APPENDIX 12: ASSESSMENT OF MOLLUSCS

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1. Introduction

1.1 A total of 26 small groups of mollusc shells were recovered from 26 samples taken during excavation. All were assessed.

1.2 Eleven groups of molluscs were recovered from bulk samples; the remaining 15 were recovered from spit samples taken at measured depths through the dry valley. In each case, the soil was processed using a modified Siraf-type tank fitted with 1.0 mm and 0.25 mm flexible nylon meshes to retain the residue and flot fractions respectively. The flot and residue fractions were air-dried in a warm drying cabinet and then visually sorted for mollusc shell. Study of the molluscan shell was intended to assist Fieldwork Event Aims 5 and 6

- *recovering palaeo-environmental remains from ditches and other features*
- *provide information on Iron Age land-use, environment and economy*

2. Methodology

2.1 Each sample was roughly quantified and then scanned under a binocular microscope to determine the species-composition of the assemblage. Taxonomic identifications were made using the MoLSS reference collection in conjunction with Cameron & Redfern 1976; and Kerney & Cameron 1979. Allocation of identified taxa to habitat groups, as specified by the CTRL post-excavation assessment report template, followed these sources together with Kerney 1999.

2.2 All mollusc groups were examined; no sub-sampling was required.

3. Quantification

3.1 A total of 26 small groups of mollusc shells, an approximate total of 639 shells, were assessed.

3.2 This material derived entirely from terrestrial species but with occasional fragments of the marine bivalve common mussel, *Mytilus edulis.* There were no freshwater species.

3.3 Identified terrestrial taxa recovered were *Cecilioides acicula*, *Oxychilus sp., Retinella sp. Vallonia pulchella, V. costata, Cepaea nemoralis, C.hortensis, Helix aspersa, Helicella sp., Cochlicopa lubrica, Pomatias elegans, Pupilla muscorum, Clausilia sp., Discus rotundatus* and *Columella edentula.*

3.4 The table below groups this material in terms of habitat preference and relative abundance as specified by the CTRL assessment template.

4. Provenance

4.1 Mollusc shells were mainly recovered from the dry valley, with small numbers of shells also recovered from pits (undated and Early Iron Age) and Anglo-Saxon burials.

5. Conservation

5.1 Further analysis of this material would involve more detailed examination under a binocular microscope in order to ensure identification and quantification of all species present. There is no reason why such work would damage the shells or impose any restriction on long-term storage procedures.

5.2 The material is in good condition and presents no difficulty in terms of species identification. The value of the assemblage will not be affected by factors of preservation.

5.3 The shells are mainly small and fragile and therefore liable to accidental damage by crushing. They should therefore all be stored by context/sample groups in glass tubes or clear plastic boxes, each contained within labelled plastic bags. The complete assemblage should then be stored in an archive quality 'shoe-box'.

5.4 There is no reason to discard any of the mollusc assemblage as further identification and quantification may provide some degree of insight into the characteristics of local habitat(s).

6. Comparative material

6.1 The material could usefully be compared with mollusc samples from other sites along the CTRL and in the Darent valley (O'Connor 1984).

7. Potential for further work

7.1 The site lies within the 'landscape zone' of the North Downs, Medway River Valley.

7.2 The assemblage has some potential to contribute to study of each of the main categories as defined by the CTRL Archaeological Research Strategy. It derives from a range of periods and feature types including an Early Iron Age pit [342], Anglo-Saxon graves [315] and [378], together with a complete series of column samples.

- *farming communities (2000 – 100 BC); context [342]/column samples*
- *towns and rural landscapes (100bc – AD 1700); contexts [315] and [378]/column samples*
- *recent landscapes (AD 1700 – 1945); column samples*

7.3 Study of the material will produce data with reference to the Fieldwork Event Aims listed below:-

- *recovering palaeo-environmental remains from ditches and other features.*
- *provide information on Iron Age land use, environment and economy.*

7.4 The assemblage has considerable potential for further study in terms of species identification and accurate quantification. Once this work is done, it will then be possible to detect spatial and temporal variation resulting from changes in local conditions, such as shading, and to consider their implications for changes in landuse.

7.5 Detailed identification and reporting on all the mollusc groups would be required.

8. Bibliography

Cameron, R A D, & Redfern, M, 1976, 'British land snails' *Linnean Society synopses of the British fauna no.6* London

Kerney, M, 1999, *Atlas of the land and freshwater molluscs of Britain and Ireland* Colchester

Kerney, M P, & Cameron, R A D, 1979, *A field guide to the land snails of Britain and north-west Europe* London

O'Connor, T P, 1984, in Philp, B, *Excavations in the Darent Valley*

Number of sample taken (columns/spot etc.) ; number of samples assessed
+ present (0-5 items), ++ some (6-10 items), +++ many (11+).

Table 23: Assessment of Molluscs from ARC CXT 98

Sample	1	12	22	7	11	23
Context	41	156	315	342	342	378
Depth						
Date/interpretation	pit/no date	tree hole	skel/ Saxon	pit/ EIA	pit/ EIA	skel/ Saxon
Catholic species				+		+
Open country species	+++	+++	+++	+++		++
Shade-loving species	+++					+
Burrowing species	+	++	++	+++	+	+++
Aquatic species						
Approx. totals	**25**	**30**	**25**	**40**	**3**	**1**

Table 24: Assessment of mollusc shell from ARC CXT 98 – dry valley samples

Sample											
Context											
Depth	0-10 cm	10-20 cm	20-30 cm	30-40 cm	40-50 cm	50-60 cm	60-70 cm	70-80 cm	80-90 cm	90-100 cm	100-110 cm
Date/interp.	dry valley	dry valley	dry valley	dry valley	dry valley	dry valley	dry valley	dry valley	dry valley	dry valley	dry valley
Catholic species		+		+	+++						
Open country species		+++	+++	+++	++	+++			++	+	++
Shade-loving species	++	+++	+++	+++	+++	+++	+++	+++	++	+++	+++
Burrowing species	++		+	+	+	++	+	++	+	+	+
Aquatic species											
Approx. totals	**21**	**21**	**30**	**24**	**50**	**45**	**30**	**50**	**25**	**45**	**35**

Sample				
Context				
Depth	110-120 cm	120-130 cm	130-150 cm	150-160 cm
Date/interp.				
Catholic species	dry valley	dry valley	dry valley	dry valley
Open-country species	+++	+		+
Shade-loving species	+++	+	+++	+
Burrowing species	++			+
Aquatic species				
common mussel				+
Approx. totals	**45**	**10**	**20**	**15**