

**MALTHOUSE FIELD, SOMPTING PADDOCKS  
FLINT REPORT SPW.17, SPW.18 & SPW.19**

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## Introduction

The excavation by Worthing Archaeological Society of the Malthouse Field in Sompting began in 2017 with further work in 2018 and 2019. The initial motivation was to interpret the structures on the site thought to be remnants of a Medieval malthouse.

Given the site's location at the foot of the South Downs it was expected that we would find traces of prehistoric activity in the form of worked flint.

Over the three years 1,451 worked flints were excavated, weighing 22kg, as tabulated below.

	2017	2018	2019	Total.
Number	116	166	1,169	1,451
Weight (kg)	1.45	2.33	18.21	22.00

For purposes of analysis each flint was recorded by context and classified as a tool type or debitage with dimensions, weight and other characteristics noted. Each of the flints was assigned a specific time-period,

The assemblage covers the period from Late Mesolithic through to Late Bronze Age with the predominant number being Late Mesolithic through to Early Bronze Age and a smaller number were identified as Late Bronze Age.

In addition, the debitage flakes include 70 flints identified as Medieval in period, which comprise 6% of the total assemblage. None of these exhibit retouch, and all were categorized as debitage.

Twelve of the thirteen trenches opened over the three years were in close proximity to each other in one field whereas Trench 10 was on slightly higher ground approximately fifty yards North West in an adjacent field. Trench 10 worked flints are included in the analysis of the total assemblage and are also the subject of a separate analysis.

The majority of the flints, 95%, were recovered from topsoil and open contexts. 5%, were from closed contexts. Most of the latter came from Trench 3 and Trench 10.

The overall condition of the flints is fairly good and shows no significant plough damage. Most of the assemblage, 59%, is locally sourced grey and mottled grey, some with fossil inclusions, and likely to have originated from the remnant "clay-with-flint" deposits from the Downs. A substantial number, 28%, are reasonably good quality black and dark grey flint that may have been sourced from beach pebbles from the coast or from nearby flint mines in the Neolithic period. A further 11% are white or light grey, probably originating from Downland chalk and 7% are stained brown and with a few red, possibly coming from river sources.

A significant number of the flints show evidence of water rolling, and, similarly, a number exhibit white patination caused by surface weathering. Two show evidence of burning and there was a single worked quartzite flake from an unknown source. A total of 263 fire-cracked flints weighing 6.51kg were found over the three years and were reinstated on site.

A full catalogue is available and only significant items are described and commented on in this report.

## Analysis of the Total Assemblage

The flints include struck flint as well as thermal flakes and natural pieces. Where there is indication of use-wear but no secondary working, a flint is categorized as a tool and shown to be a utilized flake, a blade or a piece.

For analysis purposes the flints were attributed, to the following time periods:

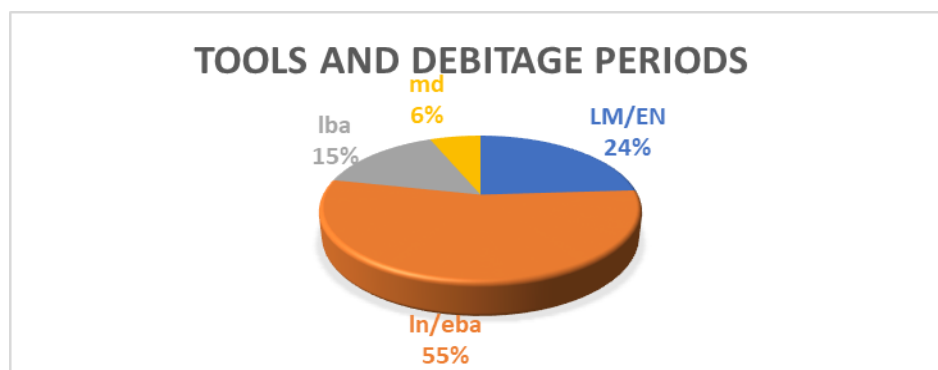
LM/EN	Late Mesolithic Early Neolithic
LN/EBA	Late Neolithic Early Bronze Age
LBA	Late Bronze Age
MED	Medieval

The table below shows the periods assigned to tools and debitage for the total assemblage.

Period	Tools	Debitage	Total
LM/EN	118	158	276
LN/EBA	242	385	627
LBA	119	58	177
MED	0	71	71

The proportion of debitage for the LBA flints is considerably smaller than that for the earlier periods.

The pie chart below shows the distribution of periods for the assemblage and indicates most activity at the site took place during the LN/EBA. This reduces by almost half in LM/EN and half again in the LBA. There is a small proportion from the Medieval period.



## Tools

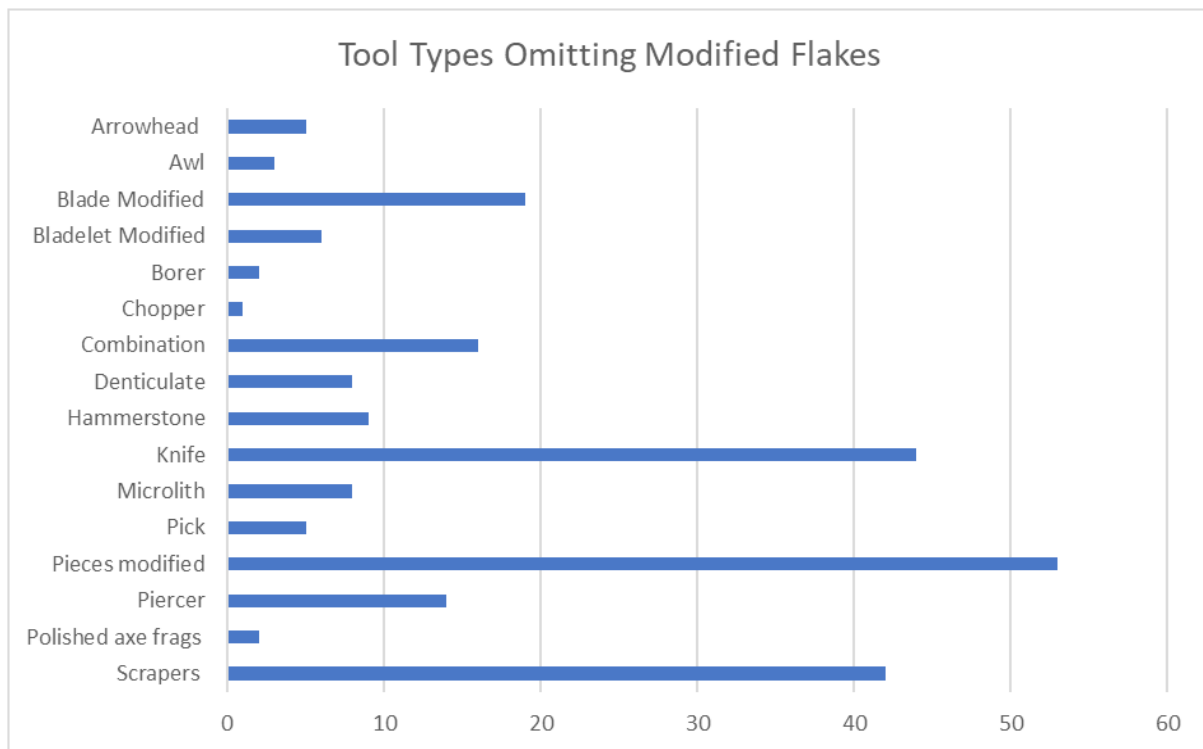
Tools comprise 41% of the assemblage. The table below shows the number of tools recovered from 2017, 2018 and 2019, together with the total and the approximate percentage of the assemblage.

