

APPENDIX 1 - ASSESSMENT OF HUMAN BONE

1.1 Human bone

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Introduction

1.1.1 All inhumations were hand excavated. In excavation cremation contexts were subject to 100% recovery as whole-earth samples and subsequently wet-sieved. Material from the >2 mm fraction was retained en masse.

1.1.2 The material was recorded in accordance with the fieldwork event aims specified in section 2.2 above.

Methodology

1.1.3 Cremated material was quantified by weight and scanned in order to determine age, sex, and potential for further analysis. Given the small size of the assemblage a decision was made to scan all of it. Each deposit was recorded on a pro forma record sheet that includes context, context type, period, weight, identifiable fragments, colour and minimum number of individuals. The > 2 mm fraction was scanned with a view to determining whether or not it should be sorted for small fragments of human bone. Inhumations and fragments of disarticulated material were examined to determine preservation, completeness, age and sex where possible.

Quantification

1.1.4 Cremations

Table 9.1.1: Cremation deposits from ARC WHS98

Context	Context type	Period	Weight	Identifiable fragments	Colour	Minimum number of individuals
6131	Fill of pit 6132	MIA; LIA	302 g	Long bone shaft	White-grey	Possible sub-adult
2416	Cremation pit 2415	LBA; EIA	7 g	Long bone shaft, metacarpal fragment, phalange	Mainly grey	?adult

Table 9.1.2: Cremation deposits from ARC PIL98

Context	Context type	Period	Weight	Identifiable fragments	Colour	Minimum number of individuals
143	Fill of pit 119	IA; RO	321 g + 1748 g of unsorted residue	Skull vault, ulna, misc. long bone fragments, unburnt animal bone	White	Adult, uncertain sex
144	Fill of pit 119	IA; RO	8 g	Nothing identifiable	White	
152	Fill of pit 119	IA; RO	> 1 g	Nothing identifiable	White	
453	Fill of posthole 452		4 g	Long bone shaft, distal end of humerus	White	?adult
544/545	Fill of pit 543		89 g + 239 g of unsorted residue	Scapula, femur, long bone shaft	White	
552/553	Fill of pit 543		67 g + 70 g of unsorted residue	Petrous, Humeral head, ?acetabulum, long bone shaft	White	Adult

Context	Context type	Period	Weight	Identifiable fragments	Colour	Minimum number of individuals
553	Fill of pit 553		8 g	Long bone shaft	White	
565/566	Fill of pit 543		60 g + 189 g of unsorted residue	Long bone shaft	White	
820	Fill of posthole 820		1 g	Nothing identifiable	White	
853	Upper fill of pit 852		1652 g	Unsorted residue	White	
853/854	Fill of pit 852		68 g	Skull vault, phalange (hand), vertebral facet, long bone shaft, unburnt animal tooth	White	
854	Lower fill of pit 852		1270 g + 2863 g of unsorted residue	Occipital, petrous, humerus shaft	White	Adult
871	Fill of pit 870		193 g + 220 g of unsorted residue	Skull vault, petrous, ?radius, femur	White	Adult
873	Fill of 872		1 g + 151 g of unsorted residue	Nothing identifiable	White	
912/914	Fill of 911/913		3 g + 871 g of unsorted residue	Nothing identifiable	Blue-grey	
926	Lower fill of 925		2 g + 544 g of unsorted residue	Nothing identifiable	White	
927	Upper fill of 925		13 g + 509 g of unsorted residue	Long bone shaft, ?humerus	White	Probable adult
949	Fill of pit 948		137 g plus 269 g of unsorted residue	Skull, ?pelvis, long bone	White	Adult
950	Fill of pit 948		4 g + 464 g of unsorted residue	?premolar tooth root	White	
955	Fill of pit 952		1 g	Long bone shaft	White	

1.1.5 Unburnt bone

Table 9.1.3: Unburnt bone from ARC WHS98

Context	Context type	Period	Preservation	Completeness	Age	Comments
2113	Fill of pit 2214	EIA	Medium	<5%	Juvenile	Skull vault
2114	Fill of pit 2119	EIA	Medium	<1%	?adult	Fibula shaft fragment
2120	Fill of pit 2130	EIA	Medium	<5%	?adult	Fibula shaft fragment
2187	Fill of pit 2184	EIA	Medium	<5%	Juvenile	Skull vault
2291	Fill of pit 2184	EIA	High	90%	Juvenile	
2295	Fill of 2296	EIA	High	90%	Adult male	
2297	Fill of 2296	EIA	Medium	>1%	?	Nothing identifiable
2341	Fill of 2339	EIA	Medium	<1%	Adult	Lumbar vertebra
4005	Fill of field boundary or	RO	Medium	<1%	Child	Phalange

