

# **Fieldwalking in Surrey: surveys in Waverley and at Paddington Farm, Abinger**

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## **Introduction (DG)**

The Excavations Committee of the Surrey Archaeological Society has long been aware of the inadequate state of our knowledge regarding past land use patterns within the county. To a large extent, an examination of the Sites and Monuments Record shows the distribution of archaeologists and collectors more clearly than it reflects the reality of any particular period in the past. As a result, large areas of the county appear, perhaps misleadingly, to be archaeologically barren. Even in well recorded localities, most individual finds have been made as a result of chance, rather than being recovered under controlled conditions.

In Surrey, this imbalance cannot be adequately corrected by aerial photographic surveys as, in general, our light soils tend not to produce the clear soil and crop marks visible in surrounding counties. Under these circumstances it is difficult to make any but the broadest statements as to past land use, especially in relation to the earlier periods.

For this reason, the Committee has been keen to encourage properly organised fieldwalking projects within the county. To this end a day symposium on fieldwalking was held in 1985 and arising from this, a small booklet, describing fieldwalking techniques, *Fieldwalking Guidelines*, has been produced. This booklet, together with the necessary recording forms, is available free from the Excavations Committee at Castle Arch, Guildford.

It is, therefore, particularly pleasing to see two papers on fieldwalking appearing in the Society's *Collections*. These projects are largely complementary, in that the Waverley Survey covered a large area, with the aim of establishing settlement patterns in relation to the drift geology and topography; while the Paddington Farm Survey examined one site in great detail, with the hope of locating areas of intra-site specialised activity. It is also helpful that both teams adopted the same grid-based collection system, as this helps make their results more easily comparable.

While the conclusions drawn by the Waverley project could perhaps be enhanced by a more extensive use of the pre-existing record, both teams are to be congratulated on their pioneering work. It is also to be hoped that their efforts will stimulate further such projects within the county and that, as a result, our understanding of the past will be greatly improved.

## **Fieldwalking in Waverley 1983-4 (SNHT)**

Farnham Museum organised a season of fieldwalking over the winter of 1983-4. It was funded by the Community Programme section of the Manpower Services Commission, which provided a team of 10 full-time and part-time staff.

The aims of the project were two-fold, first to establish a method of field survey to be used throughout the Waverley Borough whenever practicable, and second, to examine a selection of areas within the borough to ascertain the extent of archaeological material surviving on different soils. The programme sought to use systematic data collection to improve the Sites and Monuments Record (SMR), which had hitherto relied on reported chance finds, earlier non-systematic collection (Rankine 1939; 1956) and small excavations. The Farnham Museum Society used systematic field collection, based upon traverses, on fields around Frensham (Graham 1981) and the results provided impetus for the Museum to organise fieldwalking on a larger scale.

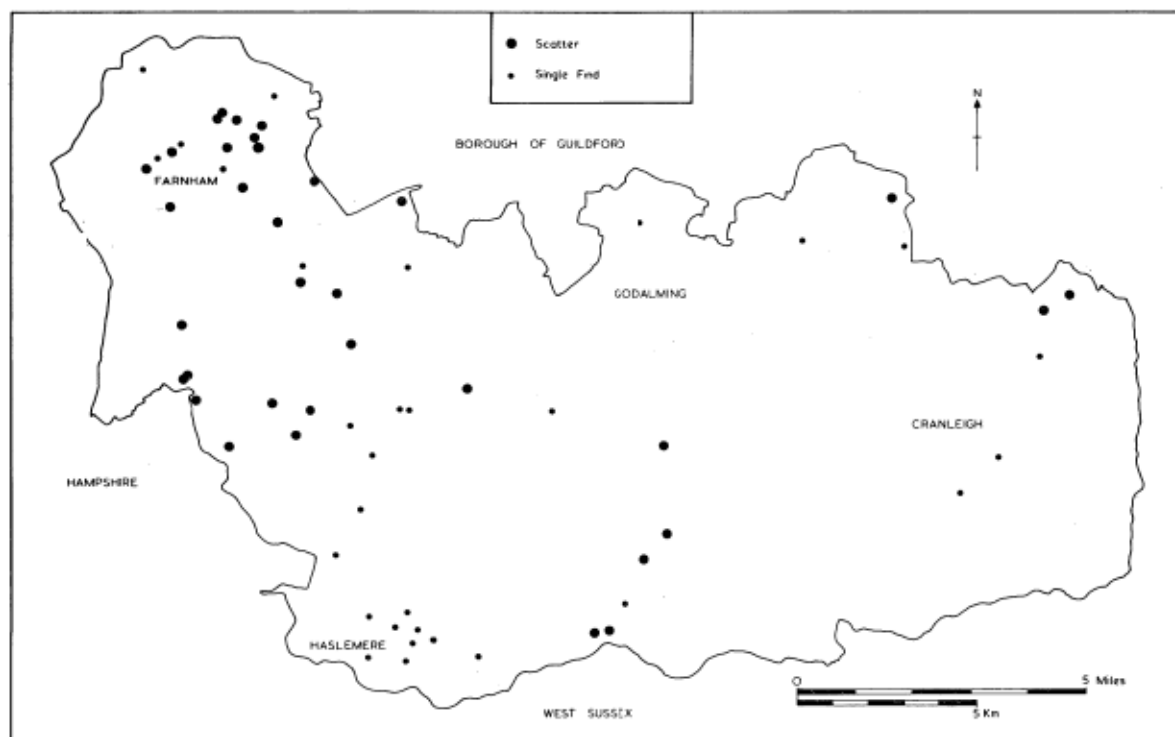


Fig 1. The distribution of Mesolithic finds in Waverley, prior to the survey (source: SCC Sites and Monuments Record)

#### FIELD SURVEY METHOD

In Waverley the amount of land that can be examined by conventional fieldwalking methods is limited, as the proportion of land in arable cultivation is very low. Fig 3 shows the amount of open land but does not indicate pasture, which is predominant on the Lower Greensand. Given these factors, it was decided to use an intensive level of coverage on the arable areas to attempt to extract more information from the available study area. It was decided to use a grid-walking system of survey, with the intention of investigating sample areas on differing soils (for discussions of methods of fieldwalking, see Fasham *et al* (1980) and Uglow *et al* (1984)).

The Waverley Borough has a varied geology, being situated to the north-west of the Weald. The south-eastern part of the region is situated on the Weald Clay, with the majority of the remaining area on the strata of the Lower Greensand (see fig 4 and the Geological Survey 1:50000 series). It was hoped that some comparisons might be made between these two zones. The Ordnance Survey 1:2500 series was used as these maps show the National Grid divided into 100m squares. This grid was replicated on the ground by measuring in from known points using a dumpy level, tapes and a prismatic compass. The grid intersections were marked with ranging poles and labelled with the appropriate grid references. The 100m squares were subdivided into 25m squares, each marked with bamboo poles topped with small flags to make them visible from a distance.

The 25m squares were to be the basic recording unit and were given letter and numerical suffixes after the relevant grid references (fig 5). When the squares were walked, the grid references and suffixes were repeated on the bags of finds. During post-excavation work, each find was marked to minimise the risk of separation from the bags during museum storage.

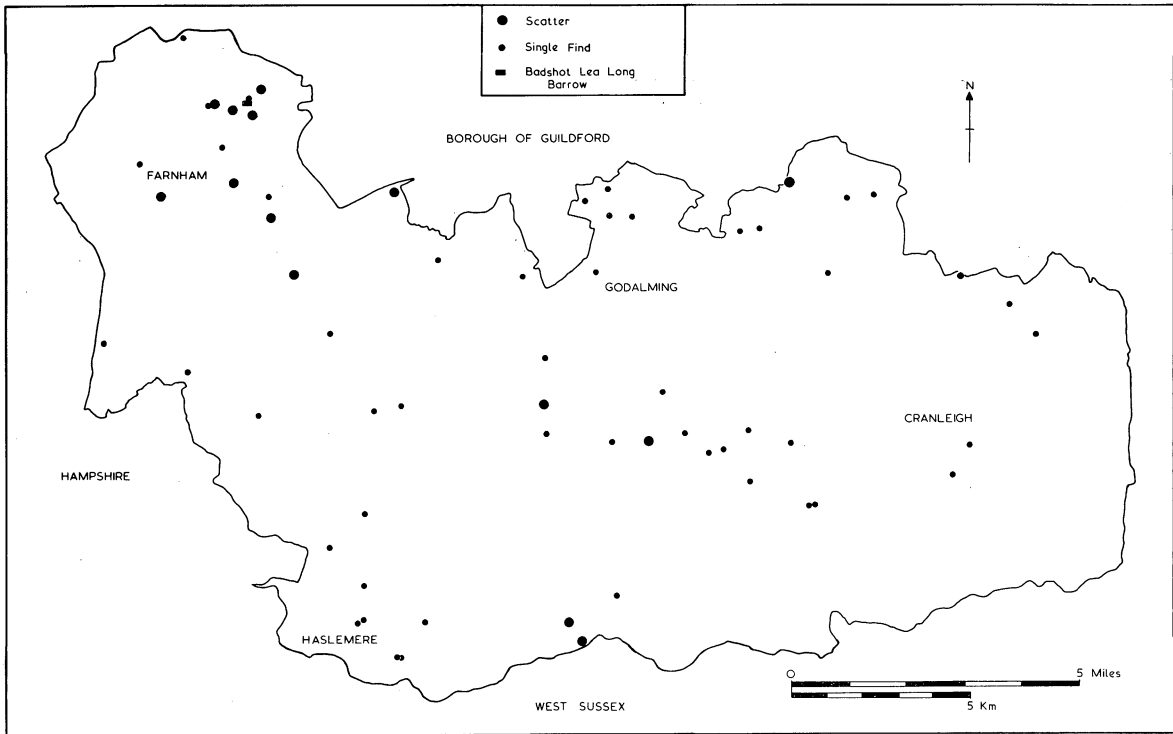


Fig 2. The distribution of Neolithic finds in Waverley, prior to the survey (source: SCC Sites and Monuments Record)