Type	2017	2018	2019	Total Assemblage	Approx. %
Arrowhead	0	1	4	5	1
Awl	1	0	2	3	1

Type	2017	2018	2019	Total Assemblage	Approx. %
Borer	0	0	2	2	0.5
Chopper	0	0	1	1	0.5
Notched Blade	0	1	0	1	0.5
Retouched Blade	3	4	11	18	4
Notched Bladelet	0	0	1	1	0.5
Retouched Bladelet	0	2	4	6	0.5
Combination	2	2	12	16	3.5
Denticulate	2	4	2	8	2
Notched Flake	1	3	4	8	2
Retouched Flake	23	18	167	208	44
Utilised Flake	1	3	10	14	3
Hammerstone	1	3	5	9	2
Knife	2	6	36	44	9.5
Microlith	3	3	2	8	2
Pick	1	0	4	5	1
Notched Piece	2	0	0	2	1
Retouched Piece	4	2	44	50	11
Utilised Piece	2	0	1	3	1
Piercer	4	1	9	14	3
Scraper	0	3	18	20	4
Button Scraper	1	0	4	5	1
Discoidal Scraper	0	0	1	1	0.5
End Scraper	2	0	8	10	2
Hollow Scraper	1	0	0	1	0.5
Microscraper	0	0	3	3	1
Y Scraper	0	0	2	2	0.5
Polished Axe Fragment	0	0	2	2	0.5
				470	

The tools assemblage is dominated by retouched flakes which comprise 44% of the total. The wide range of tool types suggests that the site was visited over a long period of time. This is exemplified by the six scraper types ranging from early Late Mesolithic Micro-scrappers to later Bronze Age Button Scrapers.

The bar chart below shows the distribution of tools types for the whole assemblage. All types of scrapers have been assigned to one “scraper” category. Modified flakes have been omitted to provide a better comparison of the specific tool types.



The number of modified pieces is second only to the modified flakes. Next most dominant are knives and scrapers followed by modified blades and bladelets, combination tools and piercers. The wide range of tools, which also includes picks and a chopper and nine hammerstones as well as arrowheads, indicates the likelihood of some habitation as well as agriculture, butchery and hunter gathering.

### Tool Types by Prehistoric Period

The table below shows the number of tool types for each prehistoric period and the approximate percentage of that period's total assemblage.

Tool type	No. in LBA	% of LBA assemblage	No. in LN/EBA	% of LN/EBA assemblage	No. in LM/EN	% of LM/EN assemblage
Arrowheads	0	0	4	1	1	1
Awls	0	0	1	<1	2	2
Blades retouched	2	2	9	3	4	3
Bladelets retouched	0	0	0	0	6	5
Borer	1	1	1	<1	0	0
Chopper	1	1	0	0	0	0
Combination	2	2	8	2	7	6
Denticulate	1	1	4	1	3	2
Fabricator	1	1	0	0	0	0
Notched Flake	2	2	6	2	0	0
Utilised flake	2	2	12	4	0	0
Retouch flake	42	37	215	64	53	43

Tool type	No. in LBA	% of LBA assemblage	No. in LN/EBA	% of LN/EBA assemblage	No. in LM/EN	% of LM/EN assemblage
Hammerstones	1	1	3	1	5	4
Knives	4	4	26	8	14	11
Microliths	0	0	0	0	8	5
Picks	0	0	2	<1	3	2
Notched piece	2	2	0	0	0	0
Utilised piece	2	2	1	<1	0	0
Retouch Piece	31	27	13	4	0	0
Piercer	3	3	6	2	6	5
Axe Fragment	0	0	2	<1	0	0
Scraper	15	13	19	6	9	7
Total	112		332		122	

The modified flakes and pieces are clearly dominant for each period. However, with no retouched pieces, LM/EN has a smaller proportion of these tool types.

At 112 and 122 respectively the number of tools in the LBA and LM/EN are similar.

The table below compares number of debitage flakes to the number of tools for each period and the ratio of the two numbers.

