7.1 Assessment of Worked and Burnt Flint

Phil Harding, Tania Wilson and Andrew Crockett

Introduction

- 7.1.1 Worked flint was recovered from a range of feature types attributable to all major chronological periods identified. Diagnostic artefacts include a Late Glacial burin, Mesolithic microliths and both leaf-shaped (Early Neolithic) and barbed-and-tanged (Early Bronze Age) arrowheads. As such, the worked flint assemblage provides evidence of human activity in the area from the Late Glacial period onwards, with the majority of the largely undiagnostic assemblage most probably attributable to the Late Bronze Age and Early Iron Age. The relatively high percentage of this assemblage (c. 84%) recovered as either residual finds in later contexts or from provisionally undated features will, however, detract from its potential with regard to detailed metrical analysis.
- 7.1.2 Burnt flint is intrinsically undatable without the use of sophisticated laboratory techniques (i.e. thermo-luminescence dating). However, it is generally considered to be indicative of prehistoric activity, and more specifically activity associated with settlement. As with the distribution of worked flint, if the majority of burnt flint recovered at Saltwood is considered to be prehistoric in origin, then the majority was recovered as residual material in later contexts.
- 7.1.3 The study of these objects assists in the following Fieldwork Event Aims:
 - To identify the nature of the prehistoric activity, determine its extent and place in the landscape,
 - To establish a dated sequence for the origin and development of settlement including associated enclosures and trackways, etc.
 - *Recovery of dated environmental and economic indicators if these are found to be present on site.*

Methodology

7.1.4 All worked flint recovered has been assessed and quantified according to artefact type, as defined in *CTRL Section 1 Archaeology: Post Excavation Assessment Instruction* (URS 2000, 23). The burnt flint has been quantified, but no further assessment has been considered viable at this stage.

Quantification

- 7.1.5 Worked flint quantification by artefact type is provided in **Table 19**, burnt flint quantification by site is provided in **Table 20**. A total of 1579 pieces of worked flint was recovered from 541 contexts, giving an average of c. 3 pieces of worked flint per context, which is a very low density given the recorded prehistoric activity at the site. Overall, only c. 16% of the worked flint assemblage was recovered from features considered to be of Middle Iron Age or earlier date, with a further c. 11% recovered from features that are as yet undated. The remainder of the assemblage is therefore considered to represent residual material in later features.
- 7.1.6 With regard to the breakdown of worked flint categories, *c*. 12% of the assemblage were tools, *c*. 9% were the by-products of tool manufacture (i.e. cores, rejuvenation

tablets etc.) and the remaining c. 79% comprising blades, flakes and debitage. Scrapers (c. 42%) and other miscellaneous retouched pieces (c. 48%) that could not be confidently attributed to a specific tool type dominated the tools. The frequency of blade/ let material, some of which may be Early Neolithic, accounts for only 8% of all flakes and blade/ lets, confirming that there is not a major Mesolithic component on the site.

7.1.7 Diagnostic pieces include a Late Glacial burin with a deep white patination, made on a truncated blade and recovered from Early Bronze Age ring ditch W33. The proximal end of a broken well-prepared flake from LBA/ EIA ditch W87, also patinated white, may be of the same date. Of the few possible Mesolithic artefacts from the site, a rod microlith from Saxon ditch W8 and an obliquely blunted point/ drill bit from a ploughsoil context are the perhaps the most diagnostic.

Artefact Type	Number	Group %	Total %
Scrapers	79	42.25%	5.00%
Piercers	2	1.07%	0.13%
Burins	1	0.53%	0.06%
Projectiles (arrowheads)	5	2.67%	0.32%
Denticulates (& micro den)	4	2.14%	0.25%
Fabricators	4	2.14%	0.25%
Microliths	2	1.07%	0.13%
Core tools (axes etc.)	0	0.00%	0.00%
Other tools	28	14.97%	1.77%
Misc. retouch	62	33.16%	3.93%
(Tools sub-total)	187		11.84%
Flake cores & core frags	66	48.53%	4.18%
Blade(let) cores & core frags	2	1.47%	0.13%
Rejuvenation tablets	10	7.35%	0.63%
Crested pieces	2	1.47%	0.13%
Microburins	0	0.00%	0.00%
Chips	56	41.18%	3.55%
(Production sub-total)	136		8.61%
Blades & bladelets (inc. no broken)	107	8.73%	6.78%
Flakes (inc. no. broken)	1119	91.27%	70.87%
(Blades & flakes sub-total)	1226		77.64%
Debitage	30	100.00%	1.90%
(Fragments sub-total)	30		1.90%
Total	1579		

Table 11:Worked flint quantification by artefact type

Table 12:	Burnt flint	quantification	by site
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Event code	No.	%age of total no.	Wt. (g)	%age of total wt.
ARC SLT98	35	11.59%	1554	38.80%
ARC SLT98C	30	9.93%	639	15.96%
ARC SLT99	3	0.99%	22	0.55%
ARC SFB99	234	77.48%	1790	44.69%
Totals	302		4005	

7.1.8 The earliest stratified groups of material on the site comprised 64 pieces of worked flint from Early Neolithic pits W136 and W175. The absence of cores and the high proportion of tools, including five well-made scrapers from pit W136, suggest that this material was derived from domestic (or possibly ritual) activity rather than tool production. Two pieces of a broken scraper from pit W175 refit, indicating that the pit contains material from a single event. The composition of the tool assemblage (i.e. scrapers and microdenticulates) is in keeping with an Early Neolithic date, as is the inclusion of blades and bladelets. Some of the latter may represent unretouched knives.

