

APPENDIX 1 - MOLLUSCS

1.1 Assessment of the Molluscs

by Mark Robinson

Introduction

- 1.1.1 A column of 13 samples, in 0.1 m units, was cut from the top 1.3 m of colluvial sediments exposed in section in a stepped trench through the bottom of Nashenden Valley. 2 kg of each sample was floated onto a 0.5 mm mesh at the Oxford Archaeological Unit and the residue sieved down to 0.5 mm.
- 1.1.2 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. The aim of the assessment is to establish the potential of molluscan analysis to provide palaeoenvironmental information extending from the Mesolithic to the late Iron Age. It is hoped that comparisons can be made with molluscan sequences from the south side of the North Downs.

Methodology

- 1.1.3 Concentrations of shells are low in the flots. Therefore, it was decided that all the flots would be assessed. The flots were scanned under a binocular microscope at magnifications of x10 and x20. The abundance of taxa was recorded on a scale of + (present, 1-5 individuals), ++ (some, 6-10 individuals) and +++ (many, 11+ individuals). An estimate was also made of the total number of individuals in each flot excluding *Cecilioides acicula*. This species was excluded because it burrows deeply and provides no useful information on conditions as a sediment or soil formed. The identifications are divided into species groups in the table of results (Table 5.1).

Quantifications

- 1.1.4 All 13 samples were assessed from the single column. Concentrations of shells (excluding *Cecilioides acicula*) are very low (Table 5.1), with useful examples being present in only five flots.

Provenance

- 1.1.5 What material is present is likely to be contemporaneous with the deposits when they were laid down or last worked. All the samples have little potential related to the research objectives. The preservation of shell is poor.

Conservation

- 1.1.6 Since the samples have no useful potential for further work, it is recommended they be discarded.

Comparative Material

- 1.1.7 Much better molluscan assemblages are available for comparison from the south side of the North Downs at White Horse Stone (Robinson in prep). However, there is a hint of similarity with them, with more shade-loving species from the lowest part of the sequence to contain shells, whereas the shells from the top of the sequence are almost entirely open-country species. Unfortunately, the assemblages are too small to take this comparison further.

Potential for Further Work

- 1.1.8 The mollusc samples have no useful potential to address the original fieldwork aims or any new research aims. Therefore, no further work is recommended.

Bibliography

Robinson, M, (in prep.) Assessment of molluscs from White Horse Stone, Pilgrims Way, West of Boarley Farm and East of Boarley Farm (ARC WHS 98, ARC PIL 98, ARC BFW 98, ARC BFE 98).

Table 5.1: Nashenden Valley Mollusc Column

Column / Section Sample	7026	7012	7011	7010	7009	7008	7007	7006	7005	7004	7003	7002	7001
Context	5006	5006	5006	5006	5005	5005	5005	5005	5005	5005	5004	5003	5003
Depth (m)	1.20-1.30	1.10-1.20	1.00-1.10	0.90-1.00	0.80-0.90	0.70-0.80	0.60-0.70	0.50-0.60	0.40-0.50	0.30-0.40	0.20-0.30	0.10-0.20	0-0.10
Catholic Species <i>Cepaea</i> sp.	-	-	-	-	-	-	-	-	-	+	-	-	-
Open Country Species <i>Pupilla muscorum</i>	-	-	-	-	-	-	-	-	-	-	-	+	-
<i>Vallonia costata</i>	-	-	-	-	-	-	-	-	-	+	+	-	-
<i>V. excentrica</i>	-	-	-	-	-	-	-	-	-	-	+	-	+
<i>Vallonia</i> sp.	-	-	-	-	-	-	-	-	-	+	-	+	+
Shade-loving Species <i>Carychium</i> cf. <i>Tridentatum</i>	-	-	-	-	-	-	-	-	-	+	-	-	-
<i>Acanthinula aculeata</i>	-	-	-	-	-	-	-	-	-	+	-	-	-
<i>Discus rotundatus</i>	-	-	-	-	+	-	-	-	-	+	-	-	-
<i>Vitrea</i> sp.	-	-	-	-	-	-	-	-	-	+	-	-	+
Burrowing Species <i>Cecilioides acicula</i>	-	-	-	+	+	++	+++	+++	+++	+++	+++	+++	+++
Synanthropic, Exotic and Introduced Species <i>Candidula gigaxii</i>	-	-	-	-	-	-	-	-	-	-	-	+	-
Approx total (excluding <i>Cecilioides acicula</i>)	-	-	-	-	1	-	-	-	-	8	4	3	6

Key: +=1-5, ++=6-10, +++= >10