

1.1 Fired clay

By Alistair Barclay

Introduction

- 1.1.1 The excavations produced a total of 1810 fragments (17 kg) of fired clay. The total assemblage includes structural clay and a small number of fired clay objects. The fired clay provides evidence for a range of activities (e.g. textile production) and for domestic structures such as walls, hearths, and ovens as well as for industrial activities (metalworking).
- 1.1.2 The assemblage will contribute towards the understanding of on-site activities and the spatial organisation of settlements. It was recorded in accordance with the Fieldwork Event Aims (see Section 2.2), in particular those relating to the economic basis of individual settlements and social and spatial organisation (aims 6, 11 and 13).

Methodology

- 1.1.3 All of the assemblage was analysed and quantified by count and weight. A record was made of type.

Quantification

- 1.1.4 Table 4.2.1 presents a breakdown of the total quantification by site for the White Horse Stone Group. Tables 4.2.2-5 give a breakdown by context for each of the site assemblages.

Table 4.2.1: quantification by site

Site	Count	Weight
ARCWHS	975	6887g
ARCPIL	290	5281g
ARCBFW	526	4974g
ARC410/99	19	149g
Total	1810	17291g

Table 4.2.2. White Horse Stone: A breakdown of all fired clay by context (Type codes: A=amorphous, LW=loomweight, SW= spindlewhorl, SC=structural clay)

Context	Special number	Count	Weight	Type	Period	Comments
2125	<9>	1	2g	A		
2142	<16>	1	1g	A		
2153	<7>	2	3g	A		
2170	<11>	2	2g	A		
2187	SF21	6	329g	LW	IA	Of triangular type and Iron Age form
2265		5	31g	A		
2267	<31>	4	10g	A		
2297	SF31	1	27g	SW	IA	Complete spindlewhorl
2297	SF42	1	29g	SW	IA	Complete spindlewhorl
2334		1	4g	A		
4014		2	13g	A		
4050		1	5g	A		
4058		2	4g	A		
4137		1	13g	SC		
4182	<96>	2	4g	A		
4281		1	35g	A		
4294		1	111g	SC?		
4308	<103>	1	1g	A		
4425		1	2g	A		
4475		1	6g	O		Pottery counter fabric AB
4499		2	10g	A		

Context	Special number	Count	Weight	Type	Period	Comments
4512		8	5g	A		
4518		1	365g	LW	IA	
4532		39	717g	LW	IA	
4562	SF50	1	175g	LW	IA	
4562	SF51	11	685g	LW	IA	triangular frags
4599		3	64g	A		
4875		18	37g			
4876		7	11g			
4918		1	2g	A		
4953		30	60g	A		
5130		90	141g			
5259		2	10g			
5316		2	4g			
5417		10	371g			
6015		1	1g			
6031		7	9g	A		?Tile
6099		3	7g	A		
7006	<538>	1	5g	A		
7008	<540>, <735>	5	15g	A		
7013	<650>	105	331g	A, SC		Some vitrified clay
7015	<733>	7	14g	SC		Vitrified possibly from a hearth
7022		2	1g	A		
7026		1	20g	A		
7071	<653>	149	748g	A,SC		Includes some vitrified frags
7079	<678>	124	1201g	A,SC		Hearth or oven frags
7080	<681>	137	648g	A,SC		Includes some vitrified fragments
7138		1	5g	A		
7139	<711>	39	288g	A		
7152	<699>	2	3g	A		
7153	<700>	3	6g	A,SC		Evidence for vitrification indicating may have come from hearth or oven
7154	<701>	8	14g	A		
7155	<702>	2	4g	A		
7157	<710>	2	2g	A		Could be pottery?
7170	<724>	1	2g	A		
7190	<788>	21	35g	SC?		
7202	<905>	1	1g	A		
7204	<897>	11	42g	A		
7207	<928>	7	22g	A		
7224	<930>	7	5g	A		
7225	<931>	5	2g	A		
8024	<714>	1	4g	A		
8069	<706>	13	24g	A		
8076	<749>	6	13g	SC?		
8077	<750>	2	5g	SC?		
8078	<751>	1	20g	SC?		
9025	<961>	32	90g	SC?		Chalk or daub?
19029	<959>	6	11g	SC?		Chalk or daub?
Total		975				

Table 4.2.3: West of Boarley Farm

Context	Special number	Count	Weight	Type	Period	Comments
1021		1	1g	A		
1030	Plus <3>	4	19g	A,SC		
1037	<4>	6	19g	SC		
1063		1	26g	A		
1136		7	19g	SC		
1137	Plus <47>	207	3127g	SC		Fragment with wattle impressions
1138	<48>	250	1354g	SC		
1139		4	117g	SC		Fragments with wattle impressions
1140	<45>	5	4g	SC		
1144	<46>	40	280g	SC		
1171		1	8g	A		
Total		526	4974g			

Table 4.2.4: Pilgrim's Way

Context	Special number	Count	Weight	Type	Period	Comments
856		1	15g	A		
910		6	39g	SC		Fragments with smoothed surfaces
971		283	5227g	A		
Total		290	5281g			

Table 4.2.5: Watching brief

Context	Count	Weight	Type	Period	Comments
(ARC 410/99 52+000) 44	8	108	SC		Fragment with wattle impression
(ARC 410/99 51+400) 4	2	21g	Tile	MD?	
(ARC 410/99 53+300) 29	2	6g	A		
(ARC 410/99) 623	7	14g	A		
Total	19	149g			

- 1.1.5 The assemblage includes possible structural clay, some complete and fragmentary objects and many amorphous fragments.

