# CTRL Flint Reports

MERSHAM, KENT. ARC MSH 98

## 7.6 ASSESSMENT OF WORKED FLINT

Tania Wilson

*Summary*

7.6.1 A small assemblage of worked flint was recovered during the excavation. All of the pieces were found in post-Roman contexts and are therefore residual. Due to the size of the group and the provenance, further analysis of this assemblage is not considered worthwhile although a short note highlighting their regional value is suggested.

*Introduction*

7.6.2 A total of 24 worked flints were recovered from the site (excluding the small quantity of material collected by MoLAS during evaluation). The majority of the assemblage was retrieved by hand during excavation but four pieces were recovered during the processing of environmental samples.

7.6.3 Analysis of this assemblage is unlikely to address the Fieldwork Event Aims, as these are targeted largely towards the more intensive Anglo-Saxon and medieval phases. However, the assemblage does augment the ceramic evidence for activity in the area prior to the late Iron Age.

*Methodology*

7.6.4 The assemblage has been quantified and scanned, but has not been catalogued. Each individual artefact has been assigned to basic categories, as shown in Table One.

*Quantification*

7.6.5 The assemblage composition is shown in Table One. There appears to be no observable bias in the collection of the material and it is likely that the assemblage is fairly representative for the site.

**7.6.6 Table One**
*Worked Flint*

| ***Artefact Type*** | ***Number*** | ***Group %*** | ***Total %*** | ***Period*** |
|---|---|---|---|---|
| Scrapers | 1 | 50 | 4 | |
| Piercers | | | | |
| Burins | | | | |
| Projectiles | 1 | 50 | 4 | Neolithic |
| Leaf-shaped arrowhead | | | | |
| Denticulates | | | | |
| Fabricators | | | | |
| Microliths | | | | |
| Core tools | | | | |
| Other tools | | | | |
| Misc. retouch | | | | |

| | | | | |
|---|---|---|---|---|
| **Tools - sub total** | | ***2*** | ***8*** | |

| | | | | |
|---|---|---|---|---|
| Flake cores & core frags | 1 | 25 | 4 | |
| Blade(let) cores & core frags | 1 | 25 | 4 | Mesolithic |
| Rejuvenation tablets | | | | |
| Crested pieces | | | | |
| Microburins | | | | |
| Chips | 2 | 50 | 8 | |
| **Production - sub total** | **4** | **17** | | |

| | | | | |
|---|---|---|---|---|
| Blades & bladelets | 1 | 6 | 4 | |
| (inc. no. broken) | | | | |
| Flakes (inc. no. broken) | 15 | 94 | 63 | |
| **Blades & flakes – sub total** | **16** | **67** | | |

| | | | | |
|---|---|---|---|---|
| Debitage | 2 | 100 | 8 | |
| **Fragments – sub total** | **2** | **8** | | |

| | |
|---|---|
| **Total** | **24** |

*Provenance*

7.6.7 The provenance of the individual artefacts is shown in Table Two. As can be seen in the table, the artefacts are fairly evenly distributed and were almost exclusively recovered from contexts of Anglo-Saxon or medieval date.

**7.6.8 Table Two**
*Worked flint by context*

| ***Context*** | ***Count*** | ***Period*** | ***Comments*** |
|---|---|---|---|
| 0 | 1 | | |
| 316 | 1 | | |
| 330 | 1 | | |
| 414 | 2 | | |
| 423 | 1 | | |
| 478 | 1 | | |
| 483 | 1 | | |
| 485 | 1 | | |
| 506 | 1 | Mesolithic | Blade Core |
| 548 | 1 | | |
| 557 | 1 | Scraper | |
| 562 | 2 | | |
| 563 | 1 | | |
| 565 | 1 | | |
| 567 | 1 | | |
| 569 | 1 | Neolithic | Arrowhead |
| 608 | 1 | | |
| 609 | 1 | Core | |
| 632 | 2 | | |
| 639 | 1 | | |
| 658 | 1 | | |

*Comparative material*

7.6.9 Other finds from the vicinity have been recorded previously and are of roughly contemporary date. From Aldington has come a scatter of flint implements, probably Mesolithic in date (Bradshaw 1968, 251), and a fragment of a Neolithic ground and polished flint axe (Alpin 1995, 219). A stone mace-head from Smeeth is likely to be late Neolithic or early Bronze Age in date (Kelly 1988, 302).

7.6.10 A substantial struck flint assemblage was recovered near Ashford at Waterbrook Farm. This dates to both the Mesolithic and late Neolithic or Bronze Age periods and represents more intensive activity within the area (Wilson 1998).

7.6.11 For other significant evidence of Mesolithic activity one must look further afield, to Park Farm at Ashford (Clark 1996, 37). The only other substantial finds of Neolithic date were made some distance away at Brabourne (Bradshaw 1975, 203; Kelly 1969, 259; 1976, 230).

*Potential for further work*

7.6.12 he potential of this assemblage to address the Fieldwork Event Aims and the Landscape Zone Priorities is fairly minimal, as these are more applicable to the more intensive phases of occupation in the Anglo-Saxon and medieval periods.

7.6.13 Given the size of the assemblage, its provenance and the paucity of other contemporary artefacts or features, further analysis is not considered worthwhile. In regional terms, however, it is worthy of note that this assemblage was recovered, and a short note to this end would be desirable, accompanied by illustrations of the diagnostic and formal tools.

**7.6.14 Bibliography**

Alpin, J., 1995; A Flint Axe from Aldington, *Kent Archaeological Review* **119**, p219.

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## 7.7 ASSESSMENT OF BURNT FLINT

Tania Wilson

*Summary*

7.7.1 A small assemblage of burnt flint was recovered during the excavation. The size of the individual pieces and their distribution suggests that this material was largely residual and hence further study would not be worthwhile.

*Introduction*

7.7.2 A total of sixteen fragments of burnt flint, weighing some 1.145kg was recovered during the archaeological excavation at Mersham. The assemblage was retrieved entirely during manual excavation.

7.7.3 Given that this material is likely to be residual it is unlikely that any further study could address the Fieldwork Event Aims.

*Methodology*

7.7.4 The assemblage has been quantified and weighed; the results are shown in Table One.

*Quantification*

7.7.5 In total, sixteen pieces of burnt flint were recovered. There is no observable bias in collection, hence it is likely that this assemblage is fairly representative for the site.

*Provenance*

7.7.6 The provenance of the individual fragments is included in Table One. The table shows that there are no apparent concentrations of burnt flint and that the material is sparsely distributed throughout the features of Anglo-Saxon or medieval date although a small scrap (not tabulated) was recovered from the single prehistoric feature identified.

### 7.7.7 Table One

*Burnt Flint*

| ***Context*** | ***Sub-Group*** | ***Group*** | ***Phase*** | ***Number*** | ***Weight (g)*** |
|---|---|---|---|---|---|
| 573 | 101 | 4 | 2 | 1 | 110 |
| 640 | 75 | 3 | 2 | 1 | 350 |
| 328 | 33 | 10 | 3 | 1 | 5 |
| 488 | 157 | 6 | 3 | 1 | 20 |
| 515 | 180 | 6 | 3 | 1 | 60 |
| 564 | 109 | 13 | 3 | 1 | 140 |
| 567 | 107 | 13 | 3 | 1 | 95 |
| 568 | 104 | 13 | 3 | 1 | 55 |

| | | | | | |
|---|---|---|---|---|---|
| 569 | 112 | 12 | 3 | 1 | 65 |
| 600 | 161 | 13 | 3 | 1 | 10 |
| 609 | 161 | 13 | 3 | 2 | 150 |
| 629 | 73 | 10 | 3 | 2 | 75 |
| 639 | 70 | 8 | 3 | 1 | 5 |
| 370 | 36 | 26 | 4 | 1 | 5 |

*Conservation*

7.7.8 It is unlikely that any further analysis of this material would be worthwhile. As it has been fully recorded in terms of quantity, weight and provenance, it is recommended that the assemblage is not retained.

*Potential for further work*

7.7.9 It is almost certain, given the size of the assemblage and its distribution, that further study of this assemblage would do little to address the Fieldwork Event Aims or the Landscape Zone Priorities.

7.7.10 It is impossible to assign a meaningful date to this assemblage.

7.7.11 Given that any further study is unlikely to be worthwhile, no further analysis is recommended.

NORTH OF WESTENHANGER CASTLE, KENT. ARC WGC 98

**ASSESSMENT OF THE WORKED FLINT**
Tania Holmes

## 1. Introduction

1.1 A total of 68 struck flints were recovered during the archaeological excavations by CAT to the north of Westenhanger Castle, and during the watching brief carried out by the OAU. 21 artefacts were collected during the watching brief and the remainder were collected during the excavation. The Museum of London Archaeology Service (MoLAS) undertook the evaluation of the area, but no struck flint from that phase of fieldwork has been seen by the author, and it is not considered here. It is briefly described in the evaluation report (URS 1998, Appendix 3) and it consists of seven pieces of struck flint, six of which are unstratified. It was noted in that report that 'there are no diagnostic types present among the unstratified material and the dating could run from Mesolithic through to Bronze Age but it is more likely to be Neolithic through to Bronze Age' (URS 1998, 22).

1.2 All of the artefacts were recovered by hand, during excavation. None have been retrieved from environmental samples.

1.3 It is anticipated that further analysis of the struck flint assemblage may assist in addressing the fieldwork event aims, specifically when determining the function and economic basis of the prehistoric activity on the site.

## 2. Methodology

2.1 The assemblage has been quantified and scanned but no detailed recording of the artefacts has taken place. Each individual artefact has been assigned to basic category, as indicated in Table 6.

## 3. Quantification

3.1 The assemblage composition is shown in Table 6. A broad range of artefacts are represented which suggest that there was no bias in the collection of material and it is likely therefore that the assemblage is fairly representative for the site as a whole. The overall total is relatively small, at just 68 struck flints, 47 of which were recovered by excavation. Several of the flints, however, came from Groups of Phases 1 and 2, which are of prehistoric date. Those from Groups 1 and 2, in particular, may well have been *in situ*.

## 4. Provenance

4.1 The provenance of the individual artefacts is shown in Table 7. An initial look at the material recovered during the excavation shows that the majority (70%) of the assemblage was recovered from phase 3 deposits and later. With the exception of one piece from a group 1 context and two pieces from group 3, a small yet significant group, forming 23% of the excavated assemblage, was recovered from group 2, the buried soil deposit seen in excavation.

4.2 Given that the assemblage from the buried soil has the potential to be *in situ*, it is considered likely that the struck flints have some value in addressing some of the research objectives.

4.3 The remaining 21 flints came from the watching brief. These were dispersed across a number of features, including the circular feature (Structure 2), which is of Iron Age date, the rectilinear enclosure (sub-group 450) of Iron Age date and associated Iron Age features. No struck flints from the OAU work appear to come from *in-situ* deposits, with the possible exception of those relating to the circular feature (Structure 2).

## 5. Comparative Material

5.1 There are no published references relating to discoveries of struck flint assemblages from the immediate vicinity of the Westenhanger site. In fact the nearest recorded assemblage is that recovered on the CTRL site to the north of Saltwood Tunnel.

5.2 Detailed assessment and analysis of the Saltwood assemblage is yet to take place, but initial scanning suggests a late Neolithic-Bronze Age date range, which may be broadly contemporary with the Westenhanger assemblage.

5.3 Previous discoveries of flintwork in the Saltwood area have been recorded (Willson 1985, 234) and a substantial bronze hoard was also found in the vicinity in 1872 during the excavations for the railway (O'Neill Osborne 1939, 202). Hence activity during this period, in the general locality, is well attested.

## 6. Potential for further work

6.1 The presence of the buried soil and the earlier features demonstrate prehistoric activity in the area, and the association of struck flint artefacts with these deposits provide good potential for addressing the Fieldwork Event Aims and the Landscape Zone Priorities.

6.2 In regional terms, this small assemblage is of some significance, given the paucity of previous discoveries in the area. This increases in status when considering the associated archaeological deposits. It is therefore recommended that the assemblage is reported on in full.

## Table Six

*Worked Flint Assemblage Composition*

| *Artefact Type* | *Number* | *Group %* | *Total %* | *Period* | *Comments* |
|---|---|---|---|---|---|
| | | | | | |
| Scrapers | 1 | 12.5 | 1.5 | | |
| Piercers | | | | | |
| Burins | | | | | |
| Projectiles | 2 | 25 | 3 | Bronze Age | B & T A/heads |
| Denticulates | 1 | 12.5 | 1.5 | | |
| Fabricators | | | | | |
| Microliths | | | | | |
| Core tools | | | | | |
| Other tools | 3 | 37.5 | 4 | | |
| Misc. retouch | 1 | 12.5 | 1.5 | | |
| *Tools - sub total* | *8* | | *12* | | |
| | | | | | |
| Flake cores & core frags | 6 | 75 | 9 | | |
| Blade(let) cores & core frags | 1 | 12.5 | 1.5 | | |
| Rejuvenation tablets | | | | | |
| Crested pieces | | | | | |
| Microburins | | | | | |
| Chips | 1 | 12.5 | 1.5 | | |
| *Production - sub total* | *8* | | *12* | | |
| | | | | | |
| Blades & bladelets | 10 | 20 | 15 | | |
| Flakes | 41 | 80 | 60 | | |
| *Blades & flakes - sub total* | *51* | | *75* | | |
| | | | | | |
| Debitage | 1 | 100 | 1.5 | | |
| *Fragments - sub total* | *1* | | *1* | | |
| | | | | | |
| Total | 68 | | | | |

## Table Seven

*Worked Flint Provenance*

| *Site* | *Context* | *Sub-Group* | *Group* | *Phase* | *Count* |
|---|---|---|---|---|---|
| Excavation | 19 | 0 | 0 | 0 | 1 |
| Excavation | 186 | 35 | 1 | 1 | 1 |
| Excavation | 55 | 50 | 2 | 1 | 3 |
| Excavation | 79 | 15 | 2 | 1 | 1 |
| Excavation | 93 | 53 | 2 | 1 | 7 |
| Excavation | 175 | 46 | 3 | 2 | 2 |
| Excavation | 4 | 27 | 6 | 3 | 1 |
| Excavation | 6 | 32 | 6 | 3 | 2 |
| Excavation | 10 | 29 | 6 | 3 | 2 |
| Excavation | 63 | 59 | 6 | 3 | 3 |
| Excavation | 115 | 32 | 6 | 3 | 2 |
| Excavation | 173 | 32 | 6 | 3 | 1 |
| Excavation | 191 | 32 | 6 | 3 | 1 |
| Excavation | 8 | 45 | 7 | 3 | 2 |
| Excavation | 102 | 52 | 7 | 3 | 8 |
| Excavation | 182 | 45 | 7 | 3 | 2 |
| Excavation | 189 | 45 | 7 | 3 | 2 |

| | | | | | |
|---|---|---|---|---|---|
| Excavation | 84 | 20 | 8 | 3 | 1 |
| Excavation | 180 | 34 | 13 | 3 | 1 |
| Excavation | 52 | 49 | 15 | 4 | 1 |
| Excavation | 53 | 49 | 15 | 4 | 1 |
| Excavation | 89 | 49 | 15 | 4 | 1 |
| Excavation | 190 | 49 | 15 | 4 | 1 |
| Watching Brief | 55 | 500 | | | 1 |
| Watching Brief | 60 | 558 | | | 4 |
| Watching Brief | 71 | 450 | 21 | 2 | 1 |
| Watching Brief | 76 | 450 | 21 | 2 | 1 |
| Watching Brief | 80 | 506 | | | 1 |
| Watching Brief | 112 | 508 | 29 | 3 | 1 |
| Watching Brief | 113 | 511 | | | 2 |
| Watching Brief | 198 | 422 | 22 | 2 | 1 |
| Watching Brief | 204 | 214 | | | 1 |
| Watching Brief | 220 | 525 | | | 1 |
| Watching Brief | 321 | 448 | 33 | 4 | 1 |
| Watching Brief | 330 | 445 | | | 1 |
| Watching Brief | 345 | 444 | 28 | 3 | 1 |
| Watching Brief | 350 | 424 | | | 1 |
| Watching Brief | 369 | 425 | | | 1 |
| Watching Brief | 418 | 424 | | | 2 |

# APPENDIX 5

**ASSESSMENT OF THE BURNT FLINT**
Tania Holmes

## 1. Introduction

1.1 A total of 178 fragments of burnt flint, weighing some 1.6kg, were recovered during the archaeological fieldwork to the north of Westenhanger Castle (this excludes any material which may have been collected by MoLAS during the evaluation. This is limited, however, to a single burnt flint). Only 3% of this assemblage was recovered during the excavation phase. The assemblage was hand recovered and no burnt flint has been retrieved from environmental samples, to date.

1.2 Whilst much of this assemblage may be residual, it is possible that it derives from the prehistoric activity noted at the site and therefore it does have some potential for addressing the Fieldwork Event Aims.

## 2. Methodology

2.1 The assemblage has been quantified and weighed, the results of which are shown in Table 8. No detailed recording has been carried out, but this is not thought to be necessary.

## 3. Quantification

3.1 In total 178 pieces of burnt flint were recovered. There is no observable bias in collection, hence it is likely that this assemblage is fairly representative for the site. The distribution of the burnt flint is shown in Table 8. This indicates that most of the assemblage came from the watching brief. The majority came, in fact, from a single context (context 164, sub-group 167, Group 19) in the south-eastern part of the site, close to deposits of Middle Bronze Age ceramics, with Structure 2 a little further to the east.

## 4. Provenance

4.1 The provenance of the individual fragments is shown in Table 8. With the exception of one group (noted above), the table shows that there are no apparent concentrations of burnt flint. All of the material recovered during the excavation was retrieved from medieval and later contexts. The material from the watching brief, in contrast, derives from at least one *in-situ* prehistoric deposit, although the remainder again came from medieval deposits.

## 5. Potential for further work

5.1 The discovery of prehistoric deposits on the site at Westenhanger may suggest that the burnt flint is a result of activity, of this date, in the area. It is difficult to suggest a date for this assemblage but burnt flint is commonly associated with Bronze Age activities although it is not impossible that the flint was incidentally burnt during the later activities. Further study of this assemblage, particularly in regards to distribution, may address the Fieldwork Event Aims and the Landscape Zone Aims.

5.2 It is recommended that this assemblage is considered alongside the struck flint assemblage and that it forms part of the main report.

**Table Eight**
*Burnt Flint Distribution*

| | *Context* | *Sub-Group* | *Group* | *Phase* | *Number* | *Weight* |
|---|---|---|---|---|---|---|
| Watching Brief | 113 | 511 | | | 3 | 4 |
| Watching Brief | 115 | 511 | | | 5 | 17 |
| Watching Brief | 164 | 167 | 19 | 1 | 161 | 1501 |
| Watching Brief | 228 | 440 | 32 | 4 | 1 | 1 |
| Watching Brief | 321 | 448 | 33 | 4 | 1 | 13 |
| Watching Brief | 330 | 445 | | | 1 | 11 |
| Excavation | 51 | 49 | 15 | 4 | 3 | 15 |
| Excavation | 127 | 21 | 11 | 3 | 1 | 20 |
| Excavation | 182 | 45 | 7 | 3 | 2 | 15 |

## APPENDIX 4: ASSESSMENT OF WORKED AND BURNT FLINT

Philippa Bradley

### 1. Introduction

1.1 A total of six pieces of worked flint were recovered from the excavations. The worked flint consists of mostly hard-hammer struck flakes, irregularly worked cores, core fragments.

1.2 Burnt unworked flint was recovered from ARC WHR 99 and ARC 330 98. The burnt unworked flint consists of a range of small to large sized fragments or pebbles of heavily calcined flint.

### 2. Methodology

2.1 The worked and burnt unworked flint was recorded onto the Oracle database using standard MoLSS methods. The material was recorded by typological group, where appropriate notes were made on pertinent technological attributes. Brief notes were also made on the general condition of the material. The burnt unworked flint was briefly scanned and quantified, a general note of the condition of the material was also made. Natural unworked flint was discarded.

### 3. Quantifications

3.1 A total of 6 pieces of worked flint and 238 pieces of burnt unworked flint (weighing 1564g) was recovered from ARC WHR 99 and ARC 330 98. The flint is summarised in the tables below.

### 4. Provenance

4.1 The worked flint was recovered from only a relatively limited number of contexts. The burnt unworked flint was spread over more contexts and concentrations, by both numbers and weight can be noted in several contexts *eg* [17], [36] (ARC WHR 99), and [682], [886] (ARC 330 98). The recovery of worn possible Beaker sherds from Fawkham Junction (ARC 330 98), confirms some limited prehistoric activity in the vicinity. However, since these contexts produced Roman ceramics, thus much of the flintwork must be redeposited.

### 5. Conservation

5.1 The flint is appropriately bagged and boxed for long-term storage. Some of the burnt unworked flint is beginning to disintegrate, however, there is little that can

be done to prevent this. No conservation is required. All of the natural flint has been discarded.

5.2 Selected burnt unworked flint could be discarded, keeping only a selection of representative material for archive purposes. The full quantification (by weight and number), together with a description of the material discarded would provide sufficient records for any future work.

## 6. Comparative material

6.1 The CTRL route has produced considerable Neolithic and Bronze Age flintwork with which this material can be compared. The material from Zone 1 provides more evidence for activity of this general character although dating this small undiagnostic group is somewhat problematic.

## 7. Potential for further work

7.1 The flint can contribute to the Research Objective:

*Farming communities (2000-100BC)*

7.2 This small group of material has very limited potential for further analysis. If a publication is produced it may be desirable to include a summary which can be drawn from this assessment.

Prepare report for publication from assessment

## 8. Bibliography

None

*Table 1: Worked Flint ARC WHR 99*

| Event code | Context | Count | Period | Comments |
|---|---|---|---|---|
| ARC WHR 99 | 6 | 1 | | Possible flake, also 3 natural |
| ARC WHR 99 | 22 | - | | 2 natural |
| ARC WHR 99 | 39 | - | | 3 natural |
| ARC WHR 99 | 40 | 1 | | Possible flake very irregular |
| ARC WHR 99 | 52 | 1 | | Cortical flake |
| ARC WHR 99 | 52 | 1 | | Possible core, few removals on small nodule |
| ARC WHR 99 | 69 | - | | 3 natural |
| Total | | 4 | | |

*Table 2: Burnt Flint ARC WHR 99*

| Event code | Context | Count | Weight | Comments * |
|---|---|---|---|---|
| ARC WHR 99 | 7 | 1 | 4 | |
| ARC WHR 99 | 17 | 3 | 129 | |
| ARC WHR 99 | 11 | 4 | 31 | |
| ARC WHR 99 | 14 | 2 | 7 | |
| ARC WHR 99 | 19 | 6 | 89 | |
| ARC WHR 99 | 36 | 13 | 71 | |
| ARC WHR 99 | 40 | 7 | 6 | |
| ARC WHR 99 | 45 | 1 | 1 | |
| ARC WHR 99 | 52 | 7 | 6 | |
| Total | | 44 | 344 | |

* All heavily calcined grey/white

*Table 3: Worked Flint ARC 330 98*

| Event code | Context | Count | Period | Comments |
|---|---|---|---|---|
| ARC 330 98 | 158 | 1 | | small rolled flake |
| ARC 330 98 | 316 | - | | 1 natural discarded |
| ARC 330 98 | 682 | 1 | | small flake, possible use to edges, fresh condition |
| Total | | 2 | | |

*Table 4: Burnt Flint ARC 330 98*

| Event code | Context | Count | Weight | Comments * |
|---|---|---|---|---|
| ARC 330 98 | 159 | 14 | 49 | |
| ARC 330 98 | 316 | 80 | 113 | |
| ARC 330 98 | 512 | 3 | 5 | |
| ARC 330 98 | 515 | 7 | 12 | |
| ARC 330 98 | 520 | 5 | 13 | |
| ARC 330 98 | 667 | 4 | 64 | |
| ARC 330 98 | 682 | 37 | 408 | |
| ARC 330 98 | 792 | 4 | 4 | |
| ARC 330 98 | 800 | 10 | 43 | |
| ARC 330 98 | 877 | 1 | 41 | |
| ARC 330 98 | 882 | 9 | 101 | |
| ARC 330 98 | 886 | 20 | 368 | |
| Total | | 194 | 1220 | |

* All heavily calcined grey/white

AREA 330 ZONE 2

**APPENDIX 3: ASSESSMENT OF WORKED FLINT**
Philippa Bradley

## 9. Introduction

9.1 Small groups of worked flint were recovered from the excavations. The worked flint consists of mostly hard-hammer struck flakes. A single blade-like flake came from ARC STP 99 and a possible soft-hammer struck flake cane from ARC 330 98. This material is not closely datable but is entirely consistent with a Neolithic or Bronze Age date, and probably no later than the early Bronze Age.

9.2 Burnt unworked flint was recovered from all sites within this zone, with ARC STP 99 producing the most in terms of both number and weight. The burnt unworked flint consists of a range of small to large sized fragments or pebbles of heavily calcined flint.

## 10. Methodology

10.1 The worked and burnt unworked flint was recorded onto the Oracle database using standard MoLSS methods and transferred to RLE Datasets. The material was recorded by typological group, where appropriate, notes were made on pertinent technological attributes. Brief notes were also made on the general condition of the material. The burnt unworked flint was briefly scanned and quantified, a general note of the condition of the material was also made. Natural unworked flint was discarded.

## 11. Quantifications

11.1 A total of 18 pieces of worked flint and 1164 pieces of burnt unworked flint (weighing 8916g) was recovered from ARC SSR 99, ARC STP 99 and ARC 330 98. The flint is summarised in the Tables below.

## 12. Provenance

12.1 The worked flint was recovered from only 14 contexts, with a maximum of two pieces being recovered from any one feature. The burnt unworked flint was spread over more contexts (23) but apart from a few contexts (eg ARC STP 99 [4] and [83]) the numbers of pieces recovered was less than 10. The distribution by weight is slightly more varied.

12.2 The flint came from a range of features across the zone including cut features, natural features and layers. The flint from ARC STP 99 came from pits sealed beneath alluvium dating to the Bronze Age. The flint itself is not diagnostic, consisting of flakes (including a slightly blade-like flake and a possible soft-hammer struck flake) but would not be inconsistent with a later Neolithic or

early Bronze Age date. It should, however, be stressed that this is a very small undiagnostic assemblage from several contexts. The flint from ARC SSR 99 and ARC 330 98 contexts have been dated to the Iron Age and Roman periods, thus the flint would appear to have been redeposited. It consists largely of debitage and a single possible pebble smoother/rubber.

12.3 The probable rubber or smoother from ARC SSR 99, context [35] is not a diagnostic artefact and may be prehistoric in date but may equally be contemporary with the Roman pottery recovered.

## 13. Conservation

13.1 The flint is appropriately bagged and boxed for long-term storage. Some of the burnt unworked flint is beginning to disintegrate, however, there is little that can be done to prevent this. No conservation is required. All of the natural flint has been discarded.

13.2 Selected burnt unworked flint could be discarded, keeping only a selection of representative material for archive purposes. The full quantification (by weight and number), together with a description of the material discarded would provide sufficient records for any future work.

## 14. Comparative material

14.1 In the local context this flint compares well with material from West of Northumberland Bottom (Area 330 Zone 3) and also from ARC NBR 98 (separate assessment).

14.2 Considerable quantities of Neolithic and Bronze Age flintwork have been recovered from Kent principally through the fieldwork undertaken for the CTRL but also from other, mostly as yet unpublished excavations.

## 15. Potential for further work

15.1 Given the restricted range of material recovered and given that the flint is redeposited, the potential for further analysis is very low. The lack of diagnostic dating precludes anything other than a very broad date range being proposed for this material. The flint indicates sparse prehistoric activity occurring in the area. The flint can contribute to some of the Landscape Zone Priorities and Fieldwork Event Aims:

*Farming communities (2000 BC-100 BC)*
*To establish the nature of the landscape through time*

15.2 If the flint is to be included within the publication, it is recommended that this assessment report can be used as a basis. It may be worth comparing the material from ARC STP 99 to other Late Neolithic – Early Bronze Age assemblages from the CTRL route in order to try and refine the dating. No illustrations would be required.

## 16. Bibliography

URS 2001a, '*Assessment of Worked Flint from Pepper Hill, Waterloo Connection'*, unpublished report prepared by Bradley, P, for OAU

URS 2001b, '*Assessment of Worked Flint Area 330 Zone 3*', unpublished report prepared by Bradley, P for MoLAS

*Table 5: Worked Flint ARC STP 99*

| Event code | Context | Count | Period | Comments |
|---|---|---|---|---|
| ARC STP 99 | 1 | 2 | | 1 wholly cortical Bullhead flake, 1 partly cortical flake |
| ARC STP 99 | 39 | 1 | | 1 slightly blade-like flake |
| ARC STP 99 | 61 | 1 | | 1 almost wholly cortical flake |
| ARC STP 99 | 63 | 1 | | 1 small ?SH flake, worn |
| ARC STP 99 | 65 | 2 | | 2 small broken flakes |
| ARC STP 99 | 73 | 2 | | 1 small flake, 1 ?trimming flake |
| ARC STP 99 | 78 | - | | 5 natural discarded |
| Total | | 9 | | |

*Table 6: Burnt Flint ARC STP 99*

| Event code | Context | Count | Weight | Comments * |
|---|---|---|---|---|
| ARC STP 99 | 4 | 1100 | 5429 | mix of large and many small frags |
| ARC STP 99 | 46 | 1 | 8 | |
| ARC STP 99 | 61 | 1 | 9 | |
| ARC STP 99 | 74 | 5 | 222 | |
| ARC STP 99 | 78 | 1 | 2 | small reddish tinged fragment |
| ARC STP 99 | 81 | 5 | 1143 | |
| ARC STP 99 | 83 | 10 | 442 | |
| Total | | 1123 | 7255 | |

***** all heavily calcined white to grey

*Table 7: Worked Flint ARC SSR 99*

| Event code | Context | Count | Period | Comments |
|---|---|---|---|---|
| ARC SSR 99 | 13 | 2 | | 1 small burnt flake, 1 HF ?side trimming flake, also 1 natural discarded (Accession 2) |
| ARC SSR 99 | 35 | - | | 2 natural discarded |
| ARC SSR 99 | 35 | 1 | | 1 small round pebble with areas of polish, probably a smoothing/rubbing stone |

| | | | | |
|---|---|---|---|---|
| ARC SSR 99 | 60 | - | | 1 natural discarded |
| Total | | 3 | | |

*Table 8: Burnt Flint ARC SSR 99*

| Event code | Context | Count | Weight | Comments* |
|---|---|---|---|---|
| ARC SSR 99 | 1 | 1 | 25 | |
| ARC SSR 99 | 12 | 5 | 243 | |
| ARC SSR 99 | 12 | 1 | 47 | |
| ARC SSR 99 | 13 | 1 | 78 | |
| ARC SSR 99 | 26 | 1 | 13 | |
| ARC SSR 99 | 28 | 2 | 115 | |
| ARC SSR 99 | 28 | 1 | 11 | |
| ARC SSR 99 | 35 | 3 | 192 | |
| ARC SSR 99 | 35 | 1 | 8 | |
| ARC SSR 99 | 39 | 3 | 144 | |
| ARC SSR 99 | 39 | 1 | 35 | |
| ARC SSR 99 | 40 | 3 | 136 | |
| ARC SSR 99 | 48 | 1 | 62 | |
| ARC SSR 99 | 59 | 1 | 40 | |
| ARC SSR 99 | 60 | 2 | 53 | |
| ARC SSR 99 | 62 | 1 | 86 | |
| ARC SSR 99 | 63 | 1 | 49 | |
| Total | | 29 | 1337 | |

* all heavily calcined white to grey

*Table 9: Worked Flint ARC 330 98*

| Event code | Context | Count | Period | Comments |
|---|---|---|---|---|
| ARC 330 98 | 296 | 2 | | small flakes, also 7 natural discarded |
| ARC 330 98 | 381 | 1 | | side trimming flake? |
| ARC 330 98 | 1009 | - | | 2 natural discarded |
| ARC 330 98 | 2002 | 2 | | 1 with hinge fracture, other is slightly irregular |
| ARC 330 98 | 2002 | 1 | | 1 ?SH flake, broken, possible used edges, Accession 141 |
| Total | | 6 | | |

*Table 10: Burnt Flint ARC 330 98*

| Event code | CONTEXT | Count | Weight | Comments * |
|---|---|---|---|---|
| ARC 330 98 | 296 | 7 | 163 | |
| ARC 330 98 | 381 | 3 | 118 | |
| ARC 330 98 | 2002 | 2 | 43 | |
| Total | | 12 | 324 | |

* all heavily calcined white to grey

## APPENDIX 4: ASSESSMENT OF WORKED AND BURNT FLINT
**Philippa Bradley**

### 17. Introduction

17.1 Small to medium-sized groups of worked flint and burnt unworked flint were recovered from the excavations. The worked flint from all sites is dominated by debitage, but there are slightly wider range of cores and core fragments from ARC 330 98. The debitage from all the sites was generally fairly undiagnostic, few blades and blade-like flakes, and no blade cores were recovered indicating that blade production was not being practised. It would also appear that blades and blade-like flakes were not preferentially selected for use as blanks for retouched flakes and other tools. The lack of soft hammer-struck flakes and the general appearance of the majority of the debitage would suggest a later Neolithic to Bronze Age date. An element from ARC WNB 98 and ARC 330 98 was cruder and less well worked, it is possible that this material is of a slightly later date and relates to the later prehistoric activity. ARC HRD 99 and ARC 330 98 produced quite a varied range of retouched pieces, only a single end scraper was recovered from ARC WNB 98.The burnt unworked flint consists of small to medium sized fragments of heavily calcined flint.

### 18. Methodology

18.1 The worked and burnt unworked flint was recorded onto the Oracle database using standard MoLSS methods. This information was transferred to RLE Datasets. The material was recorded by typological group, and where appropriate, notes were made on pertinent technological attributes. Brief notes were also made on the general condition of the material. The burnt unworked flint was briefly scanned and quantified, a general note of the condition of the material was also made. Natural unworked flint was discarded.

### 19. Quantification

19.1 A total of 40 pieces of worked flint and 112 pieces of burnt unworked flint (weighing 2,794g) was recovered from ARC HRD 99. A total of 166 pieces of worked flint and 340 pieces of burnt unworked flint (weighing 9,689g) came from ARC WNB 98 and 202 pieces of worked flint and 522 pieces of burnt unworked flint (weighing 13,272g) were recovered from ARC 330 98. The flint is summarised in the tables below.

### 4. Provenance

4.1 Small to medium-sized assemblages of worked flint were recovered from ARC WNB 98, ARC 330 98 and ARC HRD 99. Varying quantities of burnt unworked flint was also recovered from the sites. The flint from ARC HRD 99 consists of

debitage, mostly flakes, and a range of retouched forms including retouched flakes, scrapers, a piercer, a knife fragment and a fabricator. A flake from a polished implement was also recovered. A Neolithic to Bronze Age date is suggested by these retouched forms. The flint came from a series of later ditch fills eg [26], [45], [78], pit fills eg [71], burnt deposits and layers [8] and [153]. The flint was generally thinly deposited across the site with no context producing more than eight pieces.

4.2 The flint from ARC WNB 98 consisted largely of flakes, with an irregularly worked core and a core fragment were also recovered. However, only a single retouched form, an end scraper, was recovered. Thus the dating of this group is somewhat limited but a broad Neolithic-Bronze Age date range is likely given the technology of the assemblage. However, some of the less diagnostic debitage may be of later prehistoric date. This material tended to be more crudely worked with little evidence for maintenance of platform edges during knapping. The flint was sparsely distributed across the site with only three contexts producing more than 15 pieces of worked flint. The material came from various context types including LBA/EIA pit fills [1262], and layers associated with the furnace [1281] and various undated features eg [302]. A single flint, a heavily encrusted flake, came from the double Beaker inhumation [1069]; although it is unclear if it was a deliberate inclusion within the grave.

4.3 The assemblage from ARC 330 98 is again dominated by debitage, a slightly wider range of cores and fragments was recovered than the other two sites, and more retouched forms were recovered too. These retouched forms include scrapers, retouched flakes, a barbed and tanged arrowhead and a piercer. A Neolithic to early Bronze Age date is indicated by the retouched forms and the debitage recovered. The flint was mostly recovered from later contexts dating from the later Bronze Age through to the later Iron Age and Roman period. The flint came from pit fills [108], [112], [119], [141], [145-50], [202], [206], [224], [250], [255], [1394], [1399]. Burnt deposits and layers associated with the post-medieval clamp also produced worked flint eg [176], [183]. The flint was generally fairly thinly spread over the excavated contexts, however, five contexts produced 15 or more pieces of flint.

## 5. Conservation

5.1 The flint is appropriately bagged and boxed for long-term storage. Some of the burnt unworked flint is beginning to disintegrate, however, there is little that can be done to prevent this. No conservation is required. All of the natural flint has been discarded. Selected burnt unworked flint could be discarded, keeping only a selection of representative material for archive purposes. The full quantification (by weight and number), together with a description of the material discarded would provide sufficient records for any future work.

## 6. Comparative material

6.1 The flint compares well with other material recovered from the CTRL route. Considerable quantities of Neolithic and Bronze Age flintwork have been recovered from Kent, principally through the fieldwork undertaken for the CTRL route, but also from other, mostly as yet unpublished excavations. In the

immediate vicinity of ARC HRD 99 and ARC WNB 98 Neolithic and early Bronze Age flint has been recovered from Pepper Hill ARC NBR 98.

## 7. Potential for further work

7.1 The flint can contribute to the research objectives of the project following the fieldwork event aims and the Landscape Zone aims:

- *To establish a record of changing settlement and landscape morphology for the area.*

7.2 The lithics can aid the production of a chronological framework for examining the changing settlement and landscape morphology. A more detailed analysis of the technology of the material would be able to define more clearly the likely later prehistoric flintwork. There is some potential for further clarification of the technologies present. Distinctive artefacts of Neolithic-early Bronze Age were recovered together with possible later prehistoric lithics.

- *To determine the function of these areas and changes through time*

7.3 The lithics provide evidence for the activities occurring through the Neolithic and Bronze Age.

### Early Agriculturists (4500-200 BC)

- *Determine the ritual and economic landscapes and their relationships*

7.4 A single flint flake was recovered from the double inhumation burial. A barbed and tanged arrowhead was recovered from an Iron Age pit fill, and other potentially contemporary pieces were identified indicating domestic and funerary uses. This is a pattern of activity that can be matched by many of the other sites on the CTRL route.

### Farming Communities (2000-100 BC)

7.5 The lithics will have some potential to contribute to some of the research questions although the size of the assemblages may be problematic. The possible later prehistoric flintwork will shed light on the domestic activities occurring, and the changing use of resources through time. The well-documented changes in later prehistoric knapping practices can be explored in relation to the other activities occurring on the sites. As discussed in 7.2 there is some potential to examine the lithics further and more clearly to define the possible later prehistoric lithics. Given that the ceramics present on site span the early Bronze Age through the later prehistoric period a clearer understanding of the lithic technology, and hence dating, from the site would be a useful exercise. It is acknowledged that some of the material is redeposited, but the differences in periods represented have been identified by the assessment.

