oaks mostly east of pond, Frith Wood, Farleigh, Whistlers Wood and Worms Heath 'camp'. The total number of pieces studied amounted to 4,379 and details are provided in table 1. A sample was retained but the remainder were returned to Slines Oaks and buried in plastic bags adjacent to a hedgerow at TQ 372 578. The writers have seen all the material that remains in the East Surrey Museum, less than 1,600 pieces, and these are listed in table 2. Discrepancies with the earlier listings are present, but these need not be of great concern given the nature of the collection and the fact that slightly different material has been sifted on each occasion.

Raw material appears to have been local flint and this could have been secured either from the surface or from exposures along the sides of coombes. Some pieces are thinly patinated to a light grey and display iron staining on arrises. They are often abraded and have evidently been battered by agricultural machinery. The large number of cores is a

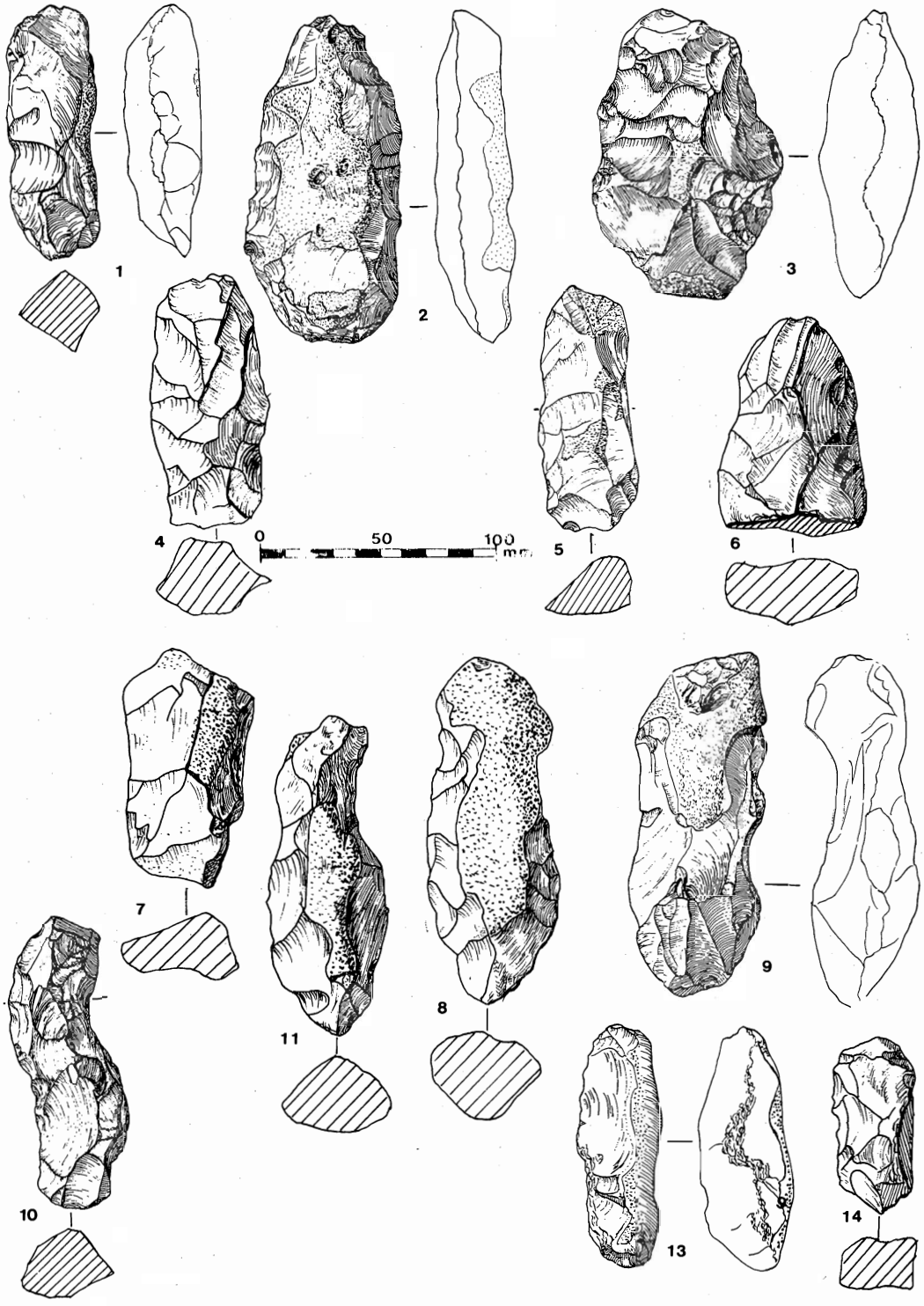

Fig 3. Slines Oaks and Worms Heath: core tools 1–11, 13–14

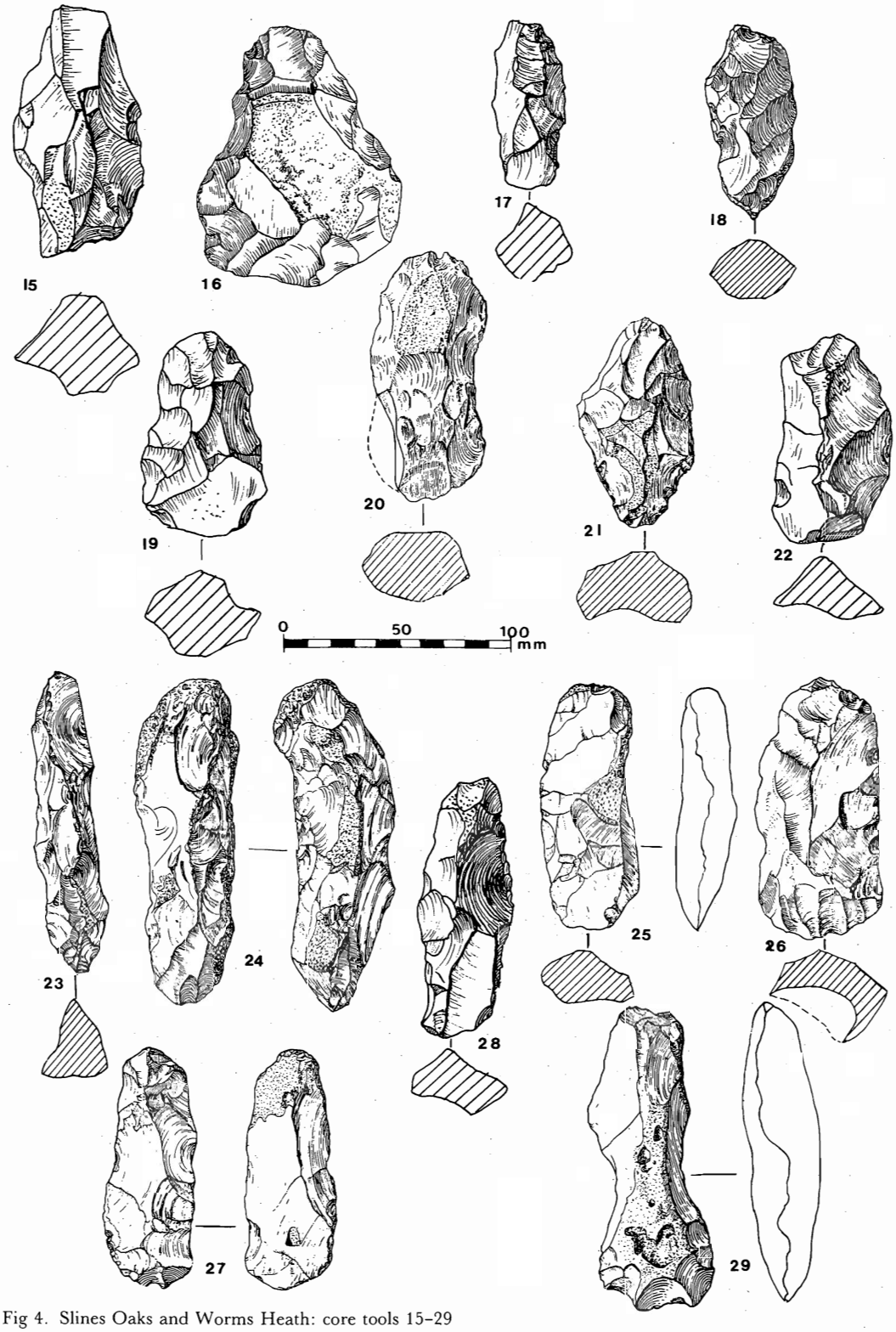

Fig 4. Slines Oaks and Worms Heath: core tools 15–29

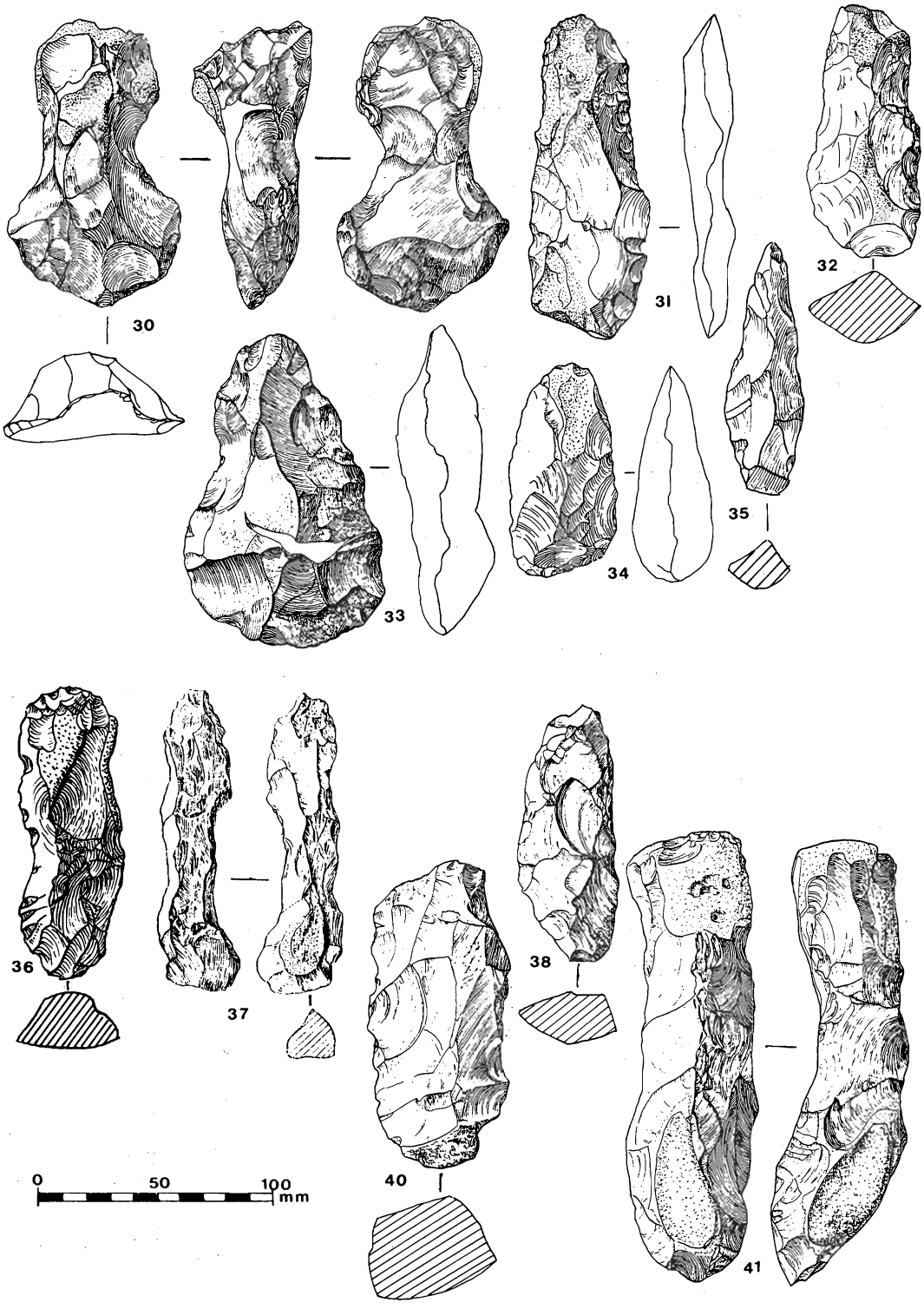

Fig 5. Slines Oaks and Worms Heath: core tools 30–38, 40–41

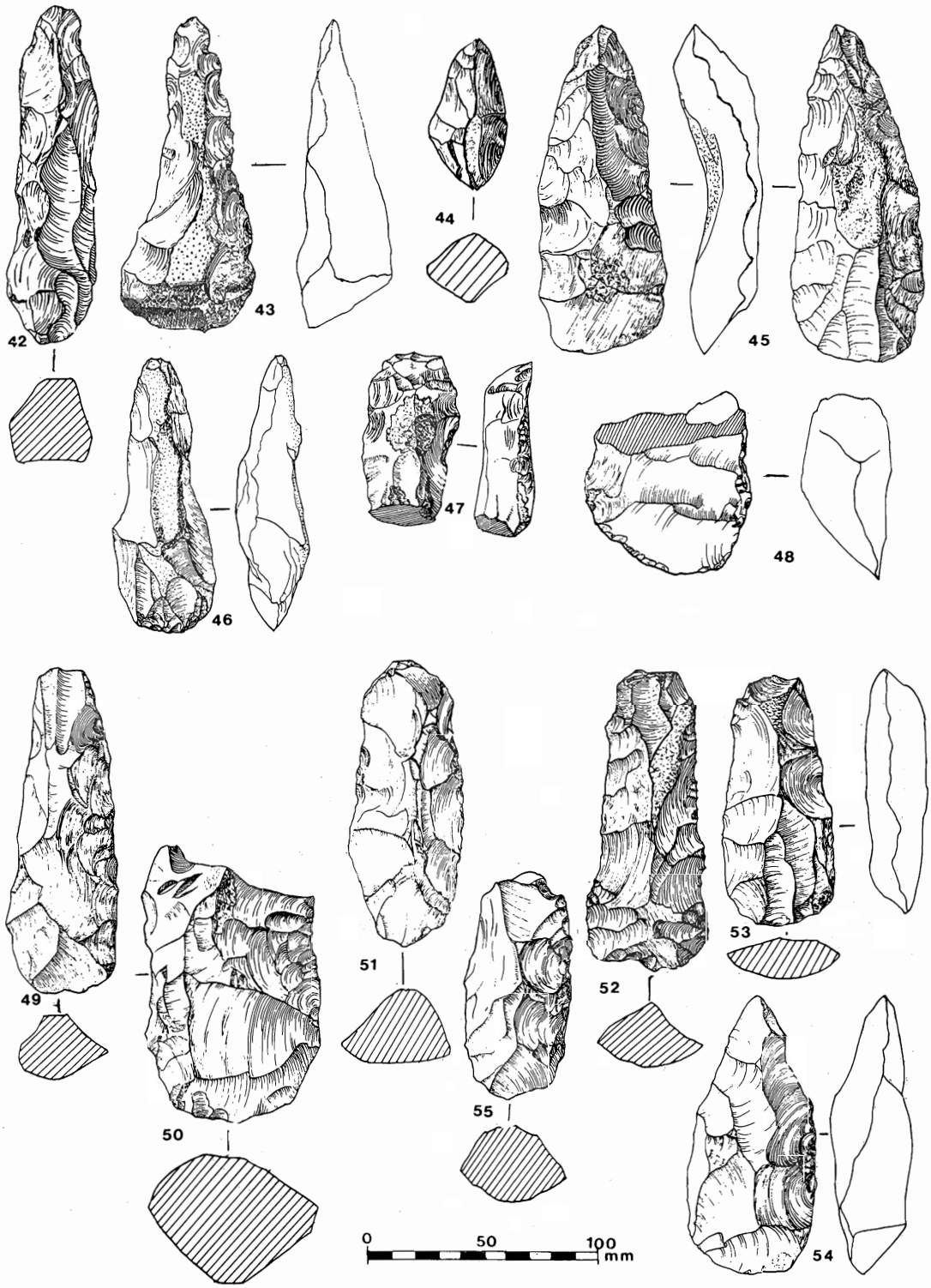

Fig 6. Slines Oaks and Worms Heath: core tools 42–54

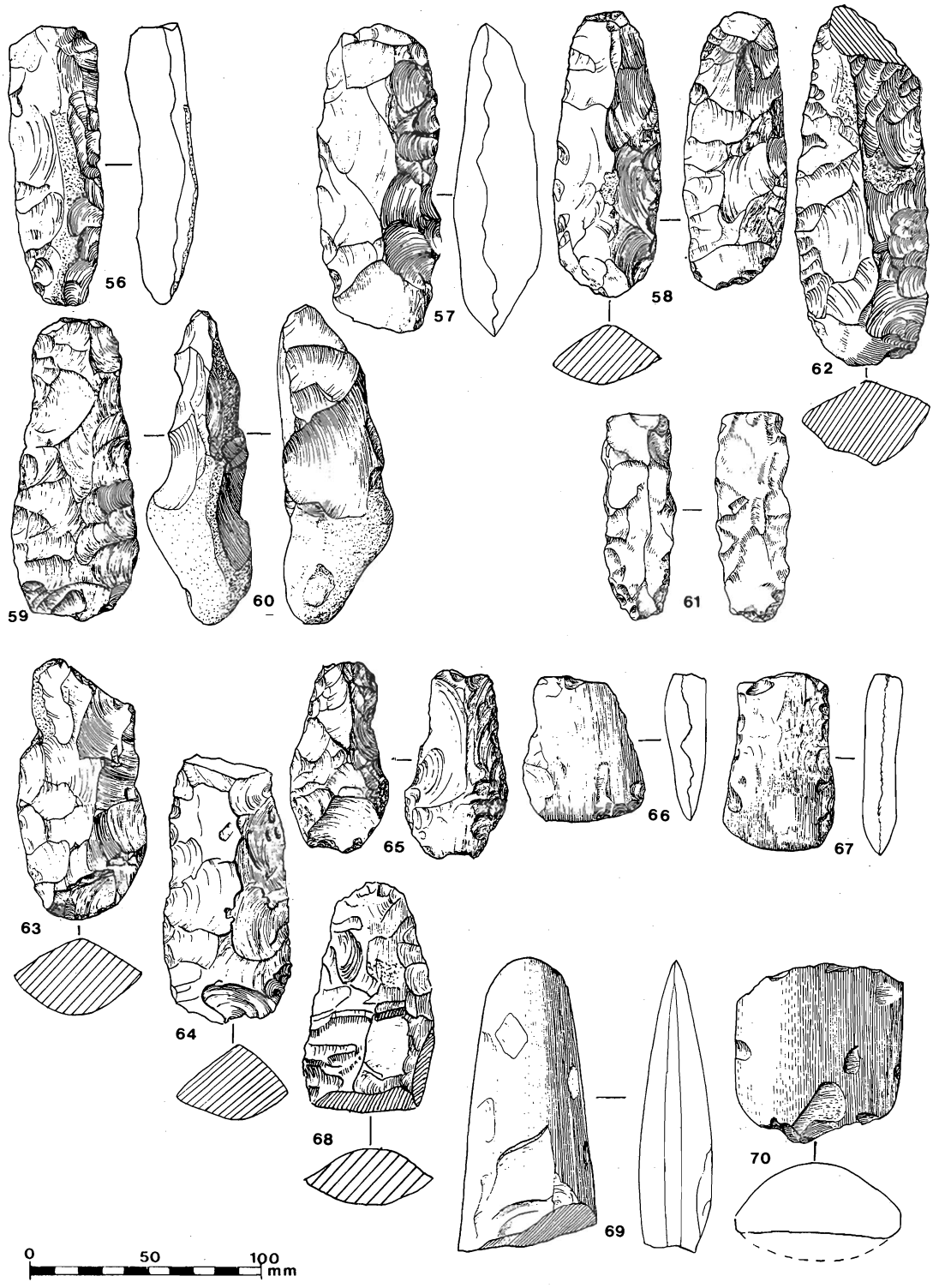

Fig 7. Slines Oaks and Worms Heath: axes 56–70

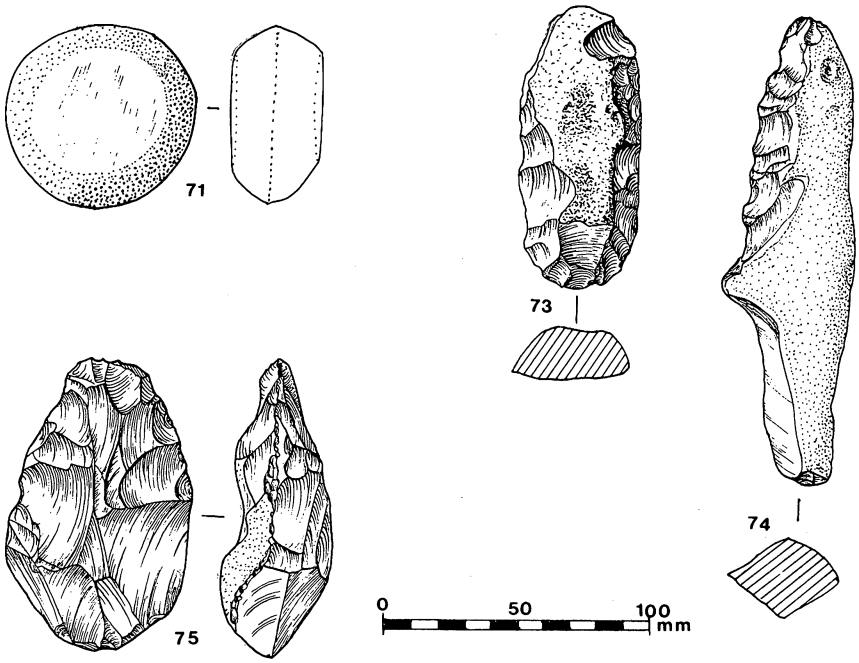

Fig 8. Slines Oaks and Worms Heath: ground pebble 71 and flints 73–5