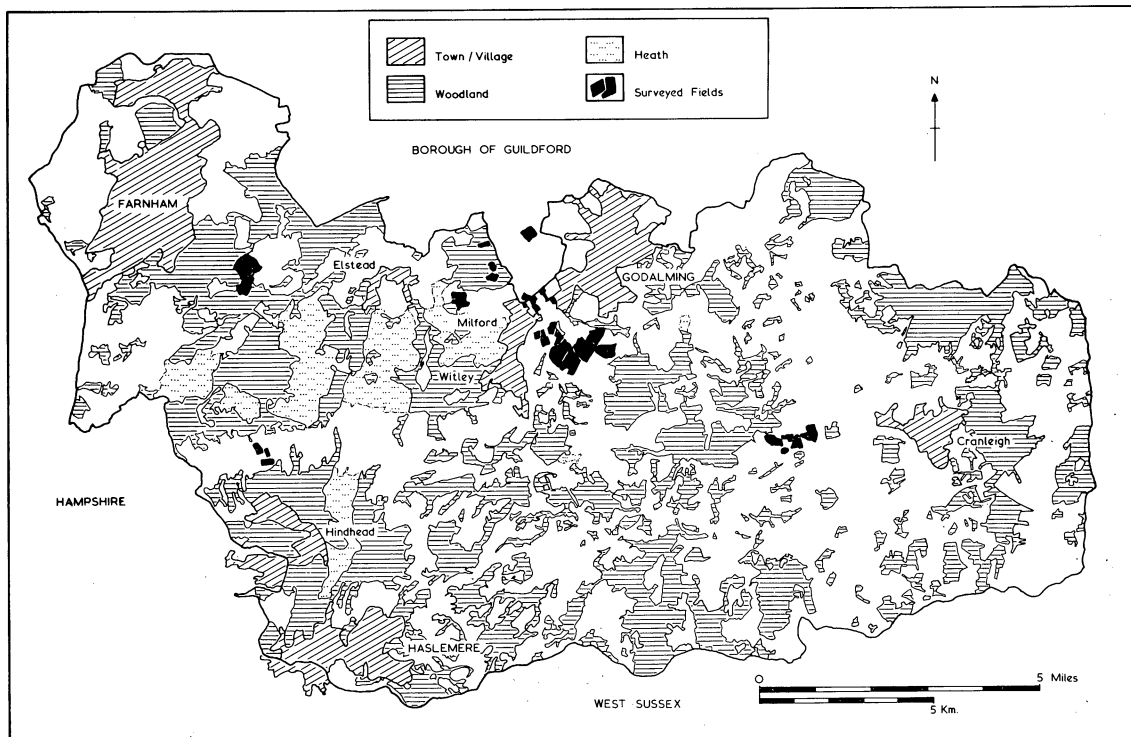


Fig 3. Land use in Waverley Borough

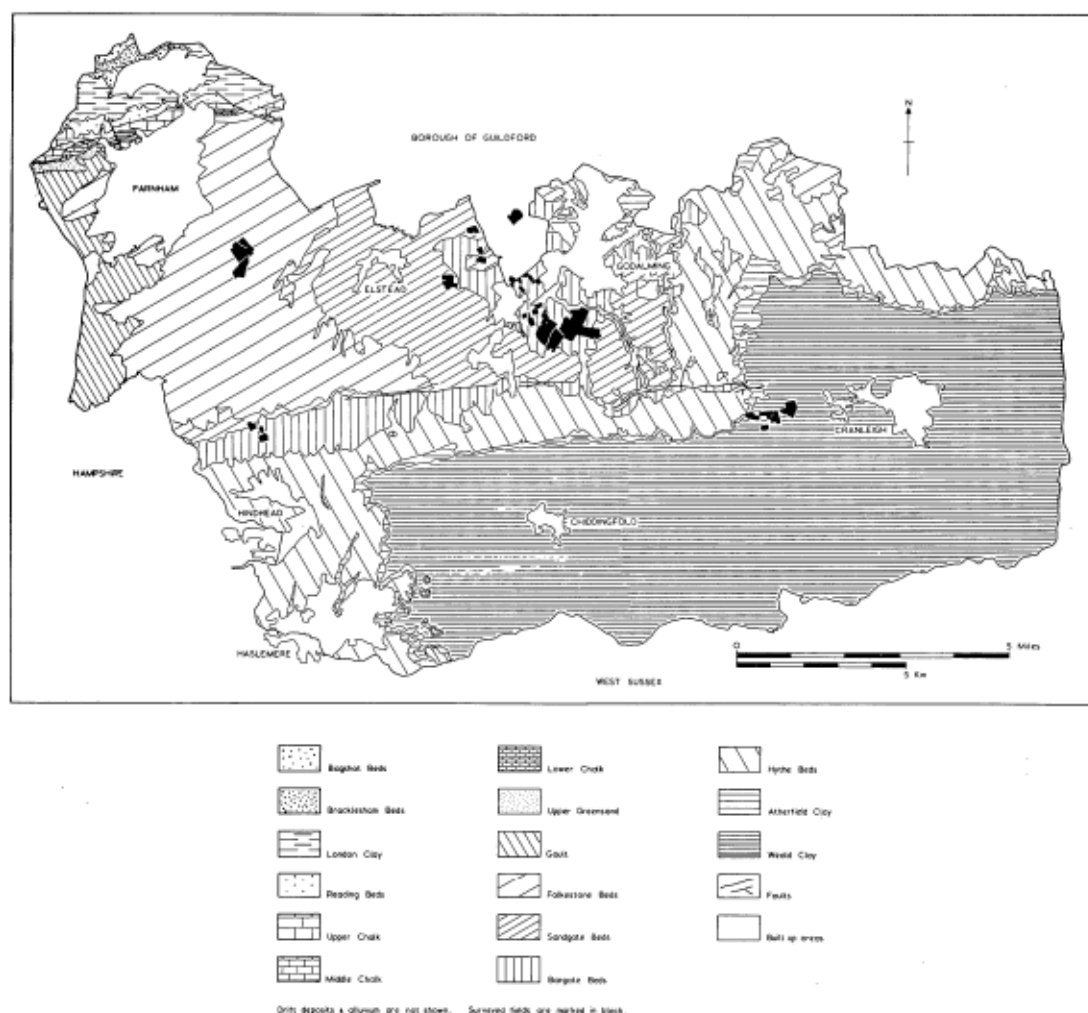


Fig 4. Geological map of Waverley Borough

Records of crop and field conditions were made for each field walked on specially designed forms. The spacing between walkers was 2m. This implies high intensity coverage, desirable with a partially experienced team of walkers. Total collection was not adopted. From an early stage it was noted that all fields contained 18th and 19th century building material and ceramics. It was considered too time-consuming to collect this for the amount of information gained. No specific concentrations of 18th and 19th century material were noted so it is likely that its presence is due to dumping and manuring. Walkers were asked to collect and retain material where the age of objects was uncertain, so that these could be examined in more detail after cleaning.

## RESULTS

Air photographs of the fields (Hunting Surveys – source: Waverley Borough Council) were examined but no archaeological features were noted. The only earthworks noted on the ground were lines of hedges that had been levelled in recent years (these were still marked on the OS

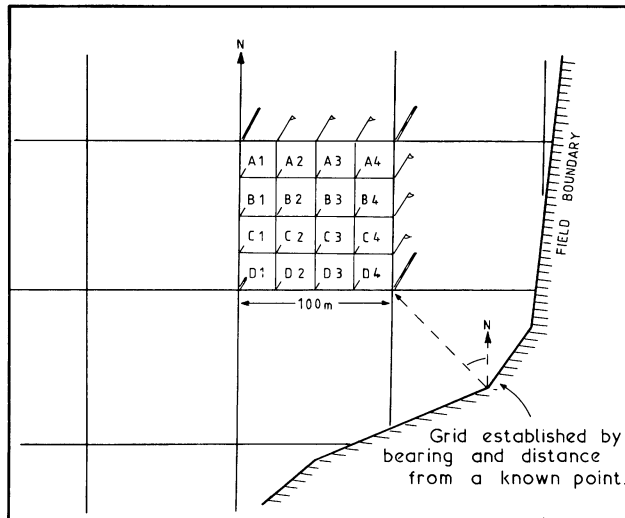


Fig 5. Diagram to show the layout of 25m squares and the suffixes used to record finds within individual grid references

base maps used). Forty-four individual fields were surveyed, varying in size from 1.9 to 27.8ha. The total area walked amounted to 283ha.

At Tilford (Fields 15–20, Folkestone Beds), the area walked was a set of fields west of the confluence of the Tilford and Farnham branches of the river Wey, between the river and an area of coniferous wood. The land in the southern fields, adjacent to Tilford Reeds, is an undulating slope towards the river. Further north, on both sides of the Farnham–Tilford road, the land slopes gently towards the river, ending in a terrace above the floodplain. Flint finds dated from the Mesolithic, with one Neolithic leaf-shaped arrowhead and five Bronze Age barbed and tanged arrowheads. There appeared to be no specific scatter of flint of any type but there was a slight increase in density towards the river. A small scatter of grey ware was noted in Field 15 at SU 864 439. As this appeared on the edge of the wood, it is possible that a larger amount of material exists in the wood itself. A few sherds of medieval and post-medieval wares were found on the fields but this was a low level random distribution, probably the result of manuring.