7.6 In order to answer the research aims the following tasks are recommended

- Examine the assemblages in order to define the possible later prehistoric lithics more fully
- Prepare publication text
- Catalogue of illustrated pieces
- Illustration of selected lithics (it is envisaged that 3 cores and up to 6 retouched pieces will require illustration)

## 8. Bibliography

URS 2000 'Assessment of worked and burnt unworked flint from Pepper Hill and Waterloo Connection (ARC PHL 97 and ARC NBR 98)', unpublished report prepared by Bradley, P for Oxford Archaeological Unit

*Table 11: Worked Flint ARC HRD 99*

SH = soft hammer-struck HH = hard hammer-struck

| Context | Count | Period | Comments [presence of diagnostic material/ dominance tool/flakes etc.] |
|---|---|---|---|
| 2 | 1 | UN | Flake |
| 7 | 7 | UN | Flake, ? Some used edges, mostly hard hammer struck |
| 7 | 1 | UN | Retouched flake, HH with semi-circular notch at distal end |
| 8 | 1 | UN | Flake ?SH, worn |
| 8 | 1 | UN | Flake, fresh condition, lateral break |
| 18 | 2 | UN | Wholly cortical flake, 1 possible flake, also 1 natural – discarded |
| 20 | 3 | UN | Flakes inc wholly cortical, 1 almost all cortex, 1 50% cortex - all HH |
| 26 | 1 | UN | ?flake, very worn and rolled poss natural |
| 45 | 1 | N | Flake from a polished implement, grey flint with small polished area |
| 51 | 1 | UN | Small flake with ?used edges |
| 67 | 1 | UN | HH flake, some post-dep damage |
| 67 | 1 | UN | Possible side scraper, very minimal retouch, possibly just use rather then formal retouch |
| 71 | 1 | UN | Large end and side scraper, shallow retouch, cortical dorsal face, worn and poss re-sharpened |
| 78 | 2 | UN | Flakes one very battered, other is a flake from a platform edge |
| 153 | 1 | UN | Large flake HF, HH partly cortical |
| 153 | 3 | UN | 3 minimally retouched flakes, all have some post-dep damage |
| 153 | 1 | UN | ?piercer with large (broken) point and ancillary retouched down one edge |
| 167 | 1 | UN | SH flake |
| 178 | 1 | UN | Flake, worn |
| 178 | - | UN | 1 natural – discarded |
| 181 | 1 | UN | Retouched flake, HH with minimal steep retouch |
| 187 | 1 | UN | Irregular flake |

| | | | |
|---|---|---|---|
| | 3 | UN | 3 slightly worn and irregular flakes, all broken |
| CH205 380-205.609 | 2 | UN | Two misc retouch, ctx is CH205.380-205.609 |

| Context | Count | Period | Comments [presence of diagnostic material/ dominance tool/flakes etc.] |
|---|---|---|---|
| CH205 380-205.609 | 1 | ?EBA | ?knife frag on very worn blade-like blank with polished bulbar face, also some natural polish |
| CH205 380-205.609 | 1 | ?EBA | Fabricator/rod steep retouch RHS, worn point much edge damage |
| | 40 | UN | |

*Table 12: Burnt Flint ARC HRD 99*

| Context | Count | Weight | Comments * |
|---|---|---|---|
| 2 | 2 | 1 | |
| 3 | 5 | 157 | |
| 5 | 1 | 12 | |
| 7 | 15 | 491 | |
| 8 | 1 | 15 | |
| 12 | 1 | 47 | |
| 12 | 5 | 37 | |
| 14 | 2 | 100 | |
| 18 | 1 | 33 | |
| 24 | 2 | 6 | |
| 29 | 1 | 132 | |
| 45 | 4 | 49 | |
| 47 | 9 | 308 | |
| 48 | 4 | 255 | |
| 53 | 7 | 4 | |
| 60 | 3 | 116 | |
| 67 | 10 | 143 | |
| 69 | 10 | 254 | |
| 77 | 1 | 0 | |
| 78 | 2 | 111 | |
| 131 | 1 | 43 | |
| 135 | 2 | 128 | |
| 150 | 7 | 180 | |
| 163 | 12 | 131 | |
| 217 | 1 | 21 | |
| 219 | 3 | 20 | |
| | 112 | 2794 | |

***** all heavily calcined white to grey

*Table 13: Worked Flint ARC WNB98*

| Context | Count | Period | Comments [presence of diagnostic material/ dominance tool/flakes etc.] |
|---|---|---|---|
| 13 | 4 | UN | 4 irregular and thick flakes |
| 238 | 1 | UN | Flake |
| 269 | 2 | UN | 2 possible flakes, also 2 natural pieces |
| 273 | 1 | UN | Small flake |
| 284 | 1 | UN | Possible flake, some post-dep damage |
| 302 | 1 | UN | Flake SS 1 |
| 302 | 1 | UN | Flake worn |
| 364 | 3 | UN | Flakes inc 1 Bullhead flake, also 1 natural |
| 398 | - | UN | Natural discarded |
| 413 | 1 | UN | Irregularly worked core - flake removals, flawed internally |
| 558 | 1 | UN | Large worn flake |
| 569 | - | UN | Natural discarded |
| 600 | 1 | N? | End scraper on large slightly blade-like flake, worn edge |
| 655 | 1 | UN | Flake |
| 829 | 1 | UN | Small flake |
| 996 | - | UN | Natural discarded |
| 1008 | 5 | UN | Chips, 1 poss natural, SS6 |
| 1009 | 24 | UN | Flakes inc some worn ones, S7 |
| 1027 | - | UN | Not flint – stone unworked |
| 1030 | 2 | UN | Worn flakes |
| 1032 | 7 | UN | Flakes one is burnt, ss12 |
| 1036 | 2 | UN | Flakes inc one Bullhead flake |
| 1036 | 1 | UN | Large flake, partly cortical retouched at proximal end, steep retouch |
| 1036 | 7 | UN | Chips, inc 2 burnt ss14 |
| 1046 | - | UN | Natural discarded |
| 1048 | 2 | UN | Flakes |
| 1051 | 1 | UN | Flake |
| 1069 | 1 | UN | Flake, heavily encrusted with calcium carbonate |
| 1097 | - | UN | Natural discarded |
| 1101 | 1 | UN | 1 battered flake, also 1 natural |
| 1104 | 1 | UN | Flake |
| 1113 | 3 | UN | Small flakes |
| 1116 | - | UN | Natural discarded |
| 1153 | 1 | UN | Wholly cortical flake |
| 1160 | 1 | UN | ?side trimming flake |
| 1161 | 1 | UN | Cortical flake |
| 1182 | 14 | UN | Flakes some irregular, all quite fresh |
| 1202 | 1 | UN | Flake, worn also 3 natural – discarded |

| Context | Count | Period | Comments [presence of diagnostic material/ dominance tool/flakes etc.] |
|---|---|---|---|
| 1233 | 1 | UN | Flake with broken edges, fresh condition |
| 1242 | 2 | UN | Flakes, one heavily corticated, 1 fresh |
| 1245 | 19 | UN | Irregular flakes, buff cortex - some refits? Some wear |
| 1247 | 8 | UN | Worn flakes some with cortex, mostly HH |
| 1247 | 1 | UN | Bullhead flake core fragment, also 3 natural - discarded |
| 1249 | 6 | UN | Flakes |
| 1251 | 5 | UN | Flakes 1 is very worn, also 1 blade-like flake |
| 1253 | 13 | UN | Flakes, inc 1 Bullhead flake, also 9 natural discarded |
| 1262 | 2 | UN | Flakes |
| 1262 | 1 | UN | Core fragment from flake core, also 11 natural discarded |
| 1281 | 1 | UN | HH, HF flake |
| 1315 | 7 | UN | Flakes inc 1 Bullhead flake, also 1 natural |
| 1316 | 3 | UN | Flakes, inc 2 Bullhead flakes, also 3 natural |
| 1318 | 2 | UN | Flakes inc 1 distal trimming flake |
| 0 | 1 | UN | Blade with worn edges, blade scars on dorsal face |
| 0 | - | UN | Not flint - stone unworked |
| 2203 | - | UN | Natural discarded |
|  | 166 | UN |  |

*Table 14: Burnt Flint ARC WNB 98*

| Context | Count | Weight | Comments* |
|---|---|---|---|
| 156 | 7 | 39 | |
| 163 | 4 | 26 | |
| 250 | 1 | 36 | |
| 258 | 2 | 66 | |
| 263 | 6 | 436 | |
| 268 | 5 | 198 | |
| 269 | 15 | 568 | |
| 269 | 20 | 33 | |
| 270 | 4 | 201 | |
| 278 | 5 | 246 | |
| 278 | 10 | 177 | |
| 282 | 5 | 272 | |
| 292 | 2 | 19 | |
| 292 | 14 | 90 | |
| 292 | 35 | 136 | |
| 296 | 1 | 19 | |
| 297 | 6 | 130 | |
| 302 | 1 | 76 | |
| 308 | 1 | 24 | |
| 314 | 22 | 457 | |
| 362 | 9 | 130 | |
| 364 | 11 | 247 | |
| 380 | 26 | 1920 | |
| 381 | 6 | 306 | |
| 387 | 1 | 125 | |
| 393 | 1 | 32 | |
| 406 | 3 | 134 | |
| 426 | 1 | 137 | |
| 489 | 3 | 99 | |
| 498 | 22 | 1569 | |
| 526 | 1 | 1 | |
| 565 | 11 | 275 | |
| 601 | 1 | 139 | |
| 609 | 7 | 176 | |
| 641 | 2 | 168 | |
| 642 | 6 | 173 | |
| 644 | 2 | 56 | |
| 698 | 1 | 26 | |
| 818 | 5 | 51 | |
| 839 | 1 | 50 | |
| 916 | 10 | 14 | |
| 964 | 1 | 47 | |
| 1023 | 11 | 337 | |

| Context | Count | Weight | Comments* |
|---|---|---|---|
| 1051 | 1 | 1 | |
| 1060 | 1 | 0 | |
| 1093 | 1 | 1 | |
| 1240 | 3 | 59 | |
| 1262 | 6 | 110 | |
| 1262 | 6 | 12 | |
| 1270 | 6 | 1 | |
| 1279 | 6 | 6 | |
| 1318 | 1 | 22 | |
| 2042 | 1 | 16 | |
| | 340 | 9689 | |

***** all heavily calcined white to grey

*Table 15: Worked Flint ARC 330 98*

| Context | Count | Period | Comments |
|---|---|---|---|
| 1 | 23 | UN | Flakes, some SH but mostly HH some trimming flakes, one or two Bullhead flakes, much post-dep damage, |
| 1 | 1 | ? LN | End and side scraper, neatly retouched poss Neolithic later?, also 4 natural |
| 63 | 3 | UN | Flakes 1 is very fresh, sharp edges, other is worn Bullhead, heavily encrusted with cal carbonate, 1 core frag heavily encrusted with calcium carbonate |
| 74 | 21 | UN | Flakes, some SH, mixture of fresh and slightly worn pieces, some med cortication some uncorticated, a couple of Bullhead flakes, also 3 natural |
| 97 | 1 | UN | Flake |
| 98 | 2 | UN | Flakes, 1 is heavily corticated small flake, other has a hinge fracture |
| 100 | 1 | UN | Flake |
| 108 | 4 | UN | Retouched flake, minimal retouch to both lateral edges, distal break, SH?, 3 flakes inc 1 Bullhead |
| 112 | 8 | UN | Flakes mostly HH, side trimming flakes and almost wholly cortical flakes |
| 114 | 2 | UN | Flake, 1 slightly blade-like flake |
| 119 | 1 | UN | Flake , worn |
| 121 | 1 | UN | Natural – discarded |
| 127 | 1 | UN | Thick flake |
| 141 | 1 | UN | Large thick trimming flake |
| 145 | 17 | UN | Flakes, some SH but mostly HH, some trimming flakes, also 7 natural, 1 core fragment, 1 multi-platform flake core |
| 146 | 7 | UN | 6 flakes, 1 core fragment on small pebble, also 3 natural |

| | | | |
|---|---|---|---|
| 147 | 3 | ? LN | 2 flakes, flint from pit 147 (fills 145, 146 and 202), two end and side scrapers (one is very large with a pronounced tang for hafting, other is smaller and also has a projecting end which may have been hafted, 1 retouched flake with minimal retouch along one edge, also 1 natural |
| 148 | 4 | UN | 2 flakes, 2 core fragments both from flake cores |
| 149 | 1 | UN | Large flake, hinge fracture, possible used edges, 1 natural |

| Context | Count | Period | Comments |
|---|---|---|---|
| 150 | 3 | UN | Flakes, inc 1 large thick cortical flake, also 1 natural |
| 176 | 1 | UN | Retouched flake, large thick flake with large area of crystalline inclusion, small retouched area and poss used edges |
| 183 | 12 | UN | Flakes, including a plunging flake, much post depositional damage, 1 retouched flake/knife square flake with minimal retouch to 1 edge, also 13 natural |
| 190 | - | UN | Natural – discarded |
| 202 | 4 | EBA? | Barbed and tanged arrowhead, broken tang and slight damage to one barb, minimal retouch, small eg, vestigial barbs, sharp point, 3 flakes inc 1 burnt flake. Beaker |
| 206 | 31 | UN | 26 flakes inc 2 burnt, many are heavily battered and abraded, also several very large flakes, mostly HH some hinges fractures, 2 cores (1 single platform, 1 two platform), 2 core frags – flake cores, 1 tested nodule, also 25 natural pieces |
| 211 | 3 | UN | Flakes, also 2 natural |
| 224 | 6 | UN | Flakes inc 1 possible CRF face/edge, also 2 natural |
| 234 | 1 | UN | Flake |
| 234 | 2 | UN | Flakes both broken and heavily encrusted with calc carbonate |
| 234 | - | UN | Natural - discarded |
| 234 | 1 | UN | Flake |
| 234 | 1 | UN | Piercer with worn point, minimal retouch |
| 235 | 1 | UN | Flake some later damage |
| 250 | 1 | UN | Large cortical flake |
| 255 | 3 | UN | Flakes inc 1 blade-like flake, poss used edges |
| 282 | 1 | UN | ?? Large irregularly worked piece, some flake removals but several natural fractures |
| 282 | 1 | UN | Large HF flake with patch of ?natural gloss |
| 321 | 1 | UN | Small flake, also 1 natural |
| 323 | 1 | UN | Small flake, also 1 natural |
| 334 | 3 | UN | Flakes all quite worn |
| 355 | 2 | UN | Flakes |
| 356 | 2 | UN | Flakes |
| 357 | 6 | UN | Flakes some used edges |
| 0 | 1 | UN | Flake with used edges, context CH40.900 |
| 0 | 1 | UN | Very large and battered flake ctx CH40.900 |
| 0 | 1 | UN | Core fragment, battered, flake removals ctx CH40.900 |
| 1302 | 1 | UN | Flake |
| 1339 | 1 | UN | Possible flake, HH struck |
| 1390 | - | UN | natural - discarded |
| 1394 | - | UN | natural - discarded |
| 1395 | 2 | UN | Flakes inc 1 side trimming flake |

| | | | |
|---|---|---|---|
| 1399 | 5 | UN | Flakes 3 possibly SH |
| 1401 | 1 | UN | Side trimming flake |
| | 202 | | |

*Table 16: Burnt Flint ARC 330 98*

| Context | Count | Weight | Comments * |
|---|---|---|---|
| 1 | 1 | 47 | |
| 63 | 2 | 189 | |
| 72 | 1 | 74 | |
| 74 | 1 | 29 | |
| 89 | 3 | 252 | |
| 95 | 23 | 1070 | |
| 96 | 1 | 3 | |
| 100 | 2 | 133 | |
| 106 | 1 | 1 | |
| 108 | 13 | 903 | |
| 110 | 39 | 1574 | |
| 112 | 17 | 690 | |
| 117 | 3 | 206 | |
| 119 | 9 | 997 | |
| 121 | 10 | 440 | |
| 131 | 1 | 15 | |
| 133 | 2 | 21 | |
| 138 | 100 | 70 | small frags |
| 145 | 22 | 101 | |
| 146 | 5 | 118 | |
| 148 | 5 | 96 | |
| 176 | 3 | 2 | |
| 190 | 1 | 28 | |
| 200 | 4 | 55 | context is 200+620 |
| 202 | 3 | 2 | |
| 206 | 49 | 2980 | |
| 211 | 2 | 32 | |
| 224 | 17 | 441 | |
| 250 | 2 | 40 | |
| 264 | 5 | 149 | |
| 282 | 6 | 54 | |
| 309 | 5 | 10 | |
| 314 | 23 | 365 | |
| 323 | 6 | 519 | |
| 324 | 1 | 2 | |
| 334 | 5 | 146 | |
| 338 | 22 | 649 | |
| 345 | 15 | 241 | |
| 347 | 11 | 20 | |
| 355 | 1 | 13 | |
| 356 | 5 | 16 | |
| 357 | 6 | 183 | |
| 395 | 7 | 26 | |
| 559 | 6 | 36 | |

| | | | |
|---|---|---|---|
| 560 | 12 | 50 | |
| 567 | 6 | 89 | |
| 590 | 9 | 8 | |
| 592 | 5 | 9 | |

| Context | Count | Period | Comments |
|---|---|---|---|
| 594 | 5 | 6 | |
| 596 | 8 | 27 | |
| 598 | 3 | 12 | |
| 600 | 8 | 33 | |
| | 522 | 13272 | |

***** all heavily calcined white to grey

AREA 330 ZONE 4

**APPENDIX 4: ASSESSMENT OF WORKED AND BURNT FLINT**
Philippa Bradley

## 9. Introduction

9.1 Small groups of worked flint were recovered from the excavations. The worked flint consists of mostly hard-hammer struck flakes. A few retouched forms (retouched, used flakes or serrated flakes, a knife) were recovered, together with some minimally worked cores and tested nodules. The flint is not closely datable but is consistent with a Neolithic-Bronze Age date.

9.2 Burnt unworked flint was recovered throughout this zone. The burnt unworked flint consists of a range of small to large sized fragments or pebbles of heavily calcined flint.

## 10. Methodology

10.1 The worked and burnt unworked flint was recorded onto the Oracle database using standard MoLSS methods. The material was recorded by typological group, where appropriate notes were made on pertinent technological attributes. Brief notes were also made on the general condition of the material. The burnt unworked flint was briefly scanned and quantified, a general note of the condition of the material was also made. Natural unworked flint was discarded.

## 11. Quantifications

11.1 A total of 252 pieces of worked flint and 1664 pieces of burnt unworked flint (weighing 35,985g) were recovered from ARC TLG 98, ARC CRS 98 and ARC 330 98.

## 12. Provenance

4.1 The worked flint was recovered from only a limited number of contexts. The burnt unworked flint was spread over more contexts but, apart from a few contexts, the numbers of pieces recovered was generally less than 10. The distribution by weight is slightly more varied (see tables below).

4.2 The flint came from a range of features across the zone including cut features, natural features and layers. Given the predominance of Late Bronze Age/Early Iron Age and later ceramics from the site and the sparse nature of the lithics it is likely that the majority of the lithics are redeposited. The condition of some of this material would support this suggestion, many pieces exhibiting abrasion and wear consistent with redeposition. A couple of contexts produced material that was very fresh with sharp edges and some material which may refit (eg contexts

[187] (Figure 11) and [433] (Pit 434, Figure 8), but these are relatively isolated instances.

## 13. Conservation

13.1 The flint is appropriately bagged and boxed for long-term storage. Some of the burnt unworked flint is beginning to disintegrate, however, there is little that can be done to prevent this. No conservation is required. All of the natural flint has been discarded.

13.2 Selected burnt unworked flint could be discarded, keeping only a selection of representative material for archive purposes. The full quantification, by weight and number, together with a description of the material discarded, would provide sufficient records for any future work.

## 14. Comparative material

14.1 In the local context this flint compares well with material from adjacent sites. Lithics were recovered from the Neolithic mortuary enclosure at Tollgate (URL 1995) and flint from the evaluation at ARC TGS 97 was identified as ranging in date from the Mesolithic to the Bronze Age (URL 97). A single Lower Palaeolithic bifacial hand axe was recovered from this evaluation (URL 97) (Figure 5).

14.2 The flint compares well with other material recovered from the CTRL route. Considerable quantities of Neolithic and Bronze Age flintwork have been recovered from Kent principally through the fieldwork undertaken for the CTRL but also from other, mostly as yet unpublished excavations.

## 15. Potential for further work

15.1 Given the restricted range of material recovered and given that the flint is largely redeposited, the potential for further analysis is low. The lack of diagnostic dating precludes anything other than a very broad date range being proposed for this material. The flint indicates sparse prehistoric activity occurring in the area. However, the flint takes on slightly more significance; the possible denuded megalithic monument from Zone 4 and the mortuary enclosure at Tollgate provide a background for this small group of lithics. Although there is little within the groups of flint that would suggest ritual activity *per se*, some of the artefacts may have been used in ritual activities or activities associated with the monuments. As a group the material is not closely datable, a few soft-hammer struck flakes, and blade-like flakes may indicate Neolithic activity but the retouched forms recovered could equally belong to the earlier Bronze Age. A single core had some platform edge preparation, other examples were minimally worked.

15.2 The flint can to a limited extent contribute to the Research Objectives identified:

- *Farming communities (2000-100BC)*

15.3 Lithics may help to clarify the pre-Late Bronze Age activities on site but given the generally small numbers and the lack of diagnostic forms this may be somewhat limited.

15.4 The lithics may also shed light on the ritual and ceremonial use of the landscape, but, again, the numbers of pieces involved may hamper a detailed analysis.

15.5 If the flint is to be included within the publication, it is recommended that this assessment report can be used as a basis, a little time would be required to prepare the text for publication purposes. The possible refitting flints are examined, and the fresh material, should be looked at in order to identify possible usewear that may shed light on the activities carried out on the site. The flint would be compared with the material from Tollgate and other sites as necessary. No illustrations would be required.

- Investigate possible refitting flint and possible usewear
- Comparison with Tollgate lithics and material from evaluations
- Time for preparing a summary publication

## 16. Bibliography

URL 1995, 'Assessment of worked flint from Tollgate', unpublished report prepared by Bradley, P for OAU

URL 1997, 'South-East of Tollgate (ARC TGS 97)' Evaluation Flint assessment prepared by Cotton, J, for MoLAS

*Table 17: Worked Flint ARC TLG 98*

| Event code | Context | Count | Period | Comments |
|---|---|---|---|---|
| ARC TLG 98 | | - | | Natural Sample 8 |
| ARC TLG 98 | | - | | 2 Natural, Sample 9 |
| ARC TLG 98 | | - | | 1 natural, Sample 10 |
| ARC TLG 98 | | - | | 3 Natural, sample 11A |
| ARC TLG 98 | | - | | 1 Natural, sample 11B |
| ARC TLG 98 | | - | | 5 Natural, sample 12 |
| ARC TLG 98 | | - | | 1 Natural, Sample 13 |
| ARC TLG 98 | | - | | 1 Natural, sample 17 |
| ARC TLG 98 | | 2 | | 2 small flakes, sample 18 |
| ARC TLG 98 | | 1 | | 1 small wholly cortical flake, 1 natural , sample 19 |
| Total | | 3 | | |

*Table 18: Burnt Flint ARC TLG 98*

| Event code | Context | Count | Weight (g) | Comments * |
|---|---|---|---|---|
| ARC TLG 98 | | 2 | 3 | Sample 25 |
| ARC TLG 98 | | 1 | 1 | Sample 2 |
| ARC TLG 98 | | 2 | 5 | Sample 26 |

| | | | | |
|---|---|---|---|---|
| ARC TLG 98 | | 3 | 9 | Sample 15 |
| ARC TLG 98 | | 1 | 4 | Sample 18 |
| ARC TLG 98 | | 1 | 2 | Sample 19 |
| ARC TLG 98 | | 3 | 6 | Sample 3 |
| Total | | 13 | 30 | |

***** all heavily calcined white to grey

*Table 19: Worked Flint ARC CRS 98*

| Event code | Context | Count | Period | Comments |
|---|---|---|---|---|
| ARC CRS 98 | 17 | 2 | | 1 slightly blade-like |
| Total | | 2 | | |

*Table 20: Worked Flint ARC 330 98*

| Event code | Context | Count | Period | Comments |
|---|---|---|---|---|
| ARC 330 98 | 32 | 1 | | Broken flake |
| ARC 330 98 | 80 | 9 | | All worn and battered, some broken, 1 or 2 are irregular, also 11 natural |
| ARC 330 98 | 82 | 1 | | Small burnt flake, also 14 natural |
| ARC 330 98 | 89 | 3 | | 3 poss SH flakes, inc 1 with thermal scars, also 2 natural |
| ARC 330 98 | 143 | - | | 2 natural |
| ARC 330 98 | 177 | 6 | | Inc 1 wholly cortical flake, 1 chunky flake, several HFs |
| ARC 330 98 | 186 | 1 | | Flake |
| ARC 330 98 | 187 | 3 | | Inc 1 flake with thermal surfaces – poss used? Very fresh and sharp edges |
| ARC 330 98 | 190 | 1 | | Bullhead flake, wholly cortical dorsal face |
| ARC 330 98 | 192 | 5 | | Flakes, also 1 natural |
| ARC 330 98 | 196 | 2 | | Small flakes, also 2 natural |
| ARC 330 98 | 198 | 1 | | Flake |
| ARC 330 98 | 222 | 1 | | Small flake |
| ARC 330 98 | 373 | 1 | | Flake |
| ARC 330 98 | 418 | 1 | | HF flake |
| ARC 330 98 | 418 | 1 | | Large HF flake with much later damage, 1 small area of possible use |
| ARC 330 98 | 418 | 1 | | Flake |
| ARC 330 98 | 433 | 6 | | ?poss refits – several trimming flakes all very sharp and fresh |
| ARC 330 98 | 436 | 1 | | Flake |
| ARC 330 98 | 448 | 2 | | Flakes |
| ARC 330 98 | 448 | 1 | | Core on a large thermal flake, some flakes taken from the dorsal cortical side, also 2 natural |
| ARC 330 98 | 529 | 4 | | Flakes inc 1 very large flake |
| ARC 330 98 | 529 | 1 | | Core fragment, irregularly worked |

| | | | | |
|---|---|---|---|---|
| ARC 330 98 | 538 | 1 | | ?Axe thinning flake from polished axe |
| ARC 330 98 | 553 | 2 | | Flakes 1 has thermal surfaces |
| ARC 330 98 | 571 | 1 | | Flake |
| ARC 330 98 | 614 | 6 | | All worn and battered, 1 has been broken post-ex, also 5 natural |
| ARC 330 98 | 615 | 4 | | All small flakes, also 1 natural |
| ARC 330 98 | 617 | 1 | | slightly blade-like, heavily corticated |
| ARC 330 98 | 631 | 6 | | All worn |
| ARC 330 98 | 633 | 7 | | All worn, also 1 natural |
| ARC 330 98 | 680 | 7 | | Flakes inc a couple of slightly blade-like flakes |
| ARC 330 98 | 681 | 4 | | Flakes inc 2 large ?trimming flakes |
| ARC 330 98 | 681 | 1 | | Thick flake |

| Event code | Context | Count | Period | Comments |
|---|---|---|---|---|
| ARC 330 98 | 688 | - | | Natural |
| ARC 330 98 | 689 | 1 | | Flake |
| ARC 330 98 | 691 | - | | Natural |
| ARC 330 98 | 700 | 1 | | Flake also 1 natural |
| ARC 330 98 | 726 | 2 | | 1 flake has platform preparation |
| ARC 330 98 | 735 | 10 | | inc some trimming flakes - dorsal and side |
| ARC 330 98 | 736 | 1 | | Small HF flake |
| ARC 330 98 | 737 | 12 | | inc some trimming flakes - dorsal and side, also 1 natural |
| ARC 330 98 | 737 | 6 | | Flakes, also 1 natural |
| ARC 330 98 | 737 | 1 | | HF flake |
| ARC 330 98 | 737 | 1 | | Flake |
| ARC 330 98 | 737 | 1 | | Large worn and damaged flake |
| ARC 330 98 | 742 | 1 | | Flake |
| ARC 330 98 | 747 | 3 | | Flakes |
| ARC 330 98 | 747 | 1 | | Core fragment - flake core |
| ARC 330 98 | 747 | 1 | | Possible smoother, oval pebble with some signs of use, also lightly burnt |
| ARC 330 98 | 750 | 1 | | Flake |
| ARC 330 98 | 751 | 3 | | Flakes, also 1 natural |
| ARC 330 98 | 771 | 4 | | Flakes, inc trimming flakes |
| ARC 330 98 | 805 | 1 | | Flakes |
| ARC 330 98 | 814 | 2 | | Flakes |
| ARC 330 98 | 830 | 2 | | Flakes |
| ARC 330 98 | 832 | 5 | | Flakes |
| ARC 330 98 | 832 | 1 | | Core on a partly cortical flake, some plat preparation |
| ARC 330 98 | 832 | 1 | | Flake |
| ARC 330 98 | 835 | 3 | | Flakes inc 2 burnt flakes, also 8 natural |
| ARC 330 98 | 835 | 1 | | Retouched flake, very worn and some later damage |
| ARC 330 98 | 835 | 1 | | Serrated flake, worn edges both poss originally used |
| ARC 330 98 | 835 | 1 | | Possible tested nodule, some thermal fractures but a couple of flake scars, also 35 natural |
| ARC 330 98 | 835 | 1 | | Core fragment, also 30 natural |
| ARC 330 98 | 844 | 1 | | Thick, almost cortical dorsal trim flake |
| ARC 330 98 | 863 | 3 | | Inc 1 thick flake |
| ARC 330 98 | 867 | 1 | | Flake, also 1 natural and 1 pebble - not worked |
| ARC 330 98 | 872 | 5 | | Flakes |
| ARC 330 98 | 873 | 29 | | Many small HF flakes, also 1 CRF tablet - irregular, also 9 natural |
| ARC 330 98 | 873 | 1 | | Small core flake removals |

| | | | | |
|---|---|---|---|---|
| ARC 330 98 | 873 | 1 | | Heavily burnt flake fragment |
| ARC 330 98 | 875 | 2 | | Flakes |
| ARC 330 98 | 878 | 9 | | Flakes, also 16 natural |
| ARC 330 98 | 878 | 1 | | Retouched flake, minimal retouch poss just use |

| Event code | Context | Count | Period | Comments |
|---|---|---|---|---|
| ARC 330 98 | 884 | - | | Large natural pebble |
| ARC 330 98 | 939 | - | | Large natural pebble |
| ARC 330 98 | 946 | 1 | | Small HF flake |
| ARC 330 98 | 959 | - | | Natural |
| ARC 330 98 | 978 | 1 | | Flake |
| ARC 330 98 | 978 | 1 | | Core fragment, very irregularly worked, some incipient cones |
| ARC 330 98 | 981 | 1 | | 1 flake, also 1 natural |
| ARC 330 98 | 984 | 1 | | Flake |
| ARC 330 98 | 998 | - | | Natural |
| ARC 330 98 | 1045 | 1 | | Creamy flint flake |
| ARC 330 98 | 1149 | 1 | | Possible flake, worn |
| ARC 330 98 | 1173 | 1 | | Small fragment |
| ARC 330 98 | 1173 | 1 | | Wholly cortical flake from smallish flake |
| ARC 330 98 | 1173 | 1 | | ?knife some retouch but a lot of damage, partly cortical blank |
| ARC 330 98 | 1173 | 6 | | All fairly small flakes |
| ARC 330 98 | 1182 | 1 | | Flake |
| ARC 330 98 | 1186 | 4 | | Also 3 natural |
| ARC 330 98 | 1189 | - | | 1 natural |
| ARC 330 98 | 1189 | 1 | | Small flake |
| ARC 330 98 | 1209 | 1 | | Irregular flake, concreted with ?iron pan |
| ARC 330 98 | 1210 | 10 | | Some trimming flakes, also 1 natural |
| ARC 330 98 | 1230 | - | | 1 natural lump |
| ARC 330 98 | 1232 | - | | Natural |
| ARC 330 98 | 1236 | - | | Natural |
| Total | | 247 | | |

*Table 11: Burnt Flint ARC 330 98*

| Event code | Context | Count | Weight (g) | COMMENTS * |
|---|---|---|---|---|
| ARC 330 98 | 32 | 1 | 83 | |
| ARC 330 98 | 80 | 4 | 108 | |
| ARC 330 98 | 82 | 1 | 11 | |
| ARC 330 98 | 143 | 10 | 259 | |
| ARC 330 98 | 177 | 20 | 338 | |
| ARC 330 98 | 179 | 4 | 61 | |
| ARC 330 98 | 194 | 2 | 1 | |

| | | | | |
|---|---|---|---|---|
| ARC 330 98 | 196 | 1 | 15 | |
| ARC 330 98 | 198 | 2 | 5 | |
| ARC 330 98 | 217 | 1 | 12 | |
| ARC 330 98 | 225 | 1 | 2 | |
| ARC 330 98 | 250 | 2 | 40 | |
| ARC 330 98 | 352 | 24 | 233 | |
| ARC 330 98 | 373 | 3 | 159 | |
| ARC 330 98 | 379 | 1 | 60 | |
| ARC 330 98 | 384 | 25 | 120 | |
| ARC 330 98 | 386 | 1 | 61 | |

| Event code | Context | Count | Weight (g) | COMMENTS * |
|---|---|---|---|---|
| ARC 33098 | 390 | 231 | 2027 | |
| ARC 33098 | 399 | 6 | 70 | |
| ARC 33098 | 400 | 1 | 46 | |
| ARC 33098 | 417 | 77 | 2248 | |
| ARC 33098 | 418 | 19 | 232 | |
| ARC 33098 | 428 | 10 | 5 | |
| ARC 33098 | 433 | 22 | 199 | |
| ARC 33098 | 436 | 1 | 87 | |
| ARC 33098 | 448 | 39 | 897 | |
| ARC 33098 | 462 | 1 | 42 | |
| ARC 33098 | 480 | 7 | 58 | |
| ARC 33098 | 526 | 4 | 14 | |
| ARC 33098 | 527 | 3 | 15 | |
| ARC 33098 | 529 | 41 | 2839 | |
| ARC 33098 | 535 | 2 | 11 | |
| ARC 33098 | 538 | 2 | 80 | |
| ARC 33098 | 567 | 6 | 89 | |
| ARC 33098 | 570 | 5 | 19 | |
| ARC 33098 | 575 | 5 | 19 | |
| ARC 33098 | 611 | 2 | 5 | |
| ARC 33098 | 614 | 7 | 28 | |
| ARC 33098 | 631 | 2 | 130 | |
| ARC 33098 | 633 | 5 | 6 | |

| | | | | |
|---|---|---|---|---|
| ARC 330 98 | 680 | 2 | 29 | |
| ARC 330 98 | 686 | 2 | 6 | |
| ARC 330 98 | 688 | 8 | 79 | |
| ARC 330 98 | 700 | 6 | 8 | |
| ARC 330 98 | 701 | 3 | 33 | |
| ARC 330 98 | 735 | 1 | 11 | |
| ARC 330 98 | 736 | 2 | 69 | |
| ARC 330 98 | 736 | 6 | 24 | |
| ARC 330 98 | 737 | 6 | 322 | |
| ARC 330 98 | 747 | 2 | 62 | |
| ARC 330 98 | 754 | 11 | 95 | |
| ARC 330 98 | 756 | 7 | 193 | |
| ARC 330 98 | 771 | 3 | 158 | |
| ARC 330 98 | 773 | 10 | 13 | |
| ARC 330 98 | 805 | 1 | 56 | |
| ARC 330 98 | 809 | 4 | 2 | |
| ARC 330 98 | 811 | 3 | 6 | |
| ARC 330 98 | 812 | 3 | 172 | |
| ARC 330 98 | 818 | 5 | 58 | |
| ARC 330 98 | 820 | 4 | 46 | |
| ARC 330 98 | 825 | 3 | 7 | |
| ARC 330 98 | 828 | 2 | 20 | |
| ARC 330 98 | 831 | 3 | 24 | |
| ARC 330 98 | 832 | 6 | 62 | |
| ARC 330 | 833 | 1 | 57 | |

| | | | | |
|---|---|---|---|---|
| 98 | | | | |
| ARC 330 98 | 835 | 5 | 37 | |

| Event code | Context | Count | Weight (g) | COMMENTS * |
|---|---|---|---|---|
| ARC 33098 | 864 | 8 | 47 | |
| ARC 33098 | 872 | 1 | 82 | |
| ARC 33098 | 873 | 7 | 253 | |
| ARC 33098 | 875 | 7 | 163 | |
| ARC 33098 | 878 | 14 | 889 | |
| ARC 33098 | 884 | 11 | 625 | |
| ARC 33098 | 901 | 2 | 85 | |
| ARC 33098 | 934 | 1 | 6 | |
| ARC 33098 | 939 | 1 | 96 | |
| ARC 33098 | 948 | 3 | 116 | |
| ARC 33098 | 951 | 2 | 12 | |
| ARC 33098 | 890 | 6 | 12 | |
| ARC 33098 | 905 | 3 | 7 | |
| ARC 33098 | 981 | 3 | 27 | |
| ARC 33098 | 984 | 4 | 11 | |
| ARC 33098 | 998 | 1 | 7 | |
| ARC 33098 | 1084 | 2 | 23 | |
| ARC 33098 | 1168 | 1 | 23 | |
| ARC 33098 | 1173 | 1 | 17 | |
| ARC 33098 | 1173 | 15 | 139 | |
| ARC 33098 | 1175 | 2 | 31 | |
| ARC 33098 | 1175 | 39 | 193 | |
| ARC 33098 | 1182 | 1 | 37 | |

| | | | | |
|---|---|---|---|---|
| ARC 33098 | 1182 | 1 | 11 | |
| ARC 33098 | 1186 | 1 | 9 | |
| ARC 33098 | 1186 | 3 | 64 | |
| ARC 33098 | 1188 | 1500 | 1416 | |
| ARC 33098 | 1206 | 6 | 26 | |
| ARC 33098 | 1210 | 1 | 22 | |
| ARC 33098 | 1216 | 1 | 13 | |
| ARC 33098 | 1218 | 3 | 5 | |
| ARC 33098 | 1226 | 1 | 17 | |
| ARC 33098 | 1231 | 6 | 49 | |
| ARC 33098 | 1232 | 5 | 7 | |
| ARC 33098 | 1236 | 5 | 20 | |
| ARC 33098 | 777 | 3 | 3 | |
| ARC 33098 | 448 | 7 | 76 | |
| ARC 33098 | 974 | 2 | 4 | |
| ARC 33098 | 839 | 5 | 39 | |
| ARC 33098 | 190 | 5 | 58 | |
| ARC 33098 | 555 | 2 | 3 | |
| ARC 33098 | 625 | 2 | 1 | |
| ARC 33098 | 956 | 5 | 25 | |
| ARC 33098 | 1182 | 16 | 41 | |
| ARC 33098 | 878 | 7 | 1 | |
| ARC 33098 | 1138 | 3 | 7 | |
| ARC 33098 | 674 | 23 | 67 | |
| ARC 330 | 420 | 9 | 58 | |

| | | | | |
|---|---|---|---|---|
| 98 | | | | |
| ARC 330 98 | 1196 | 2 | 4 | |

| Event code | Context | Count | Weight (g) | COMMENTS * |
|---|---|---|---|---|
| ARC 33098 | 713 | 2 | 4 | |
| ARC 33098 | 840 | 1 | 37 | |
| ARC 33098 | 458 | 2 | 9 | |
| ARC 33098 | 862 | 8 | 6 | |
| ARC 33098 | 836 | 4 | 11 | |
| ARC 33098 | 771 | 7 | 80 | |
| ARC 33098 | 844 | 5 | 18 | |
| ARC 33098 | 875 | 3 | 39 | |
| ARC 33098 | 736 | 3 | 6 | |
| ARC 33098 | 944 | 4 | 41 | |
| ARC 33098 | 689 | 4 | 34 | |
| ARC 33098 | 873 | 2 | 28 | |
| ARC 33098 | 676 | 5 | 17 | |
| ARC 33098 | 1177 | 2 | 7 | |
| ARC 33098 | 638 | 2 | 10 | |
| ARC 33098 | 832 | 2 | 10 | |
| ARC 33098 | 990 | 3 | 4 | |
| ARC 33098 | 823 | 4 | 16 | |
| ARC 33098 | 402 | 10 | 299 | |
| ARC 33098 | 949 | 3 | 13 | |
| ARC 33098 | 1047 | 3 | 7 | |
| ARC 33098 | 691 | 9 | 75 | |
| ARC 33098 | 771 | 13 | 121 | |

| | | | | |
|---|---|---|---|---|
| ARC 330 98 | 939 | 2 | 49 | |
| ARC 330 98 | 726 | 5 | 7 | |
| ARC 330 98 | 982 | 4 | 26 | |
| ARC 330 98 | 812 | 14 | 407 | |
| ARC 330 98 | 401 | 99 | 758 | |
| ARC 330 98 | 867 | 34 | 5281 | |
| ARC 330 98 | 908 | 3 | 1 | |
| ARC 330 98 | 754 | 18 | 59 | |
| ARC 330 98 | 450 | 3 | 34 | |
| ARC 330 98 | 576 | 1 | 3 | |
| ARC 330 98 | 615 | 3 | 19 | |
| ARC 330 98 | 807 | 5 | 23 | |
| ARC 330 98 | 1193 | 18 | 24 | |
| ARC 330 98 | 1150 | 1 | 3 | |
| ARC 330 98 | 980 | 2 | 31 | |
| ARC 330 98 | 710 | 150 | 2681 | |
| ARC 330 98 | 412 | 125 | 2926 | |
| ARC 330 98 | 712 | 5 | 8 | |
| ARC 330 98 | 741 | 38 | 652 | |
| ARC 330 98 | 390 | 44 | 1407 | |
| ARC 330 98 | 143 | 1000 | 2778 | |
| ARC 330 98 | 835 | 7 | 557 | |
| Total | | 1651 | 35955 | |

***** all heavily calcined white to grey

COBHAM GOLF COURSE

APPENDIX 4: ASSESSMENT OF WORKED FLINT
Philippa Bradley

## 17. Introduction

17.1 A total of 231 pieces of worked flint were recovered from the excavations (Tables 11 and 13). The worked flint consists of mostly hard-hammer struck flakes, irregularly worked cores, core fragments. A range of mostly minimally retouched forms were recovered (retouched or used flakes, serrated flakes, scrapers, piercers and denticulates. The flint is generally hard-hammer struck with very little evidence for platform preparation or maintenance during knapping. Retouching is generally limited in extent, and many retouched pieces are made on thick cortical flakes. This assemblage is typical of mid-late Bronze Age technologies.