feature of the assemblage, flake cores outnumbering blade cores except at the 'camp' where the proportions are reversed, blades too are prominent at that site though absent from the material seen by the present writers and this fact alone emphasises the futility of pursuing any statistical exercise. Small tools are mainly restricted to scrapers and a variety of utilized flakes, though a number of borers and the occasional knife (73, 74) are present, while a few microliths at one extreme, and transverse and barbed and tanged arrowheads at the other illustrate the chronological range.

The knapping on all but a handful of pieces is extremely crude and economical. Thinning, trimming and neat retouch is kept to a minimum and one is left with the impression of a number of sites where large chunky pieces of debitage, flakes, blades, cores and core tools were being used in a relatively carefree way.

The main reason for looking at the collection however is the large number of core tools recovered, many of them crude, that well illustrate the type and range of tools found on sites on or near the Clay-with-flints deposits in southern England but which remain inadequately reported. These are listed separately (Microfiche 2–7). A number are designated picks, adzes and axes but these labels do not imply that they were so used and perhaps the earlier term 'celt' would be better applied. The main distinguishing feature here is that axes have a straight profile and adzes a curved one, while picks come to a point rather than a cutting edge. Most tools catalogued as adzes and axes have tranchet edges and one (57) has a tranchet detachment on both faces at the cutting edge and at the butt, while a further example (51) has a double tranchet at the butt only. Few have flat or oblique facets at the butt (52, 60) in contrast to axes from the Thames where it is a prominent feature but the axes here are altogether more crude in appearance than those from the river. Other features, waisting and the presence of neater flaking at the blade in contrast to the butt, while present are also less evident, but one or two of the neater examples (eg 62) can be paralleled closely among Thames axes, and the sturdy pointed butt (45 and 54) is also a common feature.

	General, Slines Oaks	*Mostly east of pond Slines Oaks*	*Farleigh*	*Whistlers Wood*	*Frith Wood*	*Worms Heath 'camp'*	*Total*
Cores	485	157	1			190	833
Core fragments	137	106	6	2		48	369
Core rejuvenators	18	7				17	42
Crested pieces	16	41				25	82
Flakes	719	677	36	51		119	1602
Blades	186	371	12	16		319	904
Microliths	2					1	3
Scrapers	42	37	1	1		56	137
Borers	25	20				4	49
Truncated pieces	28	31				21	80
Burin	1						1
Obliquely trimmed pieces	5	2				6	13
Single notch	34	7				2	43
Double notch	5	2				1	8
Backed blades	8	1					9
Denticulated pieces	20	3				1	24
Retouched pieces	72	12				12	96
Unclassified	4						4
Hammerstones	2	11					13
Axe sharpening flakes	1	1				1	3
Axe thinning flakes	4	3					7
Micro-burins		3					3
Fabricator						1	1
Tranchet axes/adzes	3					12	15
Non tranchet axes/adzes	4			1	1	5	11
Heavy axes	5					4	9
Picks	1		1			9	11
Pick hammer	1						1
Polished axes	4						4
Stone discs	2						2
Total	1834	1492	57	71	1	854	4379

