

Specialist Report 12

Human Remains

by Lauren McIntyre

Introduction

Fragments of cremated human bone were recovered from the middle fill (2639) of pit 2640 from the Pipeline Diversion (COLP15). The deposit was processed by wet sieving, then sieved and sorted into >10mm, 10-4mm and 4-2mm fractions. The remains were examined in accordance with the recommendations set out by the CIfA and BABAO (McKinley 2004; 2017).

Results

A summary of the osteological findings for deposit 2639 is presented in Table 12.1. The total weight was 3.1g, which is substantially below the expected range for a cremated adult (between 1000g and 2400g, with an average of *c* 1650g; McKinley 2000a, 269). Fragments were predominantly a buff white colour (fully calcined) and, to a lesser extent (approximately 20%), blue/grey and brown. This colour variation may indicate that the degree of combustion was variable in terms of temperature and heat distribution, the blue/grey brown colours indicating lower temperatures and/or less exposure to flames and less oxygen supply (McKinley 2000a, 66).

Almost two thirds of the fragments (64.5% of the total bone weight) were less than 10-4mm in size, and two fragments (1.1g or 35.48% of the total bone weight) were over 10mm in size. Fragments of skull (vault) and torso (rib) were identified, amounting to 41.94% of the total bone fragments.

Considerable fragmentation and the small quantity of bone present have made identification of the minimum number of individuals (MNI) represented by the material (based on repeatable elements) problematic. However, at least one individual is present. The general thickness of identifiable skeletal elements indicates that this individual was either adult or an older subadult. It was not possible to estimate sex.

Periostitis was observed on the cortical surface of one unidentified fragment of long bone shaft (possibly humerus or femur). Periostitis refers to new bone which forms as a response to non-specific inflammation of the overlying soft tissue (the periosteum)

as a result of trauma or other pathological conditions, for example metabolic conditions, such as scurvy, neoplastic disease, or specific infectious disease (Resnick and Niyawama 1995; Roberts 2000, 148; Weston 2012, 492-3). Prevalence and severity of periosteal new bone formation in archaeological populations is generally considered to be indicative of adaptation or maladaptation to environmental conditions, in particular poor sanitation, malnutrition and general health stressors (Roberts and Manchester 1995). There is insufficient evidence to say what had caused the changes in the present case.

One fragment of burnt non-human animal bone (0.4g, 12.9% of the total bone weight) was observed amongst the human material. This was blue/grey in colour and was identified as pig, specifically the distal end of a lateral metapodial (Strid, pers. comm.). The presence of pig bone may relate to pyre goods. Animals were could be placed on the funeral pyre as food offerings during the Iron Age and Roman periods, with pig, along with sheep or goat, ox and domestic fowl remains, being most commonly found in Romano-British cremation burials (Philpott 1991, 195-6).

Discussion

Pit 2640 had not been significantly truncated by later activity and therefore it is likely that deposit 2639 comprises the total amount that was originally buried in the feature, rather than the remnants of a once larger deposit. Small deposits of archaeological burnt human bone such as this can relate to token burials, memorial deposits (eg cenotaph burials, whereby only a small token amount of the cremated bone is buried), or redeposited pyre debris (McKinley 2000b; 2004a, 10; 2013). The present bone is unlikely to represent a cenotaph or token burial, because it was accompanied by industrial waste, including charcoal, slag and fired clay. Cremation burials are known from the immediate vicinity and it is possible that the present deposit had originated from these and was subsequently incorporated into the feature. Alternatively, the bone may represent redeposited pyre debris, more specifically, the remnants of cremations, collected up with other pyre debris from a nearby pyre site and buried within the pit. Redeposited pyre debris is frequently encountered in the archaeological record and is not specific to time period. It may be found in cremation graves, as a surface spread, in specifically excavated features, or, as with the present deposit, in pre-existing features. It is not possible to say which interpretation – redeposited pyre debris or remains from

nearby cremations – applies. For this reason, general ‘cremation-related deposit’ is the preferred categorisation for this context (McKinley 2013, 155).