17.2 Burnt unworked flint was recovered from ARC CGC98 and ARC 33098 (see Tables 12 - 14). The burnt unworked flint consists of a range of small to large sized fragments or pebbles of heavily calcined flint.

## 18. Methodology

18.1 The worked and burnt unworked flint was recorded onto the Oracle database using standard MoLSS methods. The material was recorded by typological group, where appropriate notes were made on pertinent technological attributes. Brief notes were also made on the general condition of the material. The burnt unworked flint was briefly scanned and quantified, a general note of the condition of the material was also made. Natural unworked flint was discarded.

18.2 A single box of unstratified (recovered from the ploughed subsoil and roughly plotted to the western third of the site) material from ARC CGC 98 was scanned only. Its composition was very similar to the rest of the material from this site.

## 19. Quantifications

19.1 A total of 226 pieces of worked flint and 145 pieces of burnt unworked flint (weighing 7111g) was recovered from ARC CGC 98.

19.2 Five pieces of worked flint and 10 pieces of burnt unworked flint (weighing 35g) came from ARC 330 98. The flint is summarised in the Tables below.

## 20. Provenance

20.1 The worked flint was recovered from only a relatively limited number of contexts. The burnt unworked flint was spread over more contexts and

concentrations, by both numbers and weight can be noted in several contexts eg [160] and [176]. The distribution by weight is slightly more varied.

20.2 The flint came from a range of features across Area 330 Zone 5 but were mostly recovered from Cobham Golf Course, ARC CGC 98 and a flint scatter to the east of Knights Place Farm. From ARC CGC 98 flint was recovered from pit and ditch fills, and also from a later ploughsoil. At Knights Place Farm the flints were found redeposited in a later ploughed soil.

20.3 Good groups were recovered from ARC CGC 98 ditch fills, pit fills and layers, in particular contexts [161], [221], [223], [227] and [248]. Middle and late Bronze Age pottery was also recovered from these features. In addition many of these features produced burnt unworked flint, indicating a range of domestic tasks were being carried out, the debris being deposited in selected features across the site.

20.4 Some of the material from these contexts may well refit. No refits were identified during the assessment, although possible refits were identified in contexts [161] and [221] (Table 11) and the similarity of some of the raw materials suggests that this would be a worthwhile exercise. Similarly several examples of usewear and possible usewear were identified during the assessment (eg contexts [223] and [248] see Table 11). The numerous different types of cores recovered, the flakes and trimming flakes all indicate the approach to knapping that was taken: rough nodules were worked fairly unsystematically to remove useable cores. Other cores were worked slightly more systematically.

20.5 Very limited evidence for a pre-middle Bronze Age presence was suggested by the lithics: a few blades and blade-like flakes were recovered. However, these may simply have been produced non-intentionally during knapping, as many Bronze Age assemblages have a limited proportion of blades, rather than as deliberate removals. A possible Mesolithic burin was recovered from context [3002] (ARC 300 98).

20.6 Earlier, nearby archaeological evaluations at Cobham produced evidence for Neolithic and early Bronze Age activity (Durden 1997; Pre-Construct Archaeology 1996).

## 21. Conservation

21.1 The flint is appropriately bagged and boxed for long-term storage. Some of the burnt unworked flint is beginning to disintegrate, however, there is little that can be done to prevent this. No conservation is required. All of the natural flint has been discarded.

21.2 Selected burnt unworked flint could be discarded, keeping only a selection of representative material for archive purposes. The full quantification (by weight and number), together with a description of the material discarded would provide sufficient records for any future work.

## 22. Comparative material

22.1 Little material on middle to late Bronze Age lithics have been published from Kent and little useful comparative material has been recovered from the CTRL works in Area 330/350. Some crudely worked fairly undiagnostic material came from Area 330 Zone 3 (Bradley 2001) which may be contemporary with the Zone 5 material. An assemblage of later Bronze Age flint came from Coldharbour Road, Gravesend (Bradley 1995), and the MSA at Hollingbourne (Bradley 1998).

22.2 In a wider context later Bronze Age assemblages have begun to receive attention. Recent work on usewear analysis, coupled with reduction technology and site distribution, has produced some interesting results (Brown and Bradley forthcoming). These results, at Wallingford have shown that retouch was only used in certain cases when the users' hands required protection; many pieces were used unmodified or with very minimal retouching. This is a pattern that can be seen across Britain during the later Bronze Age.

## 23. Potential for further work

23.1 The numerous cores, core fragments, flakes and trimming flakes (Table 11) will provide an excellent opportunity to examine later Bronze Age knapping strategies, which have shown to be of considerable interest nationally (cf Brown and Bradley forthcoming). Examination of flake types may also show that particular flakes (eg trimming flakes) were selected for retouching or use unmodified. The detailed examination of the flint in conjunction with the ceramics may elucidate chronological differences in the lithics. The distribution across the site in conjunction with a more detailed examination of the middle and later Bronze Age ceramics will also provide some interesting data, although the lithic assemblage is on the small side for detailed statistical analyses to be undertaken.

23.2 The flint can contribute to the following time period research objectives:

Farming communities (2,000-100BC).

- *Determine spatial organisation of the landscape in terms of settlement location in relation to fields, pasture, woodland, enclosed areas and ways of moving between these*
- *Determine how settlements were arranged and functioned over time.*

23.3 Lithics may help to clarify the pre-late Bronze Age activities on site but given the generally small numbers and the lack of diagnostic forms this may be somewhat limited.

23.4 The majority of the lithics are clearly middle to later Bronze Age in date and as such have great potential to elucidate the domestic use of the landscape at this time.

23.5 The flint should be examined for possible usewear data and possible refits that have been identified during the assessment. Detailed analysis of the flint will enable any reduction sequences to be reconstructed. The possible usewear will require low-level microscopic analysis to enable the type of wear to be categorised.

- Investigate/confirm possible refitting flint and analyse for usewear
- Detail comparison with ARC CGC 97 etc lithics
- Time for preparing publication
- A selection of lithics would require illustration (around 20 pieces – cores and retouched forms)

## 24. Bibliography


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Pre-Construct Archaeology 'An Archaeological field evaluation at the Rochester and Cobham Golf Club, near Cobham, Kent' Unpublished report.

*Table 21: ARC CGC 98Worked Flint*

| Context | Count | Period | Comments |
|---|---|---|---|
| 73 | 4 | | Flakes, all worn |
| 73 | 1 | | ?tested nodule/irreg worked core, also 4 natural |
| 110 | | | 5 natural inc 1 sarsen frag |
| 112 | 1 | | Small flake |
| 144 | | | 1 natural |
| 146 | 2 | | 1 burnt poss used?, 1 CRF - platform |
| 132 | 1 | | Trimming flake ?used edge |
| 160 | | | Lump of sarsen - unworked |
| 161 | 10 | | All large and many cortical - some poss refits? |
| 161 | 2 | | Cores irregularly worked also 5 natural |
| 162 | 1 | | Flake with ?used edges |
| 164 | 13 | | Some trimming flakes, some used edges, several ireg flakes, 1 burnt flake |
| 164 | 1 | | Misc retouched flake |
| 176 | 1 | | Trimming flake |
| 192 | 6 | | Inc 1 thick flake from a nodule |
| 192 | 2 | | Core/core frags both irregularly worked, Also 6 natural |
| 194 | 1 | | Single platform flake core irregularly worked |
| 196 | 2 | | Slightly irregular trimming flakes |
| 196 | 1 | | Multi-platform flake core, irreg worked |
| 198 | 1 | | End and side scraper, on thin blank some cortex, neatly retouched, some wear to scraping edge |
| 198 | 2 | | Two flakes, also 1 natural |
| 198 | 1 | | ?tested nodule, irregularly worked, possibly natural |
| 200 | 1 | | Denticulate on a thick side trimming flake |
| 200 | 1 | | Multi-platform flake core many overhangs and hinges, also 2 natural |
| 202 | - | | Non-flint ?worked stone |
| 202 | 1 | | Thick trimming flake |
| 202 | 2 | | Two tested nodules very crudely worked, also 3 natural |
| 204 | 2 | | 1 trimming flake, 1 possible flake - very crudely struck, also 5 natural |
| 221 | 4 | | Blade-like SH flakes |
| 221 | 41 | | Many irregular flakes, many trimming flakes, some used edges, poss refits? , also 3 natural |
| 221 | 5 | | Multi-platform, irregularly worked cores, many HFs and overhangs and incipient cones |
| 221 | 1 | | End and side scraper on cortical blank, retouch is relatively neatly executed |
| 221 | 1 | | End scraper of thick cortical blank, minimal retouch at distal end |
| 221 | 2 | | Denticulates, 1 is minimally retouched, other is semi-circular in shape and quite elaborate |
| 221 | 1 | | Retouched flake, irregular retouch on irregular thick flake |

| Context | Count | Period | Comments |
|---|---|---|---|
| 223 | 1 | | End scraper on cortical blank minimal retouch ?used edges |
| 223 | 1 | | Piercer on cortical blank, small point |
| 223 | 26 | | Many cortical flakes, some very irregular, some used edges, mostly HH |
| 223 | 1 | | 2 platform core, irreg worked |
| 223 | 36 | | Flakes - some trimming, many large irregular ones, some used edges, many HFs, also 1 natural |
| 223 | 3 | | Blade-like SH flakes |
| 223 | 2 | | Serrated/worn flakes both on blade-like blanks |
| 223 | 1 | | Single platform flake core on large irregular nodule |
| 223 | 1 | | Multi-platform flake core |
| 223 | 1 | | Core on a flake |
| 223 | 1 | | End and side scraper on thick cortical flake, very crudely worked, partly denticualted retouch |
| 225 | 3 | | Flakes, poor quality flint |
| 225 | 1 | | Retouched flake, minimal retouch poss used as a scraper |
| 227 | 8 | | Many irregular flakes, and trimming flakes |
| 227 | 2 | | End scrapers both on trimming flakes, thick blanks |
| 227 | 1 | | Single platform flake core irregularly worked, burnt |
| 233 | 1 | | Flake, poor quality flint |
| 237 | 1 | | Small flake fragment |
| 242 | 5 | | Multi-platform flake cores, all large (2 very large irreg nodules), little controlled working |
| 248 | 7 | | Flakes inc some very large egs, some used edges, mostly HH |
| 248 | 1 | | Denticulate |
| 248 | 1 | | End scraper on fairly thick non-cortical blank, minimal retouch |
| 248 | 1 | | Serrated/worn flake |
| 248 | 3 | | Core fragments all quite irregularly worked |
| 248 | 2 | | Irregularly worked cores also 2 natural |
| **Total** | **226** | | |

Key:
HH Hard hammer
SH Soft hammer
HF Hinge fracture

*Table 22: Burnt Flint ARC CGC 98*

| Event code | Context | COUNT | Weight | Comments |
|---|---|---|---|---|
| ARC CGC 98 | 61 | 1 | 74 | Small burnt pebble, also 2 natural |
| ARC CGC 98 | 112 | 2 | 141 | Calcined grey |
| ARC CGC 98 | 122 | 1 | 89 | Calcined grey |
| ARC CGC 98 | 128 | 4 | 284 | Calcined grey and red |
| ARC CGC 98 | 136 | 2 | 195 | Calcined grey |
| ARC CGC 98 | 136 | 6 | 36 | |
| ARC CGC 98 | 138 | 3 | 167 | Calcined grey |
| ARC CGC 98 | 142 | 1 | 99 | Calcined grey |
| ARC CGC 98 | 142 | 6 | 86 | Calcined grey |
| ARC CGC 98 | 146 | 2 | 140 | Calcined grey |
| ARC CGC 98 | 148 | 4 | 406 | Calcined grey |
| ARC CGC 98 | 160 | 9 | 118 | Calcined grey |
| ARC CGC 98 | 160 | 37 | 2257 | Calcined grey and occasional red, mostly large nodules/frags |
| ARC CGC 98 | 160 | 7 | 289 | Calcined grey |
| ARC CGC 98 | 161 | 2 | 37 | Calcined grey with red tinges |
| ARC CGC 98 | 162 | 25 | 642 | Calcined grey |
| ARC CGC 98 | 164 | 3 | 164 | Calcined grey |
| ARC CGC 98 | 168 | 2 | 140 | Calcined grey |
| ARC CGC 98 | 176 | 5 | 3 | Calcined grey |
| ARC CGC 98 | 176 | 2 | 110 | Calcined grey |
| ARC CGC 98 | 176 | 14 | 1178 | Calcined grey, inc large pieces from nodules |
| ARC CGC 98 | 178 | 3 | 281 | Calcined grey |

| | | | | |
|---|---|---|---|---|
| ARC CGC 98 | 182 | 1 | 5 | Calcined grey, also 25 natural |
| ARC CGC 98 | 223 | 2 | 141 | Calcined grey |
| ARC CGC 98 | 227 | 1 | 29 | Calcined red |
| Total | | 145 | 7111 | |

*Table 23: Worked Flint ARC 330 98*

| Event code | Context | Count | Period | Comments |
|---|---|---|---|---|
| ARC 330 98 | 3002 | 2 | | 1 slightly worn, other is a flake from an opposed platform core - flake removals |
| ARC 330 98 | 3002 | 2 | | serrated/worn flakes possible gloss |
| ARC 330 98 | 3002 | 1 | Mesolithic | possible burin on large partly cortical flake |
| Total | | 5 | | |

*Table 24: Burnt Flint ARC 330 98*

| Event code | Context | Count | Weight | Comments |
|---|---|---|---|---|
| ARC 330 98 | 362 | 10 | 35 | Calcined white to grey |
| Total | | 10 | 35 | |

CUXTON

**APPENDIX 3: ASSESSMENT OF WORKED FLINT**
Philippa Bradley

## 25. Introduction

25.1 A small group of worked flint and an assemblage of burnt unworked flint was recovered from the excavations. The worked flint is dominated by debitage, which is generally undiagnostic and has limited potential for dating. The burnt unworked flint consists of small to medium sized fragments of heavily calcined flint.

## 26. Methodology

26.1 The material was recorded by typological group, where appropriate notes were made on pertinent technological attributes. Brief notes were also made on the general condition of the material. The burnt unworked flint was briefly scanned and quantified, a general note of the condition of the material was also made.

26.2 The worked and unworked flint was recorded onto the MoLAS Oracle database, and subsequently converted to RLE Datasets.

## 27. Quantification

27.1 A total of 17 pieces of worked flint and 146 pieces of burnt unworked flint were recovered. The flint is summarised below.

## 28. Provenance

28.1 The flint came from a series of context types (pit fills [100], [102], [102/103], [105], [109], posthole fill [351], tree-throw hole fill [156], ditch fill [125] and grave/grave fills [242], [305], 342]. Other than the burnt unworked flint from [102/103], [105], [156] and [342] there were few concentrations of material.

## 29. Conservation

29.1 The material is appropriately packed for long-term storage. Some of the burnt unworked flint is in a poor condition but good packing will help to support it physically and buffer its environment.

29.2 Selected burnt unworked flint could be discarded, keeping only a selection of representative material for archive purposes. The full quantification (by weight and number), together with a description of the material discarded would provide sufficient records for any future work.

## 30. Comparative material

30.1 This group has potential for comparison with that from other sites along the CTRL route.

## 31. Potential for further work

31.1 This group of flint has relatively limited potential as it is composed largely of burnt unworked flint or undiagnostic debitage. However, it is likely that this material is of Neolithic-Bronze Age date; the small size of the assemblage and its composition preclude any refinement of the dating. This dating is based on technological attributes (eg mostly hard-hammer struck) of the material and its general appearance.

31.2 Although the material indicates some form of prehistoric activity in the vicinity it is of very limited extent. Given this limited potential no further work is required. If a summary is required for publication it can be drawn from this assessment report, and the evaluation report by Jon Cotton (URL 1997).

31.3 None of the flint has potential for answering the fieldwork event aims established for the site.

## 32. Bibliography

URL, 1997, 'Cuxton Anglo-Saxon Cemetery (ARC CXT 97) Archaeological Evaluation' prepared by MoLAS

*Table 25: Assessment of worked flint*

| Event code | Context | Count | Period | Comments [presence of diagnostic material/ dominance tool/flakes etc.] |
|---|---|---|---|---|
| ARC CXT 98 | 102 | 1 | ?LBA-LIA | Flake fragment, SH? |
| ARC CXT 98 | 102/103 | 7 | ?LBA-LIA | Flakes, one or two cortical |
| ARC CXT 98 | 105 | 3 | ?LBA-LIA | Flakes, 1 is slightly bladelike |
| ARC CXT 98 | 125 | 1 | ?LBA-LIA | Broken blade, poss used edges |
| ARC CXT 98 | 305 | 2 | ?LBA-LIA | 2 possible flakes |
| ARC CXT 98 | 342 | 1 | ?LBA-LIA | Burnt flake |
| ARC CXT 98 | 351 | 1 | ?LBA-LIA | Serrated flake, Slightly blade-like, worn serrations |
| ARC CXT 98 | 367 | 1 | ?LBA-LIA | Flake |

*Table 26: Assessment of burnt flint*

| Event code | Context | Count | Weight | Comments |
|---|---|---|---|---|
| ARC CXT 97 | 41 | 4 | 120 | Calcined grey |
| ARC CXT 97 | - | 1 | 18 | Calcined grey, spit sample 30-40cm |
| ARC CXT 97 | - | 2 | 24 | Calcined grey, spit sample 110-120cm |
| ARC CXT 98 | 100 | 1 | 21 | Calcined grey |
| ARC CXT 98 | 102 | 6 | 5 | Calcined grey |
| ARC CXT 98 | 102/103 | 40 | 3412 | Calcined grey |
| ARC CXT 98 | 105 | 50 | 4100 | Calcined grey |
| ARC CXT 98 | 109 | 2 | 23 | Calcined grey |
| ARC CXT 98 | 156 | 20 | 792 | Calcined grey |
| ARC CXT 98 | 242 | 10 | 168 | Calcined grey |
| ARC CXT 98 | 342 | 17 | 638 | Calcined grey |

PARSONAGE FARM

**APPENDIX 4: ASSESSMENT OF WORKED FLINT**
Philippa Bradley

## 33. Introduction

A small group of worked flint and an assemblage of burnt unworked flint was recovered from the excavations. All elements of the reduction sequence were recovered, but some biases are evident (eg only one chip was recovered). This may reflect depositional practices as well as on site sampling policies. A relatively wide range of retouched forms was recovered including scrapers, retouched flakes and blades, serrated flakes and a piercer. The debitage included flakes, blades, blade-like flakes, a chip and three cores. The burnt unworked flint consists of small to medium sized fragments of heavily calcined flint.

### Methodology

The worked and burnt unworked flint was recorded onto the Oracle database using standard MoLSS methods. The material was recorded by typological group, where appropriate notes were made on pertinent technological attributes. Brief notes were also made on the general condition of the material. The burnt unworked flint was briefly scanned and quantified, a general note of the condition of the material was also made.

### Quantifications

A total of 57 pieces of worked flint and 128 pieces of burnt unworked flint (weighing 1242 g) were recovered from the excavations at Parsonage Farm (ARC PFM 98 and ARC 430 85+100-85+350 (OAU watching brief of Parsonage Farm). The flint is summarised in the tables below.

### Provenance

Flint was recovered from 37 contexts and therefore there were few concentrations of material; most contexts produced only one or two flints. The flint came from a variety of context types including pit fills [175], [601], an occupation layer [382] and a timber brushwood platform [183]. Many of these contexts produced post-Roman pottery and thus the flint is clearly redeposited.

### Conservation

The flint is appropriately bagged and boxed for long-term storage. Some of the burnt unworked flint is beginning to disintegrate; however, there is little that can be done to prevent this. No conservation is required.

**Comparative material**

The flint compares well with other Neolithic and Bronze Age material recovered from the CTRL route. It can contribute to the Landscape Zone priorities in a limited way given its small size and the composition of the assemblage.

**Potential for further work**

Although all elements of the reduction sequence were recovered this group of flint has limited potential given its size and overall composition. The retouched forms present provide evidence for small-scale domestic activity (food and hide preparation, knapping). However, it is likely that this material is of Neolithic-Bronze Age date; the small size of the assemblage and its composition preclude any refinement of the dating. A single opposed platform blade core may indicate a Mesolithic presence. The dating is based on technological attributes (eg mostly hard-hammer struck) of the material and its general appearance. The material recovered indicates some form of prehistoric small-scale activity in the vicinity, although its extent is unknown. Lithics were recovered from the surface survey collection undertaken across the site (URL 1994). Given this limited potential no further analytical work is required. If a summary is required for publication it can be drawn from this assessment report.

Although the lithics recovered from Parsonage Farm can contribute to some of the Landscape Zone priorities, they are not relevant for the specific fieldwork event aims for the site.

**Bibliography**

None

*Table 27: Worked Flint*

| Context | Count | Period | Comments [presence of diagnostic material/ dominance tool/flakes etc.] |
|---|---|---|---|
| 33 | 3 | | 1 slightly blade-like flake |
| 33 | 1 | | 1 end scraper |
| 33 | 1 | | 1 blade |
| 33 | 1 | ME? | 1 burnt opposed platform blade core |
| U/S | 8 | | 6 flakes, 1 multi-platform flake core, 1 double end scraper |
| 164 | 1 | | 1 retouched flake |
| 179 | 1 | | 1 blade with used edges |
| 188 | 1 | | 1 flake |
| 279 | 1 | | 1 flake |
| 312 | 1 | | 1 flake some incipient cones of percussion |
| 361 | 1 | | 1 flake |
| 375 | | | 1 natural flint discarded |
| 382 | 14 | | 9 flakes, 1 flake core with 2 platforms, 2 retouched flakes (1 is possibly a knife), 1 piercer with worn point, 1 small end and side scraper with some wear |
| 471 | 4 | | 4 flakes, one is on very cherty flint |
| 498 | 2 | | 2 flakes |
| 743 | 1 | | 1 serrated flake fragment |
| 771 | 4 | | 4 flakes |
| 854 | 1 | | 1 small chip |
| 923 | 1 | | 1 flake |
| 933 | 1 | | 1 heavily corticated flake |
| 1021 | | | 1 natural flint discarded |
| 1049 | 3 | | 1 minimally retouched blade, 2 flakes |
| 1053 | 1 | | 1 small serrated flake fragment |
| 1066 | 1 | | 1 retouched flake, on an irregular flake, some post depositional damage |
| 1069 | 1 | | 1 flake |
| 1100 | | | 2 natural flints discarded |
| 1137 | 1 | | 1 flake, also 2 natural |
| 1138 | 1 | | 1 flake |
| 1148 | 1 | | 1 single platform flake core irregularly worked |
| | Total 57 | | |

*Table 28: Burnt Flint*

| Context | Count | Weight | Comments |
|---|---|---|---|
| 101 | 14 | 334 | Burnt unworked flint calcined red |
| 175 | 1 | 28 | Burnt unworked flint calcined grey |
| 183 | 1 | 13 | Burnt unworked flint calcined grey |
| 208 | 1 | 11 | Burnt unworked flint calcined grey |
| 243 | 38 | 364 | Burnt unworked flint calcined grey |
| 280 | 1 | 244 | Burnt unworked flint heavily calcined |
| 601 | 12 | 49 | Burnt unworked flint calcined red |
| 862 | 12 | 9 | Burnt unworked flint calcined red, also 11 natural |
| 883 | 2 | 67 | Burnt unworked flint calcined grey |
| 966 | 38 | 111 | Burnt unworked flint calcined red |
| 967 | 5 | 7 | Burnt unworked flint calcined red |
| 1049 | 3 | 5 | |
| | 128 | 1242 | |

BOWER ROAD

## 1.1 Flint

*By Hugo Lamdin-Whymark*

*Introduction*

1.1.1 A total of 120 pieces of worked flint and 6 pieces of burnt unworked flint (weighing 95 g) were recovered during the watching brief at Bower Road. The flint was collected in accordance with the Landscape Zone Priorities and Fieldwork Event Aims for the site, which are set out in section 2 of the main report, above. The flint was collected in order to provide evidence for the dating and nature of occupation in the landscape, especially during the period of later agriculturalists (2000-100 BC), and for ritual and ceremonial use of the landscape.

*Methodology*

1.1.2 In order that unworked and naturally occurring material could be excluded from further analysis, 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 flint was scanned and weighed; general comments on the condition of this material were also made.

*Quantification*

1.1.3 A total of 120 pieces of worked flint and 6 pieces of burnt unworked flint (weighing 95 g) was recovered. This material is summarised below in Tables 2.1 and 2.2.

1.1.4 The assemblage contains diagnostic retouched forms dating from the Mesolithic period through to the early Bronze Age. The limited size of the assemblage makes it difficult to speculate on the nature of early use of the site. However, the presence of numerous retouched artefacts (29 flints, 24% of assemblage) of both late Mesolithic and Neolithic date indicates that various activities were performed on site. Two fabricators may indicate the lighting of fires, whilst the scrapers and piercers may indicate hide preparation. This location may therefore have represented the site of a brief late Mesolithic camp and a Neolithic activity area or habitation site. Only three cores were present in the assemblage and cortical flakes appeared underrepresented, perhaps indicating little knapping was performed on site or alternatively that cores were prepared elsewhere, perhaps at the source of the raw material.

*Provenance*

1.1.5 The majority of the assemblage was redeposited in Iron Age and Roman ditches and discrete features.

1.1.6 A total of 35 flints were recovered from cleaning layers in the vicinity of the medieval or post-medieval sheep pens (finds reference numbers 455, 458 and 511); this material was in better condition than the majority of the assemblage and is unlikely to have moved far from its original place of deposition. The diagnostic artefacts and technology indicate that this flint dates from the late Mesolithic and Neolithic.

*Condition*

1.1.7 Much of the flint has suffered some post-depositional damage; cortication is mixed. Several pieces of burnt unworked flint were also recovered; this material was very

heavily calcined either grey-white or red. A few of the worked flints were also burnt.

1.1.8 The flint is adequately bagged and boxed for long term storage. There are therefore no outstanding storage or conservation requirements.

*Comparative material*

1.1.9 The flint can be compared with groups from other sites along the CTRL route that have produced Mesolithic to early Bronze Age material. Flint of this period has been recovered from most of the sites neighbouring Bower Road (see section 1.3), although as at Bower Road, the assemblages tend to be small and redeposited. Comparison with material recovered from Church Lane and East of Station Road will be most pertinent, especially if analysis of the waterlogged channel sequence can provide contemporary palaeoenvironmental data. The small element of Mesolithic activity identified appears to be fairly typical of the sites excavated, and may represent a small temporary camp or chance hunting losses.

*Potential for further work*

1.1.10 The following section discusses potential for further work in the light of the Landscape Zone Priorities and Fieldwork Event Aims.

1.1.11 The limited size and redeposited nature of the assemblage limit the potential for further work, although the material can contribute to wider study of flint distributions at area and Landscape Zone Level. This will contribute to CTRL research aims relating to interaction of hunter-foragers with the environment, and to the activity of early agriculturalists.

1.1.12 Bullhead Bed flint, river gravel flint and a beach pebble were all exploited by the users of this site, and represent imported materials. Investigation of potential sources for the raw materials would therefore contribute to CTRL research aims relating to the interaction of early communities with their environment.

1.1.13 A summary for publication should be produced using this assessment as a basis. No further work is therefore recommended on the material itself. However it can contribute to CTRL research aims by comparisons with other sites and consideration in the broader context of the area and local landscape, using this assessment.

*Table 2.1: Summary composition of flint assemblage from Bower Road (ARC 440/99 95+900-96+300) by context*

| Context | Count | Period | Comments |
|---|---|---|---|
| 101 | 1 | | 1 flake |
| 148 | 2 | | 2 flakes |
| 152 | 2 | | 1 flake, 1 retouched flake (Burnt) |
| 207 | 4 | late Mesolithic/early Neolithic | 1 flake (Bullhead flint), 2 blades (1 burnt), 1 ?microburin |
| 215 | 1 | | 1 flake |
| 239 | 3 | | 2 flakes (1 burnt), 1 irregular waste (burnt) |
| 243 | 2 | | 1 flake, 1 blade |
| 246 | 1 | | 1 broken tanged arrowhead |
| 250 | 1 | | 1 flake |
| 254 | 2 | Mesolithic/early Neolithic | 1 rejvenation flake, 1 serrated flake (burnt) |
| 262 | 1 | | 1 flake |
| 263 | 2 | late Neolithic/Bronze Age | 1 end scraper, 1 other scraper |
| 300 | 1 | late Mesolithic/Early Neolithic | 1 flake |
| 302 | 1 | Bronze Age? | 1 flake |
| 307 | 1 | | 1 flake (burnt) |
| 324 | 2 | Neolithic? | 1 flake, 1 serrated flake |
| 371 | 1 | Late Neolithic? | 1 levallois flake (Bullhead flint) |
| 377 | 4 | Late Neolithic? | 1 levallois flake, 2 flakes, 1 irregular waste (beach pebble flint?) |
| 380 | 1 | Late Mesolithic? | 1 retouched flake |
| 381 | 4 | Mesolithic/early Neolithic? | 2 flakes, 1 blade, 1 notch |
| 384 | 2 | Late Neolithic/early Bronze Age | 1 flake, 1 thumbnail scraper |
| 403 | 1 | | 1 blade |
| 429 | 1 | | 1 flake |
| 441 | 1 | | 1 flake |
| 455 | 13 | Late Mesolithic/ Neolithic | 7 flakes (2 burnt) (1 Bullhead flint) , 1 blade, 1 multi-platform flake core, 1 other scraper, 1 piercer, 1 retouched flake |
| 458 | 10 | Late Mesolithic/ Neolithic | 7 flakes (1 Bullhead flint), 1 blade, 1 bladelet, 1 retouched flake |
| 459 | 1 | Mesolithic? | 1 ?tranchet sharpening flake/burin/retouched flake/scraper multi tool |
| 462 | 1 | | 1 multi-platform flake core |
| 471 | 2 | | 2 flakes |
| 473 | 1 | | 1 flake |
| 479 | 3 | Late Mesolithic and Late Neolithic/Early Bronze Age | 1 flake, 1 blade-like flake, 1 end and side scraper |
| 489 | 1 | | 1 flake(burnt) |
| 493 | 3 | | 1 flake, 1 rejvenation flake, 1 multi-platform flake core |
| 496 | 1 | | 1 flake |
| 501 | 4 | Mesolithic/Neolithic | 3 flakes, 1 retouched flake |
| 502 | 3 | | 2 flakes (1 burnt), 1 piercer |
| 504 | 3 | Late Neolithic | 2 flakes, 1 chisel arrowhead |
| 510 | 1 | | 1 flake (burnt) |
| 511 | 12 | Neolithic? | 4 flakes, 2 blades (1 Bullhead flint) , 4 retouched flakes (1 Bullhead flint), 1 fabricator, 1 misc. retouch (Bullhead flint) |
| 549 | 1 | | 1 notch |
| 555 | 1 | | 1 flake |
| 569 | 2 | Neolithic? | 1 flake, 1 blade-like flake |
| 573 | 1 | | 1 flake |

| Context | Count | Period | Comments |
|---|---|---|---|
| 584 | 3 | | 2 flakes (1 burnt), 1 end scraper |
| 656 | 4 | | 4 flakes |
| 669 | 1 | | 1 flake |
| 712 | 1 | Early Neolithic? | 1 retouched flake |
| 717 | 2 | | 1 flake, 1 blade-like flake |
| 736 | 1 | | 1 flake |
| 872 | 2 | | 1 flake, 1 retouched flake |
| *Total* | *120* | | |

*Table 2.2: Catalogue of burnt flint from Bower Road ARC 440/99 95+900-96+300*

| Context | Count | Material | Comments |
|---|---|---|---|
| 148 | 1 | 10 | |
| 656 | 1 | 70 | |
| 673 | 2 | 5 | |
| 717 | 1 | 8 | |
| 819 | 1 | 2 | |

## - LITHICS

### 1.2 Flint

*By Philippa Bradley*

*Introduction*

1.2.1 An assemblage of worked and burnt flint was recovered. The material was generally undiagnostic debitage with few retouched forms being recovered. The material was spread thinly across the site with only a few contexts producing more than 10 pieces of worked flint. The burnt unworked flints were slightly more concentrated, but this might be expected if the majority of this material relates to cremation ritual rather than any prehistoric activity.

1.2.2 The Fieldwork Event Aims which analysis of the material can be expected to contribute to are as follows:

- Fieldwork Event Aim 3: To recover artefact assemblages (especially pottery) to elucidate the sequence of site development; provide information on trade and exchange within the local, regional and international economy, and the status and economy of the settlement.
- Fieldwork Event Aim 13: To establish the nature and date of occupation pre-dating the cemetery.

*Methodology*

1.2.3 All of the worked flint was briefly scanned and recorded, with information regarding dating, technology and general condition being noted. The burnt unworked flint that was boxed with the worked material was scanned and weighed; general notes on the condition of this material were also made. Any burnt worked flint found amongst the unworked material has been added to the worked flint database. Several boxes of worked and burnt unworked flint were simply scanned for worked items and were not recorded. These pieces totalled 505 and 220 respectively. Much of the worked material that was scanned consisted of chips, flakes and pieces of irregular waste. As noted above many of the chips may on closer inspection prove to be natural. A large quantity of natural flint was recovered and this material has been added to the database and discarded.

*Quantification*

1.2.4 A total of 401 pieces of worked flint and 221 pieces of burnt unworked flint, weighing 5081 g was recovered. In addition 505 pieces of worked and 220 pieces of burnt unworked flint was scanned only and not recorded. The flint is listed by context in Tables 2.1-2.4.

*Provenance*

1.2.5 The flint came from a variety of feature types and contexts including grave fills and the fills of cremation pots. There appeared to be no particular concentrations of material (see above), and the material was very abraded indicating that it had been redeposited.

*Conservation*

1.2.6 Much of the flint has suffered some post-depositional damage and from the general appearance of the material it is likely that much of it has been redeposited. Cortication is mostly light to medium; although a few pieces are more heavily

corticated. The burnt unworked flint recovered was mostly very heavily calcined, and some of this material is beginning to disintegrate. However, there is little that can be done to stop this process. It is recommended that samples only of the burnt flint are retained. In general the flint is appropriately bagged and boxed for long-term storage, although some reorganisation is required. A great deal of natural flint was recovered which has been discarded during the assessment. It is therefore recommended that an initial task should be the revision of all of the box lists. This will result in a reduction in the overall total numbers of boxes.

*Comparative material*

1.2.7 The flint has generally limited further potential. It is a relatively undiagnostic group of mostly debitage. The flint was recovered from a large number of contexts and little focus for activity was identified. However, the flint does provide evidence for probable Neolithic or early Bronze Age activity, and as such provides useful background information regarding the use of the landscape in prehistory. Sites along the CTRL route will provide useful comparative material including any flintwork that came from surface collection prior to evaluation of the sites.

*Potential for further work*

1.2.8 As noted above the flint has very limited further potential. However, if the site is published a summary of the material should be included. It is suggested that this assessment is summarised for this purpose. The flint provides some evidence for probable Neolithic or early Bronze Age activity, and could contribute to general analysis at landscape zone level for the periods 'Early Agriculturalists' and 'Farming Communities'.