TABLE 1. Material deposited in East Surrey Museum, (Note: after sorting and study, a number of pieces which are listed here were returned to Slines Oaks and buried)

Adzes and axes can be classified in greater detail using symmetry of face and profile views but others, being so irregular, are difficult and perhaps impossible to classify. Some (1, 2, 26) may be preforms for either Mesolithic or Neolithic axes, while others may be tools in their own right. The edge of some (2, 12, 14) is rounded and battered as if used as a hammer, on others (24) the butt is bruised. A number have a pointed end (3, 9, 11, 23) and may have been crude picks while others (1, 17, 27) have a tranchet detachment. The wedge-shaped cross section of some (5, 11, 25) raises the possibility that they were for splitting timber. Waisted tools (30) are present. These have been noted at other sites sometimes as axes but also as waisted scrapers (Wood 1952, 22), the waisting feature being a development of a technique commonly found on tranchet axes. Y-shaped axes, though a form noted on other sites in Surrey and elsewhere, are absent from the Worms Heath collections.

In contrast to the cruder core tools the ground axes in the collection are all broken; even the two 'Seamer' axes which one might expect to have been highly valued evidently experienced greater use than the core tools in general. This enhances the view that most tools were hastily produced for immediate use and then discarded. The plentiful supply of flint allowed new tools to be quickly produced when needed.

	Probably Slines Oaks	*TQ 382 576*	*General Slines Oaks*	*Pond, Slines Oaks*	*Slines Oaks/Warlingham area*	*Worms Heath 'camp'*	*Farleigh*	*probably Farleigh*	*Whistlers Wood*	*Unprovenanced*	*Total*
Flaked nodules	2										2
Flake cores	6	1	23		46	20		19		47	162
Blade cores	6		13		21	39		4		33	112
General waste			25			6				1	32
Primary flakes	3		2								5
Secondary flakes	153	2	93	30		117	12		39		446
Spalls	3										3
Blades	30		245	91					5		371
Tips	28		6								34
Segments	13		3	27							43
Butts	59		15						3		77
Microlith	1										1
Utilized blades	16		3								19
Retouched blades	6										6
Utilized flakes	41	1	9				1		8		59
Retouched flakes	7										7
Core trimming flakes	7		9								16
Core rejuvenation flakes			9								9
Scrapers	42		2		1				6		51
Borers	13	1	4						5		23
Knives	3										3
Fabricators	1		1								2
Axe thinning flake	1										1
Axe sharpening flakes	3										3
Hammerstones			2			2		1			5
Transverse arrowhead			?1								?1
B & T arrowhead	1										1
Retouched pieces			3								3
Core tools	1	4	23		4	32			2		66
Total	442	9	491	148	72	216	13	24	68	81	1536

Core tools also come from Frith Wood 1 and Henley Wood 2

TABLE 2. Material retained in East Surrey Museum

The handaxe (75) is a remnant of an earlier epoch. Stained, rolled and abraded, it has no bearing on the rest of the collection. The two ground pebbles (71, 72) however are intriguing. While use of quartzite pebbles in the south-east is attested during the Mesolithic, use need not be restricted to that period. The bevelled edges would appear to have been used in some grinding process, but this would still allow a wide range of purpose from food preparation to flint tool fabrication and although small for the purpose, is similar to grinding stones used in early cereal processing (Bender 1975, 143). Utilized quartzite pebbles are also present among similar assemblages from Cranborne Chase (Bradley *et al* 1984).

The artefacts inspected display infinite variety both in size and form ranging from what are evidently picks and axes at one end of the scale to punches and knives at the other, and a whole range of activities would appear to be represented.