- 7.1.9 Additional Early Neolithic artefacts were found elsewhere on the site as residual finds including a leaf arrowhead from a topsoil context, whilst some of the fabricators, scrapers, flakes and blades with abraded butts are also likely to be of Early Neolithic date. These, however, are less easy to date precisely and in the absence of corroborative ceramic material may be of Late Neolithic or Early Bronze Age date.
- 7.1.10 Although relatively few diagnostic artefacts were recovered, there is limited evidence to indicate Early Bronze Age activity in the vicinity of the ring ditch W33, a pattern reflected in the low density of material from the ditch itself. Individual diagnostic items include a pressure flaked knife from undated ditch W149 and barbed-and-tanged arrowheads from trackways W34 and W170. Flint from the ring ditch is restricted to 19 pieces of which 12 were from the upper secondary fills of the ditch. The appearance of these flakes suggests that they were removed from the same nodule, possibly indicating a single knapping event at the site following the initial silting of the ditch, probably in the Late Bronze Age.
- 7.1.11 A low density of worked flint was recovered from Late Bronze Age/ Early Iron Age features across the site. A single platform core showing many incipient cones of percussion resulting from miss hits (undated ditch W63) is typical of many Late Bronze Age cores. It may also be significant that miscellaneous retouched material forms the largest part of the retouched tool component from Late Bronze Age/ Early Iron Age features from the site. This is a period that is often associated with poorly made implements.
- 7.1.12 Most features which contain flint are of Iron Age or later date and it is safe to assume that most of this flint comprises redeposited material. It is however, of note that the largest group of worked flint from later contexts was recovered from the Saxon graves, and most notably those located adjacent to the Stone Farm Bridleway. It is of note that the main cluster is situated in the immediate vicinity of two Late Bronze Age settlement enclosures.
- 7.1.13 A total of 302 pieces of burnt flint weighing 4,005g was recovered at Saltwood Tunnel, the majority of pieces (264, equivalent to 87.41%) recovered in the vicinity of Stone Farm Bridleway. However, the distribution by weight demonstrates a significantly differing ratio between that recovered adjacent to Stone Farm Bridleway (60.65%) and the Late Iron Age/ Romano-British settlement site C15 (38.80%) to the west. The disparity between count and weight ratios cannot at this moment be explained; possible factors may include differing activities to generate and/or utilise the burnt flint, differing post-depositional effects between the two areas, or differing recovery techniques during excavation.

Provenance

- 7.1.14 Worked flint was recovered as both stratified finds within features and deposits and as unstratified artefacts recovered from topsoil and subsoil deposits. Although some of the worked flint was recovered *in situ* from relatively secure contexts (i.e. the Neolithic pits) the majority was recovered as residual finds in features of later date, and most notably the Anglo-Saxon graves that focus on areas of earlier Bronze Age activity.
- 7.1.15 Very little worked flint was associated with the construction of the probable Early Bronze Age ring ditches, although two redeposited barbed and tanged arrowheads were found in late prehistoric (Iron Age) trackways. A small group of stratified core preparation waste from the upper silts of ring ditch W33 may relate to Late Bronze

Age occupation of the site. Concentrations of redeposited flint in Anglo-Saxon graves throughout the site is also likely to be associated with Bronze Age activity in the general area. There are also 16 artefacts made on Bullhead flint, probably derived from the Chalk downland to the north.

7.1.16 The concentration of burnt flint (by number) located immediately to the east of Stone Farm Bridleway is probably associated with the Bronze Age settlement enclosures and field system(s) that were concentrated in this area. However, it is of note that by mean fragment size, the later Iron Age/ Romano-British settlement area further to the west (C15) produced virtually the same weight of burnt flint.

Comparative material

- 7.1.17 Evidence of Late Glacial activity is extremely rare; although isolated artefacts do occur to suggest early recolonisation of Britain soon after the glacial retreat. Mesolithic material is often recovered from the geological sands located along the base of the South and North Downs, a zone extending throughout the Weald of Kent and Sussex. Locally, these include a microlith from Heyne Barn Field, Saltwood (Wymer 1977, 155) and a number of items from the Folkestone area, including 18 blades and flakes from Caesar's Camp (*ibid*. 149).
- 7.1.18 With the exception of the Medway megaliths, Neolithic features to compare and contrast with the Stone Farm Bridleway pits are comparatively rare in Kent (Clarke 1982, 25). However, recent discoveries associated with the CTRL, such as at Sandway Road (URS 1999) and the White Horse Stone longhouse (Glass, 450-3) have revealed broadly contemporaneous activity that may combine to help characterise the Neolithic period in Kent.

Potential for further work

- 7.1.19 Apart from demonstrating a presence, there is no potential for further analysis of the few Late Glacial pieces recovered from Saltwood, although illustration may be considered worthwhile.
- 7.1.20 The small number of stratified flints recovered in two Early Neolithic pits, including a relatively high proportion of scrapers and microdenticulates, is significant. In association with the pottery and environmental data also recovered, the pit contents will therefore provide important evidence of short-term domestic or ritual activity in the area by the first farming communities. Other probable Early Neolithic artefacts, including a leaf arrowhead, scrapers and fabricators, were found as redeposited finds in later contexts. Therefore, in view of the scarcity of other well-stratified flint from the site it may be considered worthwhile to describe the pit assemblages in more detail, although there is insufficient material to justify detailed metrical analysis.
- 7.1.21 The quantity of Early Bronze Age material is very small and of limited potential for further analysis, likewise there is little potential for additional study of the Late Bronze Age/ Early Iron Age worked flint.
- 7.1.22 The disparity between concentrations by count and concentrations by weight for burnt flint is of note. It has been suggested that this may represent differing processes that are either producing or utilising the burnt flint. It is therefore considered appropriate to carry out detailed spatial analysis for this material (by both count and weight), and compare and contrast these results with similar distribution plots for worked flint.

Bibliography

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