

## UNCORRECTED ARCHIVE REPORT

### APPENDIX 18 – MACROSCOPIC WATERLOGGED PLANT AND INVERTEBRATE REMAINS

By Mark Robinson

#### Introduction

Samples were taken from all deposits on the site in which it was thought it was possible that anerobic preservation of organic material might occur. Sample was also taken from a prehistoric ploughsoil and an interglacial feature.

The waterlogged samples were processed as described in Lambrick and Robinson (1979, 79-80) except that both sub-samples from each sample were water-sieved down to a mesh size of 0.2 mm. The residues on the sieves from the smaller of the two sub-samples were sorted under water for plant and invertebrate remains. The residues from the larger of the two sub-samples were subjected to a paraffin flotation after pieces of wood and twigs had been picked out, and then the plants were sorted for anthropod remains.

Specimens were identified with reference to the collections noted in Lambrick and Robinson (1979, 80-1). The sample from the buried soil was water-sieved over a 0.5 mm sieve and the residues sorted dry for molluscs.

The results are presented below (Tables A18:1 to A18:11) giving number or presence of taxa together with basic habitat information with abbreviations as follows:

Plants: A = aquatic; B = bankside; C = cultivated crops; D = disturbed ground; Da = disturbed ground (arable); G = grassland; M = marsh; S = scrub; T = terrestrial; W = woodland.

Insects: A = aquatic; B = bankside/ water's edge; C = carrion; D = disturbed ground; Da = disturbed ground (arable); F = dung; G = grassland; M = marsh; P = pest of stored farinaceous foods; S = scrub; T = terrestrial; V = decaying vegetation; W = woodland.

Snails: A = aquatic; M = marsh; To = terrestrial (open)

The results are interpreted and discussed in Appendix A1 together with other lines of environmental evidence and are summarised in the main report.

#### Sample descriptions

162/A/27 Bronze Age pond. Grey organic silty loam with a little gravel.

162/A/22 Layer above 162/A/27 in the Bronze Age pond. Grey/brown silty loam with fragments of plant material and much gravel.

789/A/14 Roman waterhole. Dark brown organic gritty loam with some gravel.

605/A/7 Roman pond. Coarse gravel with a little dark brown organic silty clay loam with some gravel.

674/B/4 Roman pond. Coarse gravel with a little dark brown organic loam and some large twigs.

82/ 21+ 19 Saxon well/ waterhole. Dark grey organic loam with some gravel.

43/A/22 Saxon well. Buff sandy silt with some organic fragments.

101/H/2 Late Bronze Age/ early Iron Age (plough) soil (not waterlogged).

The size of sub-samples taken from these samples and examined for various categories of evidence are given in Table A18:1.

Samples were examined from 661/A/4 and 43/A/14, but they did not contain biological remains preserved by waterlogging.

### Presentation of Results

The identifications are listed in Tables A18:3 to 11 below. Nomenclature follows Clapham et al (1962) for plants; Kloet and Hincks (1964; 1976; 1977); and Kerney (1976) and Walden (1976) for molluscs. Anthropod remains were absent from 43/A/22 and molluscs were only present in samples 162/A/27, 101/H/2, 789/A/4 and 82/21 + 19. The habitat information given after each species has been taken from the same sources as those used in Lambrick and Robinson (1979, 80-100) and Robinson (1981a, 68-71).

Percentages of selected groupings of Coleoptera have been given in Table 2. they have been calculated as a percentage of the total terrestrial Coleoptera only in the sample, as described in Robinson (1981b, 279-82). Their sum is not 100%.

**Table A18:2 Percentages of terrestrial coleoptera**

<i>Species grouping</i>	<i>Bronze Age samples 162/A/27; 162/A/22</i>	<i>Roman samples 789/A/14; 605/A/7</i>	<i>Early Saxon sample 82/ 21 + 19</i>
1. Aquatic	59.6	19.5	2
2. Pasture/ dung	7.3	2.3	6
3. ? Meadowland	2.3	2.6	4
4. Wood and trees	2.8	4.4	0
5. Marsh/ Aquatic plants	0	0.3	0
6a. General disturbed ground/ arable	1.1	3.3	2.5
6b. Sandy/dry disturbed ground/ arable	0	1.5	1.2
7. Dung/ Foul organic matter	6.2	6.4	7
8. Lathridiidae	3.9	9.5	6
9a. General synanthropic	0.6	0.8	0
9b. Serious stored grain pests	0	0	0
10. Esp. structural timbers	0	3.1	0
11. At roots in grassland	6.2	1.0	1
12. Heathland/ moorland	0	0	0
<b>Total no. terrestrial individuals</b>	<b>178</b>	<b>390</b>	<b>81</b>

Species included in the groupings for Mount Farm are as follows:

1. all Coleoptera which spend part of their adult life under water
2. *Geotrypes*, *Aphodius*, *Cypris* and *Onthophagus* spp.
3. *Apion* spp. (excluding *A. aeneum*, *A. radiolus*, *A. articarium* and *A. S. Erythrapion* sp) and *sitona* spp;
4. *Melanotus erythropus*, *Grynobius planus*, Cerambycidae , *Chalcoides* sp., *Rhynchites* sp., *Acalles turbatus* and *Ramphus pulicarius*
5. *Baris lepidii*
- 6a. *Agonum dorsale* and *Harpalus rufipes*
- 6b. *Amara anthobia*, *A. apricaria*, *A. bifrons* and *A. tibialis*;
7. *Cercyon* spp., *Megasternum* sp. *Cryptopleurum* spp., *Platystethus arenarius*, *Anotylus rugosus* and *A. sculpturatus*;
8. Lathridiidae;
9. *Ptinus fur*;
10. *Anobium punctatum*;
11. *Hoplia philanthus*, *Phyllopertha horticola*, *Ayrypnus murinus*, *Athous* spp. and *Agriotes* spp.
12. (not represented)

## References

- Clapham A R, Tutin, T G and Warburg, E F, 1962 *Flora of the British Isles* (2nd edn) Cambridge University Press
- Kerney, M P, 1976 A list of fresh and brackish water mollusca from the British Isles, *J. Conchology London* **29**, 26-8
- Kloet, G S and Hincks, W D, 1964; 1976; 1977 *A checklist of British insects: Coleoptera and Strepsiptera*, (2nd edn) Royal Entomological Society Handbook for the Identification of British Insects **11**, pt. 3, London
- Lambrick, G H and Robinson, M A, 1979 *Iron Age and Roman riverside settlements at Farmoor, Oxfordshire*, CBA Res Rep **32**, Oxford Archaeological Unit Report 2, London
- Robinson, M A, 1981a *Investigations of Palaeoenvironment in the Upper Thames Valley*, unpubl PhD thesis, University of London
- Robinson, M A, 1981b The Iron Age to Early Saxon environment of the Upper Thames terraces, in Jones, M K and Dimbleby, G (eds), 1981 *The Environment of Man, the Iron Age to the Anglo-Saxon Period*, Oxford, BAR Brit Ser **87** Oxford, 251-286
- Walden, H W, 1976 A nomenclatural list of the land mollusca of the British Isles, *J. Conchology London* **29**, 21-5