*Table 2.1: Summary of worked flint by context*

| Context | Count | Period | Comments |
|---|---|---|---|
| **ARC PHL97** | | | |
| U/S | 3 | | 3 chips, 1 is burnt |
| U/S | 76 | | 76 flakes, 17 are burnt, 10 natural also 1 calcined bone |
| 1 | 1 | | 1 flake |
| 2 | 2 | | 1 possible flake, 1 piercer with small worn point |
| 5 | 4 | | 2 flakes, 1 is slightly blade-like and has possible usewear, 2 retouched flakes both have minimal retouch which could be mostly usewear |
| 9 | 1 | | 1 possible flake, 1 natural |
| 51 | 1 | | 1 flake – usewear? |
| 81 | - | | 1 natural |
| 93 | - | | 1 natural |
| 101 | - | | 1 natural |
| 111 | - | | 2 natural |
| 113 | - | | 1 natural |
| 114 | - | | 2 natural |
| 138 | 1 | | 1 flake, 1 natural |
| 179 | - | | 2 natural |
| 184 | - | | 1 natural |
| 206 | 1 | | 1 natural |
| 209 | 2 | | 1 serrated flake (both edges) with notch, very worn with gloss, semi-circular notch at distal end, blade-like scar on its dorsal face, 1 possible tested nodule, also 1 natural |
| 225 | - | | 1 natural |
| 231 | 15 | | 14 flakes, 1 chip. 1 flake is very large and has many hard hammer scars on its dorsal |

| Context | Count | Period | Comments |
|---|---|---|---|
| | | | face – possibly Roman building material. 44 natural |
| 263 | - | | 2 natural |
| 273 | - | | 2 natural |
| 289 | - | | 3 natural |
| 318 | - | | 7 natural |
| 322 | - | | 3 natural |
| 335 | - | | 1 natural |
| 337 | - | | 4 natural |
| 419 | 24 | | 24 flakes and small chips, several may be natural. Also 36 natural (discarded) |
| 449 | 9 | | 6 flakes, 2 chips, 1 core fragment. Also 12 natural |
| 452 | 3 | | 3 flakes, 21 natural |
| 501 | - | | 43 natural |
| 563 | 1 | | 1 possible flake, 1 natural |
| 586 | - | | 1 natural |
| 587 | 2 | | 1 possible flake, 1 small chip, 4 natural |
| 592 | 4 | | 3 flakes, 1 retouched and used flake – made on a trimming flake |
| 628 | - | | 6 natural |
| 659 | - | | 2 natural |
| 662 | - | | 1 natural |
| 663 | - | | 1 natural |
| 666 | 3 | | 1 flake, 2 chips, also 3 natural |
| 678 | - | | 5 natural |
| 691 | - | | 7 natural |
| 718 | 2 | | 2 chips |
| 721 | - | | 10 natural |
| 722 | - | | 4 natural |
| 740 | 1 | | 1 flake, 13 natural |
| 753 | 1 | | 1 end scraper on a large thick flake, minimally retouched, small patch cortex |
| 763 | 2 | | 2 flakes, 1 natural |
| 777 | - | | 48 natural |
| 791 | - | | 5 natural |
| 800 | - | | 7 natural |
| 803 | - | | 3 natural |
| 804 | - | | 1 natural |
| 805 | 13 | | 12 flakes – some are very worn and may be natural, 1 ??scraper very worn and on a thermal blank, this may be natural |
| 817 | 1 | | 1 small chip |
| 835 | 1 | | 1 core fragment, 89 natural – mostly small gravel pebbles |
| 838 | 24 | | 9 flakes, 1 ? very worn scraper on thermal blank (possibly natural), 14 chips – some of which may also be natural. Also 1 small fragment of cremated bone and 33 natural |
| 863 | 1 | | 1 flake, 1 natural |
| 865 | - | | 2 natural |
| 867 | - | | 5 natural |
| 894 | - | | 2 natural |
| 936 | - | | 1 natural |
| 974 | - | | 11 natural |
| 977 | - | | 7 natural |

| Context | Count | Period | Comments |
|---|---|---|---|
| 893 | 1 | | ? 1 piercer, worn and minimally retouched, point broken |
| 1003 | 1 | | 1 ?flake, 5 natural |
| 1031 | - | | 1 natural |
| 1027 | 5 | | 4 flakes, 1 miscellaneous retouched piece, 2 natural |
| 1041 | - | | 1 natural |
| 1077 | 1 | | 1 flake, 2 natural |
| 1105 | 3 | | 3 possible flakes |
| 1127 | - | | 43 natural |
| 1128 | 11 | | 11 flakes, 89 natural |
| 1134 | - | | 35 natural |
| 1138 | 3 | | 3 possible flakes, 6 natural |
| 1220 | 6 | | 3 flakes, 3 chips1 small piece of cremated bone, 34 natural |
| 1243 | - | | 4 natural |
| 1261 | 7 | | 2 flakes, 5 chips, 9 natural |
| 1284 | - | | 2 natural |
| 1345 | 3 | | 2 flake, 1 discoidal core, 1 flake removed |
| 1352 | 1 | | 1 flake, heavily calcined |
| 1426 | 1 | | Core fragment, slightly blade-like flake scars, thin grey cortex |
| *Total* | *242* | | |
| **ARC NBR98** | | | |
| 10001 | 1 | | 1 flake, ?? fragment from gun flint production? |
| 10004 | 5 | | 5 flakes - 1is heavily calcined, two have p-x breaks, 4 natural |
| 10009 | 1 | | 1 flake, SF51 |
| 10025 | 1 | | 1 serrated flake, worn, 1 natural |
| 10030 | - | | 1 natural |
| 10045 | - | | 1 natural |
| 10046 | - | | 2 natural |
| 10075 | 1 | | 1 flake, 1 natural |
| 10090 | 29 | | 4 flakes, 25 chips, 89 natural |
| 10091 | 1 | | 1 flake, 2 natural |
| 10097 | 2 | | 1 flake, 1 roughly worked core, 1 natural |
| 10107 | 1 | | 1?flake |
| 10150 | - | | 1 natural |
| 10177 | 11 | | 11 flakes – 2 are burnt, 31 natural |
| 10188 | - | | 6 natural |
| 10193 | 1 | | 1 flake |
| 10218 | 4 | | 4 flakes |
| 10315 | 3 | | 3 flakes – 1 heavily burnt, 45 natural |
| 10384 | 1 | | 1 flake |
| 10407 | - | | 1 natural |
| 10414 | 1 | | 1 slightly blade-like flake |
| 10420 | 3 | | 3 flakes |
| 10423 | - | | 3 natural |
| 10436 | 2 | | 2 flakes, 1 is slightly blade-like, 9 natural |
| 10452 | 1 | | 1 flake, slightly blade-like |
| 10453 | 1 | | 1 flake |
| 10458 | - | | 1 natural |
| 10479 | - | | 1 natural |
| 10509 | 1 | | 1 very large flake |
| 10511 | - | | 3 natural |

| Context | Count | Period | Comments |
|---|---|---|---|
| 10515 | 1 | | 1 flake |
| 10564 | 3 | | 3 chips, 5 natural |
| 10586 | 1 | | 1 natural |
| 10597 | 2 | | 2 flakes, 3 natural |
| 10614 | 18 | | 18 flakes, 17 natural |
| 10618 | - | | 3 natural |
| 10619 | 1 | | ? core very heavily battered, possibly used as a hammerstone |
| 10625 | - | | 3 natural |
| 10633 | - | | 7 natural |
| 10660 | 1 | | 1 flake |
| 10672 | 1 | | 1 wholly cortical flake, pebble flint |
| 10701 | - | | 8 natural |
| 10734 | - | | 1 natural |
| 10742 | - | | 1 natural |
| 10745 | 1 | | 1 side trimming flake |
| 10811 | 2 | | 2 flakes, one has a thermal surface |
| 10868 | 9 | | 2 flakes, 7 chips |
| 10881 | - | | 4 natural |
| 10948 | - | | 1 natural |
| 10965 | 1 | | 1 flake |
| 10970 | 3 | | 3 chips, 2 natural |
| 11013 | 1 | | 1 multi-platform flake core, no preparation, many hinge fractures |
| 11016 | | | 3 chips – poss natural |
| 11021 | - | | 4 natural |
| 11054 | 10 | | 1 flake, 9 chips |
| 11071 | 2 | | 2 flakes, 1 natural |
| 11136 | - | | 2 natural |
| 11140 | 5 | | 5 flakes inc some trimming flakes, also 8 natural |
| 11184 | - | | 1 natural |
| 11234 | - | | 1 natural |
| 11257 | - | | 4 natural |
| 11283 | - | | 2 natural |
| 11322 | 1 | | 1 flake, 5 natural |
| 11364 | - | | 3 natural |
| 11377 | 1 | | 1 side trimming flake pebble flint |
| 11453 | - | | 1 natural |
| 11489 | - | | 1 natural |
| 11497 | 2 | | 1 blade-like flake, 1 flake, also 1 natural |
| 11503 | - | | 8 natural |
| 11513 | 1 | | 1 slightly blade-like flake |
| 11596 | - | | 1 natural |
| 11657 | 1 | | 1 flake |
| 11665 | 2 | | 1 flake, 1 slightly blade-like flake, 1 natural |
| 11675 | 1 | | 1 retouched flake, steep retouch along one edge, much plough damage SF 1780 |
| 11701 | 1 | | 1 flake |
| 11753 | 1 | | 1 flake, 1 natural |
| 11792 | - | | 1 natural |
| 11872 | 1 | | 1 slightly blade-like flake |
| 11941 | 1 | | 1 end scraper on thick partly cortical flake, steep slightly notched retouch ?re-sharpened? |
| 11944 | - | | 1 natural |

| Context | Count | Period | Comments |
|---|---|---|---|
| 11952 | - | | 2 natural NB note on bag ‘associated with post – same number’ |
| 11969 | - | | 9 natural from fill of pot |
| 11999 | - | | 3 natural |
| 12018 | 1 | | 1 flake, 4 natural |
| 12020 | - | | 3 natural from fill of pot |
| 12024 | - | | 14 natural from fill of pot |
| 12064 | 2 | | 1 end and side scraper, very worn scraping edge, slight tang possibly for hafting, partly cortical, also 1 very large flake possibly Roman building material |
| 12074 | 1 | | 1 flake |
| 12076 | 2 | | 1 core fragment, with thermal surfaces and heavily battered but with several blade scars, also 1 flake |
| 12079 | 1 | | 1 flake, 1 natural |
| 12123 | - | | 1 natural |
| 12126 | - | | 1 natural from fill of pot |
| U/S | 6 | | 3 flakes, 1 notch, some plough damage, semi-circular notch at distal end, 2 cores – roughly worked, one is on an elongated flint nodule, also 3 natural |
| *Total* | *159* | | |

*Table 2.2: Summary of burnt unworked flint by context*

| Context | Count | Weight (g) | Comments |
|---|---|---|---|
| **ARC PHL97** | | | |
| 1 | 1 | 100 | Heavily calcined grey |
| 2 | 4 | 52 | Heavily calcined grey and red |
| 5 | 2 | 75 | Heavily calcined grey |
| 9 | 12 | 350 | Heavily calcined grey and red |
| 171 | 19 | 801 | Heavily calcined grey and red |
| 182 | 1 | 5 | Heavily calcined grey |
| 209 | 1 | 15 | Heavily calcined grey |
| 231 | 54 | 1625 | Heavily calcined grey, a few pieces are tinged red |
| 233 | 1 | 11 | Heavily calcined grey |
| 276 | 3 | 352 | Heavily calcined grey |
| 337 | 1 | 2 | Heavily calcined red, small pebble |
| 662 | 13 | 275 | Heavily calcined grey, a few pieces are tinged red |
| 701 | 35 | 201 | Heavily calcined grey, a few pieces are tinged red |
| 745 | 1 | 75 | Heavily calcined grey |
| 805 | 3 | 105 | Heavily calcined grey and red |
| 868 | 32 | 200 | Heavily calcined grey, a few pieces are tinged red |
| 869 | 1 | 25 | Heavily calcined grey |
| 957 | 1 | 15 | Heavily calcined red, small oval pebble |
| 1007 | 1 | 23 | Heavily calcined grey |
| 1016 | 1 | 8 | Heavily calcined grey |
| 1027 | 3 | 190 | Heavily calcined grey |
| 1081 | 2 | 175 | Heavily calcined grey |
| 1079 | 13 | 9 | Very small pieces of gravel calcined red |
| 1090 | 1 | 5 | Heavily calcined red |
| 1240 | 1 | 6 | Heavily calcined grey |
| 1269 | 4 | 189 | Heavily calcined grey and red |
| 1345 | 3 | 60 | Heavily calcined grey |
| 1352 | 1 | 75 | Heavily calcined grey |
| *Total* | *215* | *5024* | |
| **ARC NBR98** | | | |
| 10614 | 1 | 3 | Heavily calcined grey, also 1 natural |
| 11140 | 2 | 5 | Heavily calcined red and grey |
| 11283 | 1 | 40 | Heavily calcined grey |
| 11489 | 1 | 4 | Heavily calcined grey |
| 11615 | 1 | 5 | Heavily calcined white |
| *Total* | *6* | *57* | |

## - LITHICS

### 1.3 Assessment of the Worked Flint

*by Philippa Bradley*

*Introduction*

1.3.1 A total of five pieces of worked flint and two burnt unworked flints was recovered from the excavation at Nashenden and the watching briefs undertaken in the vicinity. Three retouched pieces were recovered, but both are minimally retouched non-diagnostic forms, although technologically they are likely to be Neolithic or early Bronze Age. The assemblages are too small to provide precise dating. The burnt flint has generally been very heavily calcined. The flint was recovered from six contexts (Tables 2.1 - 2.3).

1.3.2 The recovery and study of the material was undertaken in accordance with the Fieldwork Event Aims (see section 2, main report), in particular 1, 3 and 5.

*Methodology*

1.3.3 The flint was briefly scanned, with information regarding dating, technology and general condition being noted. The material was added to an Access database.

*Quantification*

1.3.4 The flint is summarised and quantified in Tables 2.1 - 2.3.

*Table 2.1: Summary composition of flint assemblage from Nashenden (ARC NSH98), by context*

| Context | Count | Period | Comments |
|---|---|---|---|
| 5002 | 1 | ND | 1 end scraper on an irregular flake |
| 5004 | 1 | ND | 1 piercer, small neatly worked point, worn |

*Table 2.2: Summary composition of flint assemblage from Nashenden Valley (ARC 410 98 51+900), by context*

| Context | Count | Period | Comments |
|---|---|---|---|
| 38 | 1 | Medieval | 1 piece burnt flint |

*Table 2.3:Summary composition of flint assemblage from (ARC 410 99 53+300), by context*

| Context | Count | Period | Comments |
|---|---|---|---|
| 2 (410 54+442) | 1 | ND | 1flake (possibly natural) |
| 28 (410 53+300) | 2 | | 1 flake, 1 minimally retouched end scraper |
| 44 (410 52+000) | 1 | Roman | 1 burnt flint |

*Provenance*

1.3.5 The flint was recovered from six contexts (Tables 2.1 - 2.3); there is insufficient material to examine the distribution of material across either contexts or the site as a whole.

*Condition*

1.3.6 All of the flint has suffered some post-depositional damage; cortication is mostly very heavy. Two pieces of burnt unworked flint were also recovered; these have been heavily calcined and have fragmented further since excavation.

*Conservation*

1.3.7 The burnt flint has fragmented significantly since the excavation, however there is little that can be done to prevent this fragmentation. The flint is generally packed appropriately for long term storage.

*Comparative material*

1.3.8 This small group of material provides evidence for some prehistoric activity in the area although its precise nature is uncertain. Comparison of this material with that from the surface collection survey may elucidate the activity, although no very marked concentrations were observed.

*Potential for further work*

1.3.9 This small group of material cannot be closely dated and therefore does not merit any further work.

WHITEHORSE STONE

## - ASSESSMENT OF LITHICS

### 1.4 Worked and Burnt Flint

*By Pippa Bradley*

*Introduction*

1.4.1 Large assemblages of worked flint were recovered from White Horse Stone (ARCWHS98) and Pilgrims Way (ARCPIL98); smaller assemblages of worked flint came from Boarley Farm (ARCBFE98 and ARCBFW98). Small quantities of burnt unworked flint came from all four sites.

1.4.2 The flint came from a range of contexts: - pits postholes (including those belonging to an earlier Neolithic structure), layers, ditches and natural features. Although few diagnostic retouched forms were recovered the technological aspects of the material suggest a Neolithic date for the majority of the flint from the sites. Within this broad date range both earlier and later Neolithic material has been identified. Little demonstrably later flint was identified but analysis and comparison of stratigraphic and other artefactual information may identify later flintwork. Similarly no Mesolithic flintwork was identified. In general the assemblages seem to represent domestic activities. Usewear has been provisionally identified on a number of pieces; given the generally fresh condition of the material there is some potential to conduct further work on this aspect of the assemblages. Potential refitting groups were also identified from a number of contexts.

1.4.3 The recovery and study of the flint was undertaken in accordance with the Fieldwork Event Aims (see Section 2.2), in particular aims 1, 5, 10, 11 and 13.

*Methodology*

1.4.4 All of the worked flint from Pilgrims Way, Boarley Farm East and Boarley Farm West (ARC PIL98, ARC BFE98, ARC BFW98 was briefly scanned and recorded, with information regarding dating, technology and general condition being noted. Only a sample of worked flint from White Horse Stone was recorded; the remaining material was rapidly scanned (see below). The flint records were put onto an Access database. All of the burnt unworked flint was scanned and weighed; general notes on the condition of this material were also made. Any burnt worked flint found amongst the unworked material has been added to the worked flint database. A large quantity of natural flint was recovered from both White Horse Stone and Pilgrim's Way. This material has been noted in the database and discarded. A summary of the constituent elements of the assemblages by site is provided in Table 2.1.1. The flint from White Horse Stone, Pilgrims Way, Boarley Farm East and Boarley Farm West is listed by context in Tables 2.1.2-7.

1.4.5 Selected material was scanned and recorded; this included all flint from the identified key structure groups (both worked and burnt unworked):

- the rectangular structure and associated features (4806 & 5297)
- Grooved Ware pits
- tree-throw holes
- and a sample from the preserved ground surface (4144)

1.4.6 The large quantity of flint from Iron Age and later contexts was scanned and a large enough sample recorded to characterise the material. The total quantity of material

from White Horse Stone has been projected from the counts provided by OAU finds department; however, considerable quantities of natural flint have inflated the counts, thus by comparing the ratio of natural to worked from other contexts an approximate figure of 5500 pieces of flint is suggested as the likely total from the site. It should also be noted that a large number of chips were recovered (*c*. 62% of the total assemblage), some of which may be natural. In many cases this small element of the assemblages was too numerous to sort; they were generally scanned and the OAU Finds Department counts were used.

*Quantification*

1.4.7 A total of 4358 pieces of worked flint and 391 pieces of burnt unworked flint, weighing 3257 g was recovered from the White Horse Stone group of sites. The material is summarised by site in Table 2.1.1, whilst Tables 2.1.2-7 provide a detailed breakdown by context for each site. As noted above it was not possible to provide an absolute number of pieces from White Horse Stone. The figure given is based on the total finds counts from the OAU Finds Department minus the expected proportion of natural flint.

*Table 2.1.1: Summary by site of constituent elements of the assemblages from White Horse Stone (ARCWHS98, ARCPIL98, ARCBFE98 and ARCBFW98)*

| Artefact Type | Number | Group % | Total % | Period | Comments |
|---|---|---|---|---|---|
| ARCWHS98 | | | | | |
| Scrapers | 14 | 31.1 | 0.4 | | 9 end, 4 end and side, 1 side |
| Serrated flake | 7 | 15.6 | 0.2 | | Many worn, some gloss |
| Retouched flake | 10 | 22.2 | 0.3 | | Flakes with minimal retouch along 1 or more edges |
| Misc retouch | 6 | 13.3 | 0.3 | | |
| Hammerstones | 4 | 8.9 | 0.1 | | Spherical nodules with battered areas, 1 burnt |
| Knives | 3 | 6.7 | 0.1 | | |
| Core tool | 1 | 2.2 | 0.02 | | Alternate flaking, roughout? |
| *(Tools – sub total)* | *45* | *100* | *1.32)* | | |
| | | | | | |
| Flake cores & core frags | 37 | 1.7 | 1.0 | | All relatively neatly worked, some evidence for platform edge preparation. Includes single platform, multi-platform, keeled, opposed platform, core on a flake, tested nodules and core fragments |
| Rejuvenation tablets | 3 | 0.1 | 0.1 | | 1 tablet, 2 face/edge |
| Chips | 2187 | 97.9 | 62 | | Many burnt, core front chips noted, some chips may be natural |
| *(Production - sub total)* | *2227* | *100* | *63)* | | |
| | | | | | |
| Flakes | 1253 | 100 | | | Hard and soft hammers used, a few blades or blade-like flakes noted, all stages of reduction present |
| *(Flakes – sub total)* | *1253* | *100* | *35.5)* | | |
| Total | 3525 | | | | |
| ARCPIL98 | | | | | |
| Scrapers | 13 | 28.3 | 1.6 | | 8 end, 1 side, 3 end and side |
| Serrated flake | 9 | 19.6 | 1.1 | | Some are very worn, some with gloss, mostly one edge only serrated |
| Retouched flake | 14 | 30.4 | 1.7 | | Flakes with minimal areas of retouch |
| Misc retouch | 2 | 4.3 | 0.2 | ?LNE | |
| Piercer | 4 | 8.7 | 0.5 | | 3 on blanks with long flakes |
| Knives | 2 | 4.3 | 0.2 | | 1 with invasively retouch, 1 scraper/knife |
| Arrowhead | 2 | 4.3 | 0.2 | LNE | 1 *petit tranchet* derivative arrowhead, very small neatly worked eg, 1 fragment |
| *(Tools – sub total)* | *46* | *100* | *5.5)* | | |
| | | | | | |
| Flake cores & core frags | 10 | 4.2 | 1.2 | | Includes single platform, multi-platform, opposed platform and core fragments |

| Artefact Type | Number | Group % | Total % | Period | Comments |
|---|---|---|---|---|---|
| Rejuvenation tablets | 4 | 1.7 | 0.5 | | 1 tablet, 3 face/edge |
| Chips | 223 | 94.1 | 27.5 | | Many broken, some burnt, no particular types noted |
| (Production - sub total) | *237* | *100* | *29.2)* | | |
| | | | | | |
| Flakes | 527 | 100 | | | Hard and soft hammers used, all stages of reduction |
| *(Flakes – sub total)* | *527* | *100* | *65.1)* | | |
| Total | 810 | | | | |
| ARCBFE98 and BFW98 | | | | | |
| Arrowhead | 1 | 100 | | ENE | Leaf-shaped possibly unfinished |
| (Tools – sub total) | *1* | 100 | 4.3 | | |
| | | | | | |
| Chips | 11 | 100 | | | |
| *(Production - sub total)* | *11* | *100* | *47.8)* | | |
| | | | | | |
| Flakes | 11 | 100 | | | |
| *(Flakes – sub total)* | *11* | *100* | *47.8)* | | |
| Total | 23 | | | | |
| Grand Total | 4358 | | | | |

*Table 2.1.2: Summary of worked flint from Pilgrims Way (ARCPIL98), by context*

| Context | Count | Period | Comments |
|---|---|---|---|
| 310 | 8 | ?NE | 2 flakes, 1 multi-platform flake core, 4 chips, 1 very worn serrated flake |
| 311 | 30 | | 13 flakes, 17 chips – some of which are burnt and some are probably natural, also 30 natural |
| 335 | 2 | | 2 chips, one may be natural |
| 437 | | | 2 natural |
| 453 | 3 | | 3 flakes, 15 natural |
| 464 | | | 2 natural |
| 471 | | | 2 natural |
| 474 | 6 | | 5 flakes, 1 core fragment, 2 natural |
| 480 | | | 3 natural |
| 500 | 1 | | 1 flake |
| 505 | | | 2 natural |
| 506 | 1 | | 1 core frag with 1 blade scar |
| 528 | 14 | | 6flakes, 8 chips |
| 534 | 17 | | 7 flakes, 10 chips, 3 natural |
| 565 | 1 | | Context 565/566 1 flake, 2 nat |
| 570 | 1 | | 1 flake |
| 572 | 5 | | 5 flakes |
| 573 | 4 | | 4 flakes |
| 575 | 2 | | 2 flakes |
| 651 | 19 | | 10 flakes, 9 chips, some of which may be natural, also 1 natural |
| 693 | 8 | | 4 flakes, 4 chips |
| 695 | 47 | | 24 flakes (2 burnt), 23 chips (2 burnt) 16 natural |
| 696 | 2 | | 2 flakes, 2 natural |
| 698 | 9 | | 7 flakes, 2 chips |
| 699 | 10 | | 6 flakes, 4 chips, also 1 natural |
| 701 | 13 | | 10 flakes, 3 chips |
| 707 | 15 | | 3 flakes, 12 chips some of which may be natural |
| 709 | 10 | MNE; LNE | 1 very small neat PTD arrowhead, 9 flakes - 2 are burnt, also 1 natural |

| Context | Count | Period | Comments |
|---|---|---|---|
| 712 | 2 | | 2 flakes, 1 natural |
| 739 | 4 | | 4 chips, some might be natural, 6 natural |
| 745 | 1 | | Very worn serrated flake |
| 853/854 | 3 | | 3 flakes, 12 natural |
| 854 | 12 | | 12 flakes - 5 are very heavily calcined, 13 natural |
| 862 | 21 | | 16 flakes - 1 burnt, some used, 2 retouched flakes, 1 end, 1 side scraper, 1 serrated flake with gloss, scraper is burnt, several Bullhead flakes ?refits, also 1 natural |
| 862 | 37 | | 23 flakes, 14 chips, some burnt and some may be natural, also 2 natural |
| 869 | | | 9 natural |
| 887 | | | 3 natural |
| 888 | 3 | | 2 flakes, 1 is poss a CRF, 1 single plat flake core some preparation, also 2 natural. All flint heavily encrusted with cal carbonate |
| 896 | 1 | | 1 misc retouch, flake with small area of neat retouch - poss use |
| 897 | 6 | | 5 flakes, three with usewear, 1 misc retouch – large flake with area of retouch, several trimming flakes – GW layer |
| 899 | 12 | | 1 opposed plat flake core Bullhead flint, 10 flakes - some usewear, many trimming flakes ?refits, 1 retouched flake – minimal poss just use |
| 902 | 1 | NE | 1 end and side scraper, neat non-cortical blank, worn edge |
| 905 | 14 | | 14 flakes, some usewear? |
| 906 | 7 | | 7 flakes |
| 907 | 5 | | 5 flakes |
| 908 | 11 | | 11 flakes, also 1 natural |
| 910 | 26 | | 24 flakes, 1 very worn serrated flake, 1 knife/scraper reworked, 3 natural |
| 910 | 85 | | 82 flakes, 1 serrated flake, 1 core fragment, 1 single platform flake core, 10 natural |
| 912 | 7 | | 3 flakes, 3 retouched flakes - some with minimal retouch – poss just use, 1 piercer long point |
| 912/914 | 4 | ?NE | 3 flakes – some plat prep, 1 end scraper on long blank |
| 912/914 | 25 | | 24 flakes, 1 core tablet, 6 natural |
| 914 | 19 | | 12 flakes - 2 are burnt, 3 used 3 retouched/used flakes, 2 CRF face/edge, 2 end scrapers - one v worn and ?resharpened |
| 922 | 1 | | 1 flake |
| 923 | 2 | | 1 retouched/used flake, 1 large scraper on prep flake, denticulated-type retouch |
| 924 | 15 | NE? | 11 flakes - 1 is burnt, 1 retouched/used flake, 1 worn serrated flake, 1end and side scraper 1 piercer long point; Neolithic possibly later |
| 928 | 2 | | 1 flake, 1 retouched/used flake |
| 949 | 1 | | 1 flake, 3 natural |
| 953 | 12 | | 1 blade, 11 flakes |
| 954 | 22 | | 5 flakes, 17 chips 1 flake is burnt |
| 959 | 16 | ?NE | 1 core frag with 1 blade scar, 1 end scraper on long blank, 1 ?arrowhead fragment/??knife, 13 flakes some with usewear ; Neolithic possibly later |
| 959 | 144 | | 52 flakes – one of which is heavily burnt, 1 multi-platform core, 1 piercer, 90 chips, 6 natural |
| 963 | 7 | | 7 flakes, some trimming flakes |
| 965 | 5 | | 4 flakes, 1 serrated flake both edges serrated, also 3 natural GW |
| 967 | 15 | | 11 flakes - 1 is burnt, 1 retouched/used flake, 1 worn serrated flake, 1end and side scraper 1 piercer long point |
| 969 | 2 | | 1 flake, 1 retouched flake, poss used as a scraper, 1 natural |
| 971 | 32 | | 26 flakes - 2 of which are burnt, 1 multi- platform flake core, 1 serrated flake, 3 end scrapers, 1 invasively worked knife, many of the flakes are trimming flakes |
| Total | 810 | | |

*Table 2.1.3: Summary of burnt unworked flint from Pilgrims Way (ARCPIL98), by context*

| Context | Count | Weight (g) | Comments |
|---|---|---|---|
| 310 | 2 | 104 | Heavily calcined flint grey to white, also 1 shell |

| Context | Count | Weight (g) | Comments |
|---|---|---|---|
| 311 | 2 | 15 | Heavily calcined grey |
| 715 | 1 | 670 | Very large heavily calcined lump, calcined grey |
| 854 | 5 | 83 | Very heavily calcined white |
| 871 | 6 | 109 | Very heavily calcined red-white |
| 887 | 1 | 1 | Calcined grey |
| 905 | 2 | 4 | 1 piece conjoins, very heavily calcined white, also 1 natural |
| 910 | 1 | 1 | Calcined grey |
| 949 | 2 | 5 | very heavily calcined grey |
| 971 | 1 | 17 | Very heavily encrusted with cal carbonate, reddish tinge so poss burnt |
| 950 | 1 | 1 | Calcined grey |
| Total | 24 | 1010 | |

*Table 2.1.4: Summary of worked flint from East of Boarley Farm and West of Boarley Farm (ARCBFE98, ARCBFW98), by context*

| Context | Count | Period | Comments |
|---|---|---|---|
| ARCBFE98 | | | |
| 1001 | 3 | NE | SF 1000 Small broken leaf-shaped arrowhead possibly unfinished, 2 flakes |
| 1013 | 1 | | 1 flake |
| 1027 | 3 | | 2 flakes, 1 chip (possibly natural) |
| 1028 | 1 | | 1 flake |
| ARCBFW98 | | | |
| 1010 | 1 | | 1 flake |
| 1021 | 6 | | 6 chips, some may be natural, also 3 natural |
| 1030 | 4 | | 1 flake, 3 chips |
| 1037 | 2 | | 2 flakes |
| 1041 | 1 | | 1 burnt flake |
| 1138 | - | | 1 natural |
| 1144 | 1 | | 1 chip, possibly natural |
| Total | 23 | | |

*Table 2.1.5: Summary of burnt unworked flint from East of Boarley Farm and West of Boarley Farm (ARCBFE98, ARCBFW98), by context*

| Context | Count | Period | Weight (g) | Comments |
|---|---|---|---|---|
| ARCBFE98 | | | | |
| 1017 | 5 | | 54 | 5 heavily burnt flints calcined white |
| ARCBFW98 | | | | |
| 1021 | 1 | | 1 | 1 burnt unworked flint calcined white/grey |
| 1063 | 1 | | 26 | 1 burnt unworked flint calcined grey |
| Total | 7 | | 81 | |

*Table 2.1.6: Summary of worked flint from White Horse Stone (ARCWHS98), by context*

| Context | Count | Period | Comments |
|---|---|---|---|
| 2076 | 3 | | 3 flakes, 1 is blade-like |
| 2101 | 1 | | 1 flake |
| 2103 | 8 | | 3 flakes, 1 roughly worked nodule with some flakes removed, 4 chips |
| 2104 | 6 | | 2 flakes, 4 chips |
| 2108 | 21 | | 20 flakes - 1 burnt, many trimming flakes, 1 chip |
| 2210 | 5 | | 5 flakes |

| Context | Count | Period | Comments |
|---|---|---|---|
| 2113 | 2 | | 2 flakes |
| 2114 | 1 | | 1 flake |
| 2152 | 1 | | 1 heavily burnt flake |
| 2169 | 9 | | 6 flakes - 1 burnt, 2 chips, 1 single platform flake core with some edge abrasion |
| 2185 | 14 | | 12 flakes inc several trimming, 1 flake core frag, 1 retouched flake, poss just use |
| 2185 | 1 | | 1? Possible hammerstone, one area of battering looks like use but rest of sphere is battered all over |
| 2185 | 5 | | 1 flake, 4 chips, also 2 natural |
| 2186 | 1 | | 1 small flake |
| 2191 | 2 | | 2 flakes, 1 very heavily burnt |
| 2197 | 1 | | 1 burnt flake |
| 2224 | 1 | | 1 flake, also 1 natural |
| 2225 | 5 | | 4 flakes, 1 end scraper on a blade-like flake with worn scraping edge |
| 2233 | 1 | | 1 burnt flake, also 1 natural |
| 2240 | 1 | | 1 flake |
| 2242 | 1 | | 1 heavily burnt flake |
| 2248 | 1 | | 1 flake |
| 2253 | 2 | | 2 flakes, 1 is burnt |
| 2261 | 2 | | 2 flakes, 1 is burnt |
| 2263 | 1 | | 1 flake |
| 2264 | 5 | | 3 flakes, 1 end scraper - minimal retouch possibly just use, 1 single platform flake core some edge prep, hinge fractures, also 1 natural |
| 2267 | 6 | | 6 flakes - 1 is burnt |
| 2280 | 4 | | 4 flakes, 1 with ?usewear |
| 2341 | 1 | | 1 flake |
| 2342 | 4 | | 3 flakes, 1 multi-platform flake core |
| 2353 | 1 | | 1 side scraper, minimally retouched |
| 2431 | 1 | | 1 flake - thermal dorsal surface |
| 2561 | 2 | | 2 flakes both heavily burnt |
| 2573 | 1 | | 1 flake |
| 4000 | 3 | ?NE | 1 flake, 1 minimally retouched flake, 1 end scraper on long blank bld scars all very worn |
| 4000 | 3 | | 3 chips |
| 4002 | 11 | | 11 chips |
| 4005 | 25 | | 25 chips |
| 4016 | 7 | | 5 flakes, 1 very worn serrated flake, 1 end scraper all encrusted with cal carbonate |
| 4017 | 1 | | 1 flake |
| 4018 | 1 | | 1 retouched flake |
| 4041 | 1 | | 1 flake, slightly blade-like |
| 4058 | 2 | | 2 flakes |
| 4060 | 1 | | 1 flake |
| 4065 | 1 | | 1 flake |
| 4065 | 1 | | 1 flake |
| 4097 | 4 | | 3 flakes, 1 multi-platform flake core |
| 4100 | 1 | | 1 flake ?used edges |
| 4141 | 30 | NE | 26 flakes inc many trimming, 3 single platform flake cores inc 1 on an oval Bullhead nodule, 1 roughly worked keeled core |
| 4141 | 3 | NE | 1 end and side scraper, 1 end scraper with retouch along one edge, 1 very worn serrated flake |
| 4144 | 173 | | 103 chips - some burnt, 69 flakes (8 burnt), 1 tested nodule, also 65 natural |
| 4144 | 239 | | all chips/small flakes, scanned - counts are OAU finds count, some are burnt, also a few natural - not discarded |

| Context | Count | Period | Comments |
|---|---|---|---|
| 4144 | 190 | | 55 flakes - 3 burnt, 134 chips - 42 burnt, 1 end scraper - very worn, also 171 natural |
| 4185 | 6 | | 1 flake, 5 chips - 1 burnt, also 1 shell fragment |
| 4186 | 1 | | 1 flake |
| 4203 | 1 | | 1 multi-platform flake core |
| 4289 | 1 | | 1 blade-like flake previous blade scars |
| 4278 | 1 | | 1 large flake |
| 4281 | 1 | | 1 flake |
| 4298 | 1 | | 1 roughly worked nodule, many thermal flaws |
| 4344 | 1 | | single platform flake core on irreg nodule, 1 blade scar some plat preparation |
| 4532 | 1 | | ?hammerstone, very battered also burnt, spherical |
| 4498 | 15 | | 12 flakes inc several trimming, much calc carb concretion, 1 core frag, 1 serrated flake, 1 retouched flake, poss just use |
| 4498 | 3 | | 3 flakes |
| 4802 | 4 | | 4 flakes, inc 1 plunging flake |
| 4804 | 1 | | Flake, side trimming |
| 4818 | 14 | | 14 chips, also 4 natural |
| 4825 | 5 | | 2 flakes - 1 burnt, 3 chips - 2 burnt, also 2 natural |
| 4835 | 2 | | 2 small chips, also 6 natural |
| 4847 | 5 | | 5 small chips |
| 4849 | 2 | | 2 Flakes |
| 4856 | | | 1 natural |
| 4858 | 2 | | 2 burnt flakes |
| 4860 | 18 | | 4 flakes, all burnt 14 chips - 3 burnt, also 13 natural |
| 4869 | 2 | | 1 trimming flake, 1 poss CRF - face/edge |
| 4875 | 34 | | 4 flakes - 1 burnt, 30 chips - 12 burnt, also 26 natural |
| 4876 | 1 | | Flake, some blade-like scars but thick and chunky, some cortex on edge |
| 4876 | 5 | | 5 flakes - 2 burnt, 14 natural NB one bag also from this context not recorded as a note says it probably came from ARCTHM although it is labelled as WHS |
| 4860 | 1 | | 1retouched flake, poss use , made on a blade-like flake |
| 4887 | 7 | | 7 chips - 2 burnt, also 3 natural |
| 4909 | 1 | | 1 flake with ?used edges, much cal carbonate |
| 4909 | 2 | | 2 chips, also 3 natural |
| 4918 | 1 | | 1 knife, broken at distal end, retouched and use on both edges inc gloss, SH |
| 4920 | 2 | | 2 flakes, one is burnt, the other is just possibly natural |
| 4931 | 2 | | 1 flake, 1 serrated flake, broken in antiquity but also a recent break, well defined serrations, no sign of gloss |
| 4942 | 1 | | 1 retouched flake |
| 4945 | 4 | | 3 flakes, one is iron stained, 1 multi-platform flake core |
| 4947 | 20 | | 1 flake - burnt, 19 chips - some burnt and some may be natural, also 4 natural |
| 4953 | 5 | | 5 flakes (4 are burnt) inc 3 trimming flakes |
| 4961 | 5 | | 5 flakes |
| 4966 | 3 | | 3 flakes - 2 are burnt, also 8 natural |
| 4967 | 21 | | 18 flakes, one has usewear, several trimming flakes, many are encrusted with cal carbonate, 1 multi-plat flake core, 1 hammerstone with 3 areas of battering, 1 very worn serrated flake |
| 4967 | 101 | | 94 chips - scanned only, some are burnt, 6 flakes, 1 serrated flake very worn |
| 4969 | 40 | | 25 flakes- 7 burnt, 14 chips - 7 burnt, 1 misc retouch - flake with minimal retouch along 1 edge NB 2 bags from this context could not be found |
| 4978 | 1 | | 1 flake with used edges, possibly a very worn serrated flake |
| 4993 | 1 | | 1 small chip, also 1 natural |
| 4995 | 2 | | 2 flakes, one is burnt |

