Excavations on the Mesolithic Site at Thatcham, Berks—1958

INTERIM REPORT

By J. WYMER

With a Report on the Pollen Analyses by DR. G. W. DIMBLEBY

INTRODUCTION

THE presence of a mesolithic site near the Moor Brook on the Newbury Sewage Outfall Works has been known since 1921, when Harold Peake and O. G. S. Crawford followed up some workmen's observations by cutting a trench and recovering a quantity of flint artifacts two feet beneath the surface, sealed by shell marl and a black, compact material resembling peat (Peake and Crawford, 1922). The flint implements were compared with those from Yorkshire, found beneath peat on moors, Svaerdborg in Denmark and, the axes in particular, to the shell mound period in Denmark. Because of the latter comparison an Early Neolithic Period was suggested for the 'factory' and the site is thus marked on the O.S. maps. Professor Clark (1932) related the flint industry to the Maglemosian culture, as did Peake when he later described some flint implements from the site of the boating pool in Victoria Park, Newbury (Peake, 1934). He regarded these as the same industry as at Thatcham and postulated a Boreal date of *c.* 5000 B.C.. Rankine (1955) places Thatcham in his phase 1 of mesolithic occupation in mid-Southern Britain, the initial period of exploration along the Middle Thames and its tributaries.

The black, compact material sealing the mesolithic occupation at Thatcham is, as was pointed out by A. H. Lyell (Peake and Crawford, 1922, p. 509) and also in the following report by Dr. Dimbleby, not peat at all. Dr. Dimbleby has suggested the term 'charcoal layer'. Because of its resemblance to peat there has existed some confusion when relating the deposit with the true peat of the Kennet Valley near Newbury, often 10–15 ft. thick. The date and origin of this true peat still remains obscure although an excellent summary of the evidence was presented by Peake in 1935 (Peake, 1935) and his conclusions were that peat was still forming in the Mid-Late Bronze Age but part of the peat was dry enough to be used as a site for an urn burial in the Late Bronze Age and that beavers were mainly responsible for its formation. Some may have formed in the mesolithic period. The human skull found in peat at Halfway between Newbury and Hungerford near some red deer antlers (Palmer, 1878) may be mesolithic. The pile structure found in peat, 7 ft. below the surface in Bartholomew St., Newbury (Money and Richards, 1895) had its platform level with the top of the peat and therefore may be later than the formation of that deposit, although the flint implements associated with this structure are, to judge by the illustrations, mesolithic in type. Peake (1935) pointed this out in his review of the site. In view of the associated

finds, a re-investigation of the Kennet peat by a pollen analyst would be illuminating.

Crawford considered the black, compact material overlying the mesolithic occupation to have been laid under water and therefore reasoned that, as water could not have lain over the ground with a 6 ft. cliff only a few yards away, the material must pre-date the cutting of the cliff, that is the bluff facing the swamp of the present Moor Brook. The flint implements found by W. E. Harris from the site of the boating pool in Victoria Park, Newbury, (Peake, 1934) were found under similar conditions "sealed by peat upon a bank of gravel" but "just below the present level of the Flood Plain". The implements were inescapably the same types as at Thatcham so Peake concluded that they had been derived from the terrace above, although they were unabraded. Similar flint implements have also been found at the Pumping station, East of Victoria Park (Richards, 1894) and at Greenham Dairy Farm (Peake, 1930) both at this low level. Recently, October 1958, Mr. P. Tosdevine has reported flakes, blades, an axe rough-out (?) and a broken obliquely-blunted pointed microlith, 12″ below peaty soil above clay, half a mile to the East of the Thatcham sites, on the level of the present swamp. The artifacts are mainly orange in colour, like those from Victoria Park, Newbury, but some have white patination above the staining. Clark (1932) considered that the 6 ft. cliff at Thatcham did *not* antedate the industry. The present excavations on site 2 show there is no reason to assume that mesolithic industries on the level of the present flood plain need be derived from a higher level.

Since 1921, Mesolithic research, greatly stimulated by the classic works of Clark in 1932 and 1934, has continued intensively in S. Britain: Farnham (Clark and Rankine, 1939), Lower Halstow (Burchell, 1925), Abinger (Leakey, 1951), Oakhanger (Rankine, 1952) have been excavated and the new technique of pollen analysis has been applied at several sites, notably at Broxbourne in the Lea valley (Warren, Clark, Godwin and Macfadyen, 1934). The radio-active carbon method of absolute dating has been applied recently. Apart from other excavations, active field work has resulted in the discovery or reassessment of numerous surface sites, particularly in Surrey, Hants, Wilts and Devon (See Carpenter, Draper, Rankine and Tucker). It is now clear that mesolithic occupation in S.E. Britain was by no means confined to sandy hills of the Weald (cf. Butser site, Draper, 1952). Berkshire's addition to this wealth of material has been scanty and mainly restricted to meagre finds from Newbury and district. There is reason to believe this has been due to lack of observation rather than lack of mesolithic occupation in the county. The valley of the Kennet in mesolithic times (i.e. Boreal—Atlantic) must have been a series of connected lakes, marshes and islands as the river meandered its post-glacial course through a valley far too large for it, hence the inevitable silting and

formation of peaty swamps. This was the ideal environment for the hunter-fishers of the Maglemosian culture (or another of similar economy), the same as at Star Carr, Broxbourne, Lower Halstow and Uxbridge.[1]

In 1951 I found a few ochrous-stained flakes and blades of mesolithic type beneath silt and shell marl, upon gravel, in a gravel pit at Aldermaston near Padworth Mill (Nat. grid ref. 608 668) and also a broken obliquely-blunted, pointed microlith in a nearby ploughed field at a slightly higher level. In 1957, D. B. Connah brought to my notice a mesolithic site at Woolton Hill near Newbury, on a sandy hill above a small tributary of the River Enborne, in sight of the Hampshire Downs. The site appears to be nothing more than a surface scatter, but undisturbed concentrations may exist. A. E. Collins has drawn attention to a rich site at Kintbury, sealed by flood deposits of the Kennet. There are some ochrous-stained microliths and a tranchet axe in the Reading University History Museum labelled Barossa, Sandhurst, in the Blackwater Valley. Numerous small tranchet axes exist in the Reading Museum and Thames Conservancy Collections, most of them dredged from the Thames. Several long blades have been dredged from the Thames at Tilehurst, another long blade found in a gravel pit at Burghfield and a small tranchet axe on Burghfield Common.

It is impossible at this stage to know whether the culture at Thatcham is related to the Wealden sites in Hants and Surrey but it is significant to remember, when studying their flint industries, that the Thatcham people were hunter-fishers and the people of the open sites of the Weald and elsewhere were not, but must have had a different economy which would certainly be reflected in their flint industry. It is possible that the two cultures merely represent seasonal change of economy, valley in the winter, hills in the summer, and this must always be considered when attempting to draw typological parallels between such flint industries. Unfortunately there is virtually no other evidence available.

In 1956, Messrs. Collins, Sheridan and Barber of Newbury informed the Curator of Newbury Museum that for some years they had been collecting flints from Thatcham Sewage Outfall Works and nearby but had recently found evidence of concentrations, associated with bones beneath "peat" and realised that this was important and sought advice. Mr. H. H. Coghlan, Curator of Newbury Museum, suggested they visit me at Reading Museum and in November 1957, I was privileged to see much of the flint material they had found: it included a remarkable series of gravers,

[1]The sites at and near Uxbridge (Clark, 1932) have recently been re-investigated by Mr. A. D. Lacaille, F.S.A., to whom I am indebted for showing me the material. The flint industry, found beneath peat and shell malm dated by pollen analysis to the Boreal period, is similar to that from Thatcham. Publication is shortly forthcoming in the Transactions of the Middlesex Archæological Society.

many microliths (nearly all obliquely-blunted points but one broken Horsham point), blades, cores, a few conjoined flakes but no axes. A visit to the site impressed upon me the great extent of the occupied area and its threat of destruction by gravel-working in the immediate vicinity.

The site (fig. 1) is divided naturally into two by a shallow depression about 150 ft. wide: that to the N.W. was close to Peake and Crawford's original trench, that to the S.E. on a slope down to the present swamp of the Moor Brook. Some of the conjoined flakes had been found on this latter site, near to each other. They could not have been derived from the higher level of the other site.