Discussion

Being a surface assemblage, little can be added to provide a more secure chronological bench-mark for many of these tools; for while it is clear that such features as tranchet sharpening had a long period of use in the Mesolithic, it is by no means certain how long this continued into or alongside the Neolithic. Certainly some tranchet axes from the Thames display Neolithic knapping traits, while Martin Green has noted tranchet detachments on Neolithic material from Cranborne Chase (Bradley *et al* 1984, 96). Neither does the rest of the material provide any indicators; one microlith, an obliquely blunted point, a long-lived type, is counterbalanced by the presence of 'Seamer' axes and a Bronze Age arrowhead. Such a geological and geographical focal point may in any case expect to display almost continuous occupation of one kind or another in successive periods; in which case the assemblage could easily represent up to six millennia of activity. Put in another way, only one core tool need be discarded every 75 years. The appearance of the flint artefacts however suggest that this is not so, and apart from the odd piece most of the assemblage appears to be relatively homogenous in terms of patination, staining and abrasion, while the knapping technique is generally pretty crude and contrasts markedly with Mesolithic/Neolithic flintwork from the Greensand deposits or from the Thames Valley. In fact the group sits well alongside the crude material from elsewhere on the North Downs and indeed from the Chalk and Clay-with-flints deposits of other southern counties, the flintwork often formerly referred to as 'Campignian'.

Frank Lasham (1893) was first to note the difference in the character of flintwork from the North Downs, describing the tools as rough and badly shaped compared with the Greensand examples; comparable to Palaeolithic types in 'rudeness and general characteristics' as well as being 'plough stained'. Though he thought the difference was chronological, he observed that the assemblages included rough flakes, rough celts, scrapers, pounders, and cores which he compared with collections from downland at Eastbourne and Cissbury in Sussex, and Ropley in East Hampshire. In a series of rambles Johnson and Wright (1903) emphasized that these sites were by no means unique; in particular they demonstrated the presence of a series of sites between Headley and Chipstead. Wright's Collection (British Museum unregistered) included large cores and chunky flakes from Addington, scrapers and flakes from Caterham and flakes from Chipstead, but the greater part of the material seems to originate from the Banstead area; 38 chunky scrapers, three axe fragments, a waisted tool, together with three waisted scrapers and 47 crude core tools. The great number of these latter tools indicates that the site may be a good parallel for Worms Heath. Resulting from discussion in the 1920s the crude celts and picks from the Chalk downs sites were amongst those considered similar to examples from the Thames when the term *Thames pic* was coined to compete with the *Campignian pic* (Dale 1918, 29; Smith 1926, 92) but the material was not considered further until Commander K R V Todd's work in the late 1940s which stimulated discussion of the Secondary Neolithic in Surrey (Wood 1952). Todd's assemblage from East Horsley was from an excavated site and greater emphasis could therefore be placed on the contemporaneity of the artefacts. Thus large, chunky flakes, scrapers and often crude cores were seen as an integral part of the assemblage but there were a variety of other crude tool types including wedges, adzes, flake axes, picks, fabricators, knives, and most significantly a polished axe fragment. Also present and remarked on by Wood as being highly characteristic of the Secondary Neolithic were four chalk balls and a flint ball of unknown use. The West Horsley site produced a large and varied scraper assemblage and from the surface a waisted scraper (Wood 1952).

More recently such assemblages have been seen as the debris from groups exploiting the Clay-with-flints for raw materials, and the reason behind concentrations of tranchet axes in these areas is explained in the availability of surface nodules for their manufacture (Care 1979). The material is comparable with that from excavated flint mine sites and while it has been suggested that the crude core tools from surface sites may reflect similar activities

(Gardiner 1984, 28) in the Neolithic, it has been emphasized that elsewhere the assemblages contain a wide number of tool types of which the core tools form only part (Bradley *et al* 1984, 96) and the assemblages may in fact represent settlement debris.

Returning to the Surrey sites; after close scrutiny it becomes apparent that some in fact occupy well drained locations on isolated sand or gravel deposits overlying the chalk rather than on the Clay-with-flints proper. The Worms Heath sites are all contained on Blackheath Beds gravel, while the West Horsley site is on Netley Heath deposits. Johnson and Wright collected material from the sands of Headley Heath and late Neolithic flintwork has been found there more recently (O'Connell & Poulton 1982, 6–7). Large areas of Thanet Sands are present at Banstead and it could be that the material in the W Wright Collection comes from that formation. In contrast, a number of scraper and flake assemblages from the Leatherhead area (Sergeant Beveridge Collection - Guildford Museum) are sited on the Upper Chalk. Whether or not this area of the North Downs had a loess mantle during the Neolithic (Catt 1978, 14), those areas providing better drainage and variety of habitat within its catchment area are likely to have provided more attractive settlement sites. The next stage must be to investigate some of these sites in a more structured way.

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