| Context | Count | Period | Comments |
|---|---|---|---|
| 4996 | 25 | | 21 flakes (5 are burnt), some usewear, 1 opposed plat flake core, 1 poss CRF face/edge, 1 serrated blade, 1 retouched flake - poss just use |
| 4996 | 11 | | 6 flakes - 2 burnt, 5 chips - 3 burnt, also 6 natural |
| 4997 | 2 | | 1 worn/retouched flake, minimal retouch, 1 burnt flake |
| 4997 | 14 | | 11 chips, 3 flakes, also 1 piece shell |
| 4998 | 19 | | 16 flakes inc many trimming flakes, 1 multi-platform flake core, 1 single plat flake core, 1 core frag |
| 4998 | 13 | | 12 flakes, several encrusted with cal carbonate, 1 chip, also 4 natural |
| 5002 | 1 | | 1 burnt chip, also 4 natural |
| 5009 | | | 10 natural |
| 5011 | 12 | | 1 flake - burnt, 11 chips - 7 burnt, also 4 natural |
| 5021 | 6 | | all small chips, also 1 natural |
| 5025 | 9 | | all tiny chips -poss natural, also 6 natural |
| 5073 | 64 | | 55 flakes - 4 burnt, 4 core frags - 1 discoidal - all flake, 1 tested nodule roughly worked, 3 misc retouch - 2 minimally retouched flakes, 1 poss piercer, 1 side scraper - steeply retouched on irreg thickish blank |
| 5120 | | | 4 natural |
| 5122 | 21 | | 1 flake, 20 chips - NB scanned only so some may be natural, also some burnt, also 3 natural |
| 5130 | 11 | | 8flakes - 2 burnt, 2 burnt end scrapers minimally retouched, 1 knife on a blade-like flake, worn |
| 5133 | 21 | | 1 flake - burnt, 20 chips - NB scanned only so some may be natural, also some burnt, also 4 natural |
| 5134 | 13 | | 3 flakes, 10 chips |
| 5135 | 17 | | 17 chips, several burnt, also 3 natural |
| 5145 | 17 | | 6 flakes - 1 is heavily burnt, 11 chips – some are burnt |
| 5145 | 27 | | 27 very small chips, some are burnt and some may be natural |
| 5151 | 1 | | 1 chip |
| 5153 | 1 | | 1 flake |
| 5159 | 3 | | 3 flakes - 2 are heavily burnt, also 3 natural |
| 5160 | 74 | | 74 flakes, 2 natural |
| 5164 | 3 | | 1 flake, 2 chips, also 5 natural |
| 5166/5167 | 13 | | 2 small flakes, 11 chips all very small, some poss natural, also 3 lumps natural |
| 5170 | 1 | | 1 heavily burnt flake, 7 natural |
| 5173 | 4 | | 1 flake, 3 chips, 1 natural |
| 5177 | 1 | | 1 chip, 3 natural |
| 5179 | 22 | | 22 flakes, 2 natural |
| 5181 | 6 | | 2 chips, 4 flakes, 5 natural |
| 5183 | 1 | | 1 chip, 4 natural |
| 5202 | 8 | | 1 flake, 7 chips -some very heavily burnt, 1 natural |
| 5204 | 11 | | 2 flakes, 9 very small chips - some may be natural, also 4 natural |
| 5210 | 1 | | 1 small burnt chip |
| 5218 | 8 | | 1 flake, 7 chips |
| 5221 | 35 | | 35 flakes, 2 natural |
| 5226 | 14 | | 11 chips, some are burnt, some may be natural, 3 flakes |
| 5228 | 2 | | 2 chips, poss natural, also 3 natural |
| 5343 | 6 | | 1 flake, 5 chips, 3 natural |
| 5245 | 7 | | 7 chips, all very small, some burnt, also 2 natural |
| 5255 | 35 | | 1 heavily burnt flake, 34 chips, several burnt, also 1 natural |
| 5237 | 84 | | 22 flakes, 61 chips - many burnt, 1 ?core on flake, also 13 natural |
| 5257 | 34 | | 33 flakes - 3 with ?usewear, 6 burnt, 1 end and side scraper on a ?side trimming flake, also 1 natural |
| 5258 | 9 | | 9 flakes, also 5 natural |
| 5259 | 15 | | 14 flakes, 1 large retouched/used flake on a trimming flake, also 4 natural |

| Context | Count | Period | Comments |
|---|---|---|---|
| 5265 | 214 | | 214 chips, 1 natural |
| 5270 | 61 | | 56 chips, many burnt, 5 flakes, 5 natural |
| 5272 | 10 | | 5 flakes, 5 chips, 5 natural |
| 5274 | 2 | | 2 flakes, 2 natural |
| 5279 | 5 | | 5 chips, 2 natural |
| 5284 | 40 | | 1 knife? Very heavily calcined, 39 flakes, some burnt, 35 natural |
| 5290 | 1 | | 1 burnt chip |
| 5292 | 24 | | 24 flakes and small chips, may are burnt |
| 5295 | 60 | | 60 chips, may are burnt |
| 5305 | 18 | | 18 chips, many are burnt, also 5 natural |
| 5307 | 2 | | 2 chips, 2 natural |
| 5310 | 20 | | 1 flake, 19 chips, 2 natural |
| 5312 | 244 | | 244 flakes/chips, 2 natural |
| 5314 | | | 4 natural |
| 5320 | 59 | | 46 chips, many burnt, 13 flakes, 1 natural |
| 5328 | 6 | | 6 chips, 4 natural |
| 5340 | 5 | | 5 chips, 2 burnt |
| 5354 | 1 | | 1 small blade-like flake, 5 natural |
| 5356 | 1 | | 1 burnt flake, 10 natural, 1 small frag calcined bone |
| 5364 | 3 | | 3 small burnt chips |
| 5388 | 30 | | 6 flakes - 2 are burnt, 24 chips, some are burnt, also 1 natural |
| 5394 | 6 | | 6 small chips |
| 5395 | 4 | | 2 chips, 2 flakes - 1 of which is burnt |
| 5417 | 1 | | 1 multi-platform flake core very heavily burnt, fragmenting |
| 5421 | 1 | | 1 flake |
| 5422 | 4 | | 3 flakes, 1 chip, also 9 natural |
| 5422 | 3 | | 1 flake, 1 misc retouch - broken flake with minimal retouch along 1 edge, 1 multi-plat flake core some edge abrasion |
| 5423 | 5 | | 4 flakes, 1 misc retouch - flake with minimal retouch to edges, also 11 natural |
| 5426 | 6 | | 6 chips, 24 natural |
| 5434 | | | 4 natural |
| 5437 | 11 | | 5 flakes, 6 chips, 33 natural |
| 5449 | 6 | | 1 chip, 5 flakes - 2 burnt, 1 used, 1 natural |
| 5453 | 5 | | 5 flakes all heavily calcined |
| 5479 | 5 | | 5 flakes |
| 5483 | 3 | | 3 flakes |
| 5618 | 18 | | 1 flake, 17 chips, 1 natural |
| 5484 | 1 | | 1 flake |
| 5485 | 3 | | 3 flakes - 1 is burnt |
| 5486 | 1 | | 1 flake – burnt |
| 5487 | 2 | | 1 flake, 1 ?end scraper - broken and very worn, neat retouch on non-cortical blank |
| 5488 | | | 1 natural |
| 5490 | 2 | | 2 flakes - 1 is burnt |
| 5494 | 2 | | 2 flakes, also 1 natural |
| 5498 | 1 | | 1 flake |
| 5500 | 1 | | 1 flake - used edges?? |
| 5501 | 1 | | 1 flake |
| 5502 | 6 | | 6 small flakes |
| 6013 | 4 | | 4 chips - 1 burnt, 1 natural |
| 6015 | 2 | | 2 flakes |

| Context | Count | Period | Comments |
|---|---|---|---|
| 6031 | 6 | | 2 flakes, 4 chips, also 2 natural |
| 6033 | | | 1 natural |
| 6047 | 3 | | 3 flakes |
| 6061 | 2 | | 2 flakes |
| 6063 | 1 | | 1 flake |
| 6064 | 3 | | 1 CRF - tablet, 2 flakes inc 1 trimming flake, 1 lump ironstone/concretion |
| 6077 | 6 | | 6 tiny chips - some poss natural |
| 6081 | 1 | | 1 flake |
| 6085 | 4 | | 1 flake, 3 chips |
| 6086 | 18 | | 2 flakes - 1 is burnt, 16 chips |
| 6096 | 1 | | 1 misc core tool? Alternate flaking , some thermal scars |
| 6097 | 27 | | 27 chips - some may be natural |
| 6099 | 27 | | 4 flakes - 1 burnt, 23 chips - 1 burnt, 2 natural |
| 6122 | 13 | | 3 flakes, 1 core frag - flake core, 9 chips - 1 burnt |
| 6126 | 43 | | 19 flakes - 8 burnt, 24 chips - 5 burnt, also 5 natural and 1 bone fragment |
| 6131 | 5 | | 2 flakes, 3 chips, also 1 natural |
| 6133 | 25 | | 25 chips - NB scanned only OAU finds count used |
| 6165 | 4 | | 3 flakes, 1 chip, also 1 natural |
| 7002 | 28 | NE? | 19 flakes, 2 end and side scrapers - 1 has been minimally retouched, 7 chips, also 1 natural |
| 7006 | 1 | | 1 burnt flake |
| 7008 | 2 | | 2 chips - 1 is burnt |
| 7012 | 9 | | 4 flakes, 1 minimally retouched flake - poss just use, 4 chips |
| 7013 | 7 | | 6 flakes, 1 chip, also 4 natural, also 1 piece bone |
| 7014 | 6 | | 6 flakes - 2 are burnt, also 1 natural |
| 7015 | 56 | | 37 chips - scanned only OAU counts used - some are burnt, 19 flakes - 15 are burnt, also 1 natural |
| 7016 | 257 | | 201 flakes and small chips, 50 chips - all scanned, some burnt counts are OAU, 6 flakes - 5 burnt, also 1 natural |
| 7023 | 9 | | 9 chips, also 7 natural |
| 7025 | 3 | | 3 flakes - 1 is heavily encrusted in calc carbonate, also 18 natural |
| 7025 | 16 | | 16 chips - 1 burnt, also 8 natural |
| 7026 | 20 | | 1 flake, 19 chips - 7 burnt, also 3 natural |
| 7030 | 1 | | 1 flake |
| 7031 | 20 | | 17 chips - 2 burnt, 3 flakes, 1 natural, also several very tiny chips - ?mostly natural |
| 7071 | 50 | | 13 flakes - 1 burnt, 37 chips - scanned only OAU counts |
| 7079 | 10 | | 2 core fragments - flake cores, 1 is burnt, 8 flakes, 9 chips, 3 natural |
| 7129 | 2 | | 1 large flake, 1 ?tested nodule, 1 natural |
| 7138 | 7 | | 7 flakes |
| 7141 | 1 | | 1 flake |
| 7143 | 6 | | 4 flakes inc 1 very large one, 1 core frag - flake core, 1 core on a flake - flake removals, 1 natural |
| 7151 | 4 | | 4 flakes, also 1 natural |
| 7154 | 6 | | 6 flakes - 2 are burnt |
| 7155 | 1 | | 1 flake |
| 7204 | 2 | | 1 flake, 1 tested nodule - iron-stained nodule, also 1 natural |
| 7247 | 1 | | 1 serrated blade very worn, PPBS |
| 7273 | 1 | | 1 flake |
| 8011 | 2 | | 2 flakes - 1 is slightly irregular |
| 8014 | 3 | | 1burnt ?hammerstone very heavily burnt, 2 flakes inc 1 trimming flake |
| 9047 | 13 | | 4 chips, 1 tested nodule, 8 flakes |
| 9051 | 1 | | 1 flake |

| Context | Count | Period | Comments |
|---|---|---|---|
| 9052 | 5 | | 5 chips |
| Total | 3525 | | |

*Table 2.1.7: Summary of burnt unworked worked flint from White Horse Stone (ARCWHS98), by context*

| Context | Count | Weight | Comments |
|---|---|---|---|
| U/S | 4 | 58 | calcined grey-white |
| 718 | 1 | 3 | Heavily calcined white |
| 1127 | 1 | 0.5 | less than 0.5 g calcined white |
| 1134 | 1 | 0.5 | calcined red |
| 2103 | 1 | 11 | calcined red and grey |
| 2187 | 6 | 68 | all lightly burnt, probably 1 item originally and now shattered |
| 2189 | 4 | 5 | calcined grey |
| 2200 | 2 | 11 | calcined grey-red |
| 2233 | 2 | 5 | calcined grey |
| 2243 | 1 | 2 | calcined white/red |
| 2255 | 1 | 2 | calcined red |
| 2264 | 1 | 1 | calcined grey |
| 2401 | 1 | 1 | calcined red |
| 2561 | 1 | 21 | calcined grey |
| 4000 | 1 | 21 | calcined grey |
| 4050 | 1 | 6 | calcined red |
| 4141 | 2 | 4 | calcined red/grey |
| 4144 | 17 | 50 | calcined grey-white |
| 4144 | 25 | 110 | calcined grey to white, one or two are reddish tinged, also 3 natural |
| 4909 | 4 | 3 | calcined grey |
| 4995 | 26 | 143 | all heavily calcined grey, also one natural |
| 4996 | 4 | 98 | all heavily calcined grey |
| 5130 | 13 | 195 | all heavily calcined grey |
| 5257 | 4 | 19 | calcined white-grey |
| 5352 | 3 | 12 | calcined white/grey |
| 5356 | 1 | 5 | calcined white |
| 5417 | 10 | 29 | calcined grey-white |
| 5422 | 1 | 9 | calcined grey |
| 5423 | 4 | 21 | calcined grey/red |
| 5434 | 2 | 0.5 | calcined grey |
| 5437 | 5 | 0.5 | calcined grey |
| 5447 | 1 | 9 | calcined grey |
| 5449 | 2 | 3 | calcined reddish white |
| 5453 | 20 | 135 | calcined gre-white, also 3 natural |
| 5482 | 1 | 4 | calcined grey |
| 5500 | 1 | 1 | calcined grey-white |
| 5502 | 1 | 5 | calcined grey |
| 6013 | 2 | | 2 tiny burnt chips |
| 6015 | 1 | 1 | calcined grey |
| 6086 | 4 | 7 | calcined grey-white |
| 7006 | 1 | 10 | calcined grey |
| 7013 | 32 | 208 | calcined white-grey |
| 7014 | 2 | 8 | calcined white-grey |
| 7016 | 33 | 6 | calcined grey |

| Context | Count | Weight | Comments |
|---|---|---|---|
| 7148 | 1 | 20 | calcined grey |
| 7152 | 2 | 66 | calcined grey with red tinges |
| 7154 | 1 | 76 | calcined white-red |
| 8014 | 1 | 8 | calcined grey |
| 9047 | 2 | 7 | calcined grey |
| 9048 | 2 | 162 | calcined grey |
| 9051 | 1 | 1 | calcined grey |
| 9051 | 1 | 1 | calcined grey |
| Total | 262 | 1653 | |

*Provenance*

1.4.8 Large assemblages were recovered from White Horse Stone (ARCWHS98) and Pilgrims Way (ARCPIL98). Smaller assemblages came from Boarley Farm (ARCBFE98 and ARCBFW98). The provenance of the material is discussed below by site:

*White Horse Stone (ARCWHS98)*

1.4.9 White Horse Stone produced the largest flint assemblage from this group of sites (Table 2.1.1). The flint came from a range of features (pits, postholes, a preserved ground surface, tree-throw holes, ditches and other contexts). Importantly flint was associated with an earlier Neolithic post-built long house (groups 4806, 5297). Such houses are rare, and thus nationally important; any artefactual assemblages that are associated with such structures are obviously of great importance.

1.4.10 The earlier Neolithic aspect of the assemblage lacked diagnostic retouched forms, and it is not a blade-based technology. However, reasonable care and preparation both before and during knapping seems to have occurred; platform edges have been kept free from overhangs and rejuvenation flakes (both edge and tablet) were recovered. Blade-like blanks seem to have been selected especially for serrated, and to a lesser extent, retouched flakes. Pits (contexts 4996-8, 5257-9), postholes (4967 and 4969) and natural features (5073 and 5130) produced good assemblages of flint associated with Grooved Ware. These assemblages comprised debitage and a range of retouched forms including scrapers, serrated and retouched flakes. A hammerstone came from context 4967. Burnt and worn or used pieces were common. The emphasis on used and worn items is a common theme of Grooved Ware associated flintwork (*cf*. Bradley 1999a; Bradley 1999b). Burnt unworked flint was also recovered from these contexts. A variety of cores including single platform, multi-platform, and a discoidal fragment (context 5073) were recovered from these features.

1.4.11 Although very few diagnostic artefacts were recovered technologically the flintwork can confidently be ascribed to the Neolithic period. However, the assemblage is not a blade-based one, and there would appear to be some differences in the composition and technology of the material associated with Grooved Ware. Much of the flintwork, however was redeposited within later Bronze and Iron Age features. Very little flint could demonstrably dated to the Bronze Age, although it is possible that some of the material from Bronze or Iron Age features could be contemporary.

*Pilgrim's Way (ARCPIL98)*

1.4.12 The medium-sized assemblage from this site came from a variety of features (pits, postholes, tree-throw holes, ditches, layers, and other contexts). A worn serrated

flake and a large piece of burnt unworked flint came from postholes (contexts 745 and 715) thought to form part of a possible second earlier Neolithic structure.

1.4.13 Several groups of flint were associated with later Neolithic Grooved Ware, mostly from pit fills (contexts 906-7, 928, 953, 959, 963, 967 and 969). This material consists of flakes, minimally retouched flakes, serrated flakes, scrapers, a possible knife and a possible arrowhead came from context 959. Possible usewear was noted on several of the pieces from the Grooved Ware pits (eg contexts 928 and 959), and interestingly worn serrated and retouched flakes are also relatively common, as noted for White Horse Stone this is a recurrent theme for Grooved Ware associated lithics from other areas of the country. Burnt unworked pieces and burnt worked flints were also recovered from these deposits. Five flakes and a piece of miscellaneous retouch came from a layer within a natural hollow also associated with Grooved Ware (context 897). A small assemblage of burnt unworked flint was also recovered from the site. Much of this burnt material is likely to have been accidentally burnt in domestic fires; none of it bore any traces of knapping prior to burning.

*East of Boarley Farm (ARCBFE98)*

1.4.14 The small quantity of flint from this site came from colluvium (1001), upper fill of an Iron Age-Romano-British ditch (1013), and layers (1027, 1028). Little focus for any prehistoric activity can be discerned from this small group, although it is of note that a broken leaf-shaped arrowhead of earlier Neolithic date was recovered from the colluvium. A small quantity of burnt unworked flint was also recovered from the site.

*West of Boarley Farm (ARCBFW98)*

1.4.15 The flint from this site came from pit fills (1041, 1063, 1021, 1030, 1037, 1138, and 1144). The material would appear to be residual, the pits dated from the Iron Age-Roman period through the Saxon to modern. There would appear to be little focus for any prehistoric activity. Two contexts produced a small quantity of burnt unworked flint.

*Conservation*

Condition

1.4.16 Some post-depositional damage was noted on some of the material, although overall most of the material is fairly fresh. Cortication is mostly medium to heavy; a few pieces are more lightly corticated. The burnt unworked flint recovered was mostly very heavily calcined, and some of this material is beginning to disintegrate. However, there is little that can be done to stop this process.

1.4.17 It is recommended that samples only of the burnt flint are retained, but certain groups of burnt unworked flint (eg materials from features such as the Grooved Ware pits) should be retained in their entirety. In general the flint is appropriately bagged and boxed for long-term storage, although some reorganisation is required (see below).

Long term storage requirements

1.4.18 A considerable quantity of natural flint was recovered from Pilgrims Way and White Horse Stone (ARCPIL98 and ARCWHS98). Much of this material has been discarded during the assessment, however as several boxes of flint were only scanned from White Horse Stone there is still an element of unworked flint mixed in with the worked material. It is recommended that an initial task should be the

discard of the remaining natural flint and the revision of all of the box lists for all of the sites. In addition the flint should be boxed by context number including small finds and material from sieving. This reorganisation will greatly aid any future analysis, enabling all of the material from a context to be studied together.

*Comparative material*

1.4.19 Sites along the CTRL route will provide useful comparative material including any flintwork that came from surface collection prior to evaluation. Given the tendency for earlier prehistoric material to be incorporated into the ploughsoil (cf. Healy 1988), this material is also of some potential. Although large quantities of flintwork have been recovered from Kent, relatively little has been published. A substantial assemblage of flint was recovered from excavations at the Chestnuts megalithic tomb (Alexander 1961, 29). The majority of this material was interpreted as Mesolithic, (ibid. 29) but earlier Neolithic, later Neolithic and Bronze Age flint was also recovered (ibid. 49-51). The Mesolithic element from this site may, however repay further study as some of the illustrated pieces may in fact be Neolithic and Bronze Age.

1.4.20 Neolithic flint has been found at Hayes Common (Philp 1973, 30-52), Ebbsfleet (Burchell and Piggott 1939), Baston Manor (Philp 1973, 5-19) and Darenth (Philp 1984). Some of this material has Peterborough Ware or Grooved Ware associations. Two recently discovered causewayed enclosures (Ramsgate and Sheppey) will provide invaluable stratified earlier Neolithic flintwork; in addition the nearby enclosure at Orsett, Essex has a substantial lithic component (Hedges and Buckley 1978).

*Potential for further work*

1.4.21 The flint from the White Horse Stone Group of sites, particularly the material associated with the Neolithic long house, and the later Neolithic Grooved Ware assemblages, has considerable potential for further study. The material constitutes the largest assemblages of flint from the OAU's excavations along the CTRL route, with all elements of the reduction sequence represented. The assemblages provide evidence for extensive Neolithic activity spanning both ends of this period from a wide range of context types. There are some differences in composition between the assemblages from White Horse Stone and Pilgrims Way. Whilst some of the differences may be chronological it is noticeable that the retouched component from Pilgrims Way is greater than White Horse Stone, and may therefore reflect site function. It will be interesting to see if there are any differences between the Grooved Ware associated assemblages from these two sites; superficially from the assessment they appear to be quite similar.

1.4.22 The lithics from the Neolithic long house will, together with the ceramics and other artefacts, aid the dating of the sequence. The lithics will also enable a greater understanding of the activities occurring on site. Given the rarity of Neolithic structures and associated artefactual remains in Britain, the finds from White Horse Stone are particularly significant. The excellent state of preservation within the colluvial deposits of the structure and the environmental sequences from the site enhance the potential. The flint from the sites can contribute to the realisation of the original Fieldwork Event Aims:

Updated research aims

1.4.23 Themes concerning chronology, settlement, landscape and society (status, settlement organisation), material culture (source of flint, finished tools, methods of production and use), regionality (distribution and exchange).

Chronology

1.4.24 What is the date of the flintwork recovered? What phases of the Neolithic and early Bronze Age are represented? Is there any evidence for continuity?

1.4.25 Settlement, landscape and society

1.4.26 The examination of the flint assemblage can contribute to the following aspects of the Neolithic and early Bronze Age:

- What is the character and extent of Neolithic activity?
- To what extent is it domestic or ritual in character, in particular with respect to possible functions of the longhouse and deposition of Peterborough and Grooved Ware?
- What is the evidence for occupation and mobility?

Material culture

1.4.27 Evidence for trade in raw materials:

- Did the flint derive from local sources? Is there any evidence for long-distance trade?
- Is there evidence that trade was in raw materials rather than finished objects? The sources of the flint can be suggested by its physical appearance (e.g. Bullhead flint) and the presence of corticated material.

1.4.28 Evidence for flint working:

- What is the evidence for in situ flint working? What is the evidence for core preparation, reduction sequences and techniques, and refitting?
- What evidence is there for onsite activities? What activities are represented? Does this vary between groups of different date and context type, such as the Peterborough and Grooved ware associated pit assemblages?

*Recommended further work*

- The above updated research questions may be addressed by a programme of detailed recording, designed to assist analysis of chronology and technological traits. Selected groups, particularly well-stratified groups associated with the Neolithic activity, will also be subjected to usewear and refitting analyses to recover evidence for use and on-site artefact production.
- Non-local material will be separated at the recording stage and possible sources identified to address questions related to trade and exchange. The sources of the flint can be suggested by its physical appearance (e.g. Bullhead flint) and the presence of corticated material.
- Spatial distribution, associations with pottery and other artefact groups and patterns of deposition will be examined to address research aims related to settlement, landscape and society in the 'early agriculturalists' and 'farming communities' periods.

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**BLIND LANE, SEVINGTON**

**APPENDIX 5 - LITHICS**

## 1.5 Assessment of Worked and Burnt Flint

*by Philippa Bradley*

*Introduction*

1.5.1 A small collection of flint was recovered during excavation and strip, map and sample works at West of Blind Lane.

1.5.2 The material was hand retrieved on site.

1.5.3 The material was recovered in accordance with the Landscape Zone Priorities and Fieldwork Event Aims for the site, set out in section 2 of the main report, above. It was hoped that this material would provide evidence for the date and character of earlier prehistoric activity on the site.

*Methodology*

1.5.4 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 flint was scanned and weighed; general comments on the condition of this material were also made.

*Quantification*

1.5.5 A total of 129 pieces of worked flint and 17 pieces of burnt unworked flint (89 g) was recovered. This material is summarised below in Table 2.1 (worked flint) and Table 2.2 (burnt flint). The flint was recovered from 34 contexts and with a few exceptions was spread thinly across the site. No diagnostic retouched artefacts or distinctive debitage was recovered but the technological traits of the material combined with the retouched forms identified have allowed broad Neolithic to early Bronze Age dating to be suggested.

*Provenance*

1.5.6 Much of the flint was found in the fills of various late Iron Age-early Roman and post-medieval ditches, predominantly those in the western SMS area and the westerly part of the area of detailed excavation (eg ditch 3002, contexts 2002 and 2008; ditch 3013, context 2010; ditch 3004, context 2041; ditch 3005, contexts 2043, 2046 and 2059-60; ditch 3007, context 2062). This material is clearly redeposited as the datable artefacts suggest a broad Neolithic to early Bronze Age date. The numbers of pieces from individual contexts is small (Table 2.1).

1.5.7 A few other features produced a little flint (eg natural feature 2014, posthole 2130, context 2128 and posthole 2143, context 2141); however, the flint in feature 2014 was found together with medieval pottery and was therefore also redeposited. The five pieces of flint from 2141 are not closely datable (one retouched blade and four flakes) and they were the only finds from the feature. The other posthole produced

an early Bronze Age knife and a core on a flake (2128), together two pieces of burnt unworked flint and some late Iron Age pottery. Larger assemblages of flint came from topsoil and subsoil layers (eg 1009, 2013 and 2181); this material is probably later Neolithic. A few pieces of flint came from disturbed natural (eg context 2077, 2103 and 2131), and a later Neolithic date also seems likely for this material. The site produced a little burnt unworked flint from surface and colluvial layers, a posthole fill, disturbed natural and the fill of a natural feature.

*Conservation*

1.5.8 Much of the flint has suffered some post-depositional damage; cortication is mixed. Several pieces of burnt unworked flint and a piece of burnt quartzite were also recovered; this material was very heavily calcined either grey-white or red. A few pieces of worked flint were also burnt. Some of the burnt unworked flint is beginning to disintegrate, but little can be done to prevent this. The flint is adequately bagged and boxed for long term storage. There are therefore no storage or conservation requirements.

1.5.9 The material should be retained pending final decisions about the scope of further analysis.

*Comparative Material*

1.5.10 The material is comparable with other Neolithic and Bronze Age assemblages from the CTRL route, particularly the better-stratified assemblages. Comparable assemblages from within the CTRL project would be those from Eyhorne Street, Tutt Hill, South of Snarkhurst Wood, Chapel Mill, Thurnham and White Horse Stone. A substantial flint scatter was identified approximately 300m away from the excavated site (URL 1994, no. 1820; Booth and Everson 1995), which would provide useful comparative material.

*Potential for Further Work*

1.5.11 This small assemblage, although not *in situ*, provides evidence for Neolithic to Bronze Age activity of a domestic nature. The assemblage is dominated by debitage, which is typical of such assemblages, and the retouched assemblage is composed of scrapers, knives, and serrated and retouched flakes. This range of artefacts would suggest that hide preparation and a range of processing tasks were occurring on site, as well as possibly knapping. The lack of small chips and flakes, which would support knapping occurring on site, may be attributable to post-depositional factors or the on-site recovery methods.

1.5.12 Further analysis in conjunction with other comparable assemblages from the vicinity, and from CTRL sites, would therefore have the potential to contribute to wider study, at Landscape Zone level, of the interaction of early prehistoric communities with the palaeo-environment.

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## 2. - LITHICS

### 1.1 Assessment of the Worked and Burnt Flint

*by Philippa Bradley*

*Introduction*

1.1.1 Flint assemblages were recovered during excavations at Church Lane and East of Station Road.

1.1.2 All material was hand-retrieved on site.

1.1.3 The flint was collected in order to examine a suspected Mesolithic artefact scatter identified during the evaluation, and to provide dating evidence, and evidence for the activity of early communities in the palaeoenvironment. The Fieldwork Event Aims for the project are set out in section 2 of the main report, above.

*Methodology*

1.1.4 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 flint was scanned and weighed; general comments on the condition of the material were also made.

*Quantification*

1.1.5 A total of 778 pieces of worked flint and 68 pieces of burnt unworked flint (weighing 699g) was recovered from the excavations at Church Lane. A smaller assemblage of 128 pieces of worked flint and 9 pieces of burnt unworked flint (weighing 61g) came from East of Station Road. This material is summarised below in Table 1-Table 4

*Provenance*

East of Station Road

1.1.6 The vast majority of the material came from a series of ditch fills. The ditches have mostly been dated to the late Iron Age-early Roman period and therefore it seems likely that all of the flint from these features is redeposited. This is supported by the range of datable retouched forms (Mesolithic to Bronze Age) that came from the fills of these ditches. It seems highly likely that the excavation of the ditches during the Iron Age disturbed Neolithic and Bronze Age occupation. The flintwork is thinly spread across these contexts with rarely more than a couple of pieces from each context. It is difficult therefore to be more precise about the nature of the pre-Iron Age occupation. However, a range of activities such as various processing tasks including possible hide preparation seem to have been occurring. Knapping may have been occurring, several cores and core rejuvenation flakes were recovered although no small flakes and chips were found. However, this may be a product of on-site sampling methods and post-depositional disturbance rather than reflecting the activities occurring on the site.

Church Lane

1.1.7 The largest single group of flint came from the topsoil and other unstratified contexts (U/S and 500; see Table 2 for a summary). The flint is thus clearly not in primary context. It is possible that the activity to which the flint relates took place upon the low hill which forms the Church Lane site. Mesolithic to Bronze Age artefacts were recovered from these contexts; debitage dominated but a range of retouched forms including a microlith fragment, scrapers, knives, piercers, retouched flakes, a possible arrowhead roughout and a notch were also recovered. The assemblage composition suggests domestic activities similar to those suggested for Station Road. Distinctive pieces include a piercer with a long and extensively retouched point of likely later Neolithic date, an invasively retouched knife of probable early Bronze Age date and two denticulated scrapers which may be of mid Bronze Age date. Mesolithic activity is represented by a microlith fragment and a truncated flake, two blade-like flakes may also be contemporary. Several pieces of burnt unworked flint were also recovered from these contexts.

1.1.8 A series of colluvial layers and palaeosols produced assemblages of worked and burnt flint (contexts 501, 502, 525 and 527, see Table 2 and Table 4 for details). Dateable retouched forms from these layers provide broad dates ranging from the Mesolithic to the early Bronze Age.

1.1.9 Small numbers of flint were recovered from contexts 506-7, 509, 511, 513, 515, 528 and 532; the fills of a range of ditches, a burnt scoop and a tree-throw hole. These features are of varied dates (13-14th-century pottery was recovered from context 506 and some LBA Bucket Urn came from 509), and unfortunately the flintwork is generally undistinguished debitage (Table 2).

*Conservation*

1.1.10 Much of the flint has suffered some post-depositional damage; cortication is mixed. Numerous pieces of burnt unworked flint were also recovered; this material was very heavily calcined either grey-white or red. A few of the worked flint (several flakes, two multi-platform flake cores, a chip and a misc retouch piece) were also burnt.

1.1.11 Some of the burnt unworked flint is beginning to disintegrate, but little can be done to prevent this. The flint is adequately bagged and boxed for long term storage. There are therefore no storage or conservation requirements.

*Comparative Material*

1.1.12 The flint can be compared to other sites along the CTRL such as Tutt Hill and Eyhorn Street which produced Neolithic to Bronze Age material. The small element of Mesolithic activity identified appears to be fairly typical of the sites excavated, and may represent a small temporary camp or chance hunting losses.

*Potential for Further Work*

1.1.13 The assemblages provide extensive evidence for Neolithic and Bronze Age occupation with a little Mesolithic activity. The material from Church Lane and East of Station Road could be compared to other better stratified material in order to try and improve the dating, but as the groups are largely redeposited this is unlikely to be informative.

1.1.14 The flintwork has potential primarily as an indication of the use of this general area in these periods, which, when compared to the wider distribution of similarly dated scatters and sites, may be of some local importance to an understanding of the

position and interaction of the site with the local environment. The material provides relatively few clues as to the kinds of activities to which it may have been related. As the material has been redeposited by slope erosion any concentrations are unlikely to be archaeologically significant. There is therefore no potential for detailed spatial analysis, use-wear analysis or refitting of the scatters to address the Fieldwork Event Aims.

## 1.2 Assessment of the Stone

*by Ruth Shaffrey*

*Introduction and Methodology*

1.2.1 Five fragments of sandstone and ironstone were recovered during the excavations at East of Station Road. These were all unworked though one fragment from context 6007 was burnt. All retained stone was examined.

*Quantification, Provenance and Conservation*

1.2.2 Five pieces of stone were recovered during the excavations. These are described in the Table 5-Table 6 below. All five fragments were unworked though one fragment from context 6007 was burnt (Table 5). All the stone would have been available locally. The stone was found in various contexts: in the channel deposits (6007), in ditch fills (7034 and 1710) and unstratified (1300). No conservation is required. All the stone could be discarded.

*Potential for Further Work*

1.2.3 No further work is recommended.

*Table 1: East of Station Road: summary of worked flint*

| Context | Count | Period | Comments |
|---|---|---|---|
| 600 | 48 | - | 32 flakes, 2 core rejuvenation flakes ( 1 tablet, 1 face/edge), 5 cores (2 discoidal flake, 1 opposed platform flake, 1 single platform flake, 1 tested nodule – poss natural), 9 retouched (4 scrapers – 3 end and side, one is reworked and 1 end scraper on a blade-like blank, 5 retouched flakes – 1 on Bullhead flint, mostly minimally retouched). Later Neolithic? |
| 1010 | 1 | LIA-ER | 1 flake, |
| 1021 | 1 | LIA-ER | 1 ?chisel or pick very worn and irregularly flaked, with some later damage. Mesolithic? |
| 1100 | 2 | - | 1 flake, 1 ?unfinished arrowhead, possibly a leaf-shaped. Neolithic or Bronze Age? |
| 1104 | 5 | - | 3 flakes, 1 retouched flake – probably use rather than formal retouch, 1 multi-platform flake core |
| 1116 | 1 | LIA-ER | 1 small flake, Bullhead flint |
| 1118 | 3 | LIA-ER | 2 flakes – 1 is burnt, 1 blade-like flake |
| 1207 | 2 | LIA-ER | Flakes – 1 is burnt, also 2 natural |
| 1215 | 2 | LIA-ER | 2 flakes – 1 is burnt, the other flake may be natural, also 2 natural |
| 1300 | 7 | - | 5 flakes – 1 is burnt, 2 used or very finely serrated flakes – on blade-like blanks |
| 1312 | 1 | LIA-ER | 1 flake |
| 1314 | 2 | LIA-ER | 2 flakes, 1 is Bullhead flint, also 1 natural |
| 1318 | 1 | LIA-ER | Miscellaneous retouch, minimally retouched flake |
| 1319 | - | LIA-ER | 1 natural |
| 1325 | 2 | LIA-ER | 2 flakes |
| 1327 | 1 | LIA-ER | 1 flake |
| 1330 | 2 | LIA-ER | 2 flakes |
| 1338 | 1 | LIA-ER | 1 flake |
| 1353 | 1 | LIA-ER | 1?flake, possibly natural |
| 1360 | 2 | LIA-ER | 2 flakes |
| 1369 | 1 | LIA-ER | 1 flake |
| 1386 | 1 | LIA-ER | 1 end and side scraper, steeply worked |
| 1613 | 2 | - | 2 flakes, one possibly natural |
| 1620 | 1 | Modern | 1 flake possible soft-hammer struck |
| 1624 | 1 | LIA-ER | 1 flake |
| 1706 | 1 | LIA-ER | 1 flake |
| 1708 | 2 | LIA-ER | 1 flake, 1 misc retouched flake |
| 1710 | 1 | LIA-ER | 1 flake, 2 natural |
| 1714 | 2 | - | 2 flakes |
| 1716 | 4 | LIA-ER | 1 flake, 1 possible core rejuvenation flake (face/edge), 1 retouched blade, 1 retouched flake |
| 1725 | - | LIA-ER? | Natural |
| 6004 | 2 | LIA-ER | 2 flakes, 1 of which is burnt |
| 6007 | 1 | - | 1 flake |
| 6010 | | LIA-ER | 1 end and side scraper, neatly worked. Neolithic or early Bronze Age? |
| 6020 | 2 | LIA-ER | 1 end and side scraper, 1 flake. Neolithic or early Bronze Age? |
| 6028 | - | LIA-ER | 1 natural |
| 6030 | 1 | LIA-ER | 1 flake |
| 7008 | 1 | LIA-ER | 1 flake |
| 7025 | 1 | LIA-ER | 1 flake |
| 7034 | 1 | LIA-ER | 1 flake |
| 7036 | 7 | - | 4 flakes, 3 cores (1 single platform flake, 1 multi-platform flake, 1 keeled flake). Neolithic ?perhaps later |
| 8000 | 1 | - | 1 flake |
| 8013 | 1 | LIA-ER | 1 flake |
| 9010 | 1 | LIA-ER | 1 flake |
| U/S | 8 | Post-medieval | 7 flakes, 1 ?gun flint (slightly atypical). |

*Table 2: Church Lane: summary of worked flint*

| Context | Count | Period | Comments |
|---|---|---|---|
| U/S | 30 | - | 1 chip, 1 end and side scraper, with some later damage, 2 misc retouch (1 may be a scraper/knife fragment), 1 core tablet, 1 possible core rejuvenation flake (face/edge), 23 flakes (3 of which are burnt), 1 minimally retouched flake, also 3 natural. Neolithic–Bronze Age |
| 500 | 499 | - | 442 flakes (28 of which are burnt, 1 truncated, 2 blade-like), 2 core tablets, 8 cores (6 multi-platform flake, two of which is heavily burnt, 1 single platform flake), 13 chips (1 is burnt), 5 core fragments (flake cores), 2 knives (one with invasive retouch), 1 notch, 8 retouched flakes, 4 end scrapers (one on a thick Bullhead flake), 2 end and side scrapers, 2 worn scrapers, 2 denticulated scrapers, 2 piercers (with a long well retouched point), 1 microlith fragment, 4 misc retouch (1 is burnt, 1 ? arrowhead roughout, 2 misc retouched flake), 1 denticulate, also 21 natural. Mesolithic, Neolithic-Bronze Age |
| 501 | 1 | - | 1 chip |
| 502 | 84 | - | 73 flakes (6 of which are burnt), 4 chips, 1 core (multi-platform flake), 1 end scraper, 1 microlith (obliquely blunted point?), 1 piercer, 3 retouched flakes, also 2 natural |
| 506 | 6 | Med | 5 flakes (some of these flakes may be natural), 1 burnt chip, also 2 natural |
| 507 | 2 | Med | 2 flakes |
| 509 | 10 | LBA | 1 core (small multi-platform flake), 9 flakes (6 of which are heavily burnt), also 1 natural |
| 513 | 3 | LBA | 3 flakes |
| 515 | 5 | LBA? | 3 flakes, 2 cores (multi-platform flake, one is very cherty flint) |
| 525 | 55 | - | 43 flakes (2 of which are burnt), 2 chips, 2 core fragments, 2 cores (1 discoidal flake, 1 single platform flake), 1 arrowhead fragment, 1 scraper, 1 fabricator. Neolithic to early Bronze Age |
| 526 | 1 | - | 1 flake |
| 527 | 78 | - | 59 flakes (6 burnt), 10 cores (1 single platform flake, 7 multi-platform flake, 2 discoidal flake), 3 core fragments, 1 retouched blade (much later damage), 1 misc retouch, 1 end scraper with worn edge, 3 end and side scrapers, also 1 natural and 1 piece of pot. ?Neolithic (probably later) |
| 528 | 3 | - | 2 flakes, 1 chip |
| 532 | 1 | - | 1 core (multi-platform flake) |

*Table 3:East of Station Road: summary of burnt flint*

| Context | Count | Weight (g) | Comments |
|---|---|---|---|
| 1314 | 2 | 8 | 2 burnt unworked flints calcined red |
| 1351 | 3 | 38 | 3 burnt unworked flints calcined red |
| 1363 | 2 | 9 | 2 burnt unworked flints calcined grey |
| 1617 | 1 | 6 | 1 burnt unworked flints calcined grey |
| 1620 | 1 | 2 | 1 burnt unworked flint calcined red |
| | | | |

*Table 4: Church Lane: summary of burnt flint*

| Context | Count | Weight (g) | Comments |
|---|---|---|---|
| U/S | 2 | 17 | 2 burnt unworked flint calcined grey |
| 500 | 56 | 533 | 56 burnt unworked flint heavily calcined grey |
| 501 | 9 | 93 | 9 burnt unworked flint calcined grey |
| 502 | 1 | 1 | 1 burnt unworked flint calcined grey |
| 506 | 1 | 1 | 1 burnt unworked flint calcined grey |
| 509 | 2 | 1 | 2 burnt unworked flint calcined grey |
| 511 | 1 | 30 | 1 burnt unworked flint calcined grey |
| 525 | 3 | 22 | 3 burnt unworked flint calcined grey |
| 528 | 2 | 1 | 2 burnt unworked flints calcined red |

*Table 5: East of Station Road: summary of burnt stone*

| Context | Count | Material | Comments |
|---|---|---|---|
| 6007 | 1 | Sandstone | Burnt sub angular fragment |

*Table 6: East of Station Road: summary of stone*

| Context | Count | Material | Comments |
|---|---|---|---|
| 1300 | 2 | Ironstone | Fragments |
| 7034 | 1 | Cherty cream Greensand | Angular small fragment |
| 1710 | 1 | Ironstone | Small chunk |

CHAPEL MILL. MAIDSTONE

## - LITHICS

### 1.3 Assessment of Worked Flint

*by Philippa Bradley*

*Introduction*

1.3.1 A total of 43 pieces of worked flint was recovered during strip, map and sample excavation at Chapel Mill. The flint is a small group of domestic waste of the mid-later Neolithic.