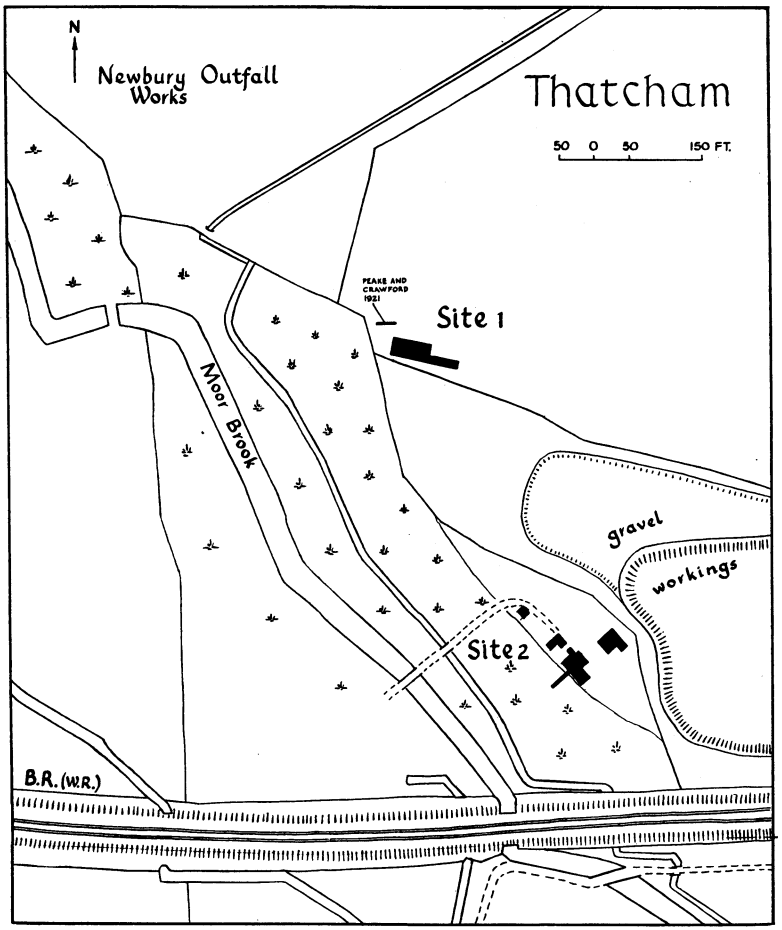

Fig. 1. Thatcham. Plan to show mesolithic sites examined 1958. Based on the O.S. 25″ map by permission of the Controller of H.M. Stationery Office.

In December 1957, a trial excavation was made on the lower site (Site 2, see plan, fig. 4) and a scatter of mesolithic artifacts and several scraps of bone were found beneath a 9″ seam of a black, compact material resembling peat. They lay above or in the top three or four inches of the natural gravel which, to this depth, was humified and disturbed, as distinct from the clean, stratified gravel beneath. All the artifacts were in mint condition. The level at which they were found was the original surface level of mesolithic times. On this 'floor' were many large flints and a few sarsen stones, 6″–9″ in diameter, but the most puzzling feature was a bank of stones about 12″ high apparently in contact with the floor and reaching almost to the present ground level. The bank was obviously artificial and probing and the cutting of a few exploratory trenches showed that it continued in a straight line in both directions for at least 100 feet. Later excavation, however, proved that the bank was later than the peaty-looking material above the mesolithic floor and in the centre of a shallow ditch (See section E-F, fig. 2). Another bank of stones, parallel to the first and about 4 feet apart was found in one section: it is assumed that the 'banks' are the remains of road metalling to prevent cart wheels sinking into the soft, peaty soil. The present footpath is consistent with the line of this feature. No dating evidence was found but several Romano-British coarse ware sherds occurred in the surface soil, as did Victorian china and some 18th century wine bottle fragments. The large flints on the floor were found to be naturally derived from the gravel.

The fragments of bone, found in this trial excavation, were from the floor and presumably contemporary with the mesolithic occupation. Peake and Crawford recorded scapula of red deer, bones of sheep, other bones of deer(?) and the petrosal of a small mammal from "beneath the peat and shell malm." Here were two sites, nearby, with floors archæologically sealed and some organic material preserved. In the collections of Messrs. Barber, Collins and Sheridan were many flint gravers, accepted as tools for working bone, No mesolithic site in South-East Britain had yet yielded a bone industry, like the Maglemosian sites of the continent and now Star Carr, Yorkshire (Clark, 1954). Most of the mesolithic sites in Southern Britain are open sites, often on acidic sands, and it is rare for bone to be preserved at all so any products or waste from a bone industry have vanished. The occurrence of gravers presupposed a bone industry, but it must not be forgotten that such tools could also be used for working wood. Thatcham, however, appeared a likely place to discover a bone industry if it had existed.

Other factors commended excavation: in the thirty-six years which had elapsed since Peake and Crawford's excavations the techniques of pollen analysis and radioactive carbon 14 dating had been evolved and it might be possible to apply these; the recovery of a greater quantity of flint artifacts and organic remains

would make a new assessment possible of the flint industry and the fauna; the threat of destruction by gravel workings insisted on early excavation.

Two weeks in June 1958, were spent upon the site by myself, directing excavations for Reading and Newbury Museums. At the close of this fortnight, Messrs. Barber, Sheridan and Tosdevine offered to continue work upon the site, as their spare time would allow, so that the extent of the occupation could be discovered and more artifacts recovered. The result of the work undertaken until October 1958 is printed below. A policy of area-excavation is contemplated which may take some years and, for this reason, it has been decided to issue this interim report and delay the final one until no more work is practicable upon the site. Prof. J. G. D. Clark visited the site in July and emphasised the possibility of larger quantities of organic material in the swamp, immediately South of site 1. It is hoped to investigate this area in 1959.

Site 1

This site was chosen close to the original trench cut by Peake and Crawford in 1921, on the same low terrace above the Moor Brook and near its bluff. A thick covering of blackthorn saplings, brambles and hawthorn had to be cleared and stumps and roots made the initial digging difficult. Fortunately, it was found that roots did not penetrate as far as the actual occupational floor which was about 2′ 3″ below surface level; the compact charcoal layer above the floor conveniently diverted roots horizontally. A thin lenticle of soft shell marl thickened towards the bluff of the low terrace (i.e. the Western end of Site 1) and the charcoal layer thinned out correspondingly, so that at the extreme Western end the occupational floor was covered by shell marl. (See Fig. 2, section A-B). In this area, badgers had taken advantage of the softness and dug their setts, in a few places actually deep enough to reach and disturb the occupational floor. Otherwise the site was intact.

The loose, peaty humus above the charcoal layer contained a few mesolithic flints, and some Romano-British coarse ware sherds, apart from modern material. It is just possible that the mesolithic material represents a later period than that beneath the charcoal layer, but only waste flakes occurred so no typological comparison could be made. This area was ploughed up to 1921, as Peake mentions that he could not undertake any excavations until the crops were off the ground. To the North of the site, and possibly to the East, the gravel is only 12 to 18 inches beneath the surface and the charcoal layer is absent. Years of ploughing could easily account for the odd scatter of mesolithic flints in the surface soil.

