

**HAND-COLLECTED ANIMAL BONE FROM C261 CROSSRAIL – EIP/TBM
CHAMBER, PUDDING MILL LANE, LONDON E15 (XSK10)**

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HAND-COLLECTED ANIMAL BONE FROM C261 CROSSRAIL – EIP/TBM CHAMBER, PUDDING MILL LANE, LONDON E15 (XSK10)

1. Introduction and methodology

This report quantifies, identifies and interprets the animal bone recovered from hand-collected context [60] at XSK10. All recovered animal bones were washed, air-dried and then bagged and labelled as a context group.

Each animal bone fragment from context [60] was then described and recorded directly onto the MOLA animal bone post-assessment Oracle database in terms of species, skeletal element, body side, age, epiphysial fusion, dental eruption and wear, sex, fragmentation, modification and measurement of fully-fused bones. Species and skeletal element were determined using the MOLA animal bone reference collection together with Schmid 1972. Evidence for age at death was derived from epiphysial fusion (Schmid 1972) and dental eruption and wear (Amorosi 1989). Fully-fused limb long bones were measured following Driesch, von den 1976. Estimated statures as withers ('shoulder') heights were calculated from measurements of complete fully fused limb long bones following von den Driesch and Boessneck 1974. The complete sitecode assemblage record is held on the Oracle post-assessment database for reference and possible future analysis with respect to available stratigraphic data.

Table 1 shows the assemblage catalogue in terms of species, skeletal representation, body side, age at death, modification and fragment count. All data are available for consultation on request on the Museum of London Archaeology Oracle animal bone post-assessment database.

2. Preservation and quantification (Table 1)

A total of 31 hand-collected fragments, two archive boxes, approximately 7.500 kg, of well-preserved animal bone were recorded from context [60]. Maximum fragment size exceeded 75 mm with most of the bones in very good surface condition and all surface detail easily visible.

3. The fauna (Table 1)

This small but very well-preserved assemblage indicates waste from two sources; butchery or post-consumption waste from a single right-side tibia (lower hind-leg/shin) of adult ox (cattle) *Bos taurus* and 30 bones, probably a partially-complete skeleton, of an adult horse *Equus caballus*. There was no recovery of poultry, sheep/goat, pig or any other domesticates; there was no recovery of fish, amphibians, poultry, scavengers, commensal species or 'game'. There was no recovery of foetal, neonate, infant or juvenile animals.

The horse group derived from elements of the head (mandibles), upper (scapula and humerus) and lower (radius/ulna) fore-leg, fore-foot (metacarpal), upper (innominate and femur) and lower (tibia) hind-leg and hind-foot (metatarsal); measurement and body side of each element suggest that all may derive from the same animal. Stature estimates range from 1.330 metres (right metacarpal) to 1.367 metres (left metatarsal) with a mean value from nine measured bones of 1.353 metres, very closely comparable to the median value for medieval horses calculated from London archaeological sites (Rackham 1995, 170) and equivalent to a modern riding pony.

There was no evidence for *ante-* or *post-mortem* modification with complete absence of tool marks, burning, gnawing or pathological change and therefore no potential for interpretation of cause of death.

Table 1: Hand-collected and wet-sieved animal bone from XSK10/summary

4. Potential for further work

Recording and analysis so far complete indicates that the bone group includes two distinct components:-

1. A tibia (shin-bone) from a leg of beef, probably from an adult animal; butchery waste from a skeletal area of good meat-bearing quality.
2. Disposal of a partially-complete carcass of an adult horse, including the lower jaws, ribs, fore- and hind-legs and fore- and hind-feet. Measurements of the limb bones indicated an animal comparable in stature to a modern riding pony. There was no pathological evidence to suggest cause of death and no tool-mark evidence for slaughter, butchery, skinning or bone-working.

The absence of small wild vertebrates precludes any comment on surrounding habitat and conditions.

Further analysis is unlikely to improve interpretation of this bone group and no additional work is required.

5. Bibliography

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6. Table

Table 1: Hand-collected animal bone from XSK10/catalogue

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CONTEXT	SPECIES	BONE	AGE	BODY SIDE	FUSION (P/A)	FUSION (D/P)	AGE (years)	ESTIMATED STATURE (m)	NOS
60	cattle	tibia		right		fused	>2.0		1
60	horse	femur	adult	right	fused	fused	>3.5	1.355	1
60	horse	humerus	adult	left	fused	fused	>3.5	1.363	1
60	horse	humerus	adult	right	fused		>3.5		1
60	horse	innominate	adult	both	fused	fused			2
60	horse	mandible	adult	left					1
60	horse	mandible	adult	right					1
60	horse	metacarpal	adult	left	fused	fused	>1.0	1.333	1
60	horse	metacarpal	adult	right	fused	fused	>1.0	1.33	1
60	horse	metatarsal	adult	left	fused	fused	>1.0	1.367	1
60	horse	metatarsal	adult	right	fused	fused	>1.0	1.364	1
60	horse	radius/ulna	adult	right	fused	fused	>3.5	1.343	1
60	horse	rib	adult						14
60	horse	sacrum	adult		fused	unfused			1
60	horse	scapula	adult	left	fused	fused			1
60	horse	tibia	adult	left	fused	fused	>3.5	1.36	1
60	horse	tibia	adult	right	fused	fused	>3.5	1.36	1
TOTAL									31