1.3.2 A total of 30 pieces of flint came from the scatter found during the Chilston Park, Chapel Mill and Lenham Heath watching brief. This material is of later Mesolithic date.

1.3.3 The flint was recovered during fieldwork and from sieving.

1.3.4 The flint was recovered in accordance with the Fieldwork Event Aims set out in section 2 of the main report, above. The primary aim of retrieving and examining the flint was to establish its typology and date. This was undertaken to provide evidence of the dating of prehistoric occupation on the site, and its character.

*Methodology*

1.3.5 The flint was briefly scanned, with information regarding dating, technology and general condition being noted. The material was added to an Access database.

*Quantification*

1.3.6 A total of 43 pieces of worked flint was recovered from Chapel Mill. The composition of the flint assemblage is summarised in Table 5. Two contexts (200 and 201, topsoil and subsoil respectively) produced small groups; the remainder produced very small numbers of pieces.

1.3.7 The Chilston Park, Chapel Mill and Lenham Heath watching brief produced 30 pieces of flint which are summarised in Table 6.

*Provenance*

1.3.8 At Chapel Mill the flint was recovered from a range of features (cremation pit fills, ditch fills and tree-throw hole fills) of later prehistoric date. The flint is therefore clearly residual with a mid-later Neolithic diagnostic retouched type (an oblique arrowhead from context 200). The remaining pieces are consistent with this date; the discoidal core is a type more commonly found during the mid-later Neolithic although it cannot be used to provide precise dating.

1.3.9 The scatter of flint from the Chilston Park, Chapel Mill and Lenham Heath watching brief lay on natural sands on a natural plateau overlooked by a larger hillock from which the flint may have been derived. The flint is clearly not *in situ*, but it does provide a relatively tight group of later Mesolithic material. It is likely that this material has not been moved too far from its original place of deposition. The Mesolithic material has been relatively carefully worked with flakes and cores showing evidence for platform edge preparation. Many of the flakes have been soft-hammer struck and one of the cores is a classic opposed platform blade example.

The technology employed is that of careful and controlled knapping, and is typical of the Mesolithic period.

*Condition*

1.3.10 All of the flint has suffered some post-depositional damage; cortication is mostly light to medium, but two of the pieces are more heavily corticated. Several of the flakes have been heavily burnt.

*Comparative material*

1.3.11 The small group from Chapel Mill could be compared to adjacent sites on the CTRL route and with any fieldwalking data. It would also be of interest for mid-later Neolithic studies across the landscape to include this small group.

1.3.12 The value of the Mesolithic material from the watching brief is greatly enhanced by the proximity of the *in situ* Late Mesolithic flint knapping site identified in CTRL excavations at Sandway Road. The watching brief material should certainly be studied in conjunction with this major assemblage.

*Potential for further work*

1.3.13 Although the material from Chapel Mill is redeposited its potential is slightly higher given its fairly tight dating to the mid-later Neolithic (an oblique arrowhead, discoidal core and based on the technological traits of the material). It is recommended therefore that this group should be included in any further study of lithics from the CTRL route and would be particularly valuable in contributing to landscape studies of the Neolithic period.

1.3.14 The material from the watching brief although again not *in situ* will provide an insight into Mesolithic activity across the CTRL route, and is therefore of some local importance. This is greatly enhanced by the proximity of the *in situ* Late Mesolithic flint knapping site identified during CTRL excavations at Sandway Road. The watching brief material should certainly be studied in conjunction with the material from Sandway Road.

*Table 5: Summary of flint from Chapel Mill*

| Context | Count | Period | Comments |
|---|---|---|---|
| 200 | 24 | mid - late Neolithic | Small group of debitage 11 flakes, 1 possible core rejuvenation flake and a small multi-platform flake core) and retouched pieces including an oblique arrowhead, a point/piercer and 2 miscellaneous retouched pieces. In addition 7 pieces of burnt unworked flint. |
| 201 | 8 | mid - late Neolithic? | Small group of 5 flakes and 3 retouched pieces (a scraper fragment, a minimally retouched side scraper and a broken point or piercer) |
| 203 | 2 | ? | 1 large thick blade-like flake and 1 flake |
| 204 | 2 | ? | 1 flake and 1 discoidal core, possibly of later Neolithic date |
| 228 | 2 | ? | 1 flake, 1 misc retouched piece |
| 229 | 2 | ? | 2 flakes with ?used edges |
| 231 | 2 | ? | 2 flakes |
| 249 | 1 | ? | 1 flake |

*Table 6: Summary of flint scatter in Chilston Park, Chapel Mill and Lenham Heath Watching Brief*

| Context | Count | Period | Comments |
|---|---|---|---|
| 16 (74+900) | 30 | Later Mesolithic | 14 flakes (some soft hammer-struck and with platform edge abrasion, also flakes with blade scars on dorsal face), 4 blade-like flakes, 5 cores (1 opposed platform blade core, 2 single platform and 2 multi-platform cores; these latter items both have some blade scars), 7 retouched pieces (1 rod microlith, 1 end and side scraper, 4 retouched flakes, and one possible broken microlith). |

SNARKHURST WOOD

## - LITHICS

### 1.4 Flint

*by Philippa Bradley*

*Introduction*

1.4.1 A medium-sized assemblage of flint was recovered from the excavations at Snarkhurst Wood; smaller quantities of worked flint came from the watching brief work carried out in the area.

1.4.2 The material was hand retrieved on site.

1.4.3 The flint was collected in accordance with the Fieldwork Event Aims and Landscape Zone priorities for the sites, which are set out in section 2 of the main report, above. The recovery of flint was undertaken in order to establish the relationship of any late Bronze Age features at the CTRL sites with those identified at the MSA to the north. The recovery of flint was also designed to address research aims relating to the interaction of hunter-foragers with the palaeo-environment, change associated with the adoption of agriculture, and the spatial organisation of the landscape during the period of later agriculturalists.

*Methodology*

1.4.4 The flint was briefly scanned, with information regarding dating, technology and general condition being noted. The material was added to an Access database.

*Quantification*

1.4.5 A total of 138 pieces of flint was recovered from the excavation at South of Snarkhurst Wood. The assemblage is summarised below in Table 2.1. Fifteen pieces of flint were recovered from the watching brief (Table 2.2), and a single piece of flint was recovered from Musket Lane (Table 2.3).

1.4.6 Diagnostic pieces from South of Snarkhurst Wood include a finely worked plano-convex knife of later Neolithic-early Bronze Age date. Technologically diagnostic pieces (a core and a piercer) also suggest some probable Mesolithic activity in the vicinity. A possible Thames pick fragment also of Mesolithic date was recovered from Musket Lane.

1.4.7 Generally both hard and soft hammers were used as percussors. Diagnostic retouched forms and debitage indicate a small element of Mesolithic material and a larger component of later Neolithic to early Bronze Age material. The later Neolithic to early Bronze Age material comes from contexts 128, 148, 251, and possibly 135. Other material may also be contemporary. Apart from the Mesolithic blade core there does not seem to have been any blade production, however, it is possible that this reflects fieldwork bias or that the Mesolithic presence is very limited.

*Provenance*

1.4.8 Almost all of the flint occurred in a scatter at the western end of Area B, in topsoil or recovered from the machine-stripped surface. There is a notable correspondence

between the location of this group and a fieldwalking scatter recorded during the surface collection survey.

*Condition*

1.4.9 All of the flint has suffered some post-depositional damage; cortication is mostly light to medium, although two pieces are more heavily corticated. Several pieces of burnt unworked flint were also recovered; this material was very heavily calcined. A few small chips were also burnt.

*Comparative material*

1.4.10 Comparisons can be drawn with contemporary material from the CTRL route, particularly the fieldwalking data. The 1995 OAU excavations on the MSA site to the north of the CTRL trace also produced flint, but this was mostly of a mid to late Bronze Age date (Bradley 1997, 135-6).

*Potential for further work*

1.4.11 This medium-sized group contains a relatively high proportion of diagnostic material, falling into two chronological groups: Mesolithic, and late Neolithic to early Bronze Age. It therefore has some potential for further work to characterise the nature and chronology of prehistoric activity at the site. It is particularly interesting that the assemblage does not appear to replicate the results of the MSA excavation, where the assemblage was primarily composed of mid to late Bronze Age material. This will be of value in considering the fieldwork event aims relating to the relationship between the CTRL and MSA sites.

1.4.12 It is recommended that the material is fully recorded and the spatial distribution compared with other categories of material culture. It should also be compared to material from the fieldwalking and locally excavated assemblages, as well as material from other sites along the CTRL.

*Bibliography*

Bradley, P, 1997 Worked Flint, in Archaeological Investigations on the Motorway Service Area, Junction 8, M20 at Eyhorne Street, Hollingbourne (I Scott), *Archaeologia Cantiana* 117, 134-7

*Table 2.1: Summary composition of flint assemblage from South of Snarkhurst Wood (ARC SNK99) by context*

| Context | Count | Period | Comments |
|---|---|---|---|
| U/S | 1 | | 1 core rejuvenation flake (face/edge) |
| 101 | 6 | ?some Mesolithic | 4 flakes, 1 possible retouched flake (but very minimal retouch), 1 opposed platform blade core? Mesolithic |
| 120 | 1 | | Natural |
| 127 | 2 | | 2 flakes |
| 128 | 70 | Later Neolithic-early Bronze Age | 48 flakes, 1 core rejuvenation flake (face/edge), 1 multi-platform flake core, 1 tested nodule, 15 retouched pieces (1 plano-convex knife, 1 knife, 8 retouched flakes, 1 very worn serrated flake, 1 end scraper, 1 side scraper and 1 end and side scraper, 1 misc retouched piece), 4 burnt unworked fragments |
| 135 | 1 | | 1 very worn end and side scraper |
| 148 | 2 | ?Later Neolithic-early Bronze Age | 1 flake, 1? scraper or knife fragment |
| 151 | 1 | | 1 flake – possibly natural |
| 163 | 4 | | 3 flakes, 1 natural |

| Context | Count | Period | Comments |
|---|---|---|---|
| 173 | 12 | | 1 ?knife fragment, 3 flakes, 5 chips, 4 natural, 1 piece burnt bone |
| 174 | 1 | | 1 flake |
| 233 | 5 | | 3 flakes, 1 burnt unworked flint, 1 natural |
| 234 | 4 | ? Some possibly Mesolithic | 3 flakes, 1piercer – the latter is possibly Mesolithic |
| 246 | 2 | | 1burnt unworked piece, 1 natural |
| 251 | 3 | ? later Neolithic | 1 flake from a polished axe, 1 flake, 1 discoidal core |
| 261 | 14 | | 4 flakes, 10 chips – some burnt |
| 263 | 2 | | 2 flakes |
| 279 | 3 | | 3 flakes |
| 285 | 2 | | 2 flakes |
| 291 | 1 | | 1 ?tested nodule, much plough damage |
| 312 | 1 | | 1 natural cobble |
| 324 | 8 | | 1 multi-platform flake core, 7 flakes |
| 326 | 1 | | 1 flake |

*Table 2.2: Summary composition of flint assemblage from South of Snarkhurst Wood WBSDS (ARC 420 99 66+300-67+100), by context*

| Context | Count | Period | Comments |
|---|---|---|---|
| 1 | 1 | | 1 flake |
| 4 | 1 | | Natural |
| 10 | 13 | | 2 flakes, 1 multi-platform flake core (some keeled platforms), 10 burnt unworked fragments |
| 13 | 1 | | 1 flake |

*Table 2.3: Summary composition of flint assemblage from Musket Lane (ARC 420 99 67+100-68+100), by context*

| Context | Count | Period | Comments |
|---|---|---|---|
| 147 | 1 | Possibly Mesolithic | ? broken axe or chisel, possibly a Thames pick fragment |

## - LITHICS

### 1.5 Assessment of the Flint

*by Philippa Bradley*

*Introduction*

1.5.1 A small assemblage of flint was recovered from excavations at Thurnham Roman Villa (ARC THM 98), Honeyhills Wood (ARC HHW 98), Hockers Lane (ARC 420/99 62+200-63+000), the watching brief at Thurnham Villa (ARC 420/99 63+400-63+900) and the watching brief from Thurnham Lane to West of Crismill Lane (ARC 420/99 63+900-66+350).

1.5.2 A total of 334 pieces of flint were hand retrieved at Thurnham Villa, and a further 730 pieces were recovered by sample sieving. In addition, 7 pieces of flint were hand-retrieved from Hockers Lane, with a further 120 small pieces from sample sieving (located at chainage 62+800).

1.5.3 The recovery and study of flint was undertaken in accordance with the Fieldwork Event Aims for the sites, which are set out in section 2 of the main report, above. The recovery of this material was undertaken to aid the establishment of a dated occupation sequence for all phases of activity identified. It was also designed to address wider Landscape Zone Priorities concerning the reconstruction of the palaeo-environment and the interaction with past communities, and spatial organisation of landscape and change through time with particular reference to later agriculturalists (2000-1000BC).

*Methodology*

1.5.4 All material was rapidly scanned for diagnostic pieces. The sieved material contained no diagnostic pieces, and no further work has been carried out on it at this stage. The hand retrieved material was subject to rapid scanning and recording, with information regarding dating, technology and general condition being noted.

*Quantification*

1.5.5 The overall quantification of the flint assemblages from the five sites is shown in Table 2.1, and broken down by site and context in Tables 2.2 to 2.6.

1.5.6 The 334 pieces of recorded hand retrieved flint from Thurnham Villa are summarised by context in Table 2.2.

1.5.7 The 730 pieces of sieved material from Thurnham Villa contained no diagnostic pieces, but there were a few flakes and chips and a high proportion of natural material.

1.5.8 The material from Hockers Lane contained no diagnostic pieces, but there were a few flakes and chips and a high proportion of natural material.

1.5.9 Overall, diagnostic artefacts were limited, but the technology of many the common retouched pieces (scrapers, knives, piercers and awls) would support a broad Neolithic-Bronze Age range. Some of the retouched pieces (such as a denticulated scraper from context 11594) may be of mid-later Bronze Age date, whilst some of

the neater, more carefully worked pieces are likely to be of later Neolithic-early Bronze Age date.

*Provenance*

1.5.10 The majority of the flint at all sites was either redeposited in later features, or from unstratified contexts. The flint from the excavations at Thurnham Villa showed a noticeable concentration of material from the west of the site but this may simply reflect excavation biases.

1.5.11 At Thurnham Villa, seven flakes were recovered from fill 10292 of the prehistoric waterhole 10288, although these are not closely datable. From fill 10294 of the same feature, there was a worn end scraper of Neolithic or Bronze Age date. This piece is likely to have been redeposited as the feature, a waterhole, is of middle Bronze Age date, and it is unlikely that the scraper would be contemporary.

1.5.12 Context 20132, a buried soil horizon, produced four flakes, but these are not closely datable. The material is probably also redeposited, since the soil horizon is dated to the Late Iron Age to AD 70+.

1.5.13 Context 20360 produced a small group of redeposited Neolithic or Bronze Age flintwork including scrapers, a piercer and a core. This context was a buried soil horizon beneath the villa construction levelling layers, and is dated to the Late Iron Age to around AD 50. Other Neolithic and Bronze Age material came from a range of secondary contexts, and the material is demonstrably residual. These contexts include: modern and topsoil layers (10397 and 10706), the late Roman corndrier (11049), the boundary ditch of the main villa building (11331), natural disturbance (11594), a medieval ditch (11794), layers and features associated with the aisled building (12099, 12361 and 12373), and a charcoal-rich late Roman layer in room 20000 of the main villa building (20058).

1.5.14 The material from the other fieldwork events is of similar character to that from the main Thurnham Villa excavations. However, a rod or edge blunted microlith of probable later Mesolithic date was recovered during the Thurnham Villa watching brief (located at chainage 63+500). It probably represents a chance loss as no other probable Mesolithic material was identified.

*Conservation*

1.5.15 The flint is packed appropriately for long-term storage. Some of the burnt unworked flint is fragmenting but little can be done to prevent this. It is recommended that any natural material be discarded during the analysis phase. It should also be considered whether all of the burnt unworked material needs to be retained; any worked and subsequently burnt pieces will have been identified during the assessment, as all of this material will have been scanned. Therefore it may be appropriate to discard some of this material retaining a selection for the archive.

*Condition*

1.5.16 The majority of the material was redeposited in later features or came from unstratified contexts. Therefore most of the flint has suffered some post-depositional damage; cortication is mostly light to medium, a couple of pieces are more heavily corticated. The burnt unworked flint recovered was very heavily calcined, and either grey, white or reddish tinged.

*Comparative material*

1.5.17 The nature of the material suggests there will be little scope for comparative study, but the assemblage should be compared with the scatter recovered in this area during the 1994 Surface Collection Survey (URL 1995).

*Potential for further work*

CTRL Landscape Zone Priorities and Fieldwork Event Aims

1.5.18 The following section discusses potential for further work in the light of the Landscape Zone Priorities and Fieldwork Event Aims.

1.5.19 These assemblages have relatively low potential to address the Fieldwork Event Aims and CTRL Landscape Zone Priorities. Most of the material was redeposited or from unstratified contexts, and excavation biases will inevitably have skewed the retrieval of material.

1.5.20 The flint does not greatly aid the interpretation or dating of the sites. However, it does point to sporadic Mesolithic-Bronze Age activity in the area. Spatial study of the material, combined with the scatter recovered during field walking, may reveal activity areas. This contributes to the wider CTRL Landscape Zone Priorities concerning the activities of past human communities in the palaeo-environment, and the spatial organisation of the landscape in the context of later agriculturalists, 2000-1000 BC.

1.5.21 Given the provenance of the majority of the material little other further work is likely to be useful.

*Bibliography*

URL 1995 1994 Surface Collection Survey report in 2 volumes by OAU for URL

*Table 2.1: Thurnham group sites: Quantification of flint*

| Site Ref | Flint - no of pieces | Boxes and bags |
|---|---|---|
| ARC THM 98 | 318 | 7 boxes |
| ARC HHW 98 | 1 | 1 bag |
| ARC 420 99 64+800 | 2 | 1 bag |
| ARC 98 62+200 | 7 + 27 small bags from sieving | 1 box |
| ARC 420 63+500 99 | 6 | 1 bag |

*Table 2.2: Thurnham Roman villa (ARC THM 98): Flint: Summary composition of assemblage by context*

| Context | Count | Period | Comments |
|---|---|---|---|
| U/S | 3 | NE; EBA? | 1 knife, 2 miscellaneous retouched flakes, minimally retouched. Also 1 natural |
| 10014 | 5 | ? | 2 flakes, 3 burnt unworked flints |
| 10044 | 1 | ? | 1 burnt unworked flint |
| 10046 | 1 | ? | 1 flake, poss natural |
| 10053 | 1 | ? | 1 burnt unworked flint |
| 10110 | - | - | Natural |
| 10112 | 1 | ? | 1 burnt unworked flint |
| 10196 | 2 | ? | 2 burnt unworked flint |
| 10197 | 2 | ? | 2 burnt unworked flint |
| 10198 | 1 | ? | Flake, heavily calcined |
| 10242 | 1 | ? | Flake |
| 10273 | - | - | Natural |
| 10292 | 7 | ? | Flakes, all hard hammer |
| 10294 | 1 | NE; BA | Worn end scraper |
| 10307 | 1 | ? | Flake |
| 10326 | 1 | ? | Flake |
| 10343 | 2 | ? | 1 flake and 1 face/edge rejuvenation flake |
| 10349 | 1 | ? | 1?flake, poss natural; also 3 natural |
| 10395 | 1 | ? | 1 burnt unworked flint |
| 10397 | 1 | BA? | Steeply retouched end and side scraper |
| 10417 | - | - | 2 natural |
| 10419 | 1 | ? | Flake |
| 10424 | 2 | ? | 1 flake, 1 burnt unworked flint |
| 10461 | - | - | Natural |
| 10469 | - | - | 7 pieces of natural |
| 10488 | 1 | ? | Flake |
| 10499 | - | - | Natural |
| 10501 | - | - | 4 natural |
| 10517 | - | - | 4 natural |
| 10546 | - | - | 1 natural |
| 10548 | - | - | 1 natural |
| 10604 | - | - | 1 natural |
| 10609 | 1 | ? | 1 burnt unworked flint, 4 natural |
| 10616 | - | - | 2 natural |
| 10634 | 1 | ? | Flake |
| 10641 | - | - | Natural |
| 10646 | 5 | ? | 5 flakes, 1 natural |
| 10647 | - | - | 3 natural |
| 10654 | 6 | ? | Small chips, also 1 burnt bone and 4 natural |
| 10659 | 1 | ? | Chip |
| 10683 | - | - | 2 natural |
| 10692 | 1 | ? | ?flake, poss natural |
| 10693 | - | - | Natural |
| 10706 | 4 | NE; EBA | 1 end and side scraper, 3 burnt unworked flint |
| 10714 | 1 | ? | Burnt unworked flint |
| 10727 | 9 | ? | 1 flake, 8 burnt unworked flints |
| 10729 | - | - | Natural |
| 10738 | 1 | ? | Burnt unworked flint |
| 10743 | 2 | ? | 2 burnt unworked flints |
| 10744 | 3 | ? | 3 burnt unworked flints |
| 10749 | 1 | ? | 1 burnt unworked flint |
| 10754 | 1 | ? | Flake |
| 10756 | - | - | Natural |
| 10810 | - | - | Natural |
| 10828 | - | - | Natural |
| 10832 | - | - | 3 natural |
| 10859 | 1 | ? | Flake |

| Context | Count | Period | Comments |
|---|---|---|---|
| 10865 | - | - | Natural |
| 10870 | 2 | ? | 1 flake, 1 burnt unworked flint, 2 natural |
| 10888 | 2 | ? | 1 flake, 1 burnt unworked flint, 1 natural |
| 10939 | - | - | Natural |
| 10951 | 1 | ? | Flake, poss plough struck, much damage |
| 10975 | 2 | ? | Flakes |
| 10994 | 1 | ? | Flake, also 2 natural |
| 11033 | 1 | ? | burnt unworked flint, also 1 natural and 1 piece bone |
| 11044 | 1 | ? | flake |
| 11049 | 1 | NE | point, possibly an unfinished leaf-shaped arrowhead or an awl |
| 11078 | - | - | 2 natural |
| 11094 | 1 | ? | flake |
| 11235 | 1 | ? | flake, also 1 natural |
| 11251 | - | - | natural |
| 11254 | - | - | natural |
| 11301 | - | - | natural |
| 11331 | 5 | NE; EBA | 4 flakes, 1 scraper – worn edges |
| 11336 | 1 | - | 1 flake, also 2 natural |
| 11343 | - | - | natural |
| 11345 | - | - | natural |
| 11346 | 1 | - | burnt unworked flint, also 1 natural |
| 11378 | 1 | ? | flake |
| 11381 | 3 | ? | flakes |
| 11387 | 1 | ? | flake, also 1 natural |
| 11392 | - | - | natural |
| 11394 | 1 | ? | flake |
| 11447 | 1 | ? | blade |
| 11472 | - | - | natural |
| 11475 | 2 | ? | flakes, one may be plough struck |
| 11479 | 1 | ? | flake |
| 11493 | - | - | 2 natural |
| 11506 | 1 | ? | burnt unworked flint |
| 11510 | 1 | ? | flake |
| 11520 | 3 | ? | 1 flake – possibly natural, 2 burnt unworked flints |
| 11569 | - | - | natural |
| 11578 | 3 | ? | burnt unworked flints, also 1 natural |
| 11585 | - | - | natural |
| 11594 | 1 | BA? | denticulated side scraper |
| 11609 | - | - | 2 natural |
| 11616 | 1 | ? | flake |
| 11623 | 3 | ? | flakes |
| 11634 | - | - | natural |
| 11642 | - | - | natural |
| 11645 | - | - | 2 natural |
| 11682 | 1 | ? | flake |
| 11693 | - | - | natural |
| 11713 | 1 | ? | flake |
| 11776 | - | - | 3 natural |
| 11794 | 1 | NE? | scraper – side |
| 11862 | 5 | ? | burnt unworked flints |
| 11865 | - | - | 3 natural |
| 11872 | 1 | ? | large burnt cobble |
| 11890 | 1 | ? | burnt unworked flint |
| 11929 | - | - | natural |
| 11938 | - | - | natural |
| 11961 | 1 | ? | flake, possibly natural |
| 11107 | 1 | ? | flake |
| 11127 | 1 | ? | burnt unworked, also 1 natural |
| 11143 | - | - | natural |
| 11157 | - | - | natural |

| Context | Count | Period | Comments |
|---|---|---|---|
| 11163 | 1 | ? | burnt unworked flint |
| 12013 | - | - | natural |
| 12032 | 1 | ? | flake |
| 12036 | 1 | ? | flake |
| 12062 | - | - | natural |
| 12084 | 1 | ? | flake |
| 12099 | 1 | BA? | denticulated scraper, also 2 natural |
| 12101 | 16 | ? | 5 flakes, 11 burnt flints, also 2 natural |
| 12109 | 5 | ? | 2 flakes, 3 burnt unworked flints, 1 natural |
| 12203 | 25 | ? | 6 flakes, 19 burnt unworked flints, also 11 natural |
| 12279 | 11 | ? | 4 flakes, 7 burnt unworked flint, also 4 natural and 1 fossil |
| 12289 | 1 | ? | Burnt unworked flint |
| 12324 | 1 | ? | Flake, 1 natural |
| 12347 | 1 | ? | Flake, 1 natural |
| 12357 | - | - | Natural |
| 12361 | 5 | BA | 1 end scraper, 1 flake, 3 burnt, 4 natural |
| 12363 | 3 | ? | 1 flake, 2 burnt unworked flints, 3 natural |
| 12369 | 1 | ? | Flake |
| 12373 | 52 | BA? | 46 flakes including a few blades/blade-like flakes, 4 cores – mostly roughly worked multi-platform types, 1 end scraper, 1 rod |
| 12378 | - | - | Natural |
| 12379 | 1 | ? | Blade-like flake |
| 12380 | 1 | ? | Burnt unworked flint |
| 12392 | 1 | ? | Blade-like flake |
| 12434 | - | - | Natural |
| 124821 | 1 | ? | Burnt unworked flint |
| 12540 | - | - | Natural |
| 15001 | 1 | ? | Burnt unworked flint |
| 15073 | 1 | ? | Burnt unworked flint |
| 15145 | - | - | Natural |
| 15212 | 1 | ? | Flake |
| 15214 | 1 | ? | Flake |
| 15221 | 3 | ? | 2 flakes, 1 core on a flake, 3 natural |
| 15243 | - | - | Natural |
| 15275 | 2 | ? | Burnt unworked, 1 natural |
| 15279 | - | - | Natural |
| 15283 | 1 | ? | Burnt unworked flint, also 1 natural |
| 15310 | 5 | ? | Burnt unworked flint, also 4 natural |
| 15319 | 1 | ? | Flake |
| 15328 | 1 | ? | Retouched flake, some later damage |
| 15336 | 1 | ? | Burnt unworked flint |
| 20002 | 1 | ? | Burnt unworked flint, also 2 natural |
| 20043 | - | - | Natural |
| 20058 | 1 | NE; BA | End and side scraper |
| 20074 | - | - | Natural |
| 20076 | 13 | ? | Flakes, 4 natural |
| 20082 | 1 | ? | Burnt unworked flint |
| 20084 | 1 | ? | Burnt unworked flint |
| 20087 | - | - | Natural |
| 20089 | 1 | - | Burnt unworked flint |
| 20095 | - | - | Ironstone? |
| 20098 | - | - | Natural |
| 20109 | 1 | ? | Flake |
| 20112 | 1 | ? | Flake |
| 20132 | 4 | ? | Flakes |
| 20168 | 1 | ? | Chip |
| 20169 | - | - | Natural |
| 20174 | 1 | ? | Burnt unworked flint, also 1 natural |
| 20183 | 2 | ? | Flakes |
| 20188 | - | - | 3 natural |

| Context | Count | Period | Comments |
|---|---|---|---|
| 20198 | | - | Natural |
| 20200 | 1 | ? | Flake |
| 20201 | 1 | ? | Burnt unworked flint |
| 20202 | - | - | 2 natural |
| 20344 | 1 | | Flake |
| 20360 | 9 | NE; EBA? | 3 flakes, 3 scrapers, 1 piercer, 1 single platform flake core. Scrapers and piercer are neatly worked. |

*Table 2.3: Thurnham Lane west of Crismill Lane ARC 420 99 64+800, Summary of flint assemblage*

| Context | Count | Period | Comments |
|---|---|---|---|
| 8 | 1 | ? | flake, worn |
| 34 | 1 | ? | Flake |

*Table 2.4: Hockers Lane (ARC 420 99 62+200-63+000) Summary of flint assemblage from excavations*

| Context | Count | Period | Comments |
|---|---|---|---|
| 76 | - | - | 2 natural |
| 1 | 3 | ? | Flakes |
| 29 | - | - | Natural |
| 46 | 1 | ? | Flake |
| 70 | - | - | 2 natural |
| 180 | - | - | Natural |
| 213 | - | - | Natural |
| 220 | - | - | Natural |
| U/S | 1 | NE; BA? | Multi-platform core |

*Table 2.5: Honeyhills Wood ARC 420 HHW98, Summary composition of flint assemblage by context*

| Context | Count | Period | Comments |
|---|---|---|---|
| 3502 | 1 | ? | 1 chip possibly natural, also 9 natural |

*Table 2.6: Thurnham Roma Villa SDS ARC 420 63+500 99, Summary composition of flint assemblage by context*

| Context | Count | Period | Comments |
|---|---|---|---|
| U/S | 4 | ? | 3 flakes, 1 retouched flake, also 1 natural |
| 310 | 2 | ME | 1 obliquely blunted point, a burnt unworked flint |

## APPENDIX 2 - LITHICS

### 2.1 Assessment of the Worked Flint

*by Philippa Bradley*

*Introduction*

2.1.1 Two worked flakes were recovered from this site, both of which were redeposited.

*Methodology*

2.1.2 The flint was briefly scanned, with information regarding dating, technology and general condition being noted. The material was added to an Access database.

*Quantification*

2.1.3 Two struck flakes, one possibly from a discoidal core, were found (Table 6).

*Provenance*

2.1.4 One piece of flint came from context 2, a subsoil layer and one from context 29, the upper fill of later Roman ditch 62.

*Condition*

2.1.5 The flint has suffered some post-depositional damage. The flint is very lightly corticated.

*Comparative material*

2.1.6 A little flint was recovered from excavations conducted by OAU during work at Boys Hall Moat (Bradley 1994, 424). Flint has also been recovered from fieldwalking for the CTRL project within the general vicinity of this site.

*Potential for further work*

2.1.7 The material has very limited potential given the numbers of pieces and the contexts it came from. It does however indicate prehistoric activity in the general area.

*Bibliography*

Bradley, P 1994, The flint, in Earthwork survey and excavation at Boys Hall Moat, Sevington, Kent (P Booth and P Everson) *Archaeologia Cantiana* 114

*Table 6: Summary of worked flint*

| Context | Count | Period | Comments |
|---|---|---|---|
| 2 | 1 | Unident | Hard-hammer struck flake, possibly from a discoidal core |
| 29 | 1 | Unident | Hard-hammer struck flake |

## 3. - LITHICS

### 1.1 Assessment Of Worked And Burnt Unworked Flint

*By Philippa Bradley*

*Introduction*

1.1.1 A total of 497 pieces of worked flint and 10 pieces of burnt unworked flint (weighing 86 g) was recovered from the excavations at (ARC 430 81+800-82+000, ARC HWD98, ARC 430 79+200-79-500, ARC NEW98). Material from the Mesolithic and Neolithic seems to be present. The majority of the flint came from the excavations and flint scatter at Leacon Lane, with one particular feature being particularly productive (context 22 produced 288 pieces of flint).

*Methodology*

1.1.2 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 flint was scanned and weighed; general comments on the condition of this material were also made. Numerous pieces of natural flint were recovered from the excavations; these have been noted and discarded.

*Quantification*

1.1.3 A total of 497 pieces of worked flint and 10 pieces of burnt unworked flint (weighing 86g) was recovered from the excavations at Leacon Lane, Hurst Wood and Newlands (ARC 430 81+800-82+000, ARC HWD98, ARC 430 79+200-79-500, ARC NEW98). This material is summarised below in Tables 24-29.

*Table 29: Summary composition of flint assemblage from Leacon Lane WBSDI*

| Context | Chain | Count | Period | Comments |
|---|---|---|---|---|
| 2 | 81+800 | 2 | | 2 flakes, 1 from an opposed platform core, slightly blade-like removals, cherty grey flint, also 1 natural discarded |
| 8 | 81+800 | 7 | | 3 flakes, 2 chips, 1 core frag, 1 single platform flake core - grey cherty flint, 1 of the flakes is burnt |
| 22 | 81+800 | 288 | Mesolithic | 255 flakes – inc 5 burnt, some trimming flakes, some usewear, 5 CRF - face/edge, some irregular flakes, 1 plunging flake, many blades/blade-like flakes, 6 core fragments, 19 cores - 1 single plat on a thin nodule, 3 other single platform, 3 opposed platform flake/blade, 3 discoidal, 7 multi-platform - only 1 flake a single platform type has blade scars rest are flake, 2 on flakes, 1 fabricator, 2 retouched flakes, 1 serrated flake very worn, on blade-like blank, 1 misc retouch – flake retouched around its circumference, 1 notch, 4 natural |
| 43 | 81+800 | 3 | | 3 flakes |
| 2 | 81+850 | 44 | Mesolithic | 38 flakes inc blades/blade-like, 1 ?crested flake, 1 CRF face/edge, 5 cores - 1 discoidal, 2 single plat blade/flake, 2 core frags, 1 ?core tool roughout |
| 22 | 81+850 | 28 | | 21 flakes – inc 1 slightly blade-like one, and 1 flake from an opposed platform core, some usewear, hard and soft hammers, some hinges, 4 cores - 1 opposed platform with slightly blade-like removals, 2 multi-platform and 1 single platform - some edge abrasion, 1 end and side scraper very minimally retouched, 2 retouched flakes - 1 one a flake from an opposed platform core, both are minimally retouched and possibly just use |
| 2 | 81+900 | 31 | Mesolithic | 23 flakes - some SH, inc 1 possible axe thinning flake, and 1 CRF - tablet, also 1 irregular flake, 6 cores - 3 multi-platform - both with a few blade scars and 2 single platform flake and blade - 1 is a classic pyramid blade core, 1 opposed platform blade core, 2 core fragments |
| 52 | 81+900 | - | | 2 natural from sample 7 |

| | | | | |
|---|---|---|---|---|
| 54 | 81+900 | 2 | | 2 flakes |
| 56 | 81+900 | 17 | ?Mesolithic | 15 flakes inc 1 possible truncated blade, 1 chip – recent break, 1 CRF - face/edge blade scars, also 1 natural |
| 58 | 81+900 | - | | 2 natural from sample 9 |
| 60 | 81+900 | 1 | | 1 flake, 1 natural |
| 1 | 81+940 | 1 | Mesolithic | 1 opposed platform blade core, some platform preparation worn cortex |
| 3 | 81+940 | 4 | | Flakes, including 2 slightly blade-like egs, some ?usewear |
| 72 | 81+940 | 8 | ?Mesolithic | 3 flakes, 1 blade with usewear, 2 cores - 1 multi platform, 1 single platform blade (with possible refitting flake) 1 CRF - tablet, 1 retouched blade-like flake |
| Total | | 436 | | |

*Table 30: Burnt unworked flint from Leacon Lane WBSDI*

| Context | Chain | Count | Weight (g) | Comments |
|---|---|---|---|---|
| 22 | 81+800 | 1 | 5 | Calcined grey |
| 2 | 81+900 | 1 | 5 | Heavily calcined |
| Total | | 2 | 10 | |

*Table 31: Summary of flint assemblage from Hurst Wood Detailed Excavation*

| Context | Count | Period | Comments |
|---|---|---|---|
| 1 | 29 | Neolithic? | 27 flakes inc 1 flake from a polished implement and 2 burnt, many are trimming flakes, several may be natural, some worn edges, 2 core fragments, also 35 natural |
| 1 | 1 | Neolithic? | End and side scraper, well worked on thinish blank SF 5 |
| 2 | 1 | | ?used flake SF 2 |
| 2 | 1 | | Flake SF 3 |
| 13 | 1 | | 1 flake, also 1 natural |
| 25 | 3 | | 3 flakes, 1 natural |
| 28 | 1 | Mesolithic | 1 broken microlith steeply retouched along both edges, possibly late Mesolithic |
| 29 | 1 | | ?chip, possibly natural |
| 54 | 1 | | Flake |
| 77 | 1 | | Flake |
| 103 | 2 | | 1 flake, 1 possible chip |
| 125 | 8 | | 6 flakes, 1 chip, 1 multi-platform flake core - some possible refits with orange cortex |
| 129 | 2 | | 2 flakes |
| 137 | 1 | | 1 flake |
| 142 | 3 | | All possible chips |
| 143 | 1 | | 1 flake |
| Total | 57 | | |

*Table 32: Burnt unworked flint from Hurst Wood (ARC HWD98)*

| Context | Count | Weight (g) | Comments |
|---|---|---|---|
| 1 | 1 | 5 | Calcined grey |
| 13 | 4 | 16 | Calcined grey |
| 50 | 1 | 43 | Calcined grey |
| 52 | 1 | 7 | Calcined grey |
| 143 | 1 | 5 | Calcined grey |
| Total | 8 | 76 | |

*Table 33: Summary of flint assemblage from Hurst Wood WBSDI*

| Context | Chain | Count | Period | Comments |
|---|---|---|---|---|
| 5 | 79+300 | 1 | | Flake, very worn and battered |
| Total | | 1 | | |

*Table 34: Summary of flint assemblage from East of Newlands Trench Excavation*

| Context | Count | Period | Comments |
|---|---|---|---|
| 3005 | 1 | | ?Trimming flake SF 3000 |
| 3005 | 1 | | Small flake SF 3001 |
| 3005 | 1 | | Core fragment SF 3002 |
| Total | 3 | | |

*Provenance*

1.1.4 The flint from Leacon Lane came from a disturbed flint scatter within the subsoil. The material from Hurst Wood came from a range of features including a series of pits which may have been used to make charcoal. It is possible that the flint is redeposited within these features as none of it was burnt.