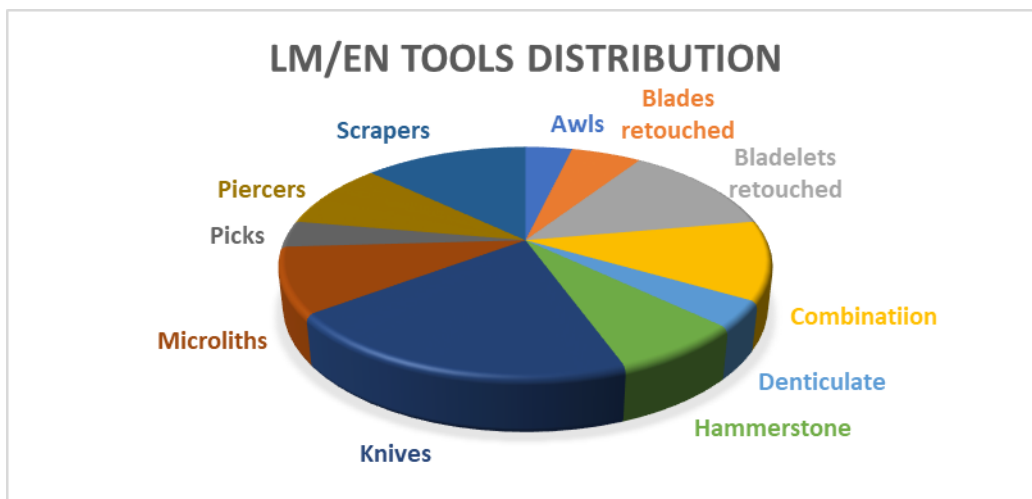
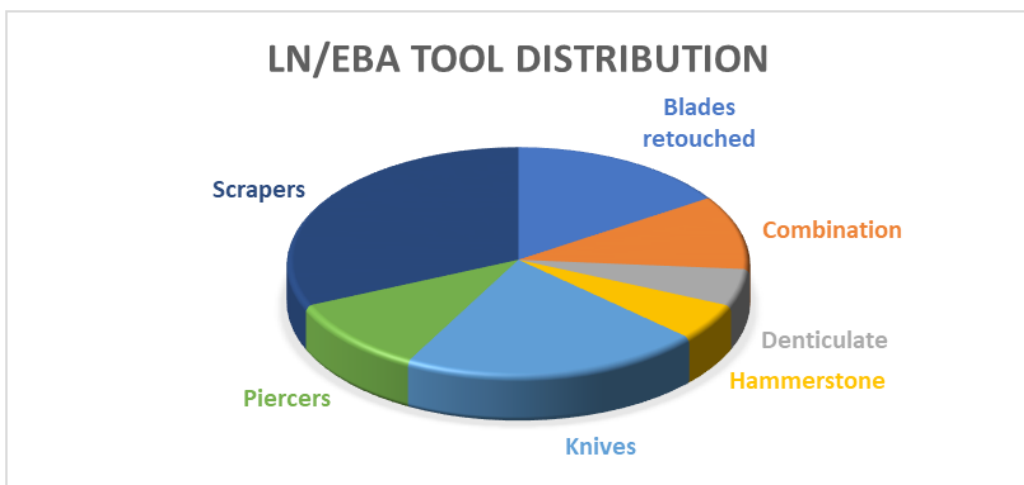
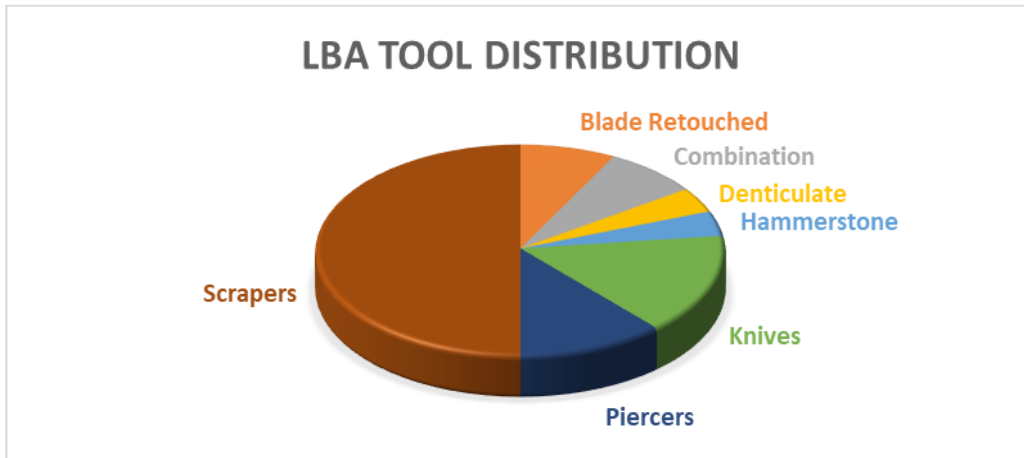
Period	No of debitage flakes	No of tools	Ratio
LM/EN	112	122	Approx. 1
LN/EBA	356	332	Approx 1
LBA	58	112	Approx. ½

LM/EN and LN/EBA have approximately equal numbers of tools and debitage flakes, whereas the LBA have half as many debitage flakes as tools.

For ease of comparison the following table ignores tools which have a percentage of one or less for each period. The utilized, notched and retouched flakes and pieces have been removed as they overwhelm the other categories.

Tool type	% of LBA assemblage	% of LN/EBA assemblage	% of LM/EN assemblage
Awls	0	0	4
Blades retouch	8	11	6
Bladelets retouch	0	0	10
Combination	8	7	12
Denticulate	4	4	4
Hammerstones	4	4	8
Knives	16	29	21
Microliths	0	0	10
Picks	0	0	4
Piercer	11	7	10
Scraper	50	22	13

Pie chart distributions of the tools without the modified flakes and pieces are shown below which makes the variety and proportion of tool types more apparent.



The Late Mesolithic and Early Neolithic flints contain the most diverse tool kit of the prehistoric periods. This, together with the number of cores and debitage bladelets from that period, indicates the hunter gatherers were not only passing through but were involved in maintenance and repair of hunting equipment, butchery and probably making temporary camps at the site or nearby. The presence of four picks in this assemblage indicates the possibility of a more permanent camp in the area. (Butler, 2005, 115).



There is a doubling in the number of flints in the Late Neolithic and Early Bronze Age indicating there was more activity during this period. The significant increase in proportions of knives, and in particular scrapers, suggests nearby habitation nearby is more likely and the presence of arrowheads, specific to this period shows hunting is continuing.

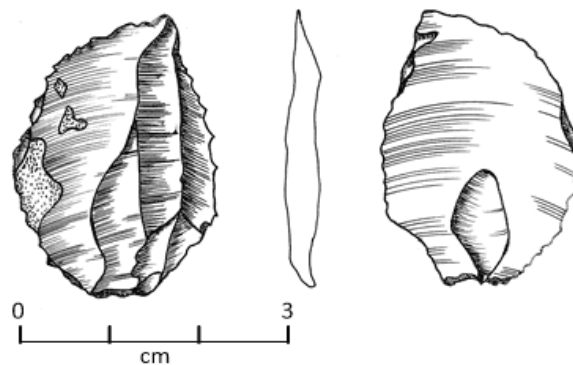
The Late Bronze Age assemblage is much smaller than that of the earlier periods. The range of tool types has decreased but still includes retouched flakes and pieces, scrapers, knives and piercers which indicate activities similar to those in LN/EBA are continuing. However, the tool type distribution has changed, most markedly with an increase in proportion of scrapers to 50% of the tools, suggesting nearby habitation is likely. Also notable is the decrease in the number of knives, possibly caused by the introduction of metal tools.

## Individual Tools

Tools comprise 40% of the assemblage. A selection of significant tools are described below; others are described in Appendix A:

### **Laurel Leaf Arrowhead, Cat. 861.9, Tr10, Context 144, Size 32x23mm.**

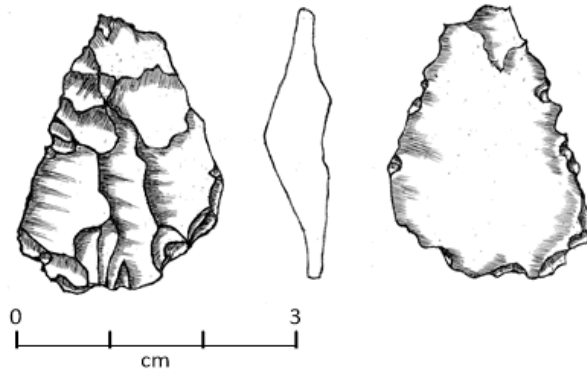
Grey mottled, patches of cortex along one dorsal edge, fine leaf shape flake with blade removals on the dorsal side and retouch along both opposing lateral edges. Late Mesolithic/Early Neolithic.