Three fields were examined at Avalon Farm, Churt (Bargate Beds). The farm is situated on a spur running from north to south. A small number of flint flakes were found on the ridge at SU 870 386 with random scattering elsewhere.

An area of the Sandgate Beds was investigated at Oxenford Grange, Peper Harow. The field area is flat where it adjoins the B3001 road and slopes southwards towards Bagmoor Common. A random pattern of flint was discovered, with only a few objects, some Mesolithic, some later prehistoric. Pottery was similarly scant. An area to the east of the farm at SU 941 431 was also investigated on the advice of the farmer, as a polished axe fragment had been found there in the 1960s (Holling & Harrison 1965). The area is a river terrace of the river Wey, which flows easterly to the north of the field. The area was walked by the author in a series of traverses 25m apart. A flint scatter containing Mesolithic material was discovered, with an increase in number of finds towards the river. As the area has not been grid-walked, it is as yet impossible to compare density of finds with other areas. Three fields on a south-facing slope east of Peper Harow House were examined but did not produce any material, probably because the field surfaces were unweathered at the time of survey.

Several plots of land were investigated at the market garden of Hurst Farm, Milford. The land lies on a flattened ridge on the Bargate Beds, which is dissected by a river valley on its south-eastern side. A concentration of flint blades was noted at SU 956 427. The landowner has also

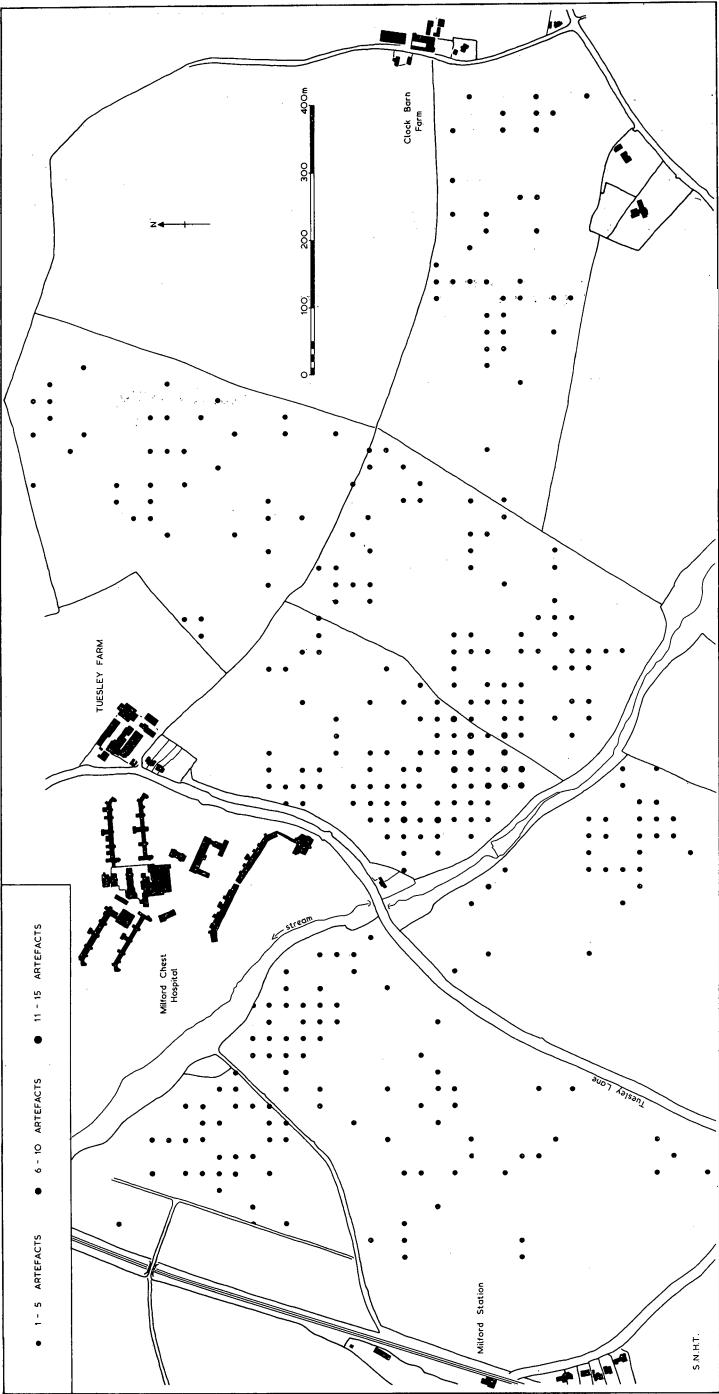


Fig 6. Dot matrix of flint finds from Milford station and Tuesley, Godalming

recovered worked flints from this location and has remarked that other finds were made on the land to the east of the farm where a modern housing estate now stands (Ockford Ridge). Few finds were made on the remainder of the farm.

An area of approximately 1km of arable land belonging to Tuesley Farm (bordering Milford Station) was investigated. The land is situated on Bargate Beds between eastings SU 953 and SU 974, and northings SU 410 and SU 420. The main feature of the landscape is a stream which runs south-east to north-west and the land is undulating. A flint scatter was discovered which borders the stream banks, with the maximum density of finds at SU 963 413 (fig 6). The density of finds falls off rapidly with distance from the stream and no concentrations of finds were noted on ridges further from the stream. No distinct changes in soil type were noted. Three leaf-shaped arrowheads were found at SU 965 416 (two) and SU 957 417. The majority of finds consisted of flint blades, probably of Mesolithic date.

Part of a large field belonging to Upper Eashing Farm was surveyed at SU 949 447, on recommendation from the farmer, as the field has a varying soil cover. It lies on the Bargate Beds, above the valley of the river Wey, where the river has cut the valley deeply into the underlying geological strata. Only the Bargate Beds stratum is represented on the field surface. A flint scatter was noted, containing material of varying date, showing an increase in density towards the western edge of the surveyed area, correlating with a change in soil type to a coarse sand.

A bloc of arable land belonging to Painshill Farm, Cranleigh, which crosses a low valley on the Weald Clay, was surveyed. The land lies between eastings TQ 016 and TQ 035 and northings TQ 384 and TQ 394, east of an outcrop of Hythe Beds which forms Hascombe Hill. A flint scatter was discovered on the ridge east of the A281 with maximum density at TQ 030 391 (fig 7). The