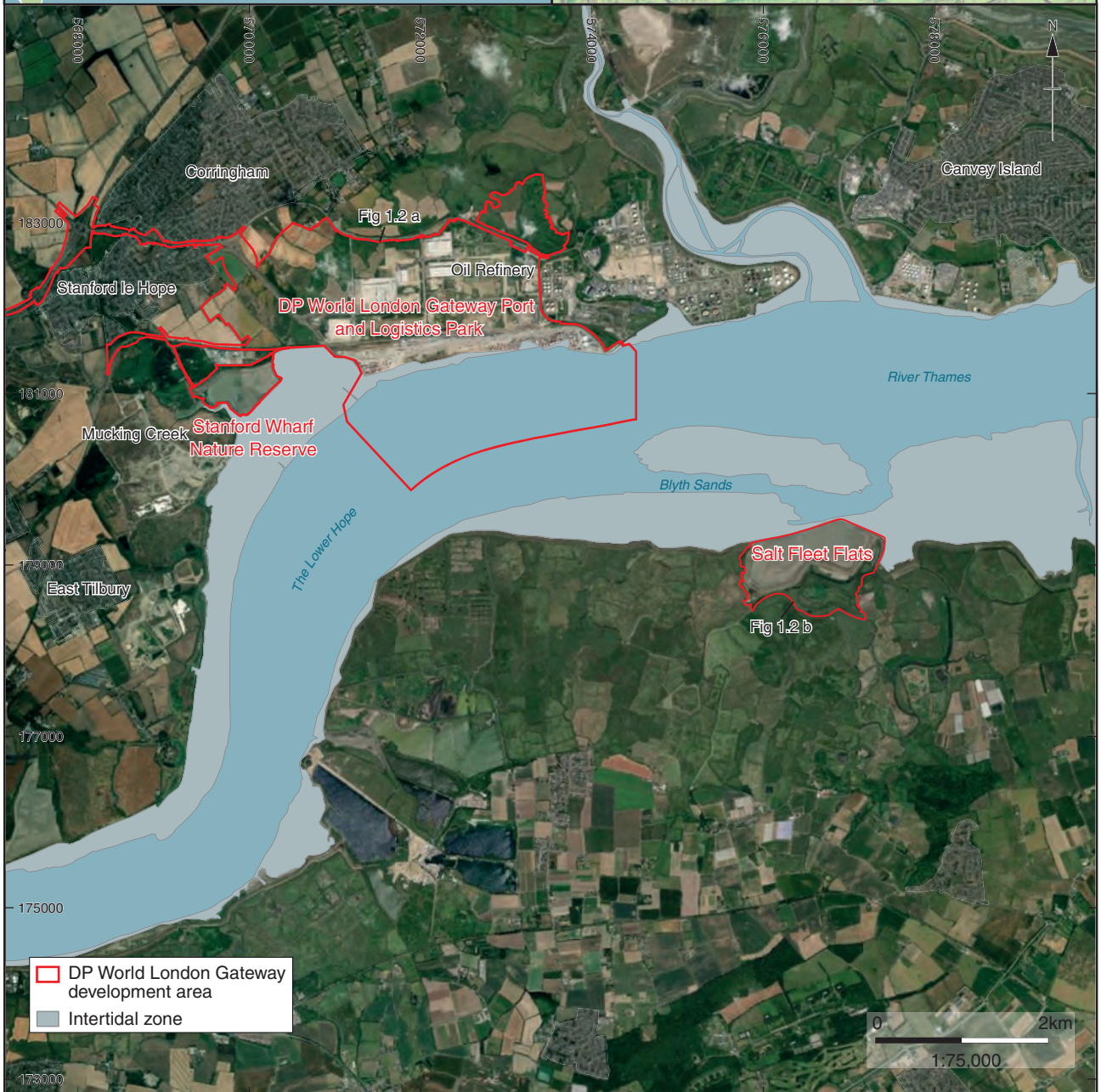
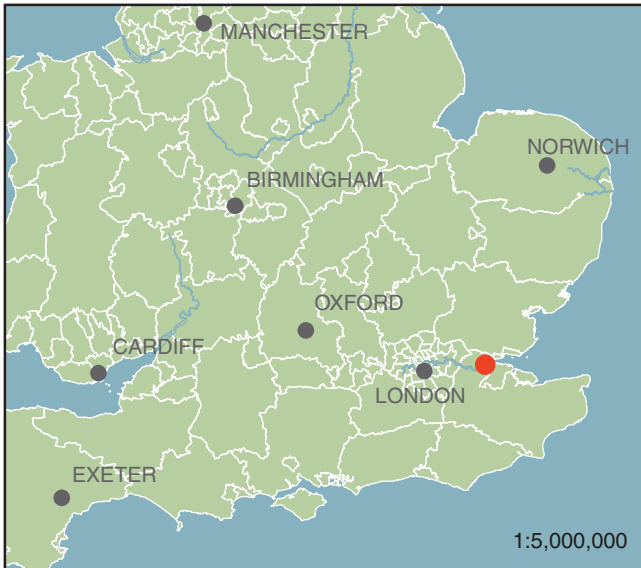
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Human Remains Table

TABLE 12.1: SUMMARY OF CREMATION RELATED DEPOSIT 2639, PIT 2640 (COLP15)

Deposit	Skeletal region	>10mm	10-4mm	Colour, MNI, age, sex, pathology
2639	Skull	0.9g (vault fragment)	/	71% bone fragments buff white in colour
	Axial	0.2g (rib fragment)	0.2g (rib fragment)	19.35% bone fragments blue/grey in colour
	Upper limb	/	/	6.45% bone fragments brown in colour
	Lower limb	/	/	MNI = 1
	Unid. Long bone	/	0.4g	Adult or older juvenile
	Unid. Joint surface	/	/	?sex
	Unid. other	/	1.0g	Possible periostitis observed on 1x unidentified long bone fragment
	(UNID. TOTAL)	/	(1.4g)	
TOTAL		1.1g	1.6g	2.7g



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