Cat. 861.9

### **Oblique Arrowhead, Cat, 108.8 Tr4C, Context 55, Size 30x21mm**

Good quality grey flint with blue grey mottling and triangular in shape. Retouched on both lateral sides, narrowing to distal tip. Visible platform and bulb of percussion, dorsal side has three thinning removals. The proximal end has been retouched on one side and notched on the other to form a short tang that may have assisted hafting. Late Neolithic/Early Bronze Age



Cat. 108.8

**Polished Axe Fragment, Cat. 743.9, Tr7, Context 132, Size 72x46mm.**

Dark grey with flecks of iron staining, no cortex. Fragment from the middle section of the axe, polished on one side with later retouch along both broken edges. Late Neolithic/Early Bronze Age.

**Polished Axe Fragment, Cat. 744.9, Tr7, Context 149, Size 40x34mm.**

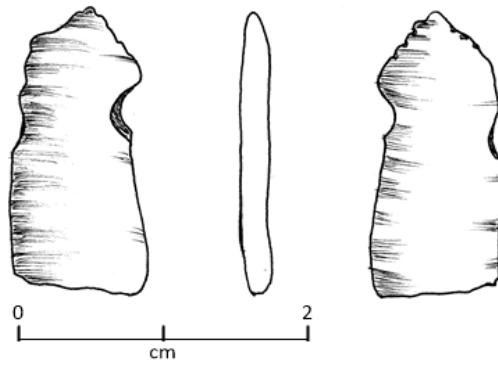
Grey with some flecks of iron staining, no cortex. Fragment from the top section of the axe with broken tip, polished on one side and semi polished on the other. Later retouch along the two parallel edges. Late Neolithic/Early Bronze Age



Cat. 744.9, Cat. 743.9

**Retouched bladelet, Cat. 865.9 Tr10 Context 114 Size 20x10 mm**

Light grey bladelet with patches of white patina on dorsal side. Two notches one on each lateral side approximately one third of the way down from the distal end, possibly for microlith preparation. Late Mesolithic/Early Neolithic.



Cat. 865.9

**Chopper, Cat. 745.9, Tr 7, Context 149 Size 85x75mm.**

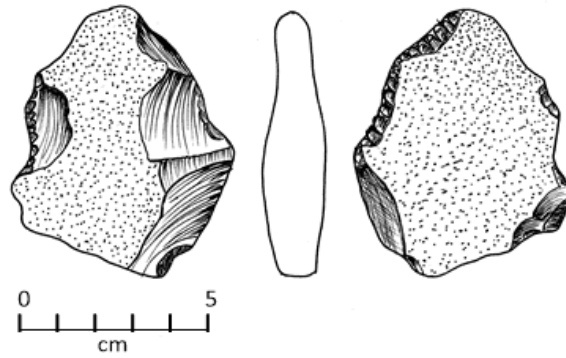
Grey crudely discoidal shaped chopper. The ventral side is very irregular with patches of cortex, some iron staining, an indentation where a fossil has been removed and a 20x20mm extrusion at the proximal end which may have assisted handling. The dorsal side is substantially clear of cortex and there is crude retouch extending halfway around the distal edges to facilitate chopping. Late Bronze Age.



Cat. 745.9

**Combination knife/notched piece, Cat. 867.9 Tr8 Context 129 Size 72x60 mm**

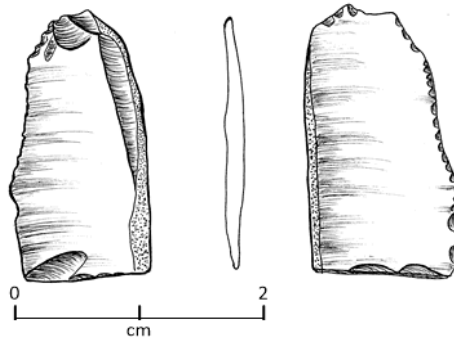
Light grey good quality flint piece, cortex covering half of dorsal side and most of ventral side. The dorsal side has several large flake removals, one is formed into a worked notch, two others combine to form a knife which has been sharpened by invasive retouch on the ventral side. Late Neolithic/Early Bronze Age.



Cat. 867.9

**Microlith, Cat. 98.7 No Tr, Context 20, Size 22x12 mm**

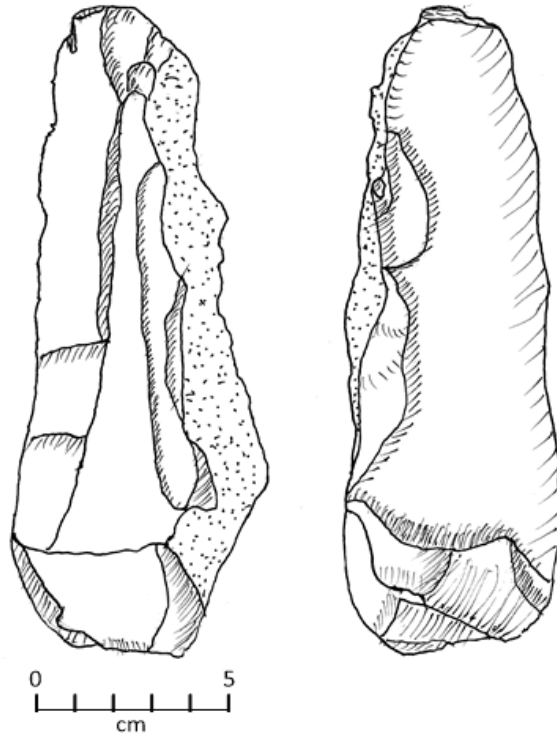
Grey microlith on broken distal end of a bladelet. Narrow strip of cortex along one lateral edge with fine retouch along opposing side. Significant iron staining. Late Mesolithic/Early Neolithic.



