

1.1 Assessment of Macroscopic Plant Remains and Charcoal

Dr M J Allen

Introduction

1.1.1 In total, 22 bulk disturbed samples of generally 10 litres volume have been recovered and processed for macroscopic plant remains and charcoal during the fieldwork events itemised in **Table 1**. All were recovered during the hand-excavation of features.

1.1.2 In terms of addressing fieldwork event aims, the recovery and assessment of these samples is primarily to establish the economic basis of agricultural communities, and to determine the local environment of the site through recovery of such palaeo-environmental data.

Methodology

1.1.3 Samples were selected for processing according to the following criteria;

- *A broad range of feature types was to be examined,*
- *Samples should be spatially arranged across the entire site, and*
- *Where possible, all chronological periods should be examined at the site*

1.1.4 Standard flotation processing methods were used, with sample flots retained on a 0.5 mm mesh and residues fractionated into 5.6 mm, 2 mm and 1 mm fractions. All coarse fractions (i.e. >5.6 mm) were hand-sorted, weighed and discarded, with flots scanned under a x10 - x30 stereo-binocular microscope in order to quantify the presence of plant macrofossils.

Quantifications

1.1.5 Macroscopic plant remains and charcoal quantification by sample per context for those fieldwork events conducted by Wessex Archaeology are provided in **Table 15**.

Provenance

1.1.6 The samples generally produced large flots (average flot size for a 10 litre sample is 60 millilitres), which were largely dominated by charcoal with mainly low levels of both rooty material and uncharred weed seeds, both of which can be indicative of stratigraphic movement.

Conservation

1.1.7 Analysis would include extraction and sorting of all charred remains from residues, facilitating storage and archive compilation.

Comparative material

1.1.8 A number of sites of these periods are known in the locale, and would provide comparative data sets. These include excavations at Stonar (Paradine n.d.), Keston Camp and Wilmington (Hillman unpub), Maidstone (Arthur 1960) and Bicknor (Arthur 1961), as well as more recent CTRL investigations at sites such as Sandway Road (URS 1999).

Potential for further work

- 1.1.9 Analysis will enable an interpretation of activities performed on site during the periods represented, and possibly the functions of some features. This will enable some indication of the role of the site in the social economy, and provide details of the community economy.

Bibliography

Arthur, J R B, 1960, 'Maidstone Chillington House – plant remains', *Arch Cantiana* **74**, 194-6

-- , 1961, 'Plant remains from Bicknor Court', *Arch Cantiana* **76**, 192-3

Hillman, G, unpub., *Carbonised charred cereal remains from Keston Camp*, unpublished manuscript

-- , unpub., *The charred remains from Iron Age pits at Wilmington, Kent*, unpublished manuscript

Paradine, P J, n.d, 'Seed identifications, Stonar, Sandwich, Kent', *Ancient Monuments Laboratory Report* **1745**

Union Railways (South) Limited [URS], 1999, *Archaeological Excavation at Sandway Road (ARC SWR99)*, unpublished interim excavation report no. 45997c (Contract no. URS/400/ARC/0001) prepared by Wessex Archaeology

Table 15: Quantification of Ecofacts

| Feature type and number | Context | Sample | Size (litres) | Flot size (ml) | Grain | Chaff | Flot | | | Other | Residue Charcoal >5.6mm |
|-------------------------|---------|--------|---------------|---------------------|-------|-------|-----------|--------------------|-----------------|------------|-------------------------|
| | | | | | | | Uncharred | Weed Seeds Charred | Charcoal >5.6mm | | |
| HOL99 Excavation | | | | | | | | | | | |
| BTS 1001 | 1002 | 3001 | 10 | 625 ^{6.25} | | | + | + | ++ | | |
| BTS 1001 | 1013 | 3004 | 10 | 20 ² | | | + | + | + | | |
| BTS 1009 | 1010 | 3006 | 2 | 50 ^{2.5} | | | + | | ++ | Moll-f (+) | |
| BTS 1023 | 1024 | 3008 | 10 | 225 ⁵ | | | + | + | ++ | | |
| BTS 1028 | 1027 | 3010 | 10 | 250 ^{12.5} | | | + | + | ++ | | |
| BTS 2068 | 2066 | 3512 | 10 | 700 ⁷ | | | + | + | ++ | | |
| Ditch 4001 | 2029 | 3507 | 10 | 10 ^{6.5} | | | | ++ | + | - | |
| Ditch 4004 | 2085 | 3513 | 10 | 5 ^{0.5} | + | | + | +(h) | + | | Burnt bone |
| Ditch 4005 | 2105 | 3514 | 10 | 1 ^{0.1} | + | + | + | + | - | | |
| Hearth 1033 | 1034 | 3012 | 10 | 1000 ¹⁰ | | | + | + | ++ | | |
| Pit 1029 | 1030 | 3011 | 10 | 1000 ¹⁰ | | | + | + | +++ | | |
| Pit 2003 | 2001 | 3501 | 10 | 350 ^{3.5} | +++ | | + | + | ++ | | |
| Pit 2043 | 2041 | 3509 | 10 | 750 ^{7.5} | | | + | + | ++ | | |
| HOL98 Evaluation | | | | | | | | | | | |
| Crem. 359604 | 359605 | 19 | 10 | 60 ⁶ | + | + | + | + | ++ | Burnt bone | +++ |
| Crem. 359606 | 359607 | 20 | 15 | 175 ^{1.75} | + | | ++ | | ++ | Burnt bone | |
| Crem. 359609 | 359608 | 21 | 15 | 500 ⁵ | + | | ++ | | ++ | Burnt bone | |
| Ditch 360303 | 360304 | 2 | 15 | 20 ² | + | + | + | +(h) | + | Moll-f (+) | |
| Ditch 359205 (=4010) | 359202 | 22 | 10 | 30 ² | + | + | ++ | + | + | | |
| Ditch 359205 (=4010) | 359203 | 23 | 0.7 | 3 ^{0.3} | ++ | | ++ | + | - | | |
| Ditch 360507 | 360508 | 18 | 15 | 35 ^{3.5} | + | + | ++ | | + | | |
| Ditch 361204 | 361203 | 26 | 15 | 20 ¹² | + | + | ++ | ++ | | | |
| Layer | 352006 | 1 | 5 | 800 ⁸ | + | | + | | +++ | | + |

Key: BTS = Burnt-out tree stump; Flot size in ^{superscript} = ml of rooty material; h = hazelnut; Moll-f = freshwater mollusc
+ = 1-10, ++ = 11-50, +++ = 51-100