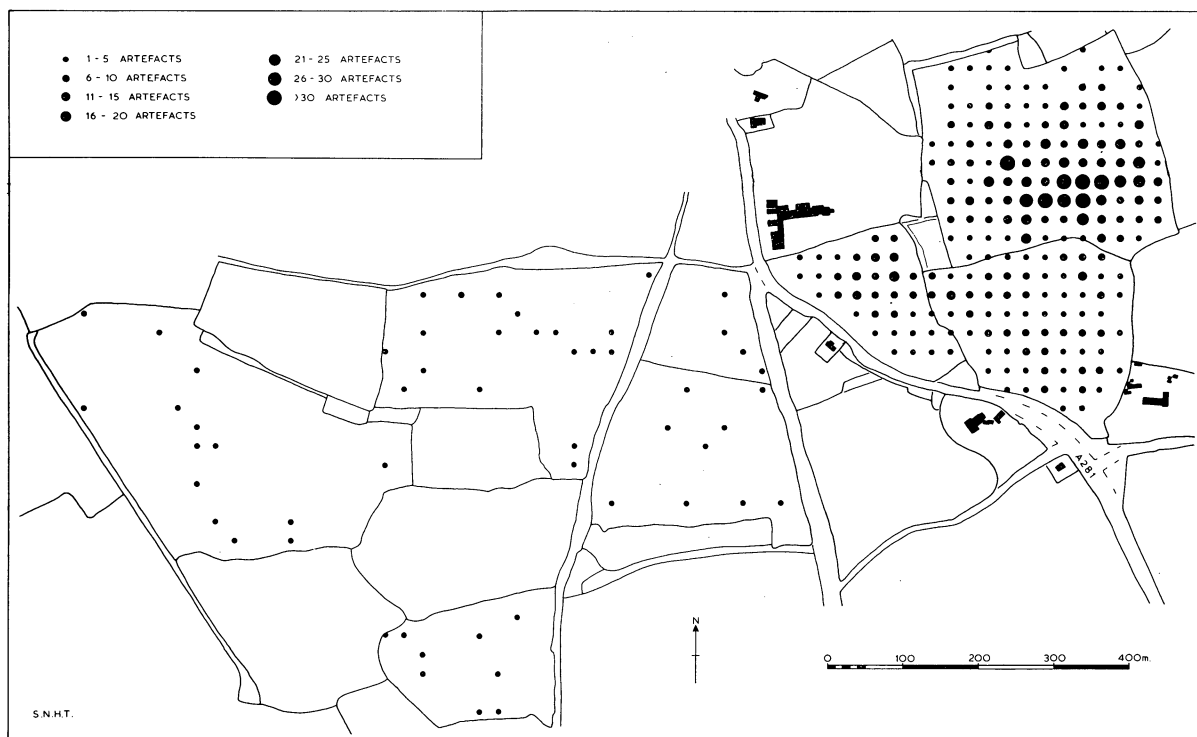


Fig 7. Dot matrix of flint finds from Painshill Farm, Cranleigh

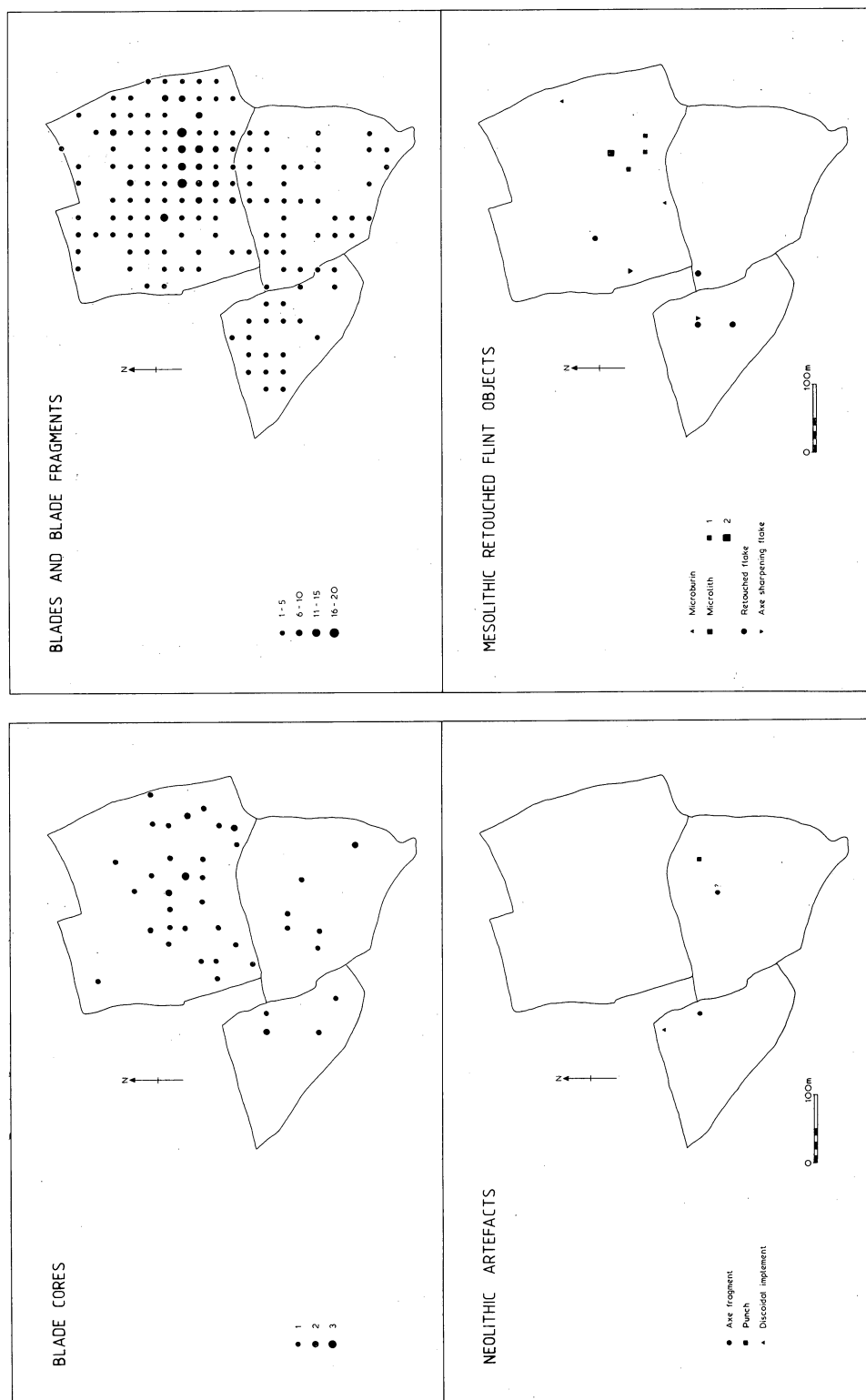


Fig 8. The distribution of specific flint objects from Painshill Farm, Cranleigh



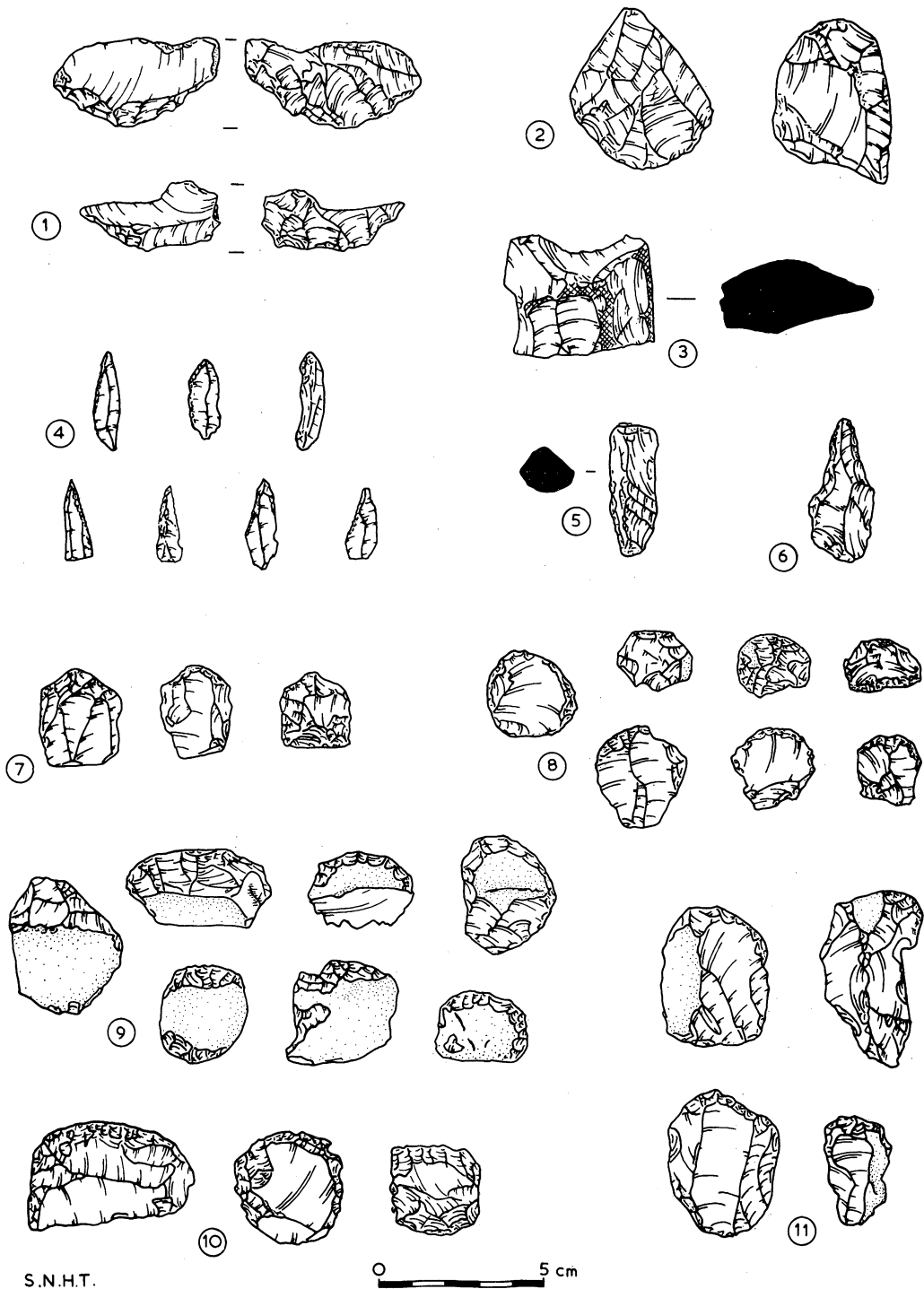


Fig 9. Examples of flint objects from Painshill Farm, Cranleigh: 1, Mesolithic axe sharpening flakes; 2, Mesolithic axe fragments re-used as blade cores; 3, Neolithic polished axe fragment; 4, microliths; 5, punch; 6, awl; 7, nosed scrapers; 8, 'thumbnail' scrapers; 9, cortical scrapers; 10, miscellaneous flat scrapers; 11, end scrapers

predominant material at this point was noted to be of Mesolithic date, including microliths of Horsham type. Items of Neolithic date were also recovered, including a polished axe fragment, discoidal implements and a punch. Scrapers of various types were recovered but their dates are less certain. Lithic material later than Mesolithic date did not cluster anywhere on the ridge and the distribution of blades centres on the source of the microliths (fig 8). On this basis it is likely that the blade distribution is waste material from microlith manufacture rather than having a later origin. The soil type east of the A281 is sandier than that of the valley floor. This is due to an outcrop of sandstone in the Weald Clay and the presence of drift deposits.

#### DISCUSSION

The majority of archaeological finds held in museums in Waverley relate to the prehistoric period, with an abundance of Mesolithic material recovered from earlier non-systematic survey (Rankine 1939; 1956). The majority of Rankine's Mesolithic finds were from the Greensand, within and south of Farnham, with other sites on similar soils ringing the Weald in neighbouring counties. Rankine hypothesised that Mesolithic hunter-gatherers preferred areas of lighter soils, due to the less dense tree cover and the attraction of game. In Rankine's gazetteer of sites in Surrey (1956), the scatters on the Greensand are given prominence but he also notes findspots on sandstone deposits within the Weald Clay, especially around Chiddingfold. The gazetteer does not record the number of finds made from each location so it is not possible to gauge the relative size of each scatter. Systematic fieldwalking has discovered another small Mesolithic site, Painshill Farm, in such a location and it is highly likely that more exist elsewhere on the sandstone outcrops and drift deposits within the Weald Clay. The abundance of river terraces around Cranleigh and the presence of drift deposits would repay further work (see also Ellaby 1977; 1985; Jacobi 1978).