Cat 98.7

**Pick, Cat. 760.9, Tr 8, Context 128 Size 169x66mm.**

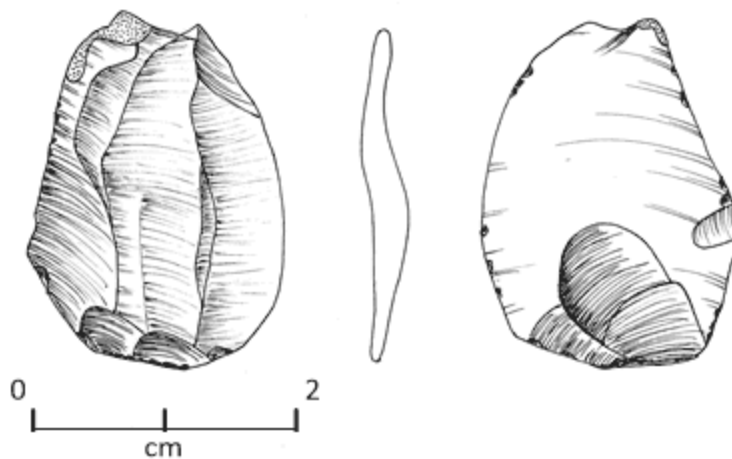
Grey pick made from tabular flint, with cortex all along one edge. Retouch on proximal end to aid handling. The working end shows evidence of wear. Late Mesolithic/Early Neolithic



Cat. 757.9

**Retouched Flake, Cat. 87.7, Tr2W, Context 17, Size 27x20mm.**

Dark grey flake ovoid in shape with visible platform and bulb and small cortex patch on distal end. Several thinning scars on dorsal side and three removals of reduction on bulb of percussion on ventral side. Possible unfinished arrowhead roughout of 2A ogival form. (Butler, 2005 123). Late Mesolithic/Early Neolithic.

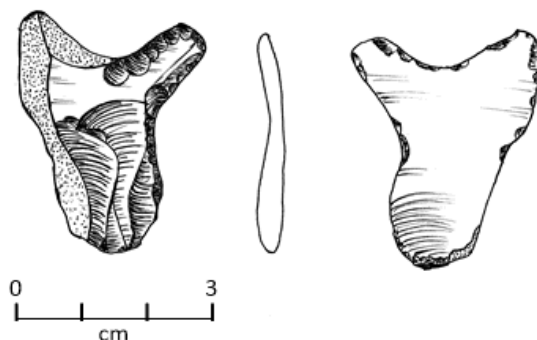


Cat. 87.7

**Y Scraper, Cat. 876.9, Tr 7, Context 132, size 37x29 mm**

Grey good quality Y shaped flint flake with visible bulb and cortex along one lateral edge extending around the end of one of the two points at the distal end. The opposite lateral side is worked into a notch up to the point at the distal end, which itself has been shaped by several flake removals. There are also flake removals between the two points. The proximal end of the flake has been narrowed by several flake removals possibly for hafting. This is

recognized as an Early Neolithic possible scraping tool. (Butler, 2005 134) Late Mesolithic/Early Neolithic.



Cat 876.9

## Debitage

Debitage comprises 60% of the assemblage.

The types ofdebitage recovered are shown in the following table:

Type	2017/18	2019	Total
Blades	7	14	21
Bladelets	4	17	21
Cores	7	9	16
Core fragments	9	8	17
Flakes	136	466	602
Burin spall	1	0	1
Total	163	513	678

91% of thedebitage is comprised of flakes with 4.4% cores and core fragments and 6% blades and bladelets.

The periods assigned to thedebitage are shown below:

Periods	1917/1918	1919	Total
LM/EN	27	131	158
LN/EBA	65	324	389
LBA	31	27	58
Medieval	26	45	71
Total	149	527	676

## Debitage Types by Prehistoric Period.

The number of each debitage type found for each prehistoric period is shown below.

Debitage type	No.in LM/EN	No. in LN/EBA	No.in LBA
Struck flakes	112	356	58
Cores	21	10	2
Blades including broken	7	15	0
Bladelets including broken	17	3	0
Burin Spall	1	0	0
Total	158	384	60

The debitage for LBA comprises 97% struck flakes and 3% cores. The assemblage for LN/EBA is 92% struck flakes with approximately 3% cores, 4% blades and 1% bladelets. LM/EN debitage comprise 71% struck flakes, 13% cores, 11% bladelets and 4% blades.

The LM/EN debitage includes a significant proportion of debitage cores which together with 17 debitage bladelets and the burin spall indicate maintenance and repair of hunting equipment is going on at the site. (Butler, 2005, 116).

The LN/EBA debitage assemblage is three times the size of LM/EN but includes fewer cores and bladelets.

The LBA debitage assemblage is much smaller than that of the earlier periods. It comprises only struck flakes and two cores. The LBA cores are crude pieces with no visible preparation and only a few randomly positioned flake removals.

## Individual Debitage

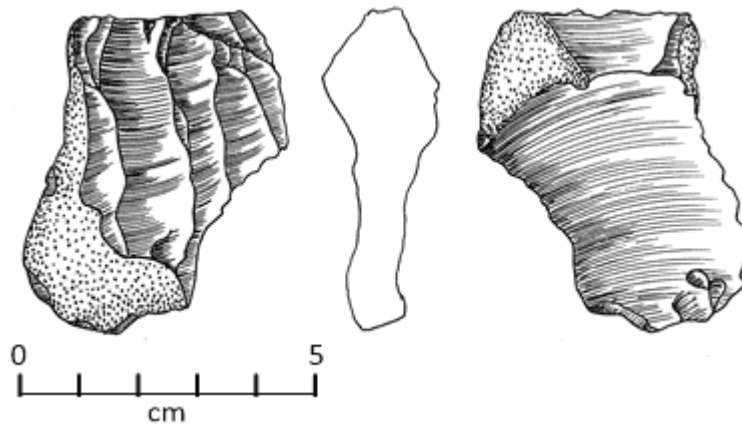
Significant cores and core fragments are described below, together with the single burin spall.

Core, Cat 291.9, Tr 10, Context 114, Size 48x36mm

Dark grey mottled core, with some remaining cortex. Poor knapping resulting in step or hinge fractures. Possibly used as a hammerstone. Late Neolithic/Early Bronze Age.

Core Fragment, Cat 345.9, Tr 8, Context 169, Size 55x40mm

Good quality black core fragment, with some cortex remaining on dorsal surface. Evidence of core preparation. Several blades removed. The removal of the core fragment has resulted in a hinge fracture. Late Mesolithic/Early Neolithic.



Cat 345.9

**Core, Cat. 14.8, Tr4B, Context 32, size 30x21mm**

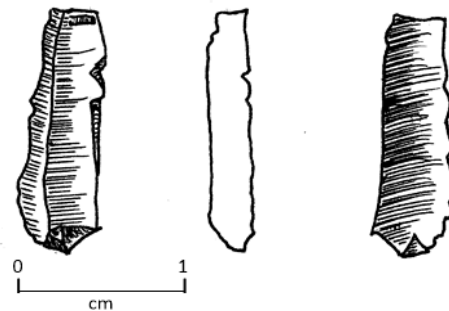
Dark grey to black good quality bi-polar core with cortex patches. Careful platform preparation for blade removals on two sides. Late Mesolithic / Neolithic.

