

APPENDIX 1 - ASSESSMENT OF LITHICS

1.1 Lithics

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Introduction

- 1.1.1 A total of 327 pieces of worked flint and 426 pieces of burnt unworked flint (3900 g) were recovered from the excavations. Some diagnostic retouched forms were recovered (eg two microliths and an arrowhead fragment) allowing broad dates to be suggested for the flint. For certain groups (eg the material from context 22) the suggested dating is based on technology rather than typology. The obliquely blunted point from context 101 and the broken possible rod microlith suggest some limited Mesolithic (possibly later Mesolithic) activity in the vicinity, although as no diagnostic debitage was identified it is perhaps more plausible that these microliths represent chance losses during hunting.
- 1.1.2 The recovery and study of the flint was undertaken in accordance with the Fieldwork Event Aims (see Section 2.2), in particular aim 1.

Methodology

- 1.1.3 All of the flint was briefly scanned and recorded, with information regarding dating, technology and general condition being noted. The material was added to an Access database. All of the burnt unworked flint was scanned and weighed; its general characteristics were also recorded.

Quantification

- 1.1.4 The worked flint is summarised by context in Table 2.1.1 and the burnt flint in Table 2.1.2. A total of 327 pieces of worked flint and 426 pieces of burnt, unworked flint (3900 g) was recovered during the watching brief. This material was all very heavily calcined and ranged in colour from grey to white and red. Table 2.1.3 provides a breakdown of the relative elements of the assemblage. Typically debitage dominates with only 4.8% being retouched. Scrapers dominate the retouched component, as is typical of a domestic assemblage.

Table 2.1.1: Summary worked flint by context

Context	Count	Period	Comments
62 (68+100)	5		5 chips
1 (68+200)	3		2 flakes, 1 core (multi-platform flake)
7	7		6 flakes, 1 retouched flake
68	5		3 flakes, 1 core tablet, 1 core fragment
11	23	LNEBA?	21 flakes (1 flake possibly from a hammerstone, 1 burnt flake, 4 blade-like flakes), 1 possible core rejuvenation flake (face/edge), 1 end and side scraper, also 1 natural
18	13		11 flakes (7 burnt), 1 burnt chip, 1 retouched flake (possibly use rather than retouch)
20	6	NE?	1 broken end and side scraper, very worn edge, 5 flakes (1 is burnt)
24	5		1 small flake, 4 chips
34	11		11 flakes
49	7		7 flakes
57	1		1 flake
59	8		8 flakes
68	1		1 large flake with some ?usewear

75	4		4 flakes one with some ?usewear
76	19		18 flakes (one of which is burnt), 1 chip
117	1		1 flake
123	3		2 flakes, 1 chip
1 (68+300)	2	NE or EBA	1 worn retouched flake, 1 miscellaneous retouch (arrowhead fragment – leaf or barbed and tanged)
22	58	NE or EBA	30 flakes, 3 cores (multi-platform and tested nodules), 20 chips and small flakes, 4 end and side scrapers, 1 end scraper
61	15		10 flakes, 5 chips/small flakes, one of which is burnt
99	3		2 flakes, 1 core rejuvenation flake – face/edge
101	9	Some LME	7 flakes, 1 obliquely blunted point with ancillary retouch, 1 chip – possibly natural
103	7		7 flakes
104	1		1 flake
115	6		6 flakes, 3 of which are burnt, also 1 natural
125	3		3 flakes
164	1	ME, possibly later	1 broken and burnt microlith, possibly a rod, extensively retouched
165	2		2 flakes
167	-		Natural
178	3		1 misc retouch (possibly a scraper fragment), 2 chips, also 1 natural
214	2		2 flakes
215	1		1 flake
223	2		2 flakes
225	-		Natural
127	10	?NE	7 flakes, 3 cores (multi-platform flake), also 1 natural
160	8		5 flakes (inc 1 very large flake), 1 multi-platform flake core, 1 serrated flake, very worn, 1 chip
181	7		6 flakes (including 1 burnt) and a chip
189	55*		15 flakes (inc 2 burnt) and 40+ chips NB this material was scanned, counts are therefore approximate
208	1		1 flake
5 (68+400)	9		1 retouched flake, 1 core rejuvenation flake (face/edge), 1 discoidal core, 6 flakes

