Channel Tunnel Rail Link London and Continental Railways Oxford Wessex Archaeology Joint Venture

Animal bone from Eyhorne Street, Hollingbourne, Kent

by Jennifer Kitch

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1 INTRODUCTION

1.1 The site

Oxford Archaeology was commissioned to undertake a Targeted Watching Brief south-east of Eyhorne Street, Hollingbourne, in Kent as part of an extensive programme of archaeological investigation carried out in advance of the construction of the Channel Tunnel Rail Link. The watching brief revealed artefacts and features dating from at least five phases of activity, the most significant of which date from the Neolithic and the Iron Age.

All of the recorded animal bone was recovered from Iron Age features. Activity of this period dates from the early and middle Iron Age (*c* 600-200 cal BC). The evidence consists of some very shallow ditches, a sequence of hollows, and eight pits which may have lain at the edge of a more extensive settlement. As well as rich deposits of charred grain and pottery, and a little animal bone, the pits also contained more exceptional material: a bent iron dagger, a small ceramic cup either imported from or imitating pottery from the Champagne region, and a pottery bowl which was neatly cut in half.

1.2 Method

Details of the animal bone recording method can be found in the CTRL Section 1 Post-excavation Project Design, Volume 2, Contractor's Method Statements (ADS 2006).

1.3 The animal bone

A total of 527 (514 g) bone fragments were recovered from the targeted watching brief at Eyhorne Street. A further 129 (76 g) fragments were collected through environmental samples, sieved through 10 mm and 4 mm meshes. Tables 1 and 2 summarise species identified in the hand collected and sieved assemblages.

The number of surviving fragments is very low. Most of the surviving fragments were recovered from the early - middle Iron Age phase. A single fragment was recovered from the late Neolithic - early Bronze Age phase.

Table 1: Summary of number of fragments of each taxon from the hand collected material

	Phase		
Taxon	Late Neolithic- early Bronze Age	Early - middle Iron Age	Total
Cattle		3	3
Equid		3	3
Large Mammal		51	51
Unidentified		470	470
Grand Total	0	527	527

Table 2, Summary of number of fragments of each taxon from the sieved material

	Phase		
Taxon	Late Neolithic- early Bronze Age	Early -middle Iron Age	Total
Sheep/Goat		4	4
Pig		1	1
Fish		1	1
Large Mammal		1	1
Medium Mammal		1	1
Small Mammal		1	1
Unidentified	1	119	120
Grand Total	1	128	129

2 RESULTS

2.1 Preservation and alteration

Condition

The bone assemblage for this phase is very poorly preserved. Tables 3 and 4 provide an overview of the condition of the bone according to the grading criteria outlined by Lyman (1996).

Table 2: Condition of the hand collected and sieved bone

Hand collected	Condition Grade				Sieved	Condition Grade			
Phase	2	3	4	5	Phase	2	3	4	5
Late Neolithic - early Bronze Age					Late Neolithic - early Bronze Age			1%	
Early - middle Iron Age	0%	1%	12%	87%	Early - middle Iron Age	2%	36%	61%	0%

The majority of the hand collected bone is in the grade 4 and 5 categories: the bone had been subject to such attritional damage that it was barely recognisable. The condition of bone from the sampled deposit is slightly better.

Distribution

The bones from this site were all recovered from pit deposits. Due to the small sample size and poor preservation, no analysis of the distribution of the bone was possible.

Butchery and Pathology

Due to the poor preservation no evidence of butchery or pathology was observed on any of the remains.

Burning

A total of 36 fragments (29%) of bone from the sieved assemblage were burnt. A single fragment of unidentifiable bone burnt white was the only bone from the late Neolithic- early Bronze Age phase of the site. The remaining burnt bone was recovered from sieved samples from the early to middle Iron Age pits 170 and 175. From the burnt assemblage only a sheep/goat radius and astragalus were identifiable to species. Both were from pit 170.

2.2 Species descriptions

Cattle

A total of three cattle teeth and bones were recovered from this assemblage, two of which were fragmented teeth from pits 217 and 226. In addition, a fragment of cattle atlas was recovered from the early - middle Iron Age pit 170. The small number of cattle remains and the poor condition provides little further information.

Equid

A total of three fragments of horse remains were identified. An equid tooth from an animal aged 3 - 6.5 years old at death along with an articulating astragalus and a distal tibia from an individual aged >2 years were recovered from the early - middle Iron Age pit 170.

Sheep/Goat

A total of four sheep/goat remains, two teeth and a burnt radius and astragalus, were recovered from this assemblage. All from the sieved samples from pit 170.

Pig

A single fragment of pig skull was found in the sieved samples from pit 170.

Fish

A single predatory fish tooth was recovered from the sieved samples from the early - middle Iron Age pit 175. It may be fossilised and has not been identified to species.

2.3 Contexts of particular interest

Pit 170 - early -middle Iron Age

The majority of the animal bone assemblage from this site was recovered from this pit. A cattle axis and an articulating rear limb of an equid dominated the identified fragments. Eight large mammal sized vertebra and five rib fragments which may have belonged to either species were also recovered from this pit. The sieved remains added to the identified assemblage with a fragment of pig skull and 4 fragments of sheep/goat remains. Over 460 unidentifiable remains, both hand collected and from sieved samples, were retrieved from pit 170.

3 DISCUSSION

The bone evidence for this site is rather sparse. Eyhorne Street is within the Wealden Greensand Landscape Zone where acid soils severely affect bone survival. The preservation is very poor and the bone is highly fragmentary. Most of the assemblage probably survived because it was particularly robust or burnt. Burning changes the structure of bone so that it becomes more resistant to decay than unburnt bone.

The small assemblage for this site does not provide enough evidence to suggest husbandry strategies for the site, although the three main domesticates plus equid (probably horse) were all present. Preservation has left a very skewed impression of the assemblage, dominated by the larger species.

The assemblage from pit 175 is particularly interesting due to the context. The inclusion of the bent sword or dagger, especially within an Iron Age context, may suggest structured deposition, but not enough animal bone survived to add any useful information. It is unusual to find fish in this kind of context. The fish tooth could be a fossilised remnant from the surrounding geology. It is also possible that the tooth was collected as a fossil and placed within the pit.

Animal bone was better preserved in the neighbouring pit 170. This pit contained the partially articulated limb of an equid, an equid tooth and many unidentified fragments which might suggest that more of the equid skeleton was originally present. The several large mammal vertebra and rib fragments may have been associated with either the equid limb or the cattle atlas; the preservation is too poor to suggest either way. Other species are present in the pit in very small numbers, probably primarily as a result of poor preservation.

No evidence of butchery has survived within the assemblage.

The poor preservation of the bone at the Eyhorne street excavations has limited the potential analysis of the ritual connotations of this particular assemblage. Within the CTRL

project route, the West Northumberland Bottom and the White Horse Stone assemblages both have horse burials, suggesting that the practice