**Core, Cat. 6.7, Context 14, size 79x44mm**

Light grey core with extensive cortex. Blade and flake removal with no clear evidence of platform preparation. Late Bronze Age

**Burin Spall, Cat. 60.7 Context 9, Size 15x4.**

Light grey spall with bulb of percussion, taken from a dihedral burin. Late Mesolithic/Early Neolithic.



Cat 60.7

## The Medieval Flint

During the 2017 and 2018 excavations a few flints appeared to have been worked relatively recently and likely to have been produced during the building of nearby medieval walls. In 2019, again apparently relatively recently worked flints were found in several of the trenches and included some dressing flakes of which several are possible gallets. A retouched piece of tabular flint was found in Trench 8 that was interpreted as a 'capping stone.'

In total 70 flints were identified as being Medieval in period and these comprise 6% of the



total assemblage. None exhibited retouch and all were categorized as debitage.

The table below shows trenches and numbers of Medieval flints found.

Trench Number	Number of medieval flints
3	21
4	6
6	6
7	5
8	8
9	1
10	24

Trenches 3 and 10 each contain the largest number of Medieval flakes followed by Trench 8, where the capping stone was found. The Medieval flints in Trench 4 were all categorized as dressing flakes or gallets. Trench 10, the outlying trench 50 yards away from the known Medieval walls, has the largest number of Medieval dressing flakes and possible gallets.

## Flints from Closed Contexts

The total number of flints from closed contexts, 86, comprise 6% of the total assemblage. Of these 57 are debitage, comprising 2 blades and 55 worked flakes and 29 are tools.

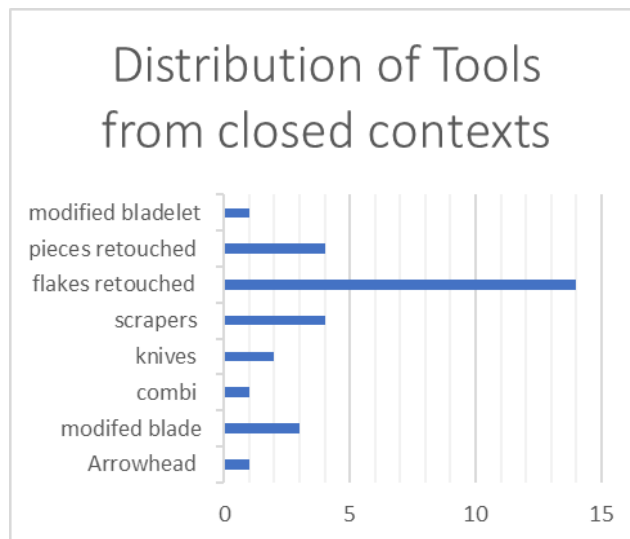
Below is a table showing the distribution of periods for the 86 flints compared to period distribution for the total assemblage.

Period	Number of flints from closed contexts	Percentage of flints from closed contexts	Percentage of each period as part of the total assemblage
LM/EN	22	26	24
LN/EBA	43	51	55
LBA	9	10	15
MED	12	14	6

The percentage of flints from closed contexts, for each prehistoric period, is similar to the percentage of the total assemblage. This indicates that, at least for the prehistoric, the closed contexts flints show no diversion from the assemblage as a whole.

The number of Medieval flints in closed context however is more than double that of the total assemblage. Again Trench 10 differs from the other trenches in the majority, 9 out of 12 of its contexts are closed.

A bar chart showing the distribution of tools from closed contexts is shown below



The tool type distribution for closed contexts appears similar to that of the total assemblage with retouched flakes comprising 48% of the closed contexts worked flints, compared to 44% for the total assemblage.

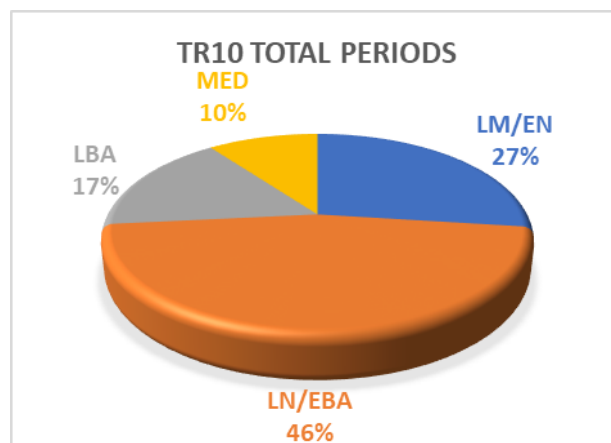
## Trench 10 Analysis

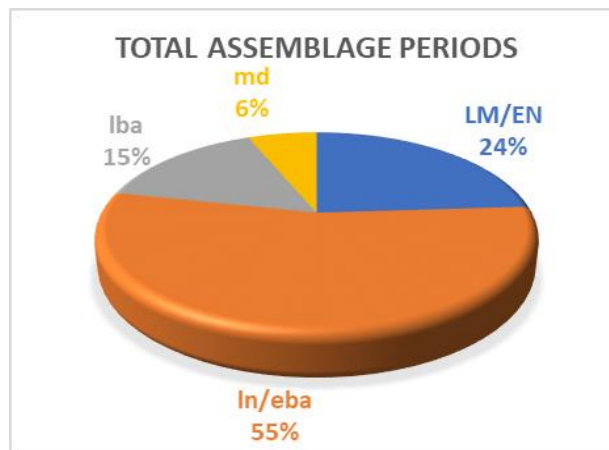
A total of 237 flints were excavated from Trench 10 comprising 94 tools and 143 debitage pieces. The debitage is almost all flakes with the addition of only two blade pieces and two cores. The number of cores comprises 0.8% of the Trench 10 assemblage, less than half of the 2.1 % for the complete assemblage. The flints date from LM/EN through to LBA together with a significant number of Medieval debitage worked flakes.

The table below shows the comparison in period of the tools and debitage for Trench 10..

Periods	Numbers of tools	Numbers of debitage	Total
LM/EN	13	52	65
LN/EB A	55	55	110
LBA	27	12	39
MED	0	24	24

The charts below show the period distribution of all the flints from Trench 10 is similar to that for total assemblage.