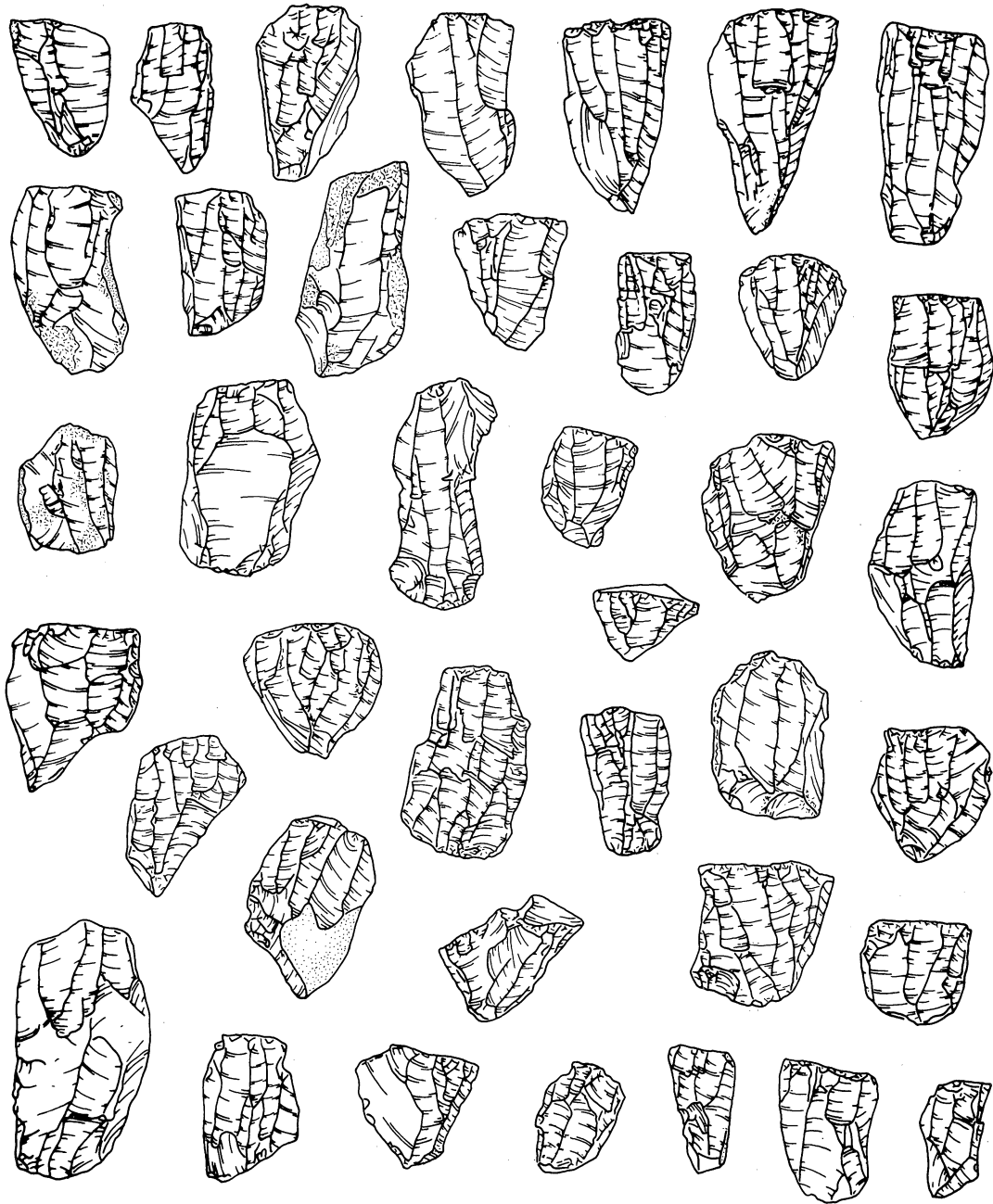
Rankine's sites on the Lower Greensand have not been reinvestigated by systematic survey as most are now built over or are on the heaths and are therefore not available for examination by fieldwalking. The majority of fields investigated on Greensand produced a few pieces of worked flint but the flint scatters found during the course of this survey tended to be situated on terraces above stream and river valleys. In other words, topography seems to have a greater importance than soil type on the greensand. Further work on the Weald Clay may produce an opposite picture on the heavier soils.

Most of the scatters investigated also contained lesser amounts of Neolithic and Bronze Age flint. This points towards later use of preferred areas and is echoed on other local sites (Rankine 1956; R Ellaby, pers comm). No prehistoric pottery or metal objects were found, therefore little comment can be offered regarding the extent of Bronze Age or Iron Age settlement. The presence of barbed and tanged arrowheads at Tilford echoes the distribution of material reported in the SMR and hints at an intensity of use of the Folkestone Beds during the Bronze Age. Unfortunately, arrowheads do not necessarily indicate settlements as the majority can end up in the archaeological record as hunting losses. However, the arrowhead finds point to settlement sites within proximity of hunting areas.

Finds from the historical periods were very thinly scattered, with the exception of 18th and 19th century building material and ceramics. The scatter of grey ware at Tilford is likely to be of Romano-British date but has not been closely identified. Previous fieldwalking in the Frensham-Millbridge area also produced Romano-British material (Brooks & Graham 1981; Graham 1981). Pottery finds from the medieval period were scarce and do not show any distribution trend; no indications of destroyed medieval buildings or earthworks were identified. It is suggested that the areas investigated have been in cultivation for centuries and the low number of finds is the result of manuring. Higher densities of medieval and post-medieval pottery finds are likely to be found closer to the present towns and hamlets. A wider study, including surface survey on the heaths and in woodland, may throw more light on the land use in more recent periods.

## ACKNOWLEDGEMENTS

I wish to thank the landowners, tenants and farm managers for their co-operation, the members of the MSC team for their assistance, Anna Mercer and the staff of Farnham Museum for practical help and Farnham Museum Society for the loan of survey equipment. Roger Ellaby



S.N.H.T.

0 5 cm

Fig 10. Examples of flint objects from Painshill Farm, Cranleigh: flint cores (unnumbered)

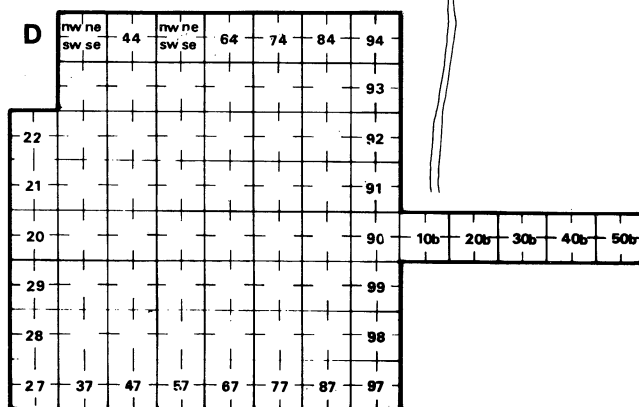
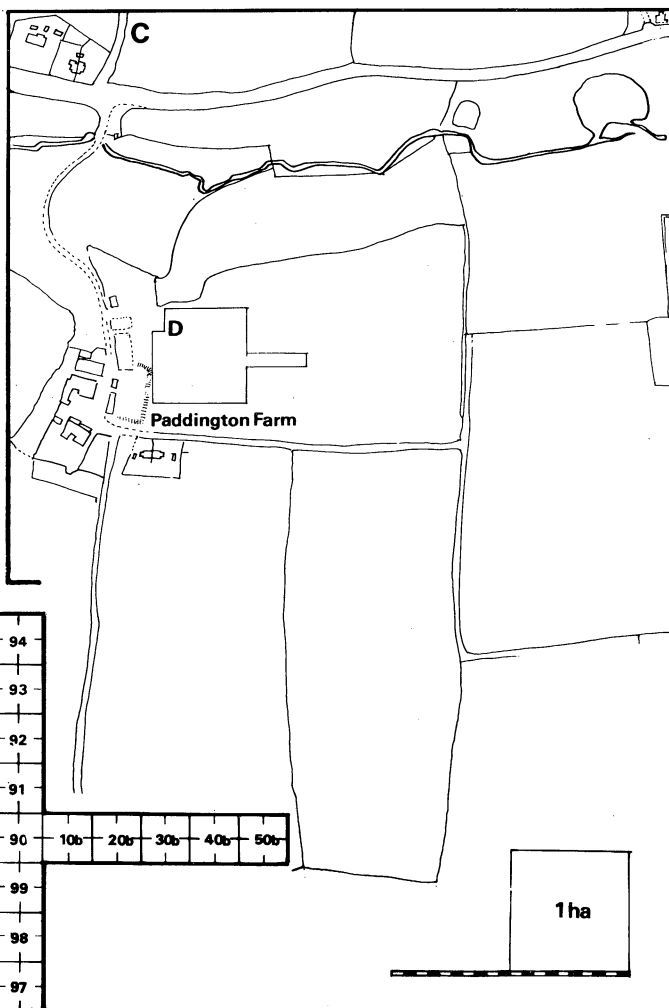
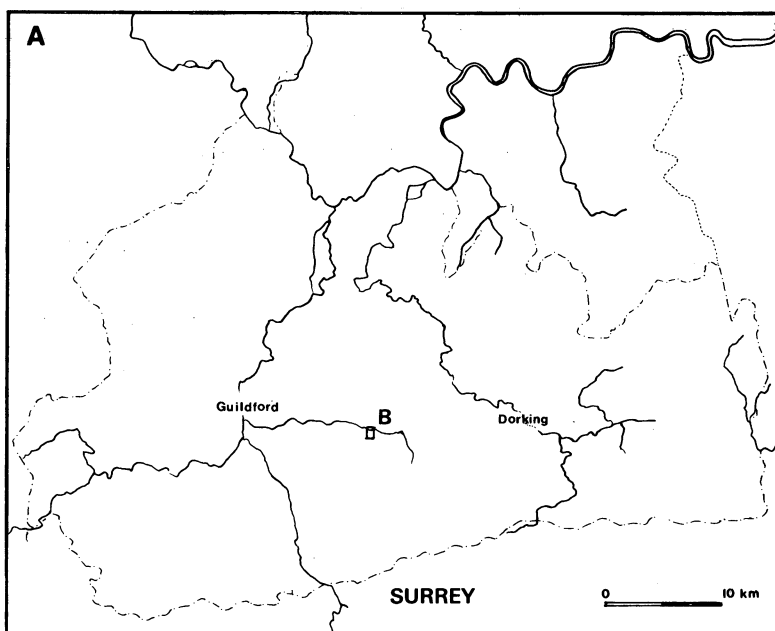