Context	Context type	Period	Preservation	Completeness	Age	Comments
	drainage ditch 4006					
6126	Fill of 6110	EIA; MIA	Medium	5%	Adult ?male	Left tibia, left clavicle
6127	Fill of 6110	EIA; MIA	Medium	<5%	Adult	Skull vault
8015	Within storage pit 8012	LBA; EIA	Medium	15%	Adult male	Skull and mandible
8016	Part of 8015	LBA; EIA	Medium	<5%	?adult	Left tibia
8020	Part of 8015	LBA; EIA	Medium	<5%	Adult	Left femur
8029	Part of 8015	LBA; EIA	Medium	5%	Adult	Right tibia
9025	Within 9011	680-970 cal AD (95% confidence)	High	70%	Adult female	Missing skull

Provenance

Pilgrim's Way

- 1.1.6 All the cremation deposits from Pilgrim's Way were cut into natural and were truncated by medieval ploughing. The material derived from 13 pits and postholes. All of the deposits are undated with the exception of the example from pit 119, which was associated with a bone pin. Iron Age pottery from this feature is likely to be redeposited from the buried soil. The pin is of a type which can be paralleled at a number of sites of broad Roman date including Colchester (Crummy 1983, 24, Figure 22) no 420, 423.

White Horse Stone

- 1.1.7 At White Horse Stone the early Iron Age settlement site produced a single richly furnished cremation (2.4.11) and three human pit burials. Two of the latter were tightly crouched inhumations, placed in fairly deep storage pits. The third was very shallow and severely plough-truncated but may have been crouched in its own grave cut. A radiocarbon date of 420-100 cal BC on a human femur from 2291 supports the assertion that the burial is early-middle Iron Age in date.
- 1.1.8 Cremation deposit 6131 is of particular significance. It was associated with pottery spread 6100 and grain dump 6130. The deposit produced an exceptional group of Iron Age artefacts, including an iron knife, four iron awls, a whetstone, a small curved iron blade and a group of at least six pottery vessels, one of which was a large urn containing a deposit of grain. Charred grain from this deposit has produced a radiocarbon date of 490-160 cal BC and supports the assertion that the burial is transitional early-middle Iron Age in date. Deposit 2416 is believed to be of late Bronze Age-early Iron Age date and was located at the periphery of the settlement.
- 1.1.9 Skeleton 2291 was found in the base of early Iron Age pit 2184. The mandible was located on the torso and various other bones have been displaced. This is likely to have been deliberate, unless it was the result of disturbance in antiquity (the subsequent fills were also early Iron Age in date). Juvenile skull vault fragments were also found in fill 2187 and are almost certainly part of the same individual.
- 1.1.10 Skeleton 2295 had been damaged by ploughing and was associated with pottery, two spindle whorls and charcoal. The skeleton was overlain by fill 2297 that contained a fragment of sacrum. The position of the skeleton suggests that originally the legs were drawn up over the lower torso. The right arm was extended while the left was bent under the left shoulder.
- 1.1.11 Selected bones of an adult male were recovered from fills 6126 and 6127 of storage pit 6110.

- 1.1.12 Deposit 8015 comprised a quantity of disarticulated material. Deposits 8016, 8020, 8029 and 8030 were also found in storage pit 8012 and are likely to belong to the same individual who has been identified as an adult male. Disarticulation of the bones of a single individual is likely to be indicative of excarnation and subsequent selection and deliberate deposition of the material.

Conservation

- 1.1.13 The material does not require any conservation for the purposes of long-term storage. Under the terms of the CTRL Act 1996, however, all human remains are to be reburied.

Comparative material

- 1.1.14 Although only one deposit at Pilgrim's Way has been dated by the presence of a bone pin to the Iron Age or Roman period, it is assumed that the remainder of the assemblage is of comparable date.