Textile equipment

- 1.1.6 This includes two complete spindlewhorls and fragments from triangular loomweights of typical Iron Age type from the site at White Horse Stone.

Structural clay

- 1.1.7 This is fired and unfired clay that is assumed to have been used to build the walls and bases of hearths and ovens or used as daub on the wattle built walls of structures that in certain cases could have become burnt. None of this material was found in situ. Some of this material was found in the metalworking area and had been vitrified. It was thought to be crucible fragments but in consultation with Lynn Keys was dismissed as hearth lining.

Miscellaneous objects

- 1.1.8 This category includes all classes of material that can not be readily assigned to the above.
- 1.1.9 Pottery 'counter' from context 4475 in glauconitic fabric (AB), burnished sherd that is square with rounded edges.
- 1.1.10 Fragment from a 'Cylindrical loomweight'-like object from a Neolithic context. Assuming this is not of later Bronze Age date (e.g. Drewett *et al.* 1988 Figure 4.2) and that its resemblance to a loomweight is fortuitous then it is an unusual find and of uncertain function. Loomweights are not generally found on early Neolithic sites, although occasional fired clay objects and structural clay with wattle impressions are (Saville 1990, 181). An alternative possibility is that the fragment represents structural clay with a single wattle impression.

Amorphous

- 1.1.11 This covers all material which has no evidence for smoothed surfaces and that is clearly not part of an object.

Provenance

Neolithic

- 1.1.12 Contexts associated with the early Neolithic structures produced amorphous fragments of fired clay, some if not all of which could derive from hearths or, in one case, the burning of soil within a tree-throw hole.
- 1.1.13 Only one fired clay object came from a Neolithic context. This had the appearance of a cylindrical loomweight of later Bronze Age date. However, its association with early Neolithic pottery and worked flint make this identification unlikely.

Bronze Age

- 1.1.14 Material of this date was rare and was of an amorphous character.

Iron Age

- 1.1.15 Most of the fired clay came from features associated with the Iron Age settlement at White Horse Stone. A considerable quantity of amorphous and structural fired clay was recovered from contexts associated with the area of iron working/dumping (Contexts 7006, 7008, 7013, 7015, 7071, 7079-80, 7138-9, 7152-5, 7157, 7170, 7190, 7202, 7204, 7207). Some of the fired clay from these contexts had been heated to temperatures sufficient to cause vitrification.
- 1.1.16 Two complete spindlewhorls came from grave 2296 (context 2297, sf 31 and 42) and can be considered to be grave goods.
- 1.1.17 Loomweight fragments and amorphous fired clay came from a number of pit deposits (contexts 2187, 4518, 4532, 4562).

Conservation

- 1.1.18 The material has no specific requirements.
- 1.1.19 At this stage all of the material should be retained. The amorphous fired clay could be discarded once a complete record has been made.

Comparative material

- 1.1.20 Comparative material is likely to come from other Iron Age sites within CTRL (e.g. Nashenden Valley, North of Saltwood Tunnel and Thurnham - Glass 1999). However, there is very little published material from the region and parallels for some of the objects are likely to come from published sites in south-east England.

Potential for further work

- 1.1.21 The fired clay has limited potential because of the assemblage size and the restricted number of diagnostic pieces. However, it will contribute to the Fieldwork Event Aims, in particular the understanding of the economic basis of the communities and the spatial organisation of the settlements (aims 1, 6, 11 and 13).
- 1.1.22 The fired clay from the Neolithic structure will add to our understanding of the organisation of the building. The perforated clay object from an early Neolithic pit deposit is an unusual find and will require further research.
- 1.1.23 The spindlewhorls and loomweights from the Iron Age settlement provide evidence for textile production and will contribute to an understanding of onsite activities. The structural clay provides indirect evidence for structures and hearths and will contribute information towards the spatial organisation of the settlements.

Updated research aims

- Themes concerning settlement and society and material culture have the potential to be addressed.

Settlement and society

1.1.24 The assemblage will contribute to the interpretation and understanding of settlement of Neolithic and Iron Age date

- What can the fired clay contribute to understanding the character and extent of Neolithic and Iron Age activity? To what extent is it domestic in character? What can the study of the fired clay contribute towards the interpretation of buildings and specialised activity areas?

Material culture

- Can the distribution of fired clay be used as an indicator for domestic and industrial activities? What is the range of material and what types of object occur?
- What evidence is there for textile production?

Recommended further work

1.1.25 The potential described above may be addressed by a programme of detailed recording of the fired clay, followed by analysis of types, fabrics (including sources of materials), function and spatial distribution.

Bibliography

Drewett, P, Rudling, D, and Gardiner, M, 1988 *The South East to AD1000*.
Longman

Saville, A 1990 *Stone, bone and fired clay, in Hazleton North, Gloucestershire, 1979-82: the excavation of a Neolithic long cairn of the Cotswold-Severn group*.
HBMCE Arch Mono 13