*Conservation*

1.1.5 The flint is appropriately bagged and boxed for long-term storage. No conservation is required. All of the natural flint has been discarded. Selected burnt unworked flint could be discarded, keeping only a selection of representative material for archive purposes. The full quantification (by weight and number), together with a description of the material discarded would provide sufficient records for any future work.

*Condition*

1.1.6 Some of the flint has suffered some post-depositional damage; although there are many fresh edges and some evidence for used edges. Cortication is mixed. Several pieces of burnt unworked flint were also recovered and a few pieces of worked flint were also burnt.

*Comparative material*

1.1.7 Mesolithic material from other sections of the CTRL route will provide comparative material.

*Potential for further work*

1.1.8 The material provides good evidence for Mesolithic activity, with possible usewear and refitting flakes. This would suggest that some *in situ* activity has been disturbed. Generally the material was in good condition and was probably only recently incorporated into the ploughsoil. It therefore represents a good group for analysis of flint technology. Further analysis (incorporating use wear, refit analysis and distribution) would contribute to CTRL research aims at Landscape Zone Level relating to the location and nature of hunter-forager activity.

## 4. - ASSESSMENT OF LITHICS

### 1.1 Lithics

*by Philippa Bradley*

*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 |
| *(Tools – sub total)* | *16* | *100* | *4.8* | | |
| 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 |
| *(Production - sub total)* | *96* | *100* | *29.4* | | |
| Flakes | 215 | 100 | 65.7 | | In all stages of reduction, hard and soft hammers noted, all types of butts noted |
| *(Flakes – sub total)* | *215* | *100* | *65.7* | | |
| ***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

BEECHBROOK WOOD

## LITHICS

### 1.2 Flint

**ARCBBW00**

*By Hugo Lamdin-Whymark*

*Introduction*

1.2.1 A total of 2264 pieces of worked flint and in excess of 1500 chips was recovered from ARC BBW00. In addition 1449 pieces of burnt unworked flint weighing 5304 g were found. This material is summarised in Table 2.1.

1.2.2 The majority of the flint was recovered from a small number of sealed features of late Mesolithic to Beaker date. The late Mesolithic feature cut 1623 (group 3013) in Area C contains considerable evidence for microlith manufacture and the use and disposal of other artefacts. The assemblage appears to be domestic in origin, probably resulting from brief habitation. Significant early Neolithic and Beaker assemblages were recovered from two further pits, [1910] and [1374] (group 3022), which may be of either domestic or ritual origin.

*Methodology*

1.2.3 All of the flint was briefly scanned and diagnostic artefacts recorded, with information regarding dating, technology and general condition being noted. The material was added to an Access database. The burnt flint was quantified but not assessed in detail.

*Quantification*

1.2.4 A total of 2264 pieces of worked flint and in excess of 1500 chips was recovered during field event ARC BBW 00. In addition 1449 pieces of burnt unworked flint weighing 5304 g was found. This material is summarised below in Table 2.1.

*Provenance*

1.2.5 The majority of the flint assemblage was recovered as *in situ* deposits from discrete features. The late Mesolithic feature cut [1623], group 3013, in Area C contained a total of 1704 flint fragments, including approximately 500 chips. A single early Neolithic feature was also identified in Area C: pit cut [1910] (fill 1909) which contained 221 flints and in excess of 400 chips.

1.2.6 The latter assemblage contained considerable evidence for knapping debris, including two single platform flake cores and a single platform blade core. Use-wear was apparent on a large number of the flakes in the assemblage, including one rounded edge on a flake. Retouched flints included 4 edge retouched flakes, a spurred piece and a serrated flake. Three flakes of Bullhead bed flint were present in this pit. The composition of the assemblage is comparable to other early Neolithic pit deposits.

1.2.7 Beaker period pit cut [1374], pit group 3022, contained four fills ((1409), (1375), (1376) and (1377)) with a flint assemblage of 302 pieces and over 650 chips. The assemblage included a barbed and tanged arrowhead (Sutton B (h) Green 1980: 122) and five scrapers (including two thumbnail scrapers). A considerable number of the flakes also appeared to have been utilized.

1.2.8 A small number of probable grave goods were also identified, a second knife and leaf shaped point from fills (865) and (949) in ring ditches sub-groups 851 and 1007 (group

3012). A small burnt flaked knife from fill (561) was recovered from pit cut [562] with a quantity of burnt animal bone and charcoal, and may represent *in situ* evidence for food preparation/consumption.

*Conservation*

1.2.9 The majority of the flint is in fresh, uncorticated condition, but some post-depositional edge damage is present on a few flakes. The burnt unworked flint was very heavily calcified either grey-white or red. A few of the worked flints were also burnt.

1.2.10 The flint is adequately bagged and boxed for long-term storage. There are therefore no storage or conservation requirements.

*Comparative material*

1.2.11 The flint can be compared to other CTRL sites that produced Mesolithic to early Bronze Age material, comparisons with material recovered from Church Lane, Sevington, Station Road East, and Bower Road, Smeeth, being the most pertinent with respect to the Mesolithic material. The Mesolithic activity identified at Beechbrook Wood is, however, more significant than on other sites, as both a substantial and *in situ* assemblage, which may furthermore represent material from brief habitation. Comparisons with the Neolithic and Beaker period pits may be drawn from CTRL sites at White Horse Stone, Aylesford, and Pilgrims Way, Aylesford.

*Potential for further work*

1.2.12 The assemblage has high potential to address the issues highlighted for the Landscape Zone Aims of both the North Downs and Wealden Greensand Zone Fieldwork Event Aims in CTRL period categories 1 and 2 as follows:

*Hunter-foragers (4,00,000-4,500 BC)*

- Define the range of human activity and where it took place
- What was the effect of climatic and environmental changes on human lifeways and adaptive strategies?

*Early Agriculturists (4,500-2,000 BC)*

- Define ritual and economic landscapes and their relationships
- Determine the nature of changes in economic lifeways, eg. relative importance of hunting-foraging and agriculture

1.2.13 Initially, due to the rapid nature of the assessment, a catalogue of the flint is required. Investigations should be made into potential sources for the raw materials and change in exploited materials through time. Detailed technological and refitting analysis of the late Mesolithic and early Neolithic and Beaker assemblages should elucidate individual techniques of reduction and provide a valuable study of changing technology through time.

1.2.14 Due to the broken nature of the flintwork metrical analysis is unlikely to prove valuable. Previously, low power use-wear analysis has provided valuable information on the activities present within midden and pit assemblages; given the date range of features present the analysis of three samples should provide an interesting contrast in activities. Examination of the spatial distribution of flints, particularly within the ring ditches may identify significant spatial concentrations of material.

**ARC BWD98**

*by Kate Cramp*

*Introduction*

1.2.15 Two fragments of worked flint were recovered by hand excavation during field event ARC BWD98.

*Methodology and Quantification*

1.2.16 The flint was examined for information regarding dating, technology and general condition. The result is presented in Table 2.2.

*Provenance*

1.2.17 SF16 is residual in Late Iron Age ditch sub-group 2452 and shows much post-depositional edge damage in accordance with this. SF1 was recorded under an invalid context number, but is likely to have originated from either topsoil 100 or subsoil 101, and is therefore also residual.

*Conservation*

1.2.18 The material is stable and requires no conservation.

*Comparative material and potential for further work*

1.2.19 The artefacts can be incorporated into the analysis of the assemblage from ARC BBW00, see above, which provides a plethora of comparative material from both periods.

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## 1.3 Humanly Modified Stone

**ARC BBW00**

*by Ruth Shaffrey*

*Introduction*

1.3.1 From an assemblage of approximately 70 samples of stone retained during the excavations at Beechbrook Wood, there were ten pieces of probable worked stone.

*Methodology*

1.3.2 All retained stone was examined. Each sample was examined with a x10 magnification hand lens, weighed and recorded by small find number and or context and with regards to description, lithology and probable function.

*Quantification*

1.3.3 A large variety of stone specimens were retained during the excavations which would suggest that a comprehensive retention procedure was followed. Ten potentially worked specimens were recovered. The worked stone is described briefly in Table 2.3. The unworked stone specimens are listed in Table 2.4.

1.3.4 A fragment of lava quernstone was found in the subsoil of Area C (1034); this has to be early Roman or later as lava rotary querns were a Roman introduction. Another quern fragment was found in a pit dating to the Bronze Age (1200) and a complete saddle quern made from ironstone was recovered from Late Neolithic context (1909), in the very base of pit [1910].

**1.3.5** Also amongst the worked stone were two probable rubbers, one of which may also have been used as a pestle. This latter rubber was recovered from context (230) in ditch sub-group 1972, interpreted as enclosure ditch to Middle/Late Bronze Age activity area 1952 (Area C), and the former from pit fill (446) in group 3038, part of Middle/Late Bronze Age activity area 2442 (Area A). Another probable pestle or small hammerstone was found in a Beaker period pit [1374] (group 3022), and a well used polisher was unfortunately unphased as a surface find (1671). Small fragments of ironstone were recovered but their size and the fact that they were not concentrated within any particular context or phase suggests that they are unlikely to be associated with iron working or smelting and that they were naturally occurring.

1.3.6 A variety of lithologies were present including ironstone, lava and probable greensand. The ironstone and Greensand are most likely both local originating in the Weald Clay and the Cretaceous Beds respectively. The lava was imported from the Niedermendig region. Most of the stone was fairly weathered as demonstrated by the lava which was very friable.

*Provenance*

1.3.7 Several items of worked stone were recovered from unphased contexts such as the subsoil. The remainder were largely from Iron Age and Bronze Age pits.

*Conservation*

1.3.8 No conservation is required. Only the worked or possible worked specimens need to be retained following assessment.

*Comparative material*

1.3.9 The single lava quern fragment can be compared with other lava querns found widely on sites across Kent including Waterloo Connection, Thurnham Villa (Shaffrey 2000a and b) and Springhead Roman town (Roe 1999, 31). Nearer by, lava querns have recently been found at Westhawk Farm, Ashford (Roe 2000).

1.3.10 Closer examination of the Greensands utilised would be needed before a source can be identified and comparative material produced.

1.3.11 The well utilised possible axe sharpener/polisher is an extremely interesting example but as it was unstratified, a decision would need to be made about whether to pursue further investigation of it.

1.3.12 Saddle querns and rubbers are common on many prehistoric sites but the saddle quern from the base of pit [1910] is made from a purple, probably limonite cemented, ironstone. The use of ironstone for saddle querns is not common but nor is it unheard of; ironstone was apparently used for saddle querns at Gravesend in a Bronze Age context (Roe 1994, 399) and Hayes Common, Hayes (Philp 1973, 51).

*Potential for further work*

1.3.13 Though there are few humanly modified stone finds from the excavations at Beechbrook Wood, mainly from Bronze and Iron Age contexts, they are able to contribute to the Landscape Zone Aims for the Wealden Greensand and North Downs zones in period categories 2 and 3, specifically with regard to the following issues:

*Early Agriculturists (4,500-2,000 BC)*

- Define ritual and economic landscapes and their relationships
- Determine the nature of changes in economic lifeways, eg. relative importance of hunting-foraging and agriculture

*Farming Communities (2,000-100 BC)*

- Determine how settlements were arranged and functioned over time

1.3.14 The well used polisher, although a surface find, is an excellent example and worth further study for comparable material. The discovery of an ironstone saddle quern from the very base of Late Neolithic pit [1910] is significant and worthy of discussion, while the artefact itself warrants proper description and illustration. Discussion would be needed in conjunction with the other artefactual deposits in the pit.

1.3.15 The rubbers need further examination and discussion. The one rubber which may be a small pestle and the other possible pestle need to be carefully looked at and comparative material sought. Pestles are not widely recorded so these could be of particular significance.

1.3.16 The lithologies of all the artefacts need to be investigated thoroughly to determine whether all the material utilised was locally available. The lava quernstone is a poor example and very weathered, so is not deemed not worthy of illustration. Comparable material would not be required so long as its presence was recorded.

**ARC BWD98**

*by Ruth Shaffrey*

*Introduction*

1.3.17 Six fragments of worked stone were recovered by hand excavation during Fieldwork Event ARC BWD98.

*Methodology and Quantification*

1.3.18 All fragments were examined. Each sample was examined with a x10 magnification hand lens, weighed and recorded by small find number and or context and with regards to description, lithology and probable function. The results are presented in Table 2.5.

*Provenance*

1.3.19 Five of the six fragments originated from one context, fill (223) in posthole [224], part of group 3056, alongside the western extent of possible causeway group 3055. This is the only find-spot for this material for both ARC BBW00 and ARC BWD98 and may indicate that the postholes may have supported a grindstone. Although undated, this group is spatially associated with the later development stages of enclosure 3072 in Target Area A (sub-phase 7.1), which also features two four-poster arrays (groups 3050 and 3056) east of group 3055. SF11 is of unclear provenance, since double-numbering in the field has resulted in a re-numbering which could not be located on the revised site plan.

*Conservation*

1.3.20 The material is stable and requires no further conservation

*Comparative material*

1.3.21 Millstone grit is a common stone type utilised for quernstones in Kent, and a wide range of comparanda should be available for further analysis, if required.

*Potential for further work*

1.3.22 The assemblage is limited by its small size, and offers no potential for further analysis. However, in the wider context of the interpretation of enclosure 3072, its presence is of interest for the functional analysis of the site and in that way may contribute to the Landscape Zone Aims for the Wealden Greensand and North Downs zones in period categories 4i, specifically with regard to the following issue:

- How were settlements and rural landscapes organised and how did they function?

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*Table 2.1: Quantification and breakdown of the flint assemblage ARC BBW00 by context*

| Context | Count | Period | Comments |
|---|---|---|---|
| 0 | 21 | Mesolithic to Bronze Age | large horseshoe scraper, end and side scraper, edge retouched flake, notch, core on flake |
| 6 | 1 | Neolithic | |
| 7 | 5 | early Neolithic, Neolithic | |
| 8 | 2 | Neolithic | truncated flake/retouch |
| 9 | 1 | Mesolithic | truncated blade and edge retouch |
| 32 | 10 | mixed Mesolithic and Neolithic | rolled |
| 33 | 2 | Neolithic | |
| 35 | 3 | Mesolithic or Neolithic? | truncated blade, 2 end and side scrapers |
| 70 | 2 | | |
| 100 | 2 | Mesolithic, Early Neolithic? | rolled |
| 201 | 11 | early Mesolithic to Neolithic | several large blades |
| 210 | 1 | | |
| 219 | 1 | | |
| 258 | 1 | | |
| 269 | 1 | | |
| 298 | 1 | | |
| 300 | 4 | Neolithic or Bronze Age, Late Mesolithic core | bladelet core |
| 378 | 1 | Mesolithic? | proximal notch? |
| 400 | 1 | Mesolithic | |
| 420 | 3 | BA? | |
| 424 | 1 | BA? | denticulated scraper, hafted? |
| 451 | 6 | Early Neolithic ? | retouched flake, piercer |
| 477 | 1 | | |
| 505 | 2 | | |
| 511 | 1 | | side and end scraper |
| 515 | 2 | Neolithic | 1 side and end scraper |
| 525 | 3 | | |
| 561 | 62 | Early Bronze Age | leaf shaped knife. Virtually all flint burnt and broken |
| 570 | 4 | | |
| 580 | 2 | | one chalk flint |
| 713 | 1 | Mesolithic/Early Neolithic | |
| 732 | 2 | | |
| 735 | 3 | | fresh, same flint? |
| 748 | 4 | | |
| 756 | 2 | | |
| 787 | 3 | Neolithic | |
| 799 | 3 | | chips |
| 801 | 1 | | |
| 804 | 4 | | |
| 821 | 1 | | |
| 842 | 2 | Neolithic? | |
| 860 | 3 | | |
| 863 | 1 | Neolithic | chalk flint |
| 865 | 4 | Early Neolithic | leaf shaped ?projectile point, unifacial retouch except on tip, edge retouched flake with rounded usewear |
| 874 | 5 | | |
| 875 | 8 | | |
| 880 | 2 | | |
| 886 | 1 | | |
| 890 | 2 | Neolithic | end scraper |
| 894 | 4 | Neolithic | side and end (horseshoe scraper), ?serrated flake |
| 899 | 1 | | |
| 901 | 5 | | |
| 908 | 6 | | |
| 909 | 3 | | |
| 912 | 2 | | chips |
| 913 | 1 | | |
| 914 | 1 | Neolithic | side scraper |

| | | | |
|---|---|---|---|
| 922 | 3 | | |
| 929 | 1 | | |
| 932 | 4 | | chips, one retouch chip |
| 938 | 1 | | chip |
| 939 | 1 | | chip |
| 943 | 2 | | |
| 944 | 1 | | |
| 947 | 1 | | chip |
| 949 | 2 | Early Neolithic or Beaker period | one leaf arrowhead rough out, or poss small knife, good retouch |
| 956 | 1 | | |
| 959 | 13 | | |
| 978 | 1 | | end scraper |
| 1001 | 1 | | |
| 1004 | 1 | | |
| 1006 | 3 | | |
| 1034 | 1 | | retouched flake |
| 1082 | 1 | | |
| 1119 | 1 | | |
| 1133 | 1 | | end scraper |
| 1154 | 3 | | chips |
| 1193 | 5 | | 1 single plt flake core, edge retouched flake - good wear |
| 1197 | 2 | Bronze Age? | two cores on flakes, one poss used like denticulate |
| 1200 | 3 | | 1 tested nodule |
| 1201 | 2 | | |
| 1213 | 3 | | |
| 1246 | 2 | | fine narrow blade - lm? |
| 1283 | 1 | Early Neolithic? | |
| 1286 | 2 | Early Neolithic? | |
| 1289 | 2 | | bullhead flint small flake core on flake/denticulated scraper |
| 1293 | 2 | | |
| 1342 | 2 | | |
| 1366 | 1 | | retouched flake |
| 1375 | 22 | Beaker period | 1 retouched flake, all burnt. 17 chips inc some microdeb. |
| 1376 | 23 | Beaker period | + 70 chips, majority burnt, conjoins, possibility of refits |
| 1377 | 239 | Beaker period | +500+ mircodeb. mainly burnt - except tools, several cores, good possiblility of refits. 1 end scraper - broken, 1 side scraper, 2 thumbnail scrapers, B+T sutton B, h., Multi plt flake core, |
| 1380 | 1 | | |
| 1390 | 1 | | scraper on non flake blank |
| 1400 | 3 | | |
| 1402 | 7 | Neolithic? | edge retouched flake, flake core |
| 1404 | 1 | | |
| 1406 | 1 | | |
| 1409 | 18 | ?early Mesolithic and Beaker period | + 82 micro debitage .mainly burnt. Scraper burnt and broken, 1 long broad ?em blade |
| 1411 | 1 | | |
| 1413 | 3 | | |
| 1415 | 1 | | |
| 1416 | 8 | Neolithic? | flake of chalk flint -axe material?, side and end scraper with two notches |
| 1453 | 1 | | scraper on non flake blank |
| 1459 | 1 | | notch |
| 1469 | 1 | | |
| 1518 | 1 | | |
| 1537 | 3 | Mesolithic blade? | I edge retouched flake |
| 1553 | 1 | | |
| 1588 | 1 | | |
| 1590 | 2 | | |
| 1594 | 3 | Neolithic? | |

| | | | |
|---|---|---|---|
| 1602 | 3 | | |
| 1604 | 3 | Neolithic | + 18 micro debitage, mainly burnt. Blade-like assemblage |
| 1608 | 1 | | |
| 1610 | 1 | | |
| 1614 | 1 | Mesolithic or Neolithic | |
| 1618 | 1 | Early Mesolithic | microlith - obliquely blunted point, not standard form |
| 1620 | 1 | | |
| 1624 | 125 | Late Mesolithic | thinning flake, blade core, flake core, 2 microliths, notch, 2 retouched flakes, truncated blade |
| 1636 | 3 | | |
| 1637 | 24 | Late Mesolithic | piercer, notch, retouched flake |
| 1638 | 17 | Late Mesolithic | |
| 1639 | 47 | Late Mesolithic | microlith, retouched flake, microburin |
| 1640 | 33 | Late Mesolithic | 2 microliths, 1 retouched flake |
| 1641 | 21 | Late Mesolithic | 2 microliths |
| 1642 | 17 | Late Mesolithic | 1 retouched flake |
| 1643 | 444 | Late Mesolithic | 17 microburins, tested nodule, flake core, 8 microliths, end scraper, 2 piercers |
| 1649 | 1 | | |
| 1656 | 7 | | 1 backed blade |
| 1657 | 3 | Neolithic? | 2 edge retouched flakes 1 with a fine notch, end and side scraper |
| 1658 | 11 | Neolithic | core on flake - bladelet removals |
| 1659 | 1 | | edge retouched flake |
| 1660 | 4 | | |
| 1663 | 1 | | |
| 1670 | 22 | Late Neolithic or early Bronze Age | Large fresh flakes, lots of heavy use. 3 flake cores, denticulated scraper, 2 end and side scrapers |
| 1672 | 1 | | |
| 1674 | 153 | Late Mesolithic | + 429 chips. retouched flake - knife?, core on flake MP flake core, rod microlith - 6 or 7a2, microburins and microlith fragments also present |
| 1675 | 323 | Late Mesolithic | piercer, 2 rod microliths, 1 microlith Jacobi 7a, truncated blade |
| 1685 | 2 | | |
| 1687 | 5 | | end scraper - flake removed from edge |
| 1691 | 1 | | |
| 1697 | 2 | | |
| 1700 | 17 | | |
| 1702 | 3 | | |
| 1703 | 1 | | |
| 1705 | 5 | | |
| 1708 | 1 | | |
| 1713 | 13 | | |
| 1720 | 4 | | |
| 1722 | 5 | | |
| 1724 | 1 | | double ended scraper, notch in side, rolled |
| 1742 | 1 | Bronze Age | denticulated scraper, |
| 1753 | 1 | | heavy edge retouch or post depositional edge damage |
| 1772 | 1 | | |
| 1791 | 2 | | flake core, partly discoidal |
| 1798 | 1 | | |
| 1802 | 1 | Early Mesolithic | possible em blade |
| 1810 | 3 | | |
| 1831 | 1 | | |
| 1860 | 1 | | |
| 1875 | 1 | | |
| 1909 | 221 | Early Neolithic | +421 chips. blade like material, possibility of refits. 4 edge retouched flakes - 1 with rounded use-wear, 2 sp flake core, sp blade core, 1 spurred piece, |

| | | | |
|---|---|---|---|
| | | | 1 serrated flake, 3 pieces of bullhead flint, core tablet |
| 1911 | 2 | | |
| 1913 | 1 | | edge retouched blade |
| 2021 | 1 | | |
| 2047 | 1 | | |
| 2061 | 2 | | end and side scraper, soft scraping, tested nodule |
| 2071 | 1 | Late Neolithic | discoidal core |
| 2094 | 2 | | |
| 2095 | 1 | | edge retouched flake, rounded usewear |
| 2099 | 2 | | |
| 2109 | 1 | | end scraper |
| 2112 | 2 | | |
| 2117 | 1 | | |
| 2133 | 1 | | |
| 2139 | 1 | | |
| 2214 | 4 | | |
| 2237 | 1 | | |
| 2241 | 4 | | |
| 2242 | 8 | | |
| 2256 | 1 | | bullhead flint |
| 2262 | 1 | | end scraper, broken |
| 2272 | 1 | | |
| 2297 | 1 | | end and side scraper |
| 2322 | 1 | | retouched flake |
| 2326 | 1 | | |
| 2342 | 4 | | Chips |
| 2345 | 3 | | |
| 2346 | 1 | | |
| 2354 | 3 | | |
| 2358 | 1 | | |
| 2427 | 1 | | end and side scraper, disc? |

*Table 2.2. Quantification of flint from ARC BWD98 by context*

| Context | Special No. | Count | Period | Comments |
|---|---|---|---|---|
| 117 | SF16 | 1 | Neolithic/Mesolithic | blade, snapped at both ends |
| 101? | SF1 | 1 | Neolithic/EBA | flake with distal break |

## - LITHICS

### 1.4 Flint

*By Hugo Lamdin-Whymark*

*Introduction*

1.4.1 A total of 83 pieces of worked flint and 245 pieces of burnt unworked flint (weighing 2,770 g) was recovered from the excavations. This material, summarised in Tables 2.1-2.2, is redeposited within later features. No diagnostic retouched forms were recovered, however distinctive technological traits indicated the presence of a small number of late Mesolithic/early Neolithic flints and Bronze Age flintworking.

*Methodology*

1.4.2 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 flint was scanned and weighed; general comments on the condition of this material were also made.

*Quantification*

1.4.3 A total of 83 pieces of worked flint and 245 pieces of burnt unworked flint (weighing 2,770 g) was recovered from the excavations. This material is summarised below in Tables 2.1 and 2.2.

*Provenance*

1.4.4 The flintwork was recovered from a wide variety of features, the majority dating from the Iron Age or later periods; therefore, the flintwork in these features is redeposited. No diagnostic retouched forms were present to assist with dating, however, technological traits aided identification of the industries present. The bipolar blade core, along with several narrow flakes and blades, which exhibit platform edge abrasion, belong to a predominantly blade-based industry of Late Mesolithic or Early Neolithic date. The majority of the assemblage comprises thick and squat flakes, struck using hard hammer percussors; these flints belong to the flake-based industry of the Bronze Age. The presence of cores, chips and irregular waste indicate that some knapping has occurred on or around the site, whilst the presence of a small retouched component (two scrapers and an edge retouched flake) indicates various activities were performed in the vicinity of the site. However, in general the quantity of flint recovered is small and reflects a background presence in the area from the late Mesolithic onwards.

*Conservation*

1.4.5 Much of the flint has suffered some post-depositional edge damage; cortication is not present. Several pieces of burnt unworked flint were also recovered; this material was very heavily calcined either grey-white or red. A few of the worked flints were also burnt.

1.4.6 The flint is adequately bagged and boxed for long-term storage. There are therefore no storage or conservation requirements.

*Comparative Material*

1.4.7 The flint can be compared to other sites from the CTRL route which produced Late Mesolithic/Early Neolithic and Bronze Age material, eg. Beechbrook Wood.

*Potential for Further Work*

1.4.8 The flint assemblage provides evidence for human activity on site predating the cut features, however, the limited size and mixed composition of the assemblage limits the potential for further work. A summary for publication should be produced using this assessment as a basis.

*Table 2.1: Summary composition of the flint assemblage by context*

| Context | Count | Period | Comments |
|---|---|---|---|
| 8010 | 2 | | Chips |
| 8012 | 7 | | Chips |
| 8015 | 6 | | 5 chips, 1 flake |
| 8017 | 1 | | 1 flake |
| 8020 | 1 | | Chip |
| 8022 | 1 | | Chip |
| 8026 | 1 | | 1 flake |
| 8048 | 1 | | 1 flake |
| 8102 | 1 | | 1 flake |
| 8128 | 2 | | 2 flakes |
| 8137 | 1 | | 1 flake |
| 8151 | 4 | | 4 flakes |
| 8155 | 1 | | 1 flake |
| 8195 | 1 | | 1 flake |
| 8231 | 1 | | 1 flake |
| 8234 | 1 | | 1 flake |
| 8281 | 1 | | 1 flake |
| 8313 | 2 | | 2 flakes |
| 8315 | 3 | Neolithic? | 3 flakes |
| 8358 | 1 | | Chip |
| 8364 | 2 | | 2 flakes |
| 8390 | 1 | Neolithic? | 1 flake |
| 8415 | 2 | | 2 flakes |
| 8417 | 2 | | 2 flakes |
| 8440 | 2 | Late Mesolithic/early Neolithic? | Fresh condition, 1 flake, 1 blade |
| 8441 | 1 | | 1 Blade-like flake |
| 8443 | 1 | | 1 flake |
| 8445 | 2 | | 1 flake, 1 single platform blade core (87 g) |
| 8447 | 4 | | 3 flakes, 1 chip |
| 8450 | 1 | Late Mesolithic/early Neolithic? | 1 bipolar blade core |
| 8457 | 3 | | 2 flakes, 1 tested nodule |
| 8484 | 1 | | 1 irregular waste |
| 8498 | 3 | | 3 flakes |
| 8499 | 1 | Neolithic? | 1 edge retouched flake |
| 8519 | 8 | Bronze Age? | 6 flakes, 1 multi-platform flake core, 1 end scraper |
| 8520 | 1 | Neolithic? | 1 flake |
| 8579 | 5 | Bronze Age? | 4 flakes, 1 fragmentary flake core |
| 8601 | 2 | | 1 flake, 1 irregular waste |
| 8604 | 1 | Neolithic? | 1 end and side scraper (on thin flake) |
| 8611 | 1 | | 1 flake |

*Table 2.2: Quantification of burnt unworked flint*

| Context | Count | Weight (g) | Comments |
|---|---|---|---|
| 8006 | 24 | 105 | |
| 8008 | 7 | 19 | |
| 8010 | 11 | 93 | |
| 8012 | 9 | 34 | |
| 8015 | 20 | 91 | |
| 8017 | 3 | 30 | |
| 8020 | 9 | 30 | |
| 8022 | 10 | 20 | |
| 8026 | 28 | 56 | |
| 8036 | 2 | 8 | |
| 8083 | 2 | 3 | |
| 8099 | 2 | 26 | |
| 8137 | 2 | 9 | |
| 8151 | 3 | 15 | |
| 8192 | 2 | 2 | |
| 8313 | 1 | 6 | |
| 8315 | 2 | 216 | |
| 8322 | 3 | 11 | |
| 8343 | 21 | 14 | |
| 8422 | 1 | 46 | |
| 8445 | 2 | 64 | |
| 8471 | 12 | 51 | |
| 8493 | 2 | 27 | |
| 8495 | 3 | 18 | |
| 8498 | 44 | 1201 | |
| 8499 | 2 | 93 | |
| 8519 | 7 | 39 | |
| 8520 | 3 | 8 | |
| 8527 | 1 | 2 | |
| 8535 | 1 | 1 | |
| 8539 | 1 | 4 | |
| 8584 | 1 | 10 | |
| 8597 | 1 | 2 | |
| 8598 | 1 | 265 | |
| 8601 | 2 | 151 | |

LODGE WOOD

**- LITHICS**

## 1.5 Assessment of Worked Flint

*by Philippa Bradley*

*Introduction*

1.5.1 A small group of six pieces of flint was recovered from the site. Although none of the material is particularly diagnostic the scraper, which is small and neatly retouched, may be Neolithic or early Bronze Age in date, as may the piercer. Scrapers are very difficult to date as the form spans a very long period. However, given its size and general technological traits it is possible to suggest a broad time span for this piece.

*Methodology*

1.5.2 The flint was briefly scanned, with information regarding dating, technology and general condition being noted. The material was added to an Access database.

*Quantification*

1.5.3 A total of 6 pieces of worked flint was recovered from the site. The flint is summarised in Table 3.

*Provenance*

1.5.4 The scraper (828) came from a middle-late Iron Age ditch (827), the piercer (830) came from a middle-late Iron Age pit (829) and the remaining material came from the topsoil. It is all residual.

*Condition*

1.5.5 The flint has suffered some post-depositional damage. Cortication is light.

*Comparative material*

1.5.6 This small group could be compared to adjacent sites on the CTRL route and with any fieldwalking data.

*Potential for further work*

1.5.7 As the material is redeposited its potential is limited given the size of the group. However, it may be useful to include this material in with a general study of the lithics from the CTRL to understand landscape patterns. Comparison of scrapers from the project as a whole may shed further light on dating.

*Table 3: Summary of worked flint*

| Context | Count | Period | Comments |
|---|---|---|---|
| 828 | 1 | ?Neolithic-Early Bronze Age | 1 small neatly retouched scraper |
| 830 | 1 | ?Neolithic-early Bronze Age | 1 piercer, small point, minimally retouched. |
| 801 | 4 | ? | Three hard hammer-struck flakes and a multi-platform flake core. The working is quite crude, one of the flakes has a hinge fracture which may indicate a later prehistoric date, but the numbers are too few to make any firm conclusions. |

## - LITHICS

### 1.6 Assessment of the Worked and Burnt Flint

*by Philippa Bradley*

*Introduction*

1.6.1 Assemblages of worked and burnt (unworked) flint were recovered during the watching brief. It was hoped that the flint would provide evidence for the date and character of prehistoric activities across the area.

*Methodology*

1.6.2 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 flint was scanned and weighed; general comments on its condition were also made.

*Quantification*

1.6.3 A total of 224 pieces of worked flint and 812 pieces of burnt unworked flint (the latter weighing 5403 g) were recovered. This material is summarised below in Table 2.1 (worked flint) and Table 2.2 (burnt flint).

*Provenance*

1.6.4 Three of the four ring ditches (89, 90 and 156) produced small quantities of worked flint (ring ditch 89: contexts 60-1, 84-5; ring ditch 90: contexts 88, 96-7, 107, 111; ring ditch 156: contexts 158, 160, 166, 178-9 - see Table 2.1 for details). Debitage dominated this small group (flakes including several trimming flakes, a core fragment, a keeled core and a core rejuvenation flake were recovered). The only retouched piece was a retouched blade from context 166 (ring ditch 156); this piece may simply have been used rather than formally retouched. Possible usewear was identified on a flake from context 88 (ring ditch 90). The keeled core from context 85 may be of later Neolithic date. Several trimming flakes were recovered, which together with the core and core fragment might suggest that nodules encountered during the digging of the ring ditches were exploited and reduced on site. The retouched blade may have been used during this phase of activity or may have been associated with the funerary process itself, although no burials clearly associated with the ring ditches were found. There appeared to be little difference between the material from the various fills of the ring ditches, and no concentrations of material were identified. There is too little material to provide any secure dating although the flint is consistent with a broad Neolithic-Bronze Age date. Context 130, an organic layer associated with ring ditch 90 produced two flakes. Small quantities of heavily burnt flint were recovered from various ring ditch contexts (Table 2.2).

1.6.5 The fill (24) of cremation pit 23 contained a single flint flake and the fill (99) of a cremation pit (98) to the east of the ring ditches produced eight pieces of heavily calcined flint. A pit with a deposit of charcoal (14) produced a blade-like flake with used edges (Table 2.1). The blade-like flake was placed vertically within the charcoal deposit; unfortunately the blade-like flake is not closely datable. A number of pit fills produced small assemblages of worked flint (contexts 38, pit 37; context 54, pit 53; pit 106; upper fill 13, pit 14; 43, fill of pit 42; 118, fill of pit 117; 151, charcoal pit 150; 267-8, fill of pit 260). Generally the flint was fairly thinly spread

across these contexts, and was relatively undiagnostic material including flakes and a core tablet from context 38, and a multi-platform flake core fragment from context 43 (see Table 2.1 for details). Three pieces of heavily burnt flint came from context 151, the fill of pit 150, and a single piece of burnt flint came from context 268, the fill of pit 260. The fill of pit 21 produced a large assemblage of heavily burnt flint (Table 2.2).

1.6.6 Contexts 19 and 20 consisted of two flint scatters, *c* 60 m apart, containing 106 pieces of worked flint (Table 2.1). The material from these scatters was heavily abraded and battered, as would be expected. Debitage dominated the group (Table 2.1), with flakes, cores and core rejuvenation flakes being recovered. A group of large cores and flakes was included in this group; some potential refitting material was identified although no actual refits were found. No small chips or flakes were found from the scatter but this may simply reflect post-depositional disturbance and/or collection methods on site. The retouched forms from the scatter include scrapers, a scraper or knife, a piercer and two retouched flakes. Typically the scrapers were neatly retouched and included a possible 'thumbnail' scraper of Beaker date. It is likely that this material is of mixed date and probably includes Neolithic to early Bronze Age flintwork.

1.6.7 A flake and a core fragment were recovered from the fill of ditch 201 (context 264). Three tree-throw holes (contexts 219, 337 and 349) produced small assemblages of debitage, including two blade-like flakes from context 337 with possible usewear (see Table 2.1 for details). Two pieces of heavily burnt flint came from context 219, the fill of tree-throw hole 217. Flint was also recovered from the topsoil, subsoil layers and other unstratified contexts (eg 100, 101 and 2, see Table 1 for details). The composition of this material is very similar to that from the flint scatters (contexts 19-20) and is similar in date range.

*Conservation*

1.6.8 Much of the flint has suffered some post-depositional damage; cortication is mixed. Several pieces of burnt unworked flint were also recovered. This material was very heavily calcined either grey-white or red. A few pieces of worked flint were also burnt. Some of the burnt unworked flint is beginning to disintegrate, but little can be done to prevent this. The burnt unworked flint could be discarded. The flint is adequately bagged and boxed for long term storage. There are therefore no storage or conservation requirements.

*Comparative Material*

1.6.9 The flint from Tutt Hill could be compared to material from other Neolithic to Bronze sites excavated along the route of the CTRL (eg Snarkhurst Wood, Sandway Road and Church Lane) and material from the County. Material from the surface artefact collection survey would also provide useful comparisons.

*Potential for Further Work*

1.6.10 The flint from Tutt Hill is generally of Neolithic to early Bronze Age date, but very limited diagnostic retouched forms and little debitage was recovered. Although the assemblage is only broadly dated to the Neolithic-early Bronze Age it seems unlikely that any of the material is contemporary with the later Bronze Age ceramics recovered. The flintwork was generally thinly spread across the contexts. Given these limitations the flint nonetheless provides evidence for earlier prehistoric activity in this area. It is unfortunate that the activity associated with the flint scatters (19 and 20) cannot be more accurately dated, since they provide potentially

interesting evidence of activity not far from the area of the targeted watching brief which might, for example, be contemporary with the ring ditches.

1.6.11 One small group of flints showed potential for refitting analysis, although no actual refits were identified during the assessment. A programme of refitting on this group, if successful, would demonstrate that the flint has not moved far from the point of original deposition and would suggest the presence of a knapping site in the vicinity of the barrows, potentially contemporary with their primary construction and use. This would help to define the range of activities associated with the barrow cemetery. While not necessarily indicating domestic occupation, the presence of a knapping site would at least suggest that the location was a focus of activity, such as a temporary campsite or a meeting place.