The charcoal layer beneath the humus is a black, compact layer 3″–5″ thick. The material cracks as it dries and, when handled, can be crumbled between the fingers like stale cake. It was considered

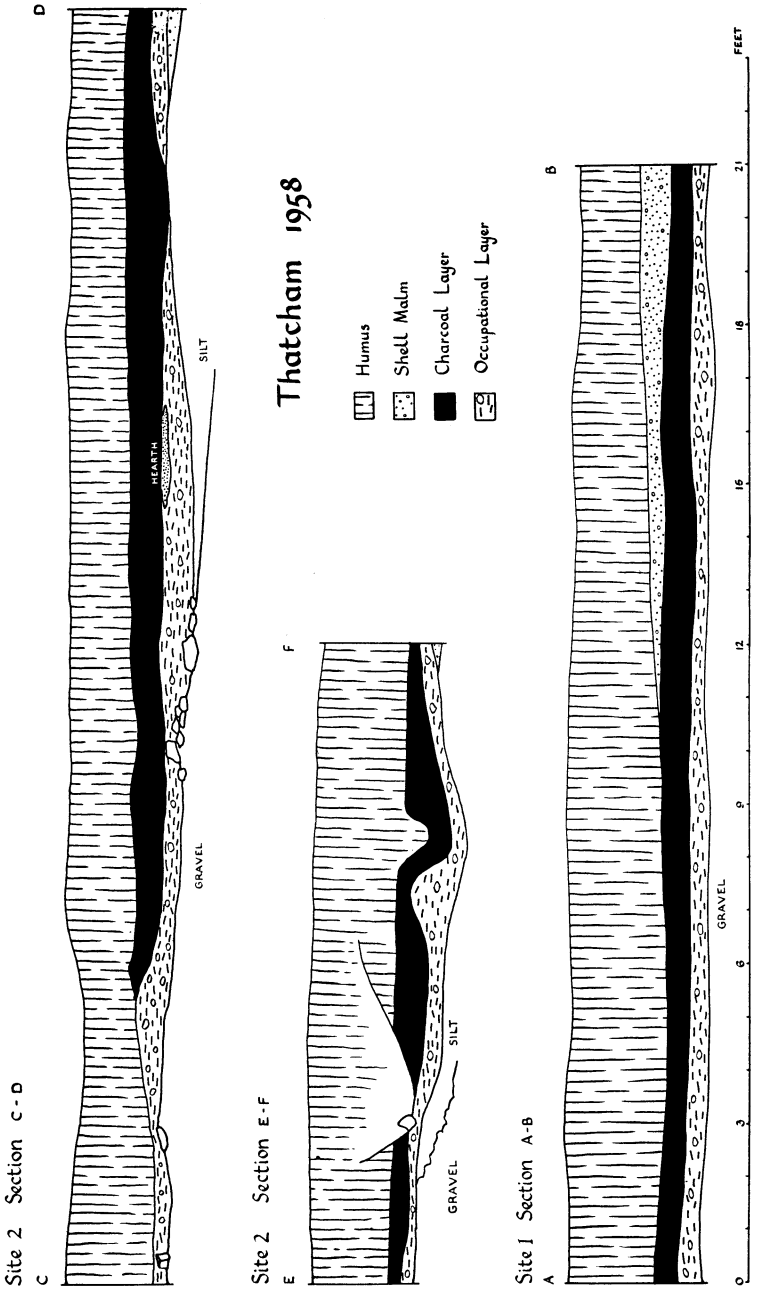

Fig. 2. Thatcham. Sections across Sites 1 and 2. The letters relate to those on the site plans.

to be a form of peat but Lyell (Peake and Crawford, 1922) demonstrated that it consisted mainly of soil so could not properly be called peat at all. A specimen which he submitted to the Geological Museum was interpreted as "probably a silt or soil of some kind". Dr. Dimbleby, in his report printed below, describes the material as "an organic layer composed largely of finely-divided carbonised remains, probably of wood". We have thus decided to term this the "charcoal layer". It is not yet possible to state whether it formed in water or not, but this fact is of great importance for elucidating the history of the site.

The archæological content of the charcoal layer was slight and, in nearly every instance, any flints or bone which did occur were so close to the bottom as to be more likely associated with the occupational layer. A few bone fragments were truly embedded in the charcoal layer, including part of the jawbone of red deer. Only three flakes were definitely related to the charcoal layer; two of them were heavily patinated white.

It is clear that the mesolithic occupation was upon the gravel. For the most part the flints and bone lay horizontally, *immediately* beneath the charcoal layer, but could be found from 3″–6″ below this level in the gravel, which was disturbed and humified to this depth. The flints, in the gravel, were lying at all angles, where they had been trodden or slipped into the old surface.

To the South of Site 1 is a depression, marking the site of an ancient channel. This channel is at present under investigation and mesolithic occupation continues across it, sealed as before by a charcoal layer, although only a few inches thick. The humus is also much thinner (9″–12″) so the level of the occupational floor is not so far below that on site 1 as it appears. Whether the occupation within this depression is related to that on site 1 or site 2 is not yet known. Another depression exists to the North of site 1, and Peake records that in 1921 it still contained some water. It was the partial filling of this depression with material from the bank of our present site 1 which first revealed mesolithic occupation at Thatcham.

Excavation was by yard transects and the resulting flint density diagram (Fig. 3) illustrates the two concentrations of mesolithic flint artifacts, the lower diagram showing the distribution of the more important tools and weapons. There is another increase in the flint yield towards the Western end and this may be leading towards another concentration. The concentrations do not represent true chipping floors as the quantity of waste material is not sufficient, and the proportion of finished implements too high. They may represent dwelling sites but there was no evidence of fire other than scattered burnt flints. A small bone implement was found on site 1 at the end of this season's work. The significant feature of the diagram is that the concentrations are near the present bluff of the shallow channel to the South and (if the increase on the West is the edge

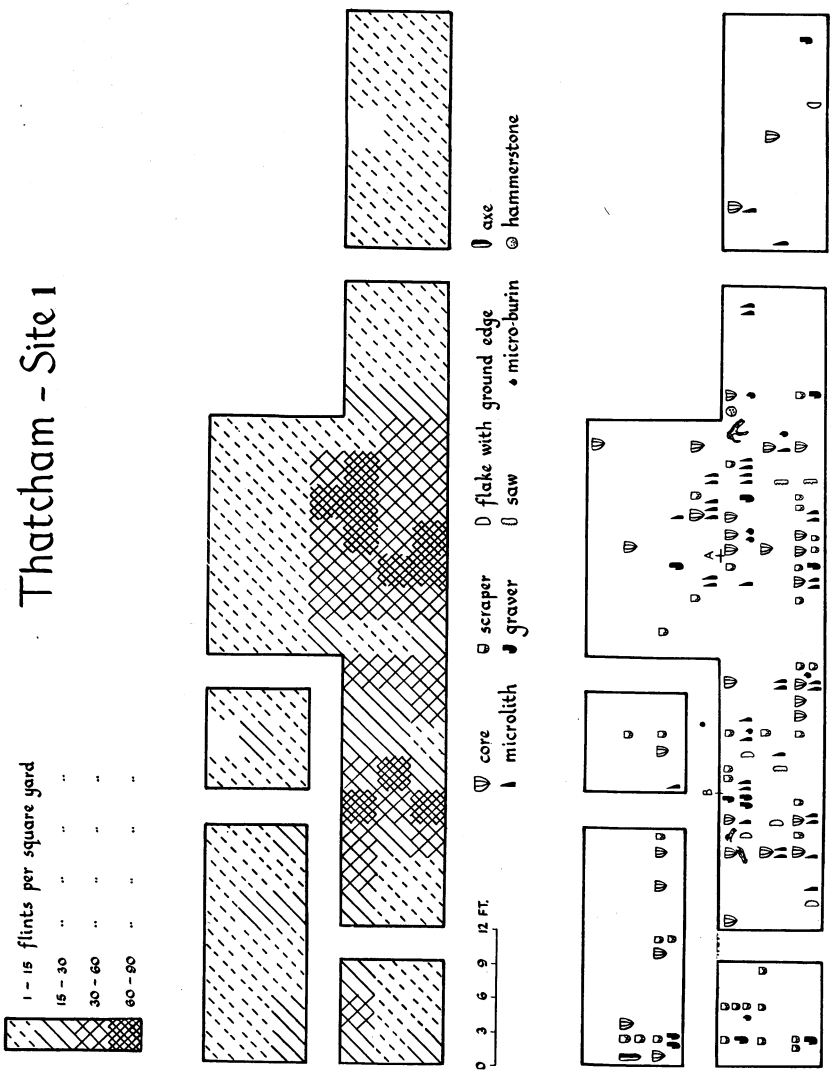

Fig. 3. Thatcham. Flint artifact density and distribution of implements. Site 1.

of another concentration) the Moor Brook to the West. The densities thin out away from these bluffs. It is known that mesolithic hunter-fishers favoured sites close to water (e.g. Star Carr) so it seems very likely that these bluffs existed at the time of the occupation of site 1. The trench cut by Peake in 1921, from which he recovered a similar quantity of material to our concentrations, was also within 10 to 15 ft. of the bluff of the Moor Brook.