Table 2.1.2: Summary of burnt unworked flint by context

Context	Count	Weight (g)	Comments
15 (68+200)	23	358	Burnt flint fragments, all calcined grey to red
16	4	12	Burnt flint fragments calcined grey to red
18	6	73	Burnt flint fragments calcined grey to red
26	5	22	Burnt flint fragments calcined red
42	3	1	Burnt flint, calcined grey
76	1		Flake, very heavily calcined grey
164	3	25	Burnt unworked fragments, calcined grey
167	1	1	Burnt unworked fragment calcined grey to red
173	3	51	Burnt unworked flint calcined red and grey
22 (68+300)	29	646	Burnt unworked flint calcined grey, some reddish tinges
61	9	37	Burnt unworked flint calcined grey; also 1 natural
62	58	610	Burnt unworked flint calcined grey
95	22	33	Burnt unworked flint calcined grey
99	1	10	Burnt unworked flint calcined grey to red
101	1	2	Heavily calcined grey/red
104	1	1	Calcined grey
127	256*	2018	Burnt ?quartzite and flint calcined grey, quite fragmentary.

* Scanned only (counts based on OAU finds records)

Table 2.1.3: Summary of typology of worked flint

Artefact Type	Number	Group %	Total %	Period	Comments
Scrapers	7	43.8	2.1	NE-EBA	Mostly neatly retouched, one is very worn
Serrated flake	1	6.25	0.6		
Microlith	2	12.5	0.6	ME, possible later	1 obliquely blunted point with ancillary retouch and 1 burnt and broken ?rod microlith
Retouched flake	4	25.0	1.2		
Misc retouch	2	12.5	0.6	NE or EBA	1 arrowhead fragment (leaf or barbed and tanged), 1 possible scraper fragment
<i>(Tools – sub total)</i>	<i>16</i>	<i>100</i>	<i>4.8</i>		
Flake cores & core frags	10	10.4	3.1	NE – BA	Mostly multi-platform flake cores, fragments and tested nodules, 1 discoidal core
Rejuvenation tablets	4	4.2	1.2		2 face/edge flakes and 2 tablets
Chips	82+	85.4	25.1		Mostly small fragments from larger flakes, some complete chips, some are burnt
<i>(Production - sub total)</i>	<i>96</i>	<i>100</i>	<i>29.4</i>		
Flakes	215	100	65.7		In all stages of reduction, hard and soft hammers noted, all types of butts noted
<i>(Flakes – sub total)</i>	<i>215</i>	<i>100</i>	<i>65.7</i>		
Total	327				

Provenance

- 1.1.5 The flint came from a series of pits, post- and stakeholes, ditch fills, tree-throw hole fills and layers. Only five contexts (11, 22, 61, 76 and 189) produced 15 or more pieces of worked flint, and the latter count was boosted by a large number of chips that were recovered (Table 2.1.1). The shallow pits (14 and 17, contexts 15 and 16) produced only burnt unworked flint, which could equally belong in the early-middle Iron Age or may perhaps be residual. The pits and postholes forming Group 66, some of which were associated with Grooved Ware, produced small assemblages, mostly of debitage (Table 2.1.1: contexts 18, 20 and 68) together with burnt unworked flint. A broken and very worn end and side scraper from context 20 together with the technology of the material from this context and others from the group suggest a Neolithic date which accords with the ceramic dating. Several of the

flakes have been burnt and burnt unworked flint was also recovered from context 18 (Table 2.1.2). Some possible usewear was identified on material from context 18. This combination of burnt and worn elements is typical of Grooved Ware assemblages (cf Bradley 1999, 214-8).