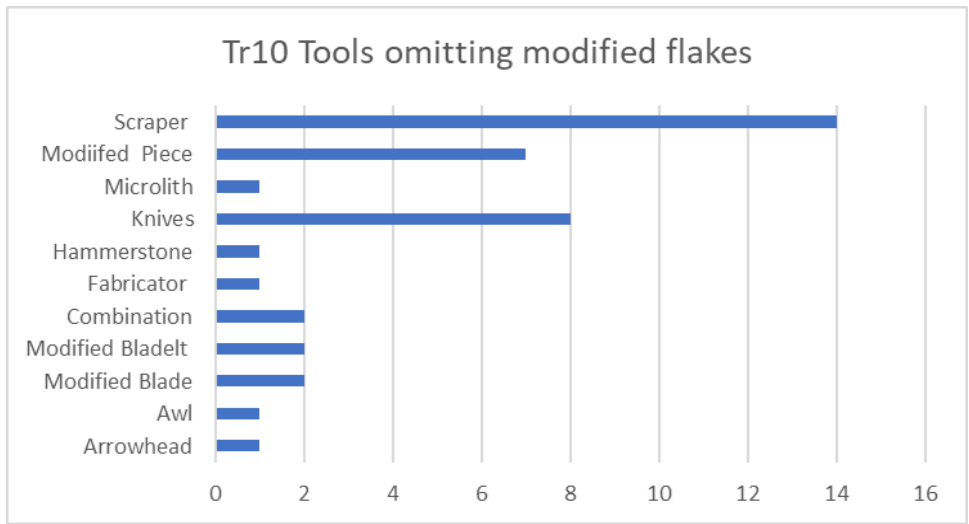
A total of 69 flints were excavated from closed contexts in Trench 10 and 168 from open contexts. Of the ten contexts in Trench 10, seven were closed.

The table below shows the number of specific tool types found in Trench 10, together with the numbers found in open and closed contexts.

Tool Type	Open Context	Closed Context	Total	% Approx
Arrowhead	1	1	2	2
Awl	1	0	1	1
Blade/bladelet	1	3	4	4
Combination	1	0	1	1
Fabricator	1	0	1	1
Flake Modified	44	9	53	56
Hammerstone	1	0	1	1
Knives	6	2	8	8
Microlith	1	0	1	1
Piece Modified	3	4	7	7
Piercer	1	0	1	1
Scraper	10	4	14	14
Total	71 (76% of total)	23 (24% of total)	94	

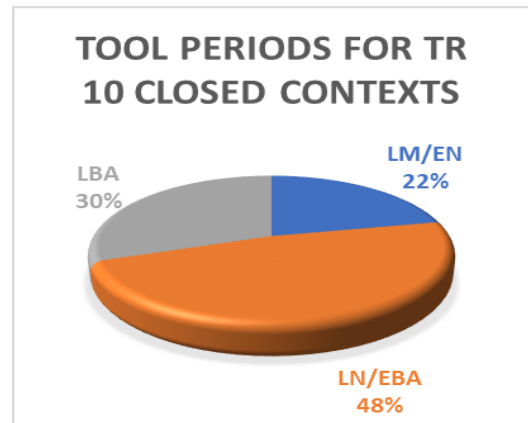
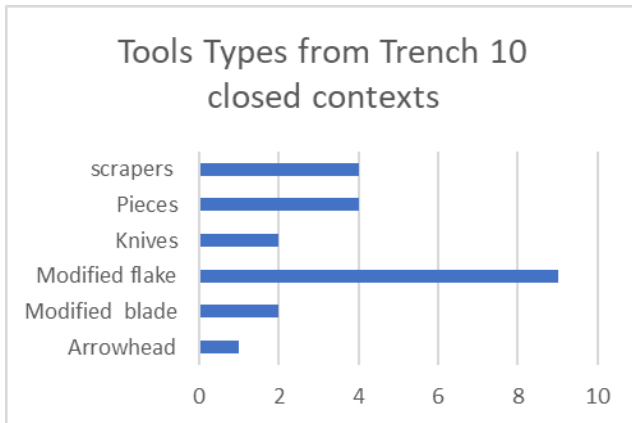
The table shows 56% of the tools are modified flakes and 14% are scrapers with knives next as most frequent at 8% and no other tool type accounting for more than 4%. It also shows that 24% of the tools came from closed contexts. The lack of less common tools types such as denticulates, picks, borers and choppers, is likely due to the small assemblage for Trench 10.

Below is a bar chart showing the distribution of tools types in Trench 10. The modified flakes have been omitted to provide a better comparison of the specific tool types.



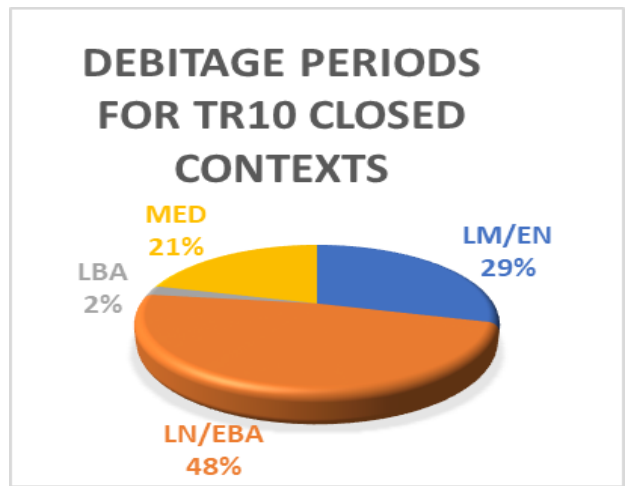
As with the tool distribution chart for the total assemblage the knives and scrapers dominate. Although the scrapers outnumber the knives by 6, the percentage of knives for the Trench 10 tools, 15%, is almost the same as that to the total assemblage, 16%. In every other way the tools distribution is similar to that of the total assemblage.

The charts below show the distribution of the periods and types of the 30 tools from the Trench 10 closed contexts.



The distribution of tool periods and of tool types from the closed contexts of Trench 10 are similar to those for the total assemblage.

The closed context debitage from Trench 10 shows the Medieval flints comprise 21% of the assemblage, compared to 6%, of the total assemblage.



Of the ten medieval flints in this group, four are categorized as gallets.

The table below shows a list of the contexts in Trench 10 where worked flints were found. It also shows for each of these contexts, the total number of worked flints,(tools plus debitage), the number of debitage flints and the number of Medieval worked flakes.

Context No	Open/closed	Number of worked flints	Number of Debitage flints	Number of Medieval Flints
105	Open	1	0	0
111	Open	35	21	0
114	Open	129	68	14
117	Closed	10	7	0
119	Closed	31	19	6
120	Closed	1	0	0
121	Closed	1	1	0
126	Closed	17	14	4
138	Closed	4	1	0
144	Closed	7	4	0

There were 24 contexts opened in Trench 10 of which 10 produced worked flakes and these did not include the contexts at the North Eastern or South Western extremities of the trench.