Site 1 in mesolithic times, *c.* 5000 B.C., was probably a peninsula from which the forest had been artificially cleared, surrounded by shallow water on two sides and jutting into the deeper waters of the Kennet river-lake to the west. If this interpretation is correct, and the Kennet has not lowered its bed since the mesolithic occupation of site 1, then a quantity of discarded or lost material may still remain beneath the swampy soil immediately to the west of the bluff of the Moor Brook. A piece of wood from beneath the charcoal layer on site 2 shows the unique conditions for preservation nearer to the present water table.

Site 2

The area investigated was about 500 ft. S.E. of site 1 on a small area of land which was probably an island in mesolithic times; to the North, separating this area from site 1, is the shallow depression mentioned above, to the South and West is the swamp of the present Moor Brook, and the section produced by the gravel workings to the East shows a silted channel, the shell marl of which truncates and overlies the charcoal layer. The island would have been roughly oval in shape, 400 ft. long and about 100 ft. at its widest point. The ground is highest to the N.E., but nowhere more than 6 ft. above the present water table, and slopes gently to the S.W.

Stratification appeared identical to that of site 1, with loose, peaty humus above a slightly thicker charcoal layer. Lenticles of sandy silt or shell marl overlay the gravel beneath the charcoal layer. As on site 1, the mesolithic remains occurred immediately beneath the charcoal layer and a few inches into the underlying deposit. The occupational layer thus varied and was either gravelly, sandy or shelly according to whatever lay beneath (see section C-D, fig. 2).

The flint density (fig. 4) shows two concentrations and the one nearer to the swamp will be treated first. The centre of this concentration coincided with the middle of a shallow, natural gully (Plate I) and also the remains of a hearth, in the form of scraps of charcoal, calcined pebbles and flakes, and burnt bone and antler fragments. This hearth lay directly beneath the charcoal layer. The outstanding find from here was the finely made bone point, a foot away from the hearth, found horizontal directly beneath the charcoal layer. Four gravers were found within the concentration but no other evidence that bone-working was carried out there.

The quantity of flint implements and waste found is not very great compared with the yields from such sites as Oakhangar (Rankine, 1952) where over 200 flints per square foot was not uncommon. There were 9,176 flints in pit II at Farnham. Temporary settlers would presumably remove most of their tools when they left and the minimum of knapping may have been carried out on the actual dwelling site. Ten microliths, four gravers, a flake with

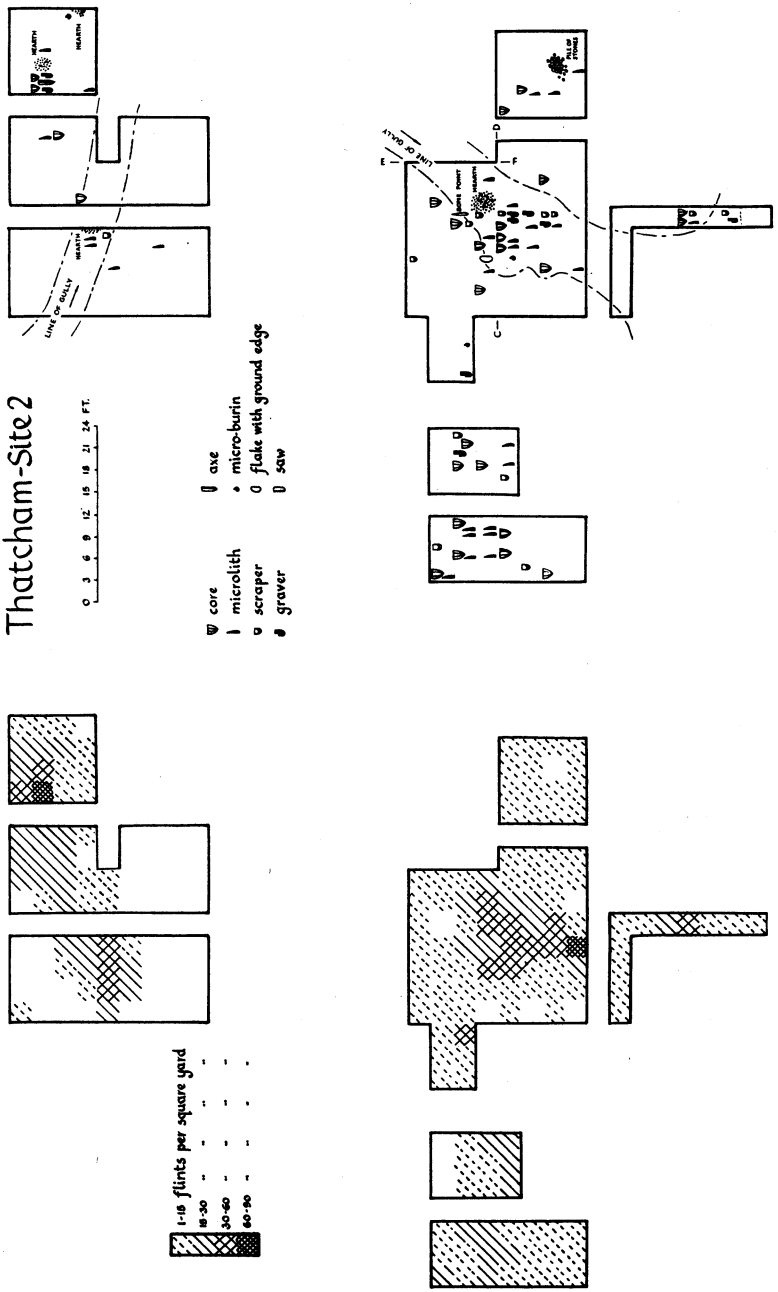

Fig. 4. Thatcham. Flint artifact density and distribution of implements. Site 2.

a ground edge, five scrapers and a bone point would not represent much of a loss. The hearth could not have burnt long for the silt was hardly reddened immediately below it and showed no other signs of lengthy baking. Three or four persons, squatting overnight in the poor shelter of this natural depression in the ground, could account for all the material representing the 'concentration'.

Fifteen feet away was a singular collection of large flints, about 3 ft. in diameter. These flints overlay a thin lenticle of silt and had all the appearance of being placed there artificially. No other heaps were found, but on the other side of the depression the floor was gravel and it was impossible to detect whether any of the large flints were artificially or naturally in position. This was not a heap of knapping material as it included sarsen stones and nodules full of incipient frost fractures. No post-holes were found.

Fifty feet away excavation has revealed part of another concentration with the remains of three hearths. This, again, is connected with a natural gully about 2 ft. deep. The densest part of the concentration is, however, to one side of the gully. It is possible that this gully, which had already silted half up before the mesolithic occupation, is the continuation of the one on the lower site but the intervening area has not been excavated. The section across the gully on the lower site (section E-F, fig. 2) shows two unusual features: the V-shaped ditch cut through the humus, charcoal layer and just touching the floor is connected with presumed road-metalling mentioned above in the introduction, of unknown date but relatively modern. The two strange kinks in the charcoal layer and occupational layer defied definite interpretation but are probably the results of burrowing animals.

The stratification, in spite of the slightly higher level, was similar above both concentrations, although on the higher one the charcoal layer was absent on the Northern side but present on the Southern below an increasing thickness of humus.

Other work on site 2 included an extension to the N.W. where the flint yield is above average but otherwise insignificant. It was from here that some wood was recovered.

A narrow trench was dug towards the swamp. The charcoal layer was absent and only 18″ of peaty humus covered the river deposits. Mesolithic flints persisted below the peaty humus but several intrusive objects occurred with them, the most surprising being a sherd of a Late Bronze Age vessel, although Collet refers to an urn beneath a barrow beside the Kennet at Speen Moor (Palmer, 1878). Other objects from this trench include Roman coarse-ware sherds and a copper halfpenny. Water made it necessary to abandon this trench.

A disturbed area, 50 ft. to the N.W., revealed nothing significant although some flint artifacts were recovered.

PLATE I

Thatcham, site 2. Natural gully which was used as a temporary shelter. The white label (see markers) on the floor indicates the position of the bone point. Nearby was a hearth.

PLATE II

Thatcham, site 1. Two antler tines of Red Deer in situ. These have been artificially cut away from the beam.