Fig 11. Paddington Farm. Location maps and grid plan

examined the flint finds and offered valuable comment. David Graham and David Bird offered many ideas and inspiration which were much appreciated.

#### **A Mesolithic site at Paddington Farm, Abinger (DF and KW)**

During the winter of 1984/5 random fieldwalking of an area to the north-east of Paddington Farm House, Abinger (TQ 102 471), by Keith Winser and Ken Waters gave an indication of the presence of a large Mesolithic site. Some 1700 pieces of flintwork were recovered in a marked concentration in the north-west sector of the field which compared dramatically with the apparent lack of material from other sectors, and it was felt that local accumulations of scrapers, cores and microliths, might indicate the presence of activity areas. In the north central part of the field, just above the slope down to the floodplain, a further concentration could be discerned, this time largely composed of large broken nodules of flint. This latter scatter corresponded with a slight depression in the ground surface and it was speculated that this may have been the siting of a stable, inferred from the name Stable Field (Abinger Tithe Map, SRO). The following autumn the opportunity of testing these views was taken and with the kind permission of Mr Evelyn, owner of the Wotton Estate, and Mr S B Osborn, the farmer, careful collection of surface material on a grid basis was made and plotted for distribution. Results are recorded below.

#### **TOPOGRAPHY**

The field of 4.3ha occupies a bluff that overlooks the Tillingbourne river which bounds its northern edge. The soil is Fyfield 2 series (Soil Survey), a well drained sandy soil over Hythe Beds, though as the field undulates considerably there may be portions of Sandgate Beds present. No terrace gravel remnants are apparent and apart from the rare piece of sandstone the only natural rock in the soil is an occasional piece of ironstone. The field has been ploughed since at least the early 18th century and is shown as such on John Roque's map of 1768; it was presumably arable from much earlier. While ploughing may have disturbed subsoil features, the surface debris is unlikely to have been significantly displaced except perhaps along the northern edge as it slopes down to the stream, and solifluction and soil creep may well have played a part here.

#### **FIELDWORK**

To ascertain the nature of the flint scatter in the north-west sector and to determine whether activity areas could indeed be identified, a 10m<sup>2</sup> grid aligned on the national grid (fig 11) was laid out over that portion of the field; the grid covered in total just under 1ha. Each square was divided into quadrants so that effectively recovery from each collection unit was of 5m<sup>2</sup>.

The fieldwork was carried out over two weekends during which weather conditions were far from ideal. This is important, as adverse conditions can have a critical effect on the results. The field had been harrowed and the crop recently planted, so that even minute pieces of flint should have been easily visible, but a warm spell meant that the surface was extremely dusty and a good deal of debris obscured from view. Unfortunately it was impossible to wait longer as the crop was beginning to show through, and if left for a week or two longer this itself would have had an effect on visibility. Fieldwalking then went ahead in bright, low, autumn sunshine. To minimise the effect of sunlight and shadows, each quadrant was cross-walked carefully in all four directions in lines approximately 1m apart. Thus the ground was covered 0.5m north to south and east to west. A time limit of 30 minutes was originally set for each grid square to encourage a standard pace of working, though it soon became apparent especially in certain areas that this could not be adhered to, and 45 minutes or longer was commonly taken. Finally a record was kept of the squares walked by each individual in case of inherent recognition bias, though this did not prove a problem.

During the week following completion of the survey there was a change in weather conditions and the field received heavy rain. As the grid had been left in place to facilitate a magnetometer survey, the opportunity was taken to re-walk four grid squares (43, 44, 53 and 54), using the same individuals who had walked the square originally. Although bright sunlight persisted, the recovery rate changed substantially and the results can be compared below. This demonstrates well the difficulty of assessing the relative significance of different surface sites where collection has been made under different conditions or methods of survey.

#### THE FINDS

All artefactual debris was collected, ranging from brick and tile through to flint fragments, in all some 12,385 pieces of material. This can be broken down as follows:

Flint	9765
Burnt flint	783
Other stone	593
Brick	73
Tile	845
Slate	1
Clay pipe	22
Glass	35
Bone	8
Pottery	198
Building flint	18
Others, metal, plastic	44
	<hr/> 12,385 <hr/>

The flint is considered separately below. Of the rest, the various types of building material, clay pipes, and pottery were perceived as a thin overall general scatter with a tendency towards higher numbers towards the north-east of the survey area, that is towards the supposed site of the stable. Of interest, given the proximity of the Abinger Roman villa  $\frac{1}{4}$  mile to the north-east was the almost total absence of Roman pottery, only one fragment of samian ware being present.

Equally striking was the virtual lack of Saxon and early medieval pottery from an area that cannot have been too distant from the Domesday settlement of Paddington.

#### *Flint*

The flint was separated into categories following the scheme advocated by Froom (1976). The identification of each piece was checked by a second person and where doubt was cast or, on the many occasions where a piece could have fitted into several categories, a third adjudicated. Thus there is certainty that the assemblage was sorted to a common and consistent standard. The following categories were present:

Tools:	
Core tools (including 1 axe fragment)	5
Microliths	25
Scrapers	15
Burins	1
Awls	7
Utilised pieces	142

Waste:	
Nodules	33
Primary flakes	339
Secondary flake	1352
Flake core	132
Blade core	135
Core rejuvenating flake	68
Blade production waste	704
Blades	174
Butts	373
Segments	186
Tips	148
Microburins	24
Spalls	341
Bashed lumps	377
General waste	5184
Burnt flint	783
	<hr/> 10,548

Judging from the cortex the raw material is predominantly from the chalk Downs about one mile to the north of the site where flint occurs on the surface of the Clay-with-flints, or it can be found, much frost shattered and weathered, at the base of the escarpment. Such factors probably explain the economical knapping so that even the most mishapen, small and unworkable nodules appear to have had one or two flakes detached. Others may have come from a gravel spread, perhaps a local terrace of the Tillingbourne, while one or two pieces were of Bullhead Beds flint, the nearest exposures of which would be in the East Horsley area some five miles to the north. Most pieces are slightly weathered, as would be expected for material from the plough soil, but only rarely does a patinated piece occur, perhaps brought in from the calcareous area at the foot of the Downs for reuse. Excluding burnt flint a total of 70,968g was recovered, the majority general waste, a category that covers a whole range of undiagnostic pieces from nucleiform fragments to thin slivers, that do not fall easily into other categories. Not all of this need necessarily be the result of ancient knapping, but historic debris and indeed modern plough damage would not be expected to amount to a significant proportion and on the whole the assemblage appears to be homogeneous and is probably attributable to one period.

### **Microliths, by Roger Ellaby**

A total of 23 microliths was collected from the study area, the majority being sufficiently complete to permit classification (Jacobi 1978, fig 6). Although the sample is small it seems typical of a number of collections made in the Wealden district since the late 19th century. Of the published groups it resembles most closely those from sites east of Horsham (Clark 1934), from Farnham (Rankine 1936; Clarke & Rankine 1939) and more recently from Flanchford, Reigate (Ellaby 1985).