- 1.1.15 The assemblage as a whole represents a wide range of Iron Age burial practice and falls within a well-known Iron Age tradition of human and animal burials in and around settlement sites. There is certainly mounting evidence, mainly the identification of Iron Age inhumation cemeteries by radiocarbon dating, that human pit burials do not represent the normal Iron Age burial rite, but have some other significance, possibly representing sacrificial offerings.

Potential for further work

- 1.1.16 The assemblage has the potential to contribute towards a number of the original fieldwork event aims, in particular aims 1 and 9. The possibility that some of the burials might represent sacrificial offerings could be further explored, although at the assessment stage no direct evidence was observed.

Pilgrim's Way

- 1.1.17 The potential of individual deposits of cremated bone is limited by the small size of the deposits. An average adult cremation can weigh between 1000-2400 g if complete (McKinley 1997, 68; observations at modern crematoria). Clearly, then many of these deposits do not represent the entire remains of any one individual. While the burial of token deposits of cremated material is known to have been deliberate in some cases, all of these features have been truncated by medieval ploughing.

- 1.1.18 A total of 11 deposits weigh less than 10 g and for these no further analysis is recommended. However, detailed examination of the more substantial deposits of cremated bone will allow for further refinement of age and sex, and also the possible identification of pathological conditions. In the case of the more substantial deposits the smaller fraction of cremated bone (<10 mm) requires sorting and detailed analysis. This deposit also contained unburnt animal bone as did deposit 853/854.

- 1.1.19 The presence of unburnt animal bone in two of the deposits may be accidental as the absence of burning indicates that it was not present on the pyre. It would nonetheless be useful to examine all of the bone in detail to determine the quantity of animal bone present and to identify it to species if possible. The identification of animal bone within human cremations has implications for the study of burial practice of the period. Sheep/goat was present within a proportion of the Iron Age cremation burials at Westthampnett (McKinley *et al.* 1997, 73).

A number of small Iron Age and Romano-British rural cremation groups have been recorded along the CTRL route (eg Boys Hall Balancing Pond, Chapel Mill). Whilst the potential of individual cremations is limited, there is the potential for examining the extent, morphology and function of, and interaction between, settlement and ceremonial features, one of the original fieldwork event aims.

White Horse Stone

- 1.1.20 The potential of the cremated bone from the early Iron Age cremation is again limited by the small size of the deposits. Burnt antler (possible red deer) has been identified in the cremated deposit 6131. The fact that it too is burnt clearly indicates that it was present on the pyre. Therefore it would be useful to examine all of the bone in detail to determine the quantity of animal bone present and to identify it to species if possible. The identification of animal bone within human cremations has implications for the study of burial practice of the period. Sheep/goat was present within a proportion of the Iron Age cremation burials at Westhampnett (McKinley *et al.* 1997, 73).
- 1.1.21 The preservation of the metalwork is exceptional. This factor, together with the secure context, apparently early date and associations with other outstanding artefact and economic assemblages, indicate that this group is of national importance.
- 1.1.22 The inhumations and the disarticulated human bone are well preserved. The disarticulated material is unlikely to provide any further information and therefore no further analysis is recommended. However, the inhumations should be analysed and recorded in full.
- 1.1.23 Burial 9025 is of significance give its Saxon date and location adjacent to a principal boundary (Pilgrim's Way marks the parish boundary between Aylesford and Boxley at this point). Evidence from Saxon charters demonstrates that judicial execution sites were regularly located at such boundaries (Reynolds 1997). It is perhaps noteworthy that the skull is absent.

Updated research aims

- 1.1.24 Themes concerning settlement, landscape and society have the potential to be addressed.
- What is the significance of the funerary deposits of Iron Age date? To what extent can these be describe as ritual? How usual is the rite of cremation during the early-middle Iron Age? What is the significance of finding animal bone and human bone in the same deposit?
 - What meaning can be attached to the human burials and cremations of Iron Age date found at the open settlement and near to the Pilgrim's Way, considering the composition and location of the burials? To what extent do these features reflect concerns with symbolism and cosmology?

Recommended further work

- 1.1.25 The above research aims may be addressed by the following methods:
- 1.1.26 Further detailed recording work is recommended for the inhumations. This will allow for further refinement of age and sex, and also the possible identification of pathologies. No further work is recommended for the cremations.
- 1.1.27 Radiocarbon dating on otherwise undated burials and cremations. Confirmation of artefact dated burials by radiocarbon dating.

- 1.1.28 Plotting of the human bone deposits in relationship to the landscape and settlement features.

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