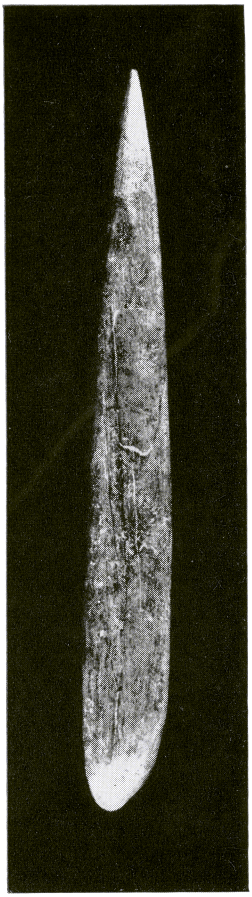

PLATE III
Thatcham, site 2. Mesolithic bone point (length $4\frac{5}{8}''$).

The Flint Industry

The flint industry found beneath the charcoal layer on both sites 1 and 2 is typically mesolithic, comprising cores, blades, flakes, microliths, gravers, scrapers, saws, borers and axes sharpened by a tranchet blow; also the waste products of this period of extremely methodical flint-working; micro-burins, axe-sharpening flakes and core-rejuvenating spalls. Neither of the two axes found showed any trace of grinding or any of the flakes the style of secondary working found on Neolithic or Bronze Age arrowheads.

Although flint artifacts and waste were plentiful upon both sites, no prolific concentrations or scatters were discovered to suggest long occupation or actual knapping sites. The highest yield of flints in any square yard of the occupational floor was 92. Compared to 276 at Star Carr and 320 in a square foot at Oakhangar the figure is low, but greater densities may still remain to be found. In several instances flakes could be replaced on cores found nearby so it is evident that the industry was carried out on the site. A great variety of flint was employed, much of it apparently derived from

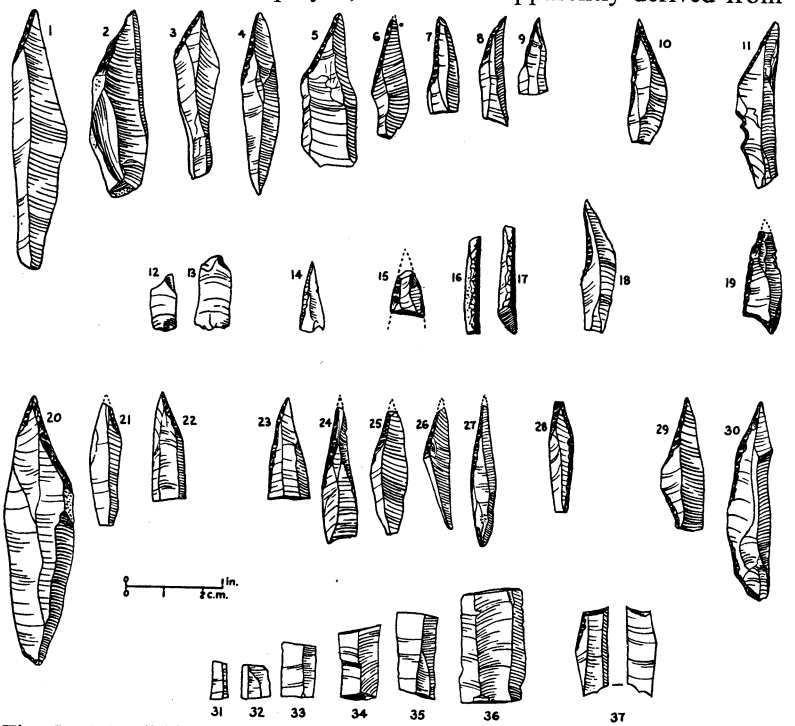

Fig. 5. Mesolithic Flints from Thatcham. 1–11, 14–30, 37, microliths; 12–13, micro-burins; 31–36, segmented blades.
Site 1: 3, 8, 9, 13–17, 21–23, 27–28, 31–37.
Site 2: 1–2, 4–7, 10–12, 18–20, 24–26, 29–30.

the river gravel which contains flints derived from the chalk areas of Hampshire and Wiltshire and a few sarsen stones, some surprisingly large. A lustrous grey-black flint seems to have been preferred, but cherty nodules of dull, grey flint were also utilised frequently. An unusual form of speckled flint also occurred among other varieties. Most of the flints were in mint condition, unstained and unpatinated, but several had a delicate ochrous staining, in some cases approaching the fine, orange colour of the flints found in Victoria Park, Newbury. Very few had faint traces of patination.

Microliths form the most interesting feature of mesolithic flint industries. It is almost certain that the pointed forms were the tips or barbs of propulsive weapons. An almost complete arrowshaft has been found in a Swedish peat bog with a microlith of triangular form set in its tip and a slot in the side of the shaft which had apparently contained an obliquely-blunted, pointed microlith as a barb. The microlith in position still had the resinous substance in which it was set adhering to it. A microlith at Star Carr was found with resin attached to it. No such finds have been made at Thatcham but it seems reasonable to assume that the microliths were used for the same purposes.

As on the majority of mesolithic sites in Southern Britain, the obliquely-blunted, pointed microlith is the dominant form. 69 microliths have so far been found at Thatcham, of which 61 are of this form, 50 being the simplest type, blunted down part of one edge to form an angle. 8 are blunted down one edge to form an arc (Fig. 5, nos. 23–28). The blunting is usually from the left side (nos. 1–9). Only 3 are blunted completely down one edge (nos. 23, 28). 4 are blunted on the opposite edge as well (nos. 10, 20, 28). Only 1 microlith had any basal retouch (no. 27) and none was worked from alternate sides. 1 (no. 11) was unusual in being notched and another (no. 18) in having concave blunting.

All the microliths are figured with their bulbar ends uppermost and have been made by the micro-burin technique in which a notch is made and the bulb of percussion snapped off. Only 10 micro-burins and one unsnapped, notched blade were recovered, however, and 2 are figured (nos. 12, 13). This discrepancy between the number of microliths and micro-burins is apparent on all sites which have been investigated systematically (e.g. Oakhangar, 308 micro-burins to 1281 microliths; Star Carr, 27 micro-burins to 248 microliths).

2 microliths (nos. 29, 30) are of the elongated trapeze form (cf. Star Carr, Clark, 1954, p. 101, nos. F42–53) and two of rod-like form (nos. 16, 17). No triangles or crescents have yet been found, although one (no. 37) is rhomboidal. The most evolved form of microlith is no. 19, a typical 'Horsham' point with the tip missing. Unfortunately this microlith was not found during the official excavations but had been found by Mr. Sheridan a year or so previously in the area of site 2. A similar microlith but without the tang

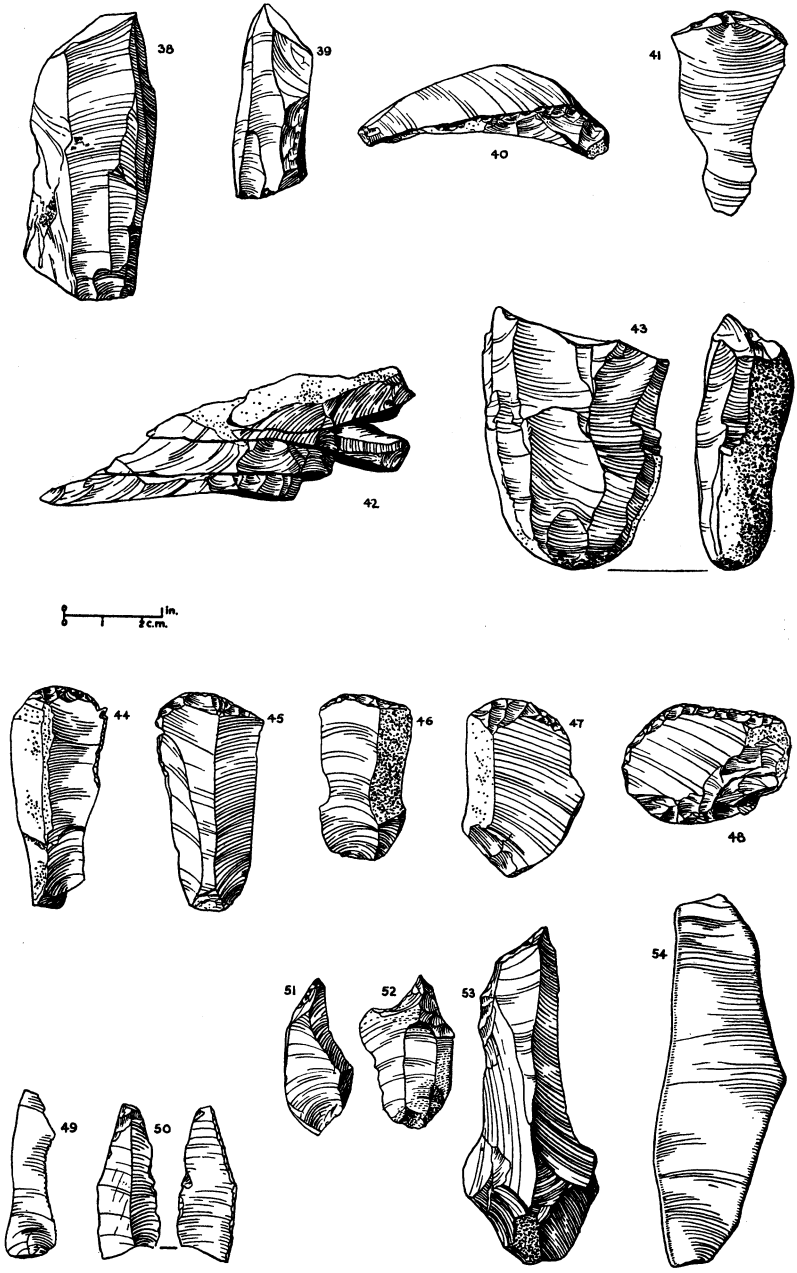

Fig. 6. Mesolithic flints from Thatcham. 38–39, cores; 40–42, core rejuvenating flakes; 43, core hammerstone; 44–48, scrapers; 49, saw; 50, double-backed blade; 51–53, borers; 54, blade with ground edge.
Site 1: 38–41, 43–50, 54, Site 2: 42, 45, 51–53.

is figured by Peake (1922, p. 507, fig. 4, bottom 2nd from left) but it is not clear whether this was found in the general scatter of artifacts which he collected or when the exploratory trench was dug.

Although not microliths in the true sense of the term, several small blades have been truncated at both ends to form rectangles (nos. 31–36). No 34 has slight blunting across the lower end.

56 cores were found, from which large and small blades had been struck. By blades is meant the flakes which tend to have parallel edges and at least two ridges on the reverse. The production of these was perhaps the dominant feature of the industry: they were useful as knives without further trimming or could be further worked into such tools as gravers, scrapers, saws and borers. The small ones could have their bulbs removed by the micro-burin technique and be blunted by pressure to form microliths. All but one of the cores have blades and flakes removed from opposite ends from two or more striking platforms, or are at various stages in the attainment of this form. Only one true conical core with one platform has been found. The production of such cores and the preservation of suitable striking angles was a skilful operation. For the latter purpose flakes were removed in a methodical manner to produce new striking platforms at the right angle (an obtuse angle between striking platform and core edge renders accurate flaking difficult or impossible) or to remove the irregularities produced by unsuccessful strikings of the core. The more common type of core rejuvenation flake is that removed along the edge of a worn-out striking platform (no. 40) but the removal of a flake like no. 41 would produce an entirely fresh platform. Nos. 38 and 39 are typical cores, the latter having apparently served afterwards as a crude scraper. One core (no. 43) had been employed as a hammerstone (cf. Star Carr, nos. F154–156), the only such tool found. The four conjoined rejuvenating flakes (no. 42) were found on site 2 within four feet of each other. The core from which they were struck was not found, nor could any of the flakes or blades found nearby be fitted to them. These were possibly all collected by the knapper.

Many scrapers were found, nos. 44–8 being typical. In spite of the name these were probably general-purpose tools used as much for paring wood as anything else. Although often of irregular shape, there seems to have been a tendency to produce the secondary working at the opposite end to the bulb.

A few flakes were found with delicate serrations along one edge, such as no. 49. Six flakes were found with ground edges, three occurring together near the pair of severed red deer antlers on site 1. No. 54 is the best example. In all cases the grinding is round *all* the edges, including the bulb. Polish may be a more accurate term, but it is impossible to know whether the flakes were ground for or by some special use.

Apart from borers (nos. 51–3) miscellaneous worked pieces defy classification and are presumably tools of the moment. No. 50 is

unusual in being double-backed, i.e. with blunting from both sides.

Gravers were presumably used for working bone and antler by the groove and splinter technique (Clark and Thompson, 1953) and several have been found at Thatcham. There is nothing yet, however, in the few remains of the bone industry to show that this groove and splinter technique was practised. Most of the gravers are of the double or single backed variety (nos. 59–62, 65, 66) but there are two 'screwdriver' types (nos. 63, 64) and a core graver, no. 67. Such tools have not previously been recorded from this site.

Two small tranchet axes have so far been found, one on each site, and both are figured, nos. 55 (Site 1) and 56 (Site 2). It is possible that these small implements were inserted into antler sleeves. The axe-sharpening flake figured below (no. 57) has obviously come from a large axe. The pollen record indicates clearing of the forest by the makers of these axes. It is difficult to believe the small axes were used for cutting down large trees, but perhaps they were mounted as adzes and used for working the timber. Some form of boat must have been used by these riparian people.

It is hoped that the further excavations will recover much more of the flint industry and, until this is done, it is unwise to seek parallels with industries from other areas or between the two sites which the pollen record has shown to differ in age. The material recovered so far does not allow any distinctions to be drawn between sites 1 and 2, even if it should exist. The simple form of the microliths suggest Maglemosian affinities, as does the absence of the evolved forms attributed to Sauveterrian influences (Clark, 1955) but Thatcham's relationship with such sites as Farnham and Oakhangar cannot yet be determined.

The microliths so far found from the two sites can be summarised thus:— (The types are based on Clark's classification, see Clark, 1934 and 1939)

Microlith Type		Site 1	Site 2	Total
Obliquely-blunted point	A1a	16	18	34
,, ,, ,,	A1b	1	1	2
,, ,, ,,	A1c	8	4	12
,, ,, ,,	A1d	—	2	2
,, ,, ,,	A2a	1	4	5
,, ,, ,,	A2b	1	—	1
,, ,, ,,	A2c	—	2	2
,, ,, ,,	B1	1	—	1
,, ,, ,,	B2	1	—	1
,, ,, ,,	B4	1	—	1
,, ,, ,,	Concave	—	1	1
Rod-like		2	—	2
	D8	—	2	2
	F2b	—	1	1
	7c	2	—	2
		34	35	69