Recent work (Jacobi 1978; 1981; 1982; Ellaby forthcoming) has identified three microlithic traditions in the Weald corresponding to successive stages of the Mesolithic period. Stage 1, the Early Mesolithic (c8000–7000 bc) may be identified with the production of relatively large obliquely-backed points (class 1) with only rarer isosceles triangles (class 2a), bitruncate points (class 2b, 3a/b) and long convex-backed lanceolate pieces (classes 3c/d, 4). Stage 2, the Horsham or Wealden period (c7000–6000 bc) yields obliquely-backed points rather smaller than those from the Early period (Pitts & Jacobi 1979) in combination with hollow-based points (class 10), isosceles triangles and bitruncate points. Stage 3, the Later Mesolithic (c6000–4000 bc) is characterised by smaller microliths, often of minute geometric proportions. The principal types



Fig 12. Paddington Farm. Distribution of microliths, microburins and awls. Small grids represent re-survey of squares 43, 44, 53 and 54



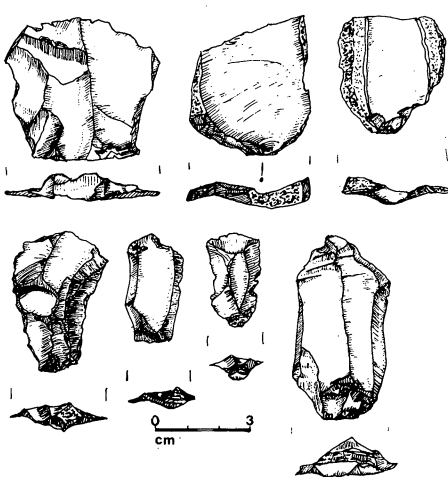
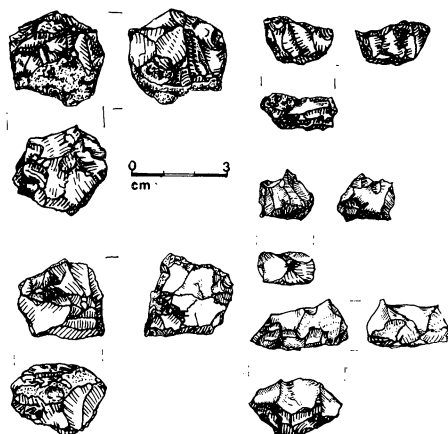
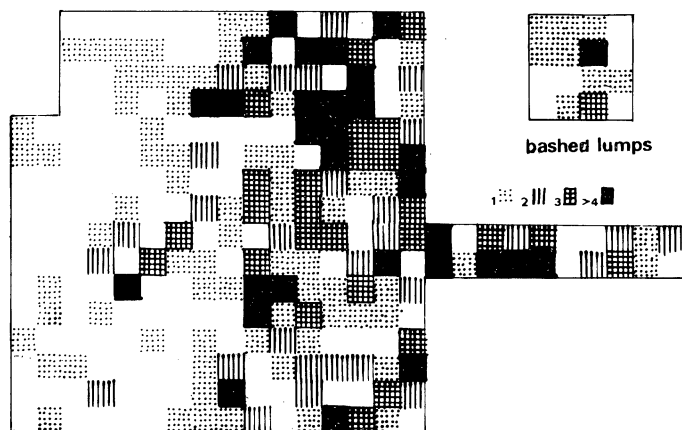
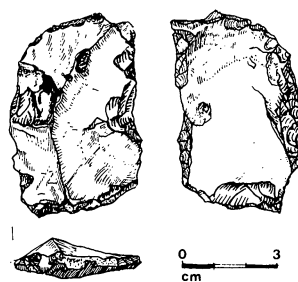
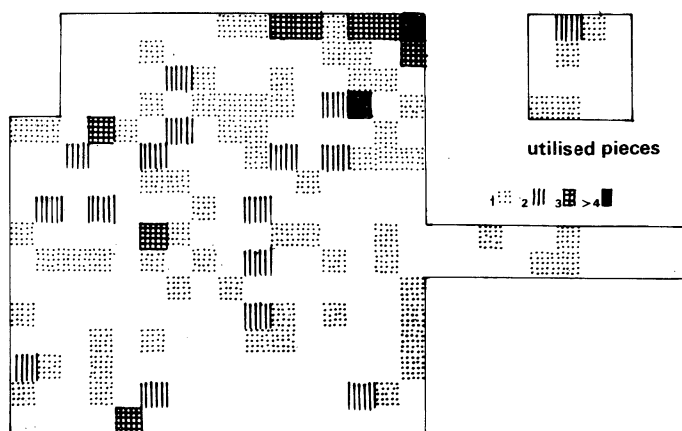


Fig 13. Paddington Farm. Distribution of utilised pieces, bashed lumps and secondary flakes. Small grids represent re-survey of squares 43, 44, 53 and 54

are straight-backed bladelets or rods (class 5) and scale triangles (class 7) while towards the end of the period there may be included small lanceolates and trapezoids, inversely retouched shouldered points and microtranchets. The obliquely-backed points, common in the preceding phases, fall sharply in quantity and possibly disappear by the end of the period.

If the above sequence is broadly correct and there are no circumstances in which it might be supposed that hunting communities were using combinations of microliths belonging to both older and newer traditions, then the Paddington Farm collection indicates that the site was visited during both the 'Horsham' and Later Mesolithic periods. The relatively small obliquely-backed points (nos 1–9) are typical of the 'Horsham' microliths which might be obtained from an excavated site, in combination with hollow-based points (nos 10–12), bitruncated points (nos 13–14) and an isosceles triangle (no 15). Examples of Later Mesolithic microliths are the scalene triangles (nos 16–19) and the fragmentary pieces of either scalene triangles or rods (nos 20–2). It cannot be certain that the higher representation of 'Horsham' microliths is due to more intensive use of the site during that period, as the soil conditions at the time of collection may have hindered the recognition of the often minute microliths of the later period. Indeed, a much larger sample of microliths, preferably obtained by sieving, would be needed to assess the full range of microliths on the site, and from such data it might be possible to make a more accurate determination of the occupational timescale.

#### Microburins (fig 12, middle)

A very light wide scatter with nothing more than a slight tendency to occur in the area of 73.

#### Microliths (fig 12, top)

Occur in the northern part especially in the area around 64, an area which also produced a concentration of tips.

#### Bashed lumps (fig 13, middle)

A heavy distribution predominantly to the east of the site not occurring in other tool types, apart from a denser concentration towards the north-east, especially around 73, 83, and 82.

#### General waste (fig 16, top)

A slight tendency towards concentration in the eastern area, with sharp falling off towards the west. Concentrations to the north-east especially around 82, 73 and the extreme north-east corner 94.

#### Burnt flint (fig 16, middle)

A light scatter overall, concentrated in the north but falling away towards the south-east. Very little gradation occurs between quadrants of dense clusters containing over 70g and adjacent quadrants with less than 10g and it may be that these clusters represent the positions of hearths.

#### Utilised pieces (fig 13, top)

Light scatter overall, less frequent in south and absent from north-west corner. Heavier concentration in the north-east.

#### Primary and secondary flakes (fig 13, bottom)

Almost absent from southern area, increasing in frequency towards north and west with higher concentration surrounding square 73.

#### Cores, rejuvenating flakes (fig 14, middle, bottom)

Flake and blade cores have similar distributions to each other but flake cores are less dispersed than the blade cores. Flake cores are totally absent from the north-east, an area of great concentration of other tool types, and apart from the very dense clusters in 43SE and 41SW the

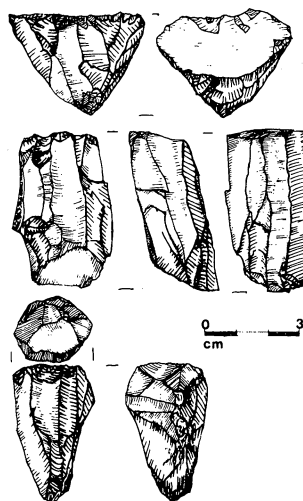
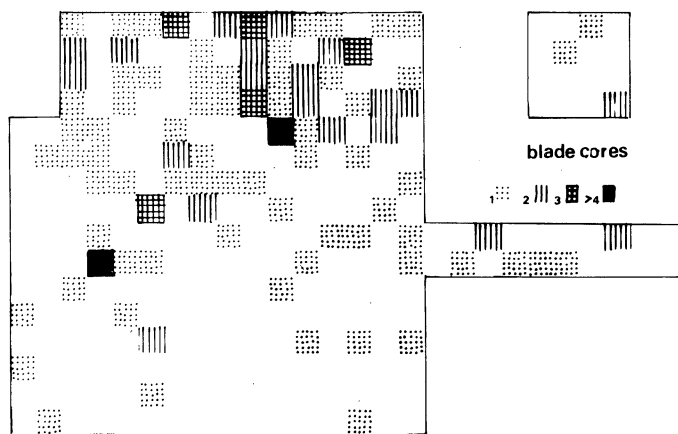
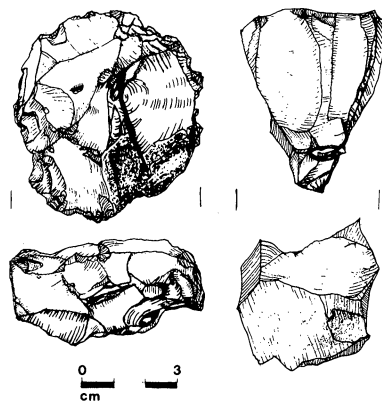
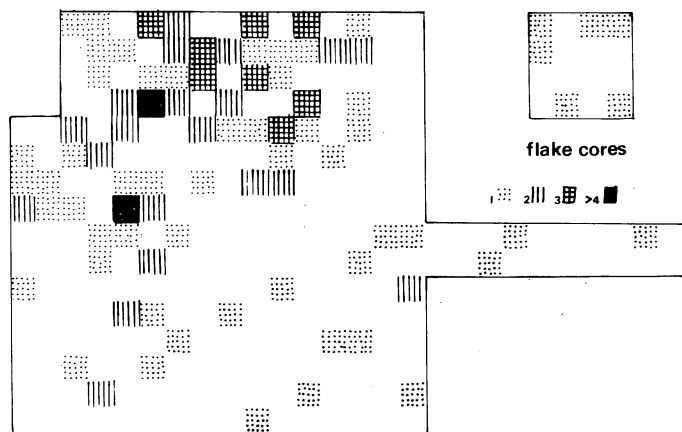
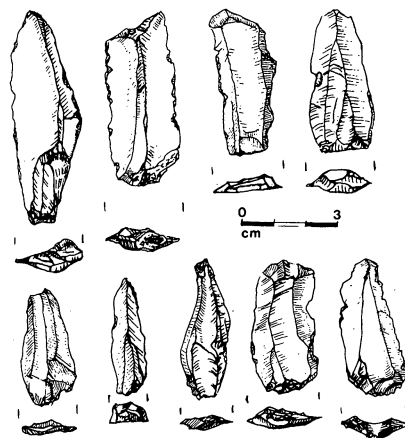


