SOIL SAMPLES FROM STONAR: ENVIRONMENTAL EVIDENCE

Nine samples from two Medieval pits were submitted to the Ancient Monuments Laboratory for examination. The following observations were made:-

Site 13

Five samples from pit 9 (12th-13th century) were examined. They were all less than 150 gm in weight and produced little of any interest. All of the samples except S16D contained small fragments of charred organic remains, mainly unidentifiable wood charcoal. S16C also produced a small fragment of material resembling charred string. S16D was a concreted deposit displaying impressions of plant remains.

S16B was a fuel ash slag produced by the reaction at high temperatures of fuel ash with surrounding clay material.

Site 10

Four samples were submitted from a late 13th century pit. These were indurated to varying degrees by inorganic substances, and some of the organic materials had been replaced. The deposits were very hard and it was necessary to soften some of them in dilute acetic acid in order to free the enclosed remains. These were identified, and the resulting species list (with sample weights) are given in Table I.

Unfortunately, this list is not very informative and does not allow any particular conclusionsto be drawn.

Table I

	738987 1350 gm (S17A)	738988 230 gm (S17B)	738989 80 gm (S17C)	738990 25 gm (S17D)
Flora				
BETULACEAE				
Betula sp. (Birch)	C	-	-	-
FAGACEAE				
Fagus sylvatica L. (Beech)	C	-	-	C
Fauna				
Invertebrata:-				
ISOPODA				
Porcellio laevis Latrielle	4	-	-	-
INSECTA				
Lepidoptera				
Indet. puparia	2	-	-	-
Diptera				
Indet. puparia	53	-	-	56
DIPLOPODA				
Indet.	1	-	-	-
MOLLUSCA				
Pomatias elegans (Müller)	fragments	-	-	-
Cecilioides acicula (Müller)	3	-	-	-
Ostrea edulis Linné (Oyster)	-	2 lower valves	-	-
Chordata:-				
PISCES	-	-	present	-
AVES				
Gallus sp. (Domestic fowl) phalanges	2			
vertebra	1	-	-	-
digit	1			
MAMMALIA				
Carnivora sesamoids	4			
rib fragments	2	-	-	-
Ovis/Capra sp.- sternal rib (Sheep/goat)	1	-	-	-
		C = wood charcoal		

Comments

Arthropods

All the Arthropod remains recovered are preserved by partial calcification of the body tissues, producing replacement fossils. Similar preservation has been noted on a number of archaeological sites on chalk or limestone substrates or receiving drainage from hardwater areas (Girling, 1977). It appears likely that soft-bodied Arthropods such as woodlice can only survive in archaeological deposits when they are calcified. Normally, their bodies decay too rapidly to allow them to become incorporated in deposits, even under permanently water-logged conditions.

The first fossil record of Porcellio laevis is of particular note. The woodlouse is regarded by Sutton (1972) as a possible naturalised species in Britain. This early Stonar record supports the view that the species is indigenous.

Mollusca

Cecilioides acicula and Pomatias elegans are land snails, probably occurring incidentally on the site and not used for food. C. acicula is a deep burrowing form, probably introduced into Britain during the medieval period.

Ostrea edulis, the oyster, is a common food species on Roman and later sites.

References

Girling, Maureen(1977) Calcified Arthropods from Archaeological Sites. (In prep.)

Sutton, S.L.(1972) Woodlice Ginn and Co.: London.

Contributors

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