- 1.1.6 The stakeholes forming Group 47 produced quantities of burnt unworked flint together with limited numbers of flakes, cores and core rejuvenation flakes. A single flake was recovered from Iron Age hollow 35-74. The fills of various ditches and gullies produced a few flakes, a core rejuvenation flake and burnt unworked flints. Feature 100, which contained a small number of early-middle Neolithic sherds, produced a small assemblage including a redeposited Mesolithic obliquely blunted point. Two Beaker pits (23 and 60, contexts 22 and 61-2) produced coherent groups of probably later Neolithic to early Bronze Age flintwork (Table 2.1.1); this dating accords with the ceramic evidence. Context 22 produced an assemblage of debitage (flakes, chips and three cores/tested nodules) and a range of neatly worked scrapers (four end and side and one end scraper). Contexts 61-2 produced smaller quantities of material of flakes, chips and burnt unworked flint (Tables 1-2). Although this material is not diagnostic it is very similar to that from context 22, and may be contemporary. Interestingly the majority of the flint came from the primary fills of these two pits (contexts 22 and 61 respectively) suggesting deliberate deposition, perhaps as grave goods.
- 1.1.7 Flint from the possible pit alignment (pits 91, 96 and 126; contexts 90, 95 and 127) amounts to seven flakes, three multi-platform flake cores (127) and a substantial quantity of burnt unworked flint and quartzite from contexts 127 and 95 (Tables 1-2). The worked element of this group is really too small to provide accurate dating, although the technology of the material suggests a Neolithic date may be appropriate. Iron Age pit 161 produced three pieces of burnt unworked flint from context 164, the middle fill, and a single piece from 167, the upper fill of the pit. The western group of Iron Age pits produced a few worked flints and some burnt unworked material (pits 161, 170 and 175; contexts 164, 165, 167, 173 and 178). The material would seem to be mostly redeposited as a possibly broken rod microlith was recovered. Two flakes came from context 223, the upper fill of Iron Age pit 226. The scatter of tree-throw holes and pits (pit 213, contexts 214-5; tree-throw hole 182, context 181; tree-throw hole 189, context 208) produced a reasonable quantity of debitage, although the figures are boosted by a large number of chips from context 189. The remaining material came from natural layers and includes debitage and a limited number of retouched pieces (eg an end and side scraper and a retouched flake). It is likely that some of this material is of a broad later Neolithic to early Bronze Age date.

Conservation

- 1.1.8 Much of the flint has suffered some post-depositional damage; cortication is mixed. A few flakes have also been burnt. The burnt unworked flint recovered was mostly very heavily calcined grey-white and red.
- 1.1.9 It is recommended that samples only of the burnt flint are retained (eg from stratified contexts). Some of the burnt unworked flint is beginning to disintegrate, however, there is little that can be done to stop this process. The flint is adequately bagged and boxed for long term storage. There are therefore no storage or conservation requirements. At this stage, all the material should be retained.

Comparative Material

- 1.1.10 This small group could be compared to other sites from the route which produced contemporary material, for example the Grooved Ware associated flint from White

Horse Stone and other sites along the CTRL route. It may also be useful to compare any fieldwalking scatters that were identified.

Potential for Further Work

- 1.1.11 Although this assemblage is small to medium-sized there is some potential for further work. The Grooved Ware associated flint will provide an interesting comparison for the material from White Horse Stone and other sites from the CTRL project. The identification of possible usewear on some material from this assemblage is also of interest and, if analysed, has the potential to add further information on the nature of these deposits and the range of activities represented. Some of the other groups (eg the material associated with Beaker pottery from context 22) are also of interest. Although the groups are not large enough for metrical analysis some technological analysis may provide useful comparative material.
- 1.1.12 Areas of further analysis will include identification of in situ scatters by spatial and refitting analysis, particularly within the Neolithic contexts. Methods of production including reduction techniques may also be studied by means of refitting analysis. The sources of the flint, which will shed light on patterns of contact and exchange, can be suggested by its physical appearance (e.g. Bullhead flint) and the presence of corticated material. The study of low-power use-wear and assemblage composition will shed light on the types of activity being undertaken. Study of the Grooved ware associated pit assemblages will contribute to understanding of Grooved Ware pit deposits, and will be valuable for comparison with similar deposits from White Horse Stone.

Bibliography

Bradley, P, 1999, Worked flint, in *Excavations at Barrow Hills, Radley, Oxfordshire*, Volume 1, *The Neolithic and Bronze Age monument complex* (A Barclay and C Halpin), Thames Valley Landscapes volume **11**, Oxford, 211-228