Fig 14. Paddington Farm. Distribution of blades and blade and flake cores. Small grids represent re-survey of 43, 44, 53 and 54

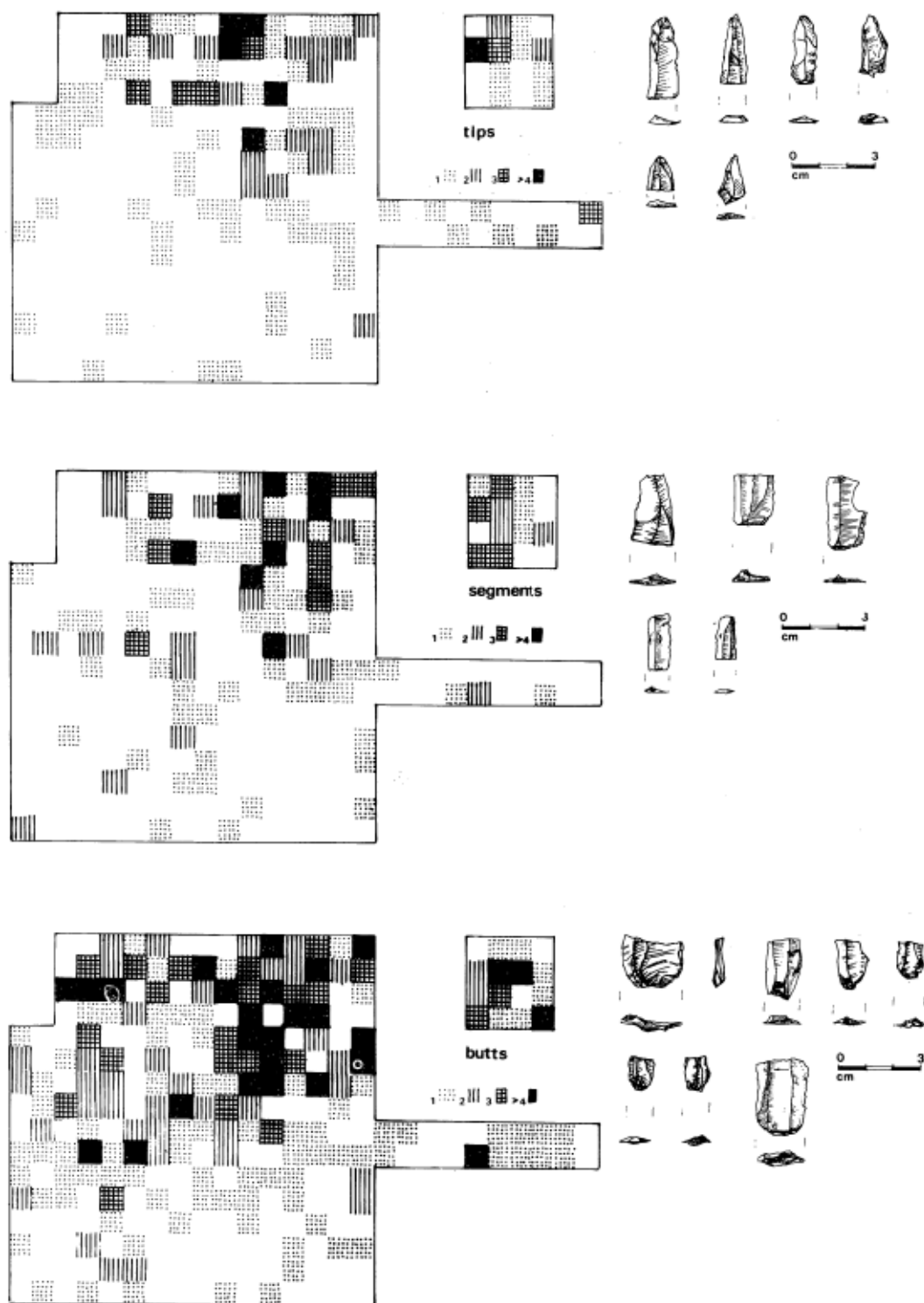


Fig 15. Paddington Farm. Distribution of blade tips, segments and butts. Small grids represent re-survey of squares 43, 44, 53 and 54



Fig 16. Paddington Farm. Numerical distribution of general waste and of burnt flint and total flint by weight. Small grids represent re-survey of squares 43, 44, 53 and 54

major concentration appears to be centred on 53. The blade core concentration, on the other hand, stretches away to the north-east, being centred around 73 but with dense clusters at 73SW and 34SE. Rejuvenation flakes were not plotted.

#### Blades and production waste (fig 14, top)

These were scattered overall falling away to the south-east and with a blank area around 53 and 54, the densest concentration being centred around 73, similar to blade cores, but unlike the latter in having a strong presence towards the extreme north-east corner, perhaps indicating separate areas where on the one hand blades were knapped, and on the other hand used, and it is worth noting the strong presence of utilised pieces in the north-east corner (94). Production waste was not plotted.

#### Butts, segments and tips (fig 15)

Butts were widely scattered, surrounding an even less dense area around 53 and falling away further to the south. The heaviest concentration towards the north-east was centred around 72 and 73. Tips were especially concentrated around 64 and 74; segments around 73.

### The magnetometer survey by Andrew David

On a very few occasions it has proved possible to detect occupation features on Mesolithic sites by magnetic survey. Hearths or accumulations of magnetically enhanced material in feature-fills should be detectable against a contrasting natural background geology, as is so often the case on later prehistoric and Roman sites. Preservation of such features is rather rare on Mesolithic sites however, especially when these are located on cultivated arable land as is the case at Paddington Farm. There is the possibility though, that pits or hollows of natural or artificial origin might exist here, as they do at Abinger nearby, and that these might have acted as traps for relevant cultural material and sediments. Magnetic susceptibility values for the topsoil on the site are about  $46 \times 10.8$  SI/kg which suggest that substantial features could be detectable. Experimental evidence also supports the likelihood that the underlying Greensand is highly susceptible to magnetic enhancement by burning (A J Clark, pers comm). With these thoughts in mind it was believed worthwhile to test the site for possibly significant magnetic anomalies.

Scanning traverses were made about 2m intervals across the site with the fluxgate gradiometer, extending well beyond the limits of the known flint scatter. Background magnetic activity was very slight, not exceeding a range of some 6 nanotesla around 'zero'. Unfortunately, no significant anomalies above this range were detectable, and given the favourable conditions for magnetic enhancement, it must then be concluded that no major features are likely to be preserved here.

It is possible that a more detailed recorded survey of the site, at closer traverse intervals and with a high instrument sensitivity, might detect minor anomalies missed by the scan, but this seems unlikely and might in this case result in the detection of ambiguous or spurious anomalies inseparable from background variations. Despite the slight and ephemeral nature of so many Mesolithic sites, however, magnetic methods of investigation – either by magnetometer or magnetic susceptibility measurement – should still be able to provide useful results on the few occasions where sizeable features (that is features larger than post- or stake-holes) are preserved and soil conditions are favourable. However, despite the spatial integrity of the flint scatter at Paddington Farm, it seems unlikely, on the evidence of the magnetometer scan, that such features do exist. Test excavation, though, is necessary to corroborate this and would provide useful feedback information on a class of site rarely examined by magnetic prospecting methods.

### Discussion

Whether the percentage of microliths recovered is a reflection of their true number will only be ascertained by a re-survey under different weather conditions. It is worth noting however that

the re-survey of squares 43, 44, 53 and 54 only produced three additional microliths amongst a good number of other pieces, including over 400 pieces of general waste. The proportions therefore do not seem to change and it may be that the microlith percentage is a correct one and that we need to consider that hunting may not have been a primary function at the site. Unfortunately, despite the apparent homogeneity of the assemblage, the difference in dating of the microliths means that only excavation is likely to resolve this aspect of the site.

Topographically the site falls into the group of bluff sites that Rankine (1939) identified along the river Wey and its tributaries – Moor Park A and B, Rockhouse, Snailslynch, Crooksbury summit, Monks Walk, Sheeplatch, Chapel Field and The Bluff. Such sites may well have extended alongside the Tillingbourne, yet despite the efforts of a number of collectors on the Greensand between Guildford and Dorking since Rankine's day, less consideration has been given to prehistoric settlement within this area. The Grinling-Collins collection in Guildford Museum provides a number of new findspots now listed by Wymer (1977). Dr Watson, formerly Surrey Archaeological Society local Secretary for Shere, collected material from a number of sites currently being studied by G Elmore and one of the writers (KW), and further details of new sites in the area (J Cotton, K Waters, pers comm) will add to the information when published.

In conclusion the results of the survey have been of great interest, for while the definition of separate activity areas cannot be demonstrated to the degree one would have wished, it is clear that this method of intensive fieldwalking is of potential value on Mesolithic greensand sites. Whether excavation would reveal more information proportionate to the additional expenditure it would involve, or whether it would simply enhance the flint count remains to be seen.

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