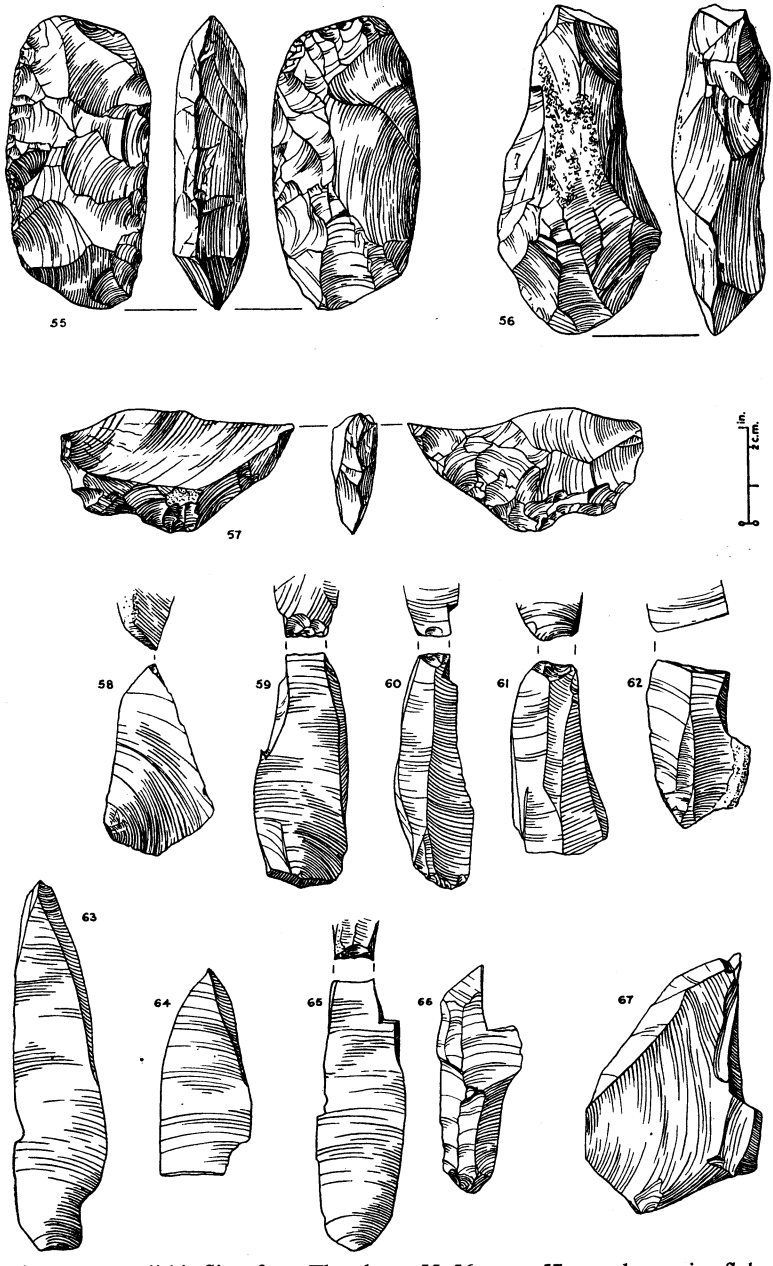

Fig. 7. Mesolithic flints from Thatcham. 55–56, axes; 57, axe-sharpening flake; 58–67, gravers.
Site 1: 55, 64, 65. Site 2: 56, 57–63, 66–67.

The Bone Industry

The mesolithic craftsman had a control over flint which has rarely been surpassed. It is not surprising that he should have employed his skill on other materials, such as wood, bone and antler. The mesolithic open sites of Southern Britain abound in flint tools, weapons and waste but nothing else; all organic matter has perished and it can only be assumed that it was ever there at all. Flint gravers, saws, scrapers, knives and axes, however, can be found on most of these open sites and must have formed the tool-kit of the craftsmen in bone or wood.

The bone industry of the Maglemosian culture is well known from the continent and, now, Star Carr (Clark, 1954), Yorks. At this latter site Professor Clark has recovered a rich bone and antler industry in association, for the first time in Britain, with Maglemosian type flints. Previously there had been only stray finds of bone or antler 'harpoons', two from Holderness, one from the 'moor-log' of the North Sea, another from Royston, Herts, and two from the Thames at Battersea and Wandsworth.

The unique preservation of organic material on the occupational level at both of the Thatcham sites has allowed the recovery of two bone artifacts and evidence of the actual working. Thatcham was the first site in this country to have its flint industry compared to that of the Danish Maglemosian. It is now, also, the first site in Southern Britain to produce bone artifacts in association with mesolithic occupation. The material recovered so far is scanty but it is hoped further artifacts may come to light as the work continues.

Two stumps of red deer antlers were found, one from each site, both artificially severed from the frontal bone. On site 1 two large red deer tines were found close to each other (Plate 2) cut away from the beams. The technique of removal was a series of V-shaped cuts, presumably with a flint blade, around the base of the tine until it was safe to snap off. The beam was probably made into a tool but, as would be expected, had been taken away. Nearby (see Distribution of Flint Implements on Site 1, Fig. 3) were three flint gravers and three blades with ground edges (inc. No. 54, Fig. 6) and it is quite likely these tools were employed in this work.

The first bone implement to be found was the finely made point from site 2 (see fig. 4) illustrated in plate 3. It is $4\frac{5}{8}''$ long, bevelled at the base and the point apparently finished by grinding and polishing. A small splinter from the surface was missing but was found 2″ away, the break being ancient. This splinter has been restored and is shown on the side of the point illustrated. The bevelling of the base suggests this point was used for tipping a spear. The surface, where unpolished, shows the minute shatter marks of a sharp tool drawn over it.

The only other bone artifact (Fig. 8) is a small ($3\frac{3}{4}''$ long) splinter of a long bone, pointed at both ends. It has been shaped by cutting

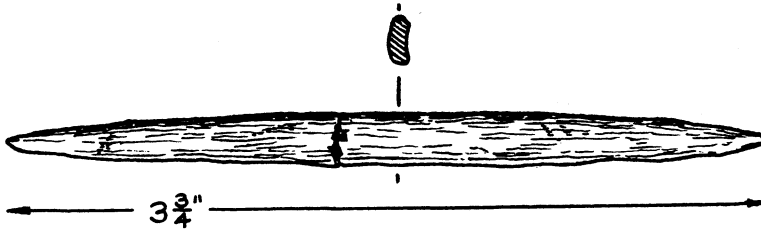

Fig. 8. Double-pointed bone implement. Thatcham, site 1.

and scraping. The points are not polished. This was found on site 1 after the Distribution of Artifact plans for this interim report had been prepared so it does not appear on fig. 3. It was, however, in the balk close to the flint concentration at the Western end of the site.

A similar implement but of circular section was found on the Hamburgian site at Meiendorf (Clark, 1938) and considered to have been used as an arrow tip for shooting birds. It would certainly seem too large to have been used as a fish gorge (i.e. for mounting a small fish as bait) but may even have been a nose ornament. Mr. W. A. Smallcombe has kindly examined this artifact and considers it to be made from the long bone of a bird, which would be very sharp and well-suited for an arrowhead.

Fauna

Both sites have produced a fair quantity of animal bones, teeth and pieces of antler below the charcoal layer, that is at the same level as the mesolithic flint and bone industry. There is no reason to doubt that they are contemporary with the occupation, although a few fragments were actually in the charcoal layer and must be later. For the most part the bones were very fragmentary, often quite amorphous and unidentifiable. The mesolithic people were presumably responsible for the general scatter and the broken, splintered condition of nearly all the larger long bones. No complete antlers occurred, although one on Site 1 still had the brow and bez tines attached to the beam, which was broken above the latter. The few pieces of bone or antler showing human workmanship upon them have already been mentioned above.

The condition of the bone as excavated varied; the majority was in fair condition, a little soft through decalcification but it could be handled with care. Some bones, particularly those on site 1 beneath the shell marl, were slightly mineralised and in a fine, hard state. The decalcified bone required treatment for if allowed to dry it became brittle, cracked, twisted and eventually crumbled.

Miss J. E. King of the British Museum of Natural History has kindly identified the material and the following lists show that the fauna of sites 1 and 2 is almost the same. Red deer is the most numerous beast represented on both sites and animals of the forest predominate over others.

Site 1

Red Deer	5 antler fragments teeth 2 lower jaw fragments 5 pelvis fragments 2 ulna fragments middle phalange	basioccipital region of skull 2 distal ends humeri proximal end humerus 2 distal ends humerus distal end radius
Roe Deer	teeth	
Pig	teeth	
Marten	incomplete lower jaw	
Beaver	teeth	
Fox	ulna	
Dog	lower incisor	

Site 2

Red Deer	2 antler fragments shed antler fragment antler tine 2 molars complete scapula scapula fragment 2 pelvis fragments frontal fragment	acetabular fragment navicular atlas astragalus 2 calcanea tibia fragment 3 metapodial fragments ulna fragment
Roe Deer	2 proximal end radii distal end radius	radius shaft
Pig	teeth 2 lower jaw fragments	proximal end radius metapodial fragment
Bos	2 molars	
Horse	molar	
Beaver	femur juv. incisor	molar 2 tibia fragments
Dog	lower incisor	
Hare	2 incomplete tibia	

Miscellaneous Finds

The few items included under this heading can be divided into two categories: those found in the top-soil and those from the mesolithic occupational level. The first category includes two sherds of Romano-British coarse ware pottery from site 1, an illegible 18th century halfpenny, 18th century wine bottle fragments, the thick sherd of a coarse Late Bronze Age urn, a piece of salt-glazed stoneware and eight sherds of Romano-British coarse ware pottery from site 2. Some of this material at site 2 was on, or very close, to the mesolithic floor, but this was only in the area beside the present

swamp where the charcoal layer was absent in patches and only a thin (12″–18″) of disturbed peaty soil covered the floor. It was obviously intrusive; in no instance was such material found below the charcoal layer on either site.