1.6.12 Some evidence for usewear has been identified but, given the lack of good groups and the number of pieces involved there is no potential for further work in this area.

*Table 2.1: Summary of worked flint*

| Context | Count | Period | Comments |
|---|---|---|---|
| 38 (83+900) | 3 | Prehist | 2 flakes, 1 core tablet |
| 13 (83+300 ) | 1 | LBA? | 1 flake |
| 72 | - | LIA-ER | Natural |
| 88 | 1 | LN-EBA | 1 flake with possibly used edges |
| 100 | 1 | - | 1 flake, very cherty flint, 1 natural |
| 106 | 1 | LIA + PM | 1 flake with blade scars on dorsal face |
| 116 | 5 | ? | 4 small chips, 1 flake. The chips may conjoin |
| 158 | 2 | LN-EBA | 2 flakes, also 2 natural |
| 160 | 4 | LN-EBA | 4 flakes, one is a very large trimming flake, fresh edges, some usewear |
| 166 | 2 | LN-EBA | 1 flake, poss used, 1 retouched blade ?use rather than retouch |
| 178 | 5 | LN-EBA | 5 flakes, all small |
| 179 | 2 | LN-MBA | 2 flakes |
| 187 | - | LN-EBA | 2 natural |
| 7 (84+320) | 3 | EIA | 1 flake, 1 used blade, possibly truncated, 1 blade-like flake with possible usewear |
| 13 | 1 | LBA? | 1 flake |
| 2 (84+400) U/S | 6 | - | 1 irregular flake, 2 multi-platform flake cores, 1 single platform flake core, 1 end and side scraper made on a ?discoidal core , 1 blade |
| 43 | 1 | LBA | Multi-platform flake core fragment |
| 54 | 3 | LBA | 3 flakes one of which has thermal internal flaws and is battered externally |
| 60 | 2 | LN-EBA | 1 trimming flake, 1 core rejuvenation flake (face/edge) core has been rotated 180 degrees |
| 61 | 1 | LN-EBA | 1 blade-like flake |
| 84 | 2 | LN-EBA | 2 flakes, one is a large trimming flake |
| 85 | 4 | LN-EBA | 1 keeled core – very cherty flint, 1 flake, 1 possible flake, 1 core fragment, ??later Neolithic |
| 96 | 1 | LN-EBA | 1 flake with blade scar on dorsal face |
| 97 | 2 | LN-EBA | 2 flakes |
| 101 | 2 | - | 1 core rejuvenation flake (face/.edge), 1 retouched flake with very worn edges |
| 107 | 2 | LN-EBA/LBA | 2 blade-like flakes with blade scars on dorsal faces |
| 111 | 3 | LN-EBA | 3 flakes, 2 are trimming flakes |
| 116 | 1 | ? | 1 blade-like flake ?used edges |
| 118 | 2 | MBA | 2 flakes |
| 130 | 2 | ? | 2 flakes |
| 151 | 9 | MN-LN | 8 flakes two of which are heavily burnt |
| 166 | 1 | LN-EBA | 1 flake |
| 264 | 2 | LBA? | 1 flake, 1 core fragment |
| 219 | 6 | MBA | 6 flakes, also 1 natural |
| 267 | 2 | ? | 2 flakes |

| Context | Count | Period | Comments |
|---|---|---|---|
| 268 | - | ? | 1 natural |
| 349 | 3 | ? | 2 flakes, 1 chip |
| 337 (84+500) | 6 | MN? | 4 flakes, 2 blade-like flakes – some with possible usewear |
| 19 (84+700) | 95 | LN-EBA | 74 flakes, 3 core fragments (flake cores), 1 multi-platform flake core, 1 single platform flake core, 1 core rejuvenation flake (face/edge), 6 misc retouch, 6 scrapers (1 fragment, 4 end, 1 possible thumbnail) , 1 scraper/knife, 1 piercer, 1 retouched flake, 2 natural, Neolithic-early Bronze Age |
| 100 | 3 | - | 3 blade-like flakes one is burnt |
| U/S (84+800) | 13 | - | 7 flakes, 2 core fragments, 1 multi-platform flake core, 1 single platform flake core, 1 retouched flake (minimal retouch), 1 end and side scraper – much later damage |
| 24 | 1 | - | 1 small flake |
| 19 (84+860) | 7 | - | 3 flakes, 1 extremely large opposed platform flake core with some edge preparation, 3 minimally retouched flakes, also 4 natural |
| 20 | 11 | - | 9 flakes (one from an opposed platform core), 1 retouched flake, 1 large ?multi-platform flake core. NB some of the flakes from this group are very large and may well refit the cores |
| Total | 224 | | |

*Table 2.2: Summary of burnt, unworked flint*

| Context | Count | Weight (g) | Comments |
|---|---|---|---|
| 2 (83+360) | 2 | 5 | Heavily calcined grey |
| 164 (84+300) | 1 | 3 | Heavily calcined grey |
| 178 | 2 | 26 | Heavily calcined white-grey |
| 179 | 2 | 11 | Heavily calcined grey |
| 61 (84+400) | 1 | 20 | Heavily calcined white-grey |
| 151 | 3 | 42 | Heavily calcined white-grey, one piece is reddish tinged |
| 219 | 2 | 3 | Heavily calcined grey |
| 268 | 1 | 10 | Heavily calcined white-grey with reddish tinges, also 1 natural |
| 99 (84+440) | 8 | 12 | Heavily calcined grey |
| 22 (84+900) | 790 | 5271 | Heavily calcined white-grey with reddish tinges* |
| Total | 812 | 5403 | |

* Scanned only, numbers from OAU finds records

HOLM HILL

## Worked Flint

1.1.1 A total of 126 pieces of worked flint was recovered. The small lithic assemblage is likely to be chronologically mixed. The majority of the assemblage consists of flake and core material, unpatinated or lightly patinated, and varying in condition from fresh to slightly edge-damaged; the raw material is likely to derive from a local gravel source.

1.1.2 While much of this material is not chronologically distinctive, and can only be dated broadly to the Neolithic/Bronze Age, the presence of blades and broken blades indicates the potential presence of an early prehistoric (Mesolithic/early Neolithic) component. One other piece warrants further mention – a Late Neolithic or Early Bronze Age knife recovered from topsoil in the vicinity of trench 3593TT, which is intrinsically interesting as both an example of its kind and probably the only closely datable piece of retouched worked flint recovered from Holm Hill. This is not, however, a particularly rare item, manufactured from locally available Bullhead flint. The flint distribution forms a low level background scatter, with a few small concentrations; approximately one quarter of the assemblage came from unstratified or topsoil contexts.

## Burnt Flint

A total of 10 pieces (511g) of burnt flint was recovered. Burnt flint is intrinsically undatable but is often considered to be indicative of prehistoric activity. However, in this instance the majority of the pieces recovered from features came from pit **359609** containing probable Romano-British cremation related deposits.

**Assessment of Worked Flint**

**Table 8: Worked Flint quantification by context**

| Trench | Feature | Context | Count | Period | Comments |
|---|---|---|---|---|---|
| | Ditch 4010 | 1017 | 5 | Neo/BA | Flakes; core |
| | Topsoil | 1021 | 21 | Neo/BA | Flakes; cores |
| | Ditch 4001 | 2011 | 1 | Neo/BA | Flake |
| | Ditch 4010 | 2028 | 3 | Neo/BA | Flakes |
| | Tree throw 2033 | 2032 | 2 | Neo/BA | Flakes |
| | Lynchet 2044 | 2045 | 1 | Neo/BA | Flake |
| | Ditch 4004 | 2085 | 7 | Neo/BA | Flakes |
| | Ditch 4005 | 2104 | 1 | Neo/BA | Flake |
| | Ditch 4005 | 2105 | 2 | Neo/BA | Flakes |
| | Subsoil | 2106 | 1 | Neo/BA | Flake |
| | Pit 2124 | 2126 | 12 | Neo/BA | Flakes; scrapers; core |
| 3525TT | Subsoil | 352502 | 1 | Meso/EN | Blade |
| 3528TT | Gully 352810 | 352809 | 1 | Meso/EN | Broken blade |
| 3528TT | Gully 352812 | 352811 | 1 | Neo/BA | Flake |
| 3529TT | Colluvium | 352902 | 1 | Neo/BA | Core rejuvenation tablet |
| 3531TT | Layer | 353104 | 1 | Neo/BA | Flake |
| 3592TT | Ditch 359205 | 359202 | 3 | Neo/BA | Flakes |
| 3593TT | Topsoil | 359301 | 1 | LN/EBA | Knife; Bullhead flint |
| 3600TT | Topsoil | 360001 | 1 | Neo/BA | Flake |
| 3601TT | Ditch 360112 (=4001) | 360111 | 2 | Neo/BA | Flake; core |
| 3603TT | Subsoil | 360302 | 1 | Neo/BA | Flake |
| 3603TT | Ditch 360303 | 360304 | 27 | Neo/BA | Flakes |
| 3605TT | Ditch 360507 | 360508 | 1 | Neo/BA | Flake |
| 3612TT | Subsoil | 361202 | 2 | Neo/BA | Blade; flake |
| 3612TT | Ditch 361204 | 361203 | 12 | Meso | Blades; flakes |
| 3614TT | Ditch 361403 | 361404 | 1 | Neo/BA | Flake |

| | | | | | |
|---|---|---|---|---|---|
| 3633TT | Ditch 363303 | 363304 | 1 | Neo/BA | Flake |
| 3634TT | Ditch 363406 (=4007) | 363407 | 5 | Neo/BA | Flakes |
| 3532TT | Palaeochannel 353218 | 353211 | 1 | Meso/EN | Broken blade |
| | Unstratified | Unstrat | 7 | Neo/BA | Flakes; core |
| | | **TOTAL** | **126** | | |

**Table 9: Worked Flint quantification by artefact type**

| Type | Number | Group % | Total % | Period | Comments |
|---|---|---|---|---|---|
| Scrapers | 2 | 66.7% | 1.6% | Neo/BA | End scrapers |
| Piercers | | | | | |
| Burins | | | | | |
| Projectiles | | | | | |
| Denticulates | | | | | |
| Fabricators | | | | | |
| Microliths | | | | | |
| Core tools | | | | | |
| Other tools | 1 | 33.3% | 0.8% | LN/EBA | Knife |
| Misc. retouch | | | | | |
| *Tools subtotal* | *3* | | *2.4%* | | |
| | | | | | |
| Flake cores/core frags | 8 | 88.9% | 6.3% | Neo/BA | |
| Blade(let) cores/core frags | | | | | |
| Rejuvenation tablets | 1 | 11.1% | 0.8% | Neo/BA | |
| Crested pieces | | | | | |
| Microburins | | | | | |
| Chips | | | | | |
| *Production sub-total* | *9* | | *7.1%* | | |
| | | | | | |
| Blades/bladelets | 14 | 12.3% | 11.1% | Meso? | |
| Flakes | 100 | 87.7% | 79.4% | Neo/BA | |
| *Blades & flakes sub-total* | *114* | | *90.5%* | | |
| | | | | | |
| Debitage | | | | | |
| *Fragments sub-total* | | | | | |
| | | | | | |
| **TOTAL** | **126** | | | | |

Assessment of Burnt Flint

**Table 10: Burnt Flint quantification**

| Trench | Feature | Context | Period | Count | Weight |
|---|---|---|---|---|---|
| 3596TT | Crem. 359609 | 359608 | RB? | 7 | 6 |
| 3633TT | Ditch 363303 | 363304 | LBA | 1 | 1 |
| | Unstratified | unstrat | - | 2 | 504 |
| | | | **TOTAL** | **10** | **511** |

LITTLE STOCK FARM

## Worked Flint

1.1.3 The worked flint includes little that is chronologically distinctive. The majority of the assemblage consists of flake and core material, unpatinated or lightly patinated, and varying in condition from fresh to slightly edge-damaged. The raw material is likely to derive from a local gravel source. Retouched pieces are limited to eight scrapers, one arrowhead and one miscellaneous retouched piece.

1.1.4 The bulk of the assemblage is not chronologically distinctive and a broad Late Neolithic to Bronze Age date may be suggested. The exception is a small group of pieces from pit **2507**, which produced nine flakes/broken flakes, all in very fresh condition (quite distinct from the rest of the assemblage), and a Neolithic transverse arrowhead. This group was associated with sherds of Middle Neolithic Peterborough ware (see above).

## Burnt Flint and Stone

1.1.5 Burnt unworked flint and stone was recovered in very small quantities from several contexts. Both categories are intrinsically undatable; burnt flint is often taken as an indicator of prehistoric activity, which is possible here given the low level background scatter of worked flint, and the burnt stone could be of similar date.

### Assessment of Worked Flint

**Table 11: Worked Flint quantification**

| Trench | Feature type | Context | Sub-group | Count | Period | Comments |
|---|---|---|---|---|---|---|
| **Little Stock Farm Excavation (ARC LSF99)** | | | | | | |
| | Ditch 2002 | 2001 | 5001 | 2 | NE/BA | 1 flake; 1 scraper |
| | Ditch 2016 | 2015 | 5003 | 2 | NE/BA | 1 broken flake; 1 scraper (thumbnail) |
| | Ditch 2018 | 2017 | 5004 | 1 | NE/BA | Flake |
| | Ditch 2020 | 2019 | 5005 | 1 | NE/BA | Flake |
| | Ditch 2026 | 2025 | 5006 | 2 | NE/BA | 1 flake; 1 broken flake (both patinated) |
| | Gully 2028 | 2027 | 5007 | 3 | NE/BA | Flakes (1 chert, 1 patinated) |
| | Layer | 2112 | | 3 | NE/BA | Flakes |
| | Ditch 2116 | 2117 | 5011 | 1 | NE/BA | Broken flake |
| | Pit 2124 | 2125 | | 1 | NE/BA | Flake |
| | Ditch 2212 | 2206 | 5005 | 1 | NE/BA | Flake |
| | Ditch 2211 | 2210 | 5006 | 1 | NE/BA | Broken flake (Bullhead flint) |
| | Pit/hollow 2214 | 2213 | | 2 | NE/BA | 1 flake; 1 scraper |
| | Gully 2227 | 2226 | 5007 | 1 | NE/BA | Flake |
| | Gully 2232 | 2230 | 5007 | 1 | NE/BA | Broken flake |
| | Layer | 2301 | | 2 | NE/BA | Flakes |
| | Vessel-hole 2304 | 2303 | | 3 | NE/BA | 2 flakes; 1 blade (patinated) |
| | Ditch 2323 | 2320 | 5014 | 1 | NE/BA | Broken flake |
| | Ditch 2334 | 2335 | 5009 | 1 | NE/BA | Flake |
| | Ditch 2336 | 2337 | 5006 | 1 | NE/BA | Flake |
| | Ditch 2346 | 2347 | 5016 | 2 | NE/BA | 1 broken flake; 1 core frag |
| | Layer | 2404 | | 1 | NE/BA | Broken flake |
| | Layer | 2407 | | 1 | NE/BA | Flake |
| | Layer | 2411 | | 1 | NE/BA | Flake |
| | Ditch 2414 | 2417 | 5004 | 1 | NE/BA | Flake |
| | Ditch 2415 | 2418 | 5005 | 1 | NE/BA | Flake |
| | Ditch 2432 | 2434 | 5005 | 1 | NE/BA | Broken flake |
| | Pit 2437 | 2438 | | 1 | NE/BA | Chip |
| | Ditch 2439 | 2440 | | 1 | NE/BA | Retouched (patinated) |

| | | | | | | |
|---|---|---|---|---|---|---|
| | Post-pit 2441 | 2442 | 5019 | 2 | NE/BA | Flakes (1 patinated) |
| | Ditch 2443 | 2444 | 5019 | 3 | NE/BA | 1 flake; 1 broken flake; 1 ?core rejuvenation |
| | Post-hole 2505 | 2504 | | 2 | NE/BA | Flakes |
| | Post-hole 2507 | 2506 | | 9 | NE/BA | 8 flakes (v fresh); 1 broken flake |
| | Post-hole 2507 | 2506 | | 1 | NE | Transverse arrowhead (ON 4007) |
| | Layer | 2508 | | 7 | NE/BA | 2 flakes; 4 broken flakes; 1 scraper (thumbnail) |
| | Ditch 2513 | 2511 | 5008 | 1 | NE/BA | Broken flake |
| | Ditch 2515 | 2514 | 5005 | 3 | NE/BA | Flakes |
| | Ditch 2517 | 2516 | 5006 | 1 | NE/BA | Flake |
| | Ditch 2524 | 2523 | 5010 | 2 | NE/BA | Broken flakes |
| | Pit 2529 | 2530 | | 2 | NE/BA | 1 flake; 1 broken flake (ON4009) |
| | Ditch 2534 | 2533 | 5006 | 2 | NE/BA | Broken flakes |
| | Post-hole 2542 | 2541 | | 1 | NE/BA | Flake |
| | Artefact sample | 2607 | 5013 | 1 | NE/BA | Flake |
| | Artefact sample | 2613 | 5012 | 2 | NE/BA | 1 core; 1 core frag |
| | Artefact sample | 2614 | 5012 | 1 | NE/BA | Flake |
| | Artefact sample | 2617 | 5012 | 1 | NE/BA | Broken blade |
| | Artefact sample | 2625 | 5007 | 1 | NE/BA | Broken flake |
| | Artefact sample | 2651 | 5008 | 3 | NE/BA | 1 flake; 2 broken flakes |
| | Artefact sample | 2658 | 5039 | 1 | NE/BA | Chip |

**Contd.**

| Trench | Feature type | Context | Sub-group | Count | Period | Comments |
|---|---|---|---|---|---|---|
| **Little Stock Farm Excavation (ARC LSF99) contd.** | | | | | | |
| | Artefact sample | 2663 | 5010 | 1 | NE/BA | Chip |
| | Artefact sample | 2666 | 5010 | 2 | NE/BA | Broken flakes |
| | Artefact sample | 2667 | 5029 | 2 | NE/BA | 1 broken flake (Bullhead); 1 scraper |
| | Artefact sample | 2668 | 5027 | 1 | NE/BA | Flake |
| | Artefact sample | 2673 | 5023 | 1 | NE/BA | Broken flake |
| | Artefact sample | 2677 | 5021 | 1 | NE/BA | Flake |
| **Little Stock Farm Evaluation (ARC LSF98)** | | | | | | |
| 3545TT | Topsoil | 354501 | | 2 | NE/BA | Broken flakes (1 patinated) |
| 3546TT | Pit 354606 | 354603 | | 1 | NE/BA | Flake |
| 3547TT | Topsoil | 354701 | | 1 | NE/BA | ?broken flake |
| 3547TT | Palaeochannel 354706 | 354705 | | 1 | NE/BA | Flake |
| 3548TT | Topsoil | 354801 | | 6 | NE/BA | 3 flakes; 1 broken flake; 2 core frags |
| 3549TT | Topsoil | 354901 | | 1 | NE/BA | Flake |
| 3551TT | Topsoil | 355101 | | 1 | NE/BA | Flake |
| 3551TT | Ditch 355105 | 355104 | 5010 | 1 | NE/BA | Flake |
| 3551TT | Nat. feature 355111 | 355107 | | 1 | NE/BA | Flake |
| 3551TT | Pit 355118 | 355117 | | 1 | NE/BA | Flake |
| 3552TT | Ditch 355203 | 355204 | 5010 | 1 | NE/BA | Core frag |
| 3619TT | Topsoil | 361901 | | 1 | NE/BA | Flake |
| 3620TT | Topsoil | 362001 | | 1 | NE/BA | Core frag |
| 3621TT | Topsoil | 362101 | | 4 | NE/BA | 3 core frags (1 patinated); 1 flake (patinated) |
| 3622TT | Topsoil | 362201 | | 4 | NE/BA | Flakes |
| 3622TT | Colluvium | 362205 | | 1 | NE/BA | Flake |
| 3622TT | Colluvium | 362206 | | 2 | NE/BA | Flakes |
| 3627TT | Topsoil | 362701 | | 1 | NE/BA | Flake (patinated) |
| 3627TT | Ditch 362704 | 362705 | 5003 | 1 | NE/BA | Core frag |
| 3627TT | Vessel-hole 362706 | 362707 | | 1 | NE/BA | ?broken flake |
| 3627TT | Ditch 362715 | 362716 | 5005 | 1 | NE/BA | Broken blade (patinated) |
| 3627TT | Ditch 362723 | 362724 | 5008 | 2 | NE/BA | 1 flake; 1 core frag |
| 3627TT | Ditch 362725 | 362726 | 5005 | 1 | NE/BA | Broken blade (Bullhead flint) |
| **Park Wood Cottage Evaluation (ARC PWC99)** | | | | | | |
| 3691TT | Ditch 369104 | 369105 | | 1 | NE/BA | Broken flake |
| 3692TT | Colluvium | 369201 | | 1 | NE/BA | Scraper |
| 3694TT | Ditch 369406 | 369407 | | 1 | NE/BA | Flake |
| 3694TT | Pit 369408 | 369409 | | 2 | NE/BA | 1 flake, 1 broken flake |

| | | | | | | |
|---|---|---|---|---|---|---|
| 3695TT | Colluvium | 369506 | | 1 | NE/BA | Core |
| | Unstratified | unstrat | | 22 | NE/BA | 12 flakes (1 Bullhead); 4 broken flakes; 2 scrapers (1=ON4006); 1 retouch |
| | | **TOTAL** | | **159** | | |

**Table 12: Worked Flint by category**

| Type | Number | Group % | Total % | Period | Comments |
|---|---|---|---|---|---|
| Scrapers | 8 | 72.7% | 5.0% | NE/BA | |
| Piercers | | | | | |
| Burins | | | | | |
| Projectiles | 1 | 9.1% | 0.6% | NE | Transverse arrowhead |
| Denticulates | | | | | |
| Fabricators | | | | | |
| Microliths | | | | | |
| Core tools | | | | | |
| Other tools | | | | | |
| Misc. retouch | 2 | 18.2% | 1.3% | NE/BA | |
| ***Tools subtotal*** | ***11*** | | ***6.9%*** | | |
| | | | | | |
| Flake cores/core frags | 13 | 92.9% | 8.2% | NE/BA | |
| Blade(let) cores/core frags | | | | | |
| Rejuvenation tablets | 1 | 7.1% | 0.6% | NE/BA | |
| Crested pieces | | | | | |
| Microburins | | | | | |
| Chips | | | | | |
| ***Production sub-total*** | ***14*** | | ***8.8%*** | | |
| | | | | | |
| Blades/bladelets | 4 | 3.1% | 2.5% | ?NE | |
| Flakes | 127 | 96.9% | 79.9% | NE/BA | |
| ***Blades & flakes sub-total*** | ***131*** | | ***82.4%*** | | |
| | | | | | |
| Debitage | 3 | 100.0% | 1.9% | NE/BA | |
| ***Fragments sub-total*** | ***3*** | | ***1.9%*** | | |
| | | | | | |
| **TOTAL** | **159** | | | | |

## Assessment of Burnt Flint

### Table 13: Burnt Flint quantification

| Event Name | Event Code | Trench | Feature type | Context | Sub-group | Count | Weight |
|---|---|---|---|---|---|---|---|
| Little Stock Farm | ARC LSF99 | | Gully 2010 | 2009 | 5002 | 1 | 4 |
| Little Stock Farm | ARC LSF99 | | Ditch 2113 | 2114 | 5005 | 1 | 8 |
| Little Stock Farm | ARC LSF99 | | Pit 2124 | 2125 | | 1 | 30 |
| Little Stock Farm | ARC LSF99 | | Ditch 2209 | 2203 | 5005 | 1 | 10 |
| Little Stock Farm | ARC LSF99 | | Layer | 2301 | | 2 | 8 |
| Little Stock Farm | ARC LSF99 | | Layer | 2319 | | 1 | 44 |
| Little Stock Farm | ARC LSF99 | | Ditch 2346 | 2347 | 5016 | 1 | 4 |
| Little Stock Farm | ARC LSF99 | | Ditch 2401 | 2402 | 5010 | 1 | 4 |
| Little Stock Farm | ARC LSF99 | | Post-hole 2505 | 2504 | | 2 | 10 |
| Little Stock Farm | ARC LSF99 | | Artefact sample | 2622 | 5035 | 1 | 2 |
| Little Stock Farm | ARC LSF99 | | Artefact sample | 2625 | 5007 | 2 | 8 |
| Little Stock Farm | ARC LSF98 | 3622TT | Topsoil | 362201 | | 1 | 6 |
| Little Stock Farm | ARC LSF98 | 3627TT | Ditch 362712 | 362711 | 5006 | 1 | 3 |
| Park Wood Cottage | ARC PWC99 | 3694TT | Pit 369408 | 369409 | | 6 | 338 |
| | | | | **TOTAL** | | **22** | **479** |

**Assessment of Worked and Burnt Flint**

*Phil Harding, Tania Wilson and Andrew Crockett*

# Introduction

1.1.6 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.

1.1.7 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.

1.1.8 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

1.1.9 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

1.1.10 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.

1.1.11 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.

1.1.12 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.

**Table 19: Worked flint quantification by artefact type**

| 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 20: Burnt flint quantification by site**

| 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** | |

1.1.13 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.

1.1.14 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.

1.1.15 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.

1.1.16 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.

1.1.17 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.

1.1.18 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

1.1.19 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.

1.1.20 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.

1.1.21 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

1.1.22 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).

1.1.23 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

1.1.24 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.

1.1.25 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.

1.1.26 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.

1.1.27 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.

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SANDWAY ROAD

**Assessment of Worked Flint**

*Dr M J Reynier*

## Introduction

1.1.28 In total 7,548 pieces of worked flint were recovered during the excavation, with an additional 65 pieces recovered during the preceding evaluation. For the purposes of this assessment a non-random subset sample of 1,088 pieces was examined from four distinct areas within the Mesolithic remains, comprising collection units within artefact scatters **137** and **144**, and pits **72** and **167**. This subset represents a *c*. 14.3% sample of the complete assemblage.

## Methodology

1.1.29 The assessment was designed to:

- *estimate the approximate age of the assemblage*
- *explore the potential for horizontal patterning*
- *explore the potential for vertical patterning*
- *suggest useful directions for the analysis of the whole assemblage*

1.1.30 Differences in the spatial distribution of the various components of the worked flint assemblage across the site were explored using the four sampled units. This was done by collapsing the usual typological classes into four groups:

- *tools (all tool classes, including retouched and edge-damaged pieces)*
- *production waste (cores, core dressings, microburins and spalls)*
- *blades and flakes*
- *fragments*

## Quantifications

1.1.31 Worked flint quantification by artefact type (**Figure 3**) is provided in **Table 9**. In summary, the sampled assemblage comprised 48 identified tools, including 26 points (all of which were microliths), two scrapers and four piercers. In addition there were 80 artefacts directly related to tool production, including eight cores and 27 microburins, and 250 complete blades and flakes. As is usual the majority of the sample was made up of fragments (*c*. 65% of the entire assemblage).

1.1.32 Microliths formed the largest class of tool, dominated by small convex-backed forms (five) and scalene micro-triangles (four). Both these forms are current in the Later Mesolithic period in Britain (*c*. 6750 - 3550 BC). Other microlith types identified include single examples of an obliquely truncated point, a partially backed point, a basally worked point and a straight-backed point. The first two types can occur throughout the Mesolithic period, while the straight-backed point is typically Later Mesolithic in character. The basally worked point, however, is more closely identified with a mid-Mesolithic date (i.e. the 7$^{th}$ millennium BC).

1.1.33 The remainder of the tool assemblage comprised two short end-scrapers and possible single blow burins, as well as four well-made bilateral piercers or awls. There is also an array of miscellaneously retouched and edge-damaged pieces.

1.1.34 The debitage assemblage is dominated by 27 microburins, the by-product of microlith manufacture. The close correspondence of microburins and microliths may suggest on-site manufacture of these points, a speculation testable by limited refitting. There are also eight cores, most of which are of the single platform/partly worked variety, and a limited array of core dressings, including crested and plunging pieces.

1.1.35 The laminar assemblage (complete blades and flakes) has a blade:flake ratio of c. 1:4. This approximates other recorded ratios for blade-based assemblages elsewhere in Britain and is generally considered to be indicative of the presence of Mesolithic technology. Worked flint assemblages from later periods (i.e. Neolithic and Bronze Age) typically yield blade:flake ratios of 1:9 or greater.

1.1.36 The frequency of fragments (*c*. 65%) is somewhat lower than might usually be expected in typical Mesolithic assemblages, where percentages approaching 90% have been obtained in high-resolution excavations. The significance of this feature is at present unknown but is more likely to relate to preservation, recovery or sampling biases than to genuine changes in flint reduction strategy.

1.1.37 In relation to the horizontal (i.e. spatial) distribution of material, each of the features examined was remarkably consistent in composition (**Figures 4-7**), however, two discrepancies:

- *the absence of tools in flint scatter **137*** (**Figure 4**)
- *the increased frequency of complete blades and flakes in flint scatter **144*** (**Figure 5**)

1.1.38 These effects may be a result of scatter **137** being further from the centre of Mesolithic activity than scatter **144**. Full analysis of the assemblage will clarify these results.

1.1.39 In relation to the vertical (i.e. temporal) distribution of material for all flint categories, no notable anomalies were observed. The majority of the total assemblage occurs in the top 0.10 m of the soil profile. Smaller frequencies are recorded between 0.10 m and 0.20 m and only trace frequencies below this. There is no marked variation between the areas examined with the exception that scatter **137** is not represented below 0.20 m (**Figure 8**). A similar picture emerged when just the distribution of tools was examined (**Figure 9**).

1.1.40 The general stratigraphic pattern appears to suggest the assemblage was deposited over a relatively short period of time. There do not appear to be any discrete periods of re-use.

1.1.41 The entire sample was made of flint with the exception of three pieces made of chert. The colour of the flint varied from a light, semi-translucent grey (*c*. 50%) to a high quality translucent dark grey to black (*c*. 16%). A small percentage of the sample, particularly the dark grey/black flint, had a milky blue patina (*c*. 3%). Tools were made on both major colour-types of flint.

1.1.42 Where cortex was preserved this was often thick, dirty white in colour and possessed a smooth surface, somewhat chalky in texture. These features indicate that the raw material was obtained from a secondary deposit, possibly head. The local flint was generally stained light brown to orange in colour and does not seem to have been used to any great extent.

## Provenance

1.1.43 A relatively small proportion of the pieces examined exhibited recently chipped or otherwise damaged margins (*c*. 19%). This suggests that the assemblage has been extremely well preserved, and may therefore be considered to be relatively undisturbed.

1.1.44 No artefacts were examined in the sample that would contradict a mainly Later Mesolithic date (c. 6750 - 3550 BC). However, it is known that some younger Neolithic material is associated with the assemblage although not part of the sample assessed. At present it is felt that this later material is intrusive and that the main Mesolithic assemblage is uncontaminated. The oldest artefact examined (the obliquely-based point) would probably have been current in the earlier half of the Later Mesolithic. The remainder of the diagnostic artefacts would not be out of place in this context, although their currency also runs into the second half of the Later Mesolithic period.

## Conservation

1.1.45 There are no conflicts between further analysis and long term storage

## Comparative material

1.1.46 Very few substantial Mesolithic sites are known from within the modern county of Kent (Reynier 1998, 176), the majority of the material recorded for the county being stray finds or small unprovenanced groups. The nearest documented example of these comes just north of the neighbouring village of Harrietsham where a small 'Horsham' type assemblage (i.e. *c*. 7000 BC) was recovered by a local collector (Jacobi 1982). Stray finds belonging to the Later Mesolithic have also been recovered from the fields all around the villages of Harrietsham and Sandway, including Moncktons collections noted in the Environmental Assessment (URL 1994).

1.1.47 As far as formal sites are concerned very few exist, and virtually all of these belong to the Later Mesolithic period. For example Perry Wood, Selling (Woodcock 1975), Finglesham, Northbourne (Parfitt and Halliwell 1984), Priory Gardens, Orpington (Grey and Tyler 1991) and Well Hill, Chelsfield (Jones 1952).

1.1.48 Interestingly, Later Mesolithic sites from Kent, and those from south-eastern England in general, tend to be dominated by scalene micro-triangles and straight, bilaterally backed points ('rods'). The dominance of convex-backed points in the Sandway Road assemblage is therefore unusual. Indeed, no precise parallel material exists. Whether this statistic is an effect of the sample or reflects a genuine change in assemblage structure will become clear upon further examination of the remaining assemblage.

## Potential for further work

1.1.49 On the basis of the 1,088 pieces examined in the assessment sample the following conclusions can be made:

- *The assemblage is predominantly of Later Mesolithic date (c. 6,750 - 3,550 BC)*
- *The assemblage may have formed over a relatively short time period*
- *There is some evidence of spatial variation across the site*
- *There is no evidence of sterile horizons*

1.1.50 The assemblage appears to be in excellent condition, a fact alone that should raise the possibility of a limited refitting programme. Not only would this shed light on how the assemblage was formed but it would also serve to clarify the tentative assumption made here that the assemblage formed over a relatively limited time period.

1.1.51 As outlined above, there is some evidence of spatial patterning across the site, notably in scatter **144**, although the small size of the sample from this area cannot preclude a bias. Because of the demonstrated potential for spatial patterning, it is probable that further detailed spatial analysis of the entire assemblage will indicate specific activity zones within the area.

1.1.52 No notable patterning was observed in the vertical distribution of the assemblage. Specifically there were no sterile horizons evident and the fall-off of the artefact frequency with depth is smooth. This suggests that the site was not re-used over a long period of time. These observations, together with the typological evidence presented above, argue that the site might have been formed over a comparatively short period of time.

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**Table 9: Worked Flint quantification by artefact type**

| Artefact Type | Number | Group % | Total % |
|---|---|---|---|
| | | | |
| ***Tools*** | | | |
| Scrapers | 2 | 4.17% | 0.18% |
| Piercers | 4 | 8.33% | 0.37% |
| Burins | 2 | 4.17% | 0.18% |
| Projectiles (arrowheads) | 0 | 0.00% | 0.00% |
| Denticulates (& micro den) | 0 | 0.00% | 0.00% |
| Fabricators | 0 | 0.00% | 0.00% |
| Microliths | 26 | 54.17% | 2.39% |
| Core tools (axes etc.) | 0 | 0.00% | 0.00% |
| Other tools | 0 | 0.00% | 0.00% |
| Misc. retouch | 14 | 29.17% | 1.29% |
| ***(Tools sub-total)*** | ***48*** | | ***4.41%*** |
| | | | |
| ***Production*** | | | |
| Flake cores & core frags | 3 | 3.75% | 0.28% |
| Blade(let) cores & core frags | 5 | 6.25% | 0.46% |
| Rejuvenation tablets | 0 | 0.00% | 0.00% |
| Crested pieces | 3 | 3.75% | 0.28% |
| Microburins | 27 | 33.75% | 2.48% |
| Chips | 42 | 52.50% | 3.86% |
| ***(Production sub-total)*** | ***80*** | | ***7.35%*** |
| | | | |
| ***Blades & Flakes*** | | | |
| Blades & bladelets (inc. no broken) | 49 | 19.60% | 4.50% |
| Flakes (inc. no. broken) | 201 | 80.40% | 18.47% |
| ***(Blades & flakes sub-total)*** | ***250*** | | ***22.98%*** |
| | | | |
| ***Fragments*** | | | |
| Debitage | 710 | 100.00% | 65.26% |
| ***(Fragments sub-total)*** | ***710*** | | ***65.26%*** |
| | | | |
| **Total** | **1,088** | | |

## Assessment of Burnt Flint

### Table 10: Burnt Flint quantification

| Context | No | Weight | Comments |
|---|---|---|---|
| U/S | 11 | 92 | |
| 1 | 17 | 308 | |
| 10 | 1 | 4 | |
| 15 | 6 | 42 | |
| 49 | 8 | 4 | |
| 56 | 1 | 1 | |
| 64 | 4 | 1 | |
| 70 | 15 | 92 | |
| 73 | 11 | 34 | Mesolithic pit 72 fill |
| 73 | 69 | | Unit 4 small finds, not weighed |
| 87 | 5 | 26 | |
| 103 | 10 | 42 | |
| 113 | 2 | 6 | |
| 116 | 3 | 4 | |
| 117 | 12 | 22 | |
| 122 | 5 | 42 | |
| 124 | 9 | 40 | |
| 126 | 1 | 4 | |
| 128 | 71 | 376 | |
| 129 | 42 | 432 | |
| 130 | 1 | 2 | |
| 131 | 4 | 10 | |
| 132 | 2 | 24 | |
| 134 | 3 | 6 | |
| 137 | 1 | | Unit 1 small finds, not weighed |
| 138 | 1 | 1 | |
| 144 | 15 | | Unit 2 small finds, not weighed |
| 149 | 38 | 368 | |
| 159 | 8 | 12 | |
| 163 | 2 | 8 | |
| 167 | 207 | | Unit 3 small finds, not weighed |
| 168 | 3 | 4 | |
| 170 | 5 | 8 | |
| 172 | 3 | 4 | |
| 173 | 12 | 80 | |
| 174 | 2 | 16 | |
| 175 | 5 | 26 | |
| 176 | 11 | 72 | |
| 177 | 12 | 50 | |
| 178 | 12 | 100 | |
| 179 | 2 | 12 | |
| 180 | 99 | 486 | |
| 181 | 140 | 486 | |
| 182 | 166 | 488 | |
| 183 | 142 | 498 | |
| 184 | 147 | 394 | |
| 185 | 67 | 424 | |
| 186 | 223 | 470 | |
| 187 | 123 | 204 | |
| 188 | 74 | 408 | |

**Contd.**

**Table 10: Burnt Flint quantification (contd.)**

| Context | No | Weight | Comments |
|---|---|---|---|
| 189 | 26 | 130 | |
| 190 | 201 | 484 | |
| 191 | 114 | 132 | |
| 192 | 88 | 200 | |
| 195 | 35 | 46 | |
| 196 | 789 | 1356 | |
| 197 | 55 | 188 | |
| 198 | 1077 | 1634 | |
| 199 | 118 | 501 | |
| 200 | 139 | 540 | |
| 201 | 12 | 114 | |
| 202 | 801 | 1646 | |
| 203 | 185 | 538 | |
| 204 | 35 | 166 | |
| 205 | 34 | 76 | |
| 206 | 617 | 1220 | |
| 207 | 98 | 228 | |
| 208 | 70 | 430 | |
| 210 | 491 | 856 | |
| 211 | 28 | 56 | |
| 212 | 17 | 100 | |
| 213 | 13 | 44 | |
| 214 | 2 | 1 | |
| 215 | 47 | 66 | |
| 216 | 72 | 126 | |
| 218 | 21 | 30 | |
| 219 | 32 | 52 | |
| 220 | 50 | 102 | |
| 222 | 3 | 9 | |
| 223 | 36 | 36 | |
| 224 | 16 | 34 | |
| 227 | 8 | 4 | |
| 228 | 43 | 88 | |
| 229 | 11 | 22 | |
| 230 | 102 | 198 | |
| 231 | 65 | 118 | |
| 232 | 32 | 52 | |
| 233 | 23 | 50 | |
| 234 | 17 | 38 | |
| 235 | 61 | 162 | |
| 236 | 57 | 88 | |
| 237 | 25 | 2 | |
| 239 | 79 | 378 | |
| 241 | 55 | 252 | |
| **TOTALS** | **7733** | **18826** | |

Weight does not include Burnt Flint Small Finds recovered as 3-d recorded items from worked flint collection units 1 – 4.