The Medieval flakes all came from open context 114 (14) and closed contexts 119 (6) and 126 (4). 114 and 126 are grouped near each other towards the center of the trench whereas 119 is further to the South West.

The prehistoric flints found in Trench 10 are similar in period to the total assemblage. The Medieval flints are however surprisingly numerous indicating the likelihood of a history of Medieval wall building nearby.

## Interpretation and Conclusions

The flint assemblage indicates activity from the Late Mesolithic through to the Late Bronze Age, with some activity in the Medieval period. The majority date from Late Neolithic/Early Bronze Age, with less from the Late Mesolithic/Early Neolithic and a smaller number still for the Late Bronze Age. A lesser number of apparently more recently struck flakes including dressing flakes and possible gallets is likely to be associated with Medieval wall building.

The raw material was mainly locally sourced grey and mottled grey flint together with a significant amount of good quality black and dark grey flint probably from beach pebbles and the nearby Neolithic flint mines on the Downs. There are some white flints from the nearby chalk downland and several brown and a few red stained flints, possibly from river sources. A significant number were water rolled which together with iron staining indicate that water has been present at the site for periods of time, possibly in the form of streams, or flooding. This is likely to be due to changes in climate conditions as well as the site's low-lying location south of Downland hills, and its proximity to a constantly varying coastline.

Most of the excavated flint came from topsoil and open contexts, with only 5% from closed contexts. The period and the tool type distribution from closed contexts is similar for the open contexts, indicating that, despite no evidence of plough damage, there has been a great deal of disturbance at the site.

The Late Mesolithic and Early Neolithic flints contain the most diverse tool kit of the three

prehistoric periods. They include a high proportion of cores and core fragments which together with microliths, bladelets, blades, knives, scrapers and picks which indicate the hunter gatherers had a significant presence at the site, involving repair and maintenance of hunting tools, knapping, and animal butchery. The evidence suggests they were not only passing through but probably also making temporary or more permanent camps locally.

The doubling in number of both the tools and the debitage flints from the period covering the Late Neolithic and Early Bronze Age, indicates a big increase in activity at the site which might at least partly be due to the increase in population. The presence of arrowheads shows hunting is continuing and the significant increase in proportions of knives, and in particular scrapers, confirms that habitation is more likely in the area and possibly farming and/or animal husbandry have been introduced.

The Late Bronze Age assemblage is smaller than both earlier periods, with the same number of tools as the Late Mesolithic/Early Bronze Age but less debitage. The small proportion of debitage can, to some extent, be explained by Late Bronze Age people using tools made on whatever flakes were to hand, including scavenged flakes from previous periods. (Butler, 2005 182.)

The tool type distribution changed in the Late Bronze Age. Most markedly the proportion of scrapers is 50%, more than double that for Late Neolithic/Early Bronze Age and almost quadruple that for Late Mesolithic/Early Neolithic. The dominance of scrapers at Late Bronze Age sites across Sussex is well established and indicates habitation nearby is likely. (Drewett, 1982, 321-399).

The reduction in the proportion of knives in the Late Bronze Age assemblage relative to the earlier periods could be explained by the fact that metal was more readily available in the later Bronze Age when some flint tools, including knives were being replaced by metal equivalents. (Butler, 2005, 179).

The Late Bronze Age flint tool types, comprising retouched flakes and pieces, scrapers, knives and piercers, which together with the probable addition of some metal tools, would indicate that habitation and farming and animal husbandry were continuing in the area. However, the small proportion of debitage contrasts markedly with later Bronze Age excavations at habitation sites on the Sussex Downs, which produced much higher proportions of debitage flakes. (Drewett, 1982, 321-399). This suggests that though the LBA were working with tools at the Malthouse site a significant proportion of their knapping occurred elsewhere. Nothing was found to indicate hunting in that period.

The abandonment of later Bronze Age sites including Blackpatch, Itford and Downview is estimated at around 1300-1100BC, (Drewett, 1982. 343), and the earliest occupancy of Late Bronze Age lowland, coastal sites including Shinewater, Climping and Ford is estimated at 1200-900BC, (Tapper, 2011, 153). Together these results indicate a movement from the Downs to lower lying areas nearer the coast in the Late Bronze Age

Of the fifty or so known Bronze Age settlement sites and hoards across Sussex over half are on the coastal plains, where they are more likely to be Late Bronze Age. Six of these are located within 5 km of the Malthouse Site (Tapper, 2011, 131-140.) So, although we have a relatively small assemblage of flints for the Late Bronze Age it is evident there is a lot of activity nearby during the period.

Extensive studies of bog records and alluvial activity across the UK conclude there were three main cold/wet phases in the relevant prehistoric periods: 2300-2000 BC, 850/550 BC and 400/100 BC, suggesting major climatic events, that would have caused flooding and localized damage on floodplains and low-lying areas. (Brown, 2008, 12-13).

The location of the Malthouse site at the foot of the Downs makes it likely these cold /wet phases would have had a disruptive effect on living conditions. This is likely to have reduced long-term occupation particularly in the Late Bronze Age (1150-650BC), but also in earlier periods. The smaller relative size of the Late Bronze Age assemblage could be explained by periods of absence due to flooding.

For later eras flint knapping was only relevant in the context of building with flint. All but one of the trenches were opened adjacent or near to the remains of a Medieval wall. A scattering of Medieval worked flakes was found in most trenches including dressing flakes and gallets.

Trench 10, the outlying trench, produced a higher number of Medieval flakes than any of the other trenches despite being 50 yards away from the known Medieval walls. Perhaps more Medieval walls await discovery.

## Summary

The flint analysis, together with information obtained from archaeological and climatic records, indicate that the Malthouse site was in a good hunting area and a viable place for at least temporary habitation throughout the early prehistoric periods. Human presence is apparent from the Late Mesolithic and increased through the Neolithic into the Early Bronze Age. Hunting continued throughout that time, settlement increased, and farming, including animal husbandry, was probably established.

Late Bronze Age flints suggest that habitation and farming continued in this period, however, the assemblage is smaller than both earlier periods. In particular, the lack of debitage at the site indicates that much of the knapping was carried out elsewhere. Some flint tools had been replaced at this time by metal equivalents however this is unlikely to be sufficient to account for the decrease in assemblage size.

The area was subject to periods of flooding particularly in the Bronze Age, which would make settlement and farming difficult and at times impossible. Habitation at the site is likely to have been intermittent and is the most likely reason for the apparent decrease in Late Bronze Age activity. However, during wet periods, fresh water provided by streams and ponds would have allowed wildfowl and other prey animals to flourish and attract hunting parties from the nearby Late Bronze Age settlements.

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