The second category concerns this report and is listed below:

Sandstone rubber: a gritty sandstone flaked by percussion into a rough disc, 3½″ diameter. There are three separate facets round the edge which appear to be part of the original surface of the stone. One of these facets has certainly been smoothed by rubbing. This was a stray find made near site 2 by Mr. Sheridan some years previous to the present excavations.

Abraded sandstone pebble: a water-smoothed, rectangular-sectioned pebble of fine-grained sandstone, 5¼″ long and 1¾″ wide in the centre, tapering to rounded points at both ends. One point is roughened by battering, but it is possible that this could be by natural agencies. Found on site 1.

Wood. An unusual find on site 2 was a piece of wood (pine ?) 16″ long, ¼″ thick, ⅝″ at the wider end tapering roughly to ¼″ at the other. The condition of this piece of wood is surprisingly good. One surface is smooth, split along the grain, but the other is rough, soft and irregular as a result of decay. This piece was found on site 2, close to the present swamp where the charcoal layer is absent but it lay horizontally on the actual mesolithic floor with cores and flakes beside it so there is no reason to regard it as intrusive. The decayed surface lay uppermost. Although quite shapeless the split surface suggests some human activity upon it.

Some extremely small fragments of semi-carbonised wood were found on site 1.

Perforated pebbles. No stone was found on either site with any artificial perforation but nine naturally holed flints were found on site 1, three in two instances within the same yard transect. Such flints are not common and it seems very likely that these pebbles had been collected for use as beads or pendants. Those from Star Carr were of amber and Lias shale and artificially perforated, but no such workable material exists in the Thatcham district. No holed flints were found on site 2.

Iron-stained sandstone. On both sites small pebbles of richly-ochrous sandstone were found in some quantity on the mesolithic floor. Such pebbles occur naturally in the underlying gravel and are probably derived from the Reading Beds so it is impossible to know whether they were collected or not. If this ochrous sandstone is rubbed on the skin it leaves a bright yellow stain and may well have been used for this purpose. Small lumps of yellow ochre and traces of red ochre occurred at Farnham.

Hazel nuts. A few carbonised hazel nut shells occurred on both sites.

Pine cones. Two scales of a pine cone were found on site 2.

Acknowledgments

The excavation in June 1958 was organised by Reading and Newbury Museums with financial assistance from the Berkshire Archæological Society and Newbury and District Field Club. Messrs. Barber, Collins and Sheridan gave active assistance in the direction of the work and their enthusiasm and perseverance is gratefully acknowledged; without it the long-term policy of excavation would not be possible.

Many other persons, mainly members of the Berks. Field Research Group, have given much of their spare time to work on the site and I should like to express my gratitude particularly to the following: Miss M. Wood, Miss P. Stinton, Miss P. Keddie, Miss M. Tombs, Mrs. A. W. Barber, Mrs. R. Sheridan, Mrs. G. Pike, Miss A. Fitzgerald, Miss S. Pearce, Mr. P. Tosdevine, Mr. D. Sheridan, Mr. K. Butcher, Mr. P. Hassel, Mr. H. Copsey, Mr. J. Turner, Mr. R. Froome, Mr. R. McAllister and friends, Dr. H. Pike, the numerous students from the Dept. of History at Reading University, Mr. D. B. Connah, M.A., members of the St. Bartholomew's Grammar School Archæological Society, and my parents.

The co-operation of Messrs. Hill and Co., who were working on the edge of the site was appreciated, and also the help of Mr. Cummings, the foreman of the Newbury Sewage Outfall Works.

Thanks are specially due to Dr. P. Wood of Reading University and his students for surveying the site, and to Mr. W. F. Rankine, F.S.A. (Scot), Mr. A. D. Lacaille, F.S.A. and Professor J. G. D. Clark for valuable advice and their visits to the site; to Miss J. E. King for examining the faunal remains; to Dr. G. W. Dimbleby and Mr. Porter for their valuable contribution to our knowledge of the site; to Miss L. K. Prichard of Newbury Museum for assistance with storage and preservation and finally to the Director of Reading Museum, Mr. T. L. Gwatkin, M.A., F.M.A. and the Curator of Newbury Museum, Mr. H. H. Coghlan, F.S.A., A.M.I.Mech.E., for their advice, encouragement and assistance in many matters.

References

Burchell, J. P. T. 1925. "The Shell Mound Industry of Denmark as represented at Lower Halstow." *Proc. Prehist. Soc. E.A.* Vol. V, pp. 73–78.

Carpenter, L. W. 1958. "Some Mesolithic Sites in N.E. Surrey." *Arch. News Letter*, Vol. 6, No. 7, pp. 155–58.

Clark, J. G. D. 1932. "The Mesolithic Age in Britain."

Clark, J. G. D. 1934. "The Mesolithic Settlements of Northern Europe."

Clark, J. G. D. 1934. "The Classification of a Microlithic Culture." *Arch. Journal*, Vol. XC, pp. 52–77.

Clark, J. G. D. 1938. "The Reindeer Hunting Tribes of N. Europe." *Antiquity*, June 1938, pp. 154–71.

Clark, J. G. D. and Rankine, W. F. 1939. "Excavations at Farnham, Surrey." *Proc. Prehist. Soc.*, Vol. V, pp. 61–118.

Clark, J. G. D. and Thompson, M. W. 1953. "Groove and Splinter Technique of Working Antler in Upper Palaeolithic and Mesolithic Europe." *Proc. Prehist Soc.*, Vol. XIX, pp. 148–60.

CLARK, J. G. D. 1954. "Excavations at Star Carr."

CLARK, J. G. D. 1955. "A Microlithic Industry from the Cambridgeshire Fenland and other Industries of Sauveterrian affinities from Britain." *Proc. Prehist Soc.*, Vol. XXI, pp. 3–20.

DRAPER, J. C. 1952. *Proc. Hants Field Club*, Vol. XVII, pt. 3, pp. 292–97.

LEAKEY, L. S. B. 1951. "Preliminary Excavations at a Mesolithic Site at Abinger Common, Surrey." *Research Paper No. 3. Surrey Arch. Society.*

MONEY and RICHARDS. 1895. "Prehistoric and Mediaeval Antiquities Discovered at Newbury during the Drainage Operations in 1894." *Trans. Newbury and D.F.C.* IV, pp. 206–10 and 259–60.

PALMER, S. 1878. "On the Antiquities found in the Peat of Newbury." *Trans. Newbury and D.F.C.* II, pp. 123–34.

PEAKE, H. and CRAWFORD, O. G. S. 1922. "A Flint Factory at Thatcham, Berks." *Proc. Prehist. Soc. E.A.* Vol. III, pp. 499–514.

PEAKE, H. 1930. "Some Unsolved Problems in the Newbury District." *Trans. Newbury and D.F.C.*, Vol. VI, p. 23.

PEAKE, H. 1934. "Mesolithic Implements at Newbury." *Trans. Newbury and D.F.C.*, Vol. VII, pp. 50–1.

PEAKE, H. 1935. "The Origin of the Kennet Peat." *Trans. Newbury and D.F.C.*, Vol. VII, pp. 116–26.

RANKINE, W. F. 1949. "A Mesolithic Survey of the West Surrey Greensand." *Research Paper No. 2, Surrey Arch. Soc.*

RANKINE, W. F. 1952. "A Mesolithic Chipping Floor at Oakhangar, Selbourne, Hants." *Proc. Prehist. Soc.*, Vol. XVIII, pp. 21–35.

RANKINE, W. F. 1953. "Mesolithic Research in East Hants—The Hants Greensand." *Proc. Hants Field Club and Arch. Soc.*, Vol. XVIII, pp. 157–72.

RANKINE, W. F. 1956. "The Mesolithic of Southern Britain." *Research Paper No. 4, Surrey Arch. Soc.*

RICHARDS, E. P. 1894. Note on objects found in excavations for sewers. *Trans. Newbury and D.F.C.*, Vol. IV, pp. 257–58.

TUCKER, J. H. 1954. "Mesolithic Sites in Wilts." *Wilts Arch. Mag.*, Vol. LV, pp. 330–32.

WARREN, S. H., CLARK, J. G. D., GODWIN, H. and M. E. and MACFADYEN, W. A. 1934. "An Early Mesolithic Site at Broxbourne sealed under Boreal Peat." *Journ. Roy. Anthrop. Inst.*, Vol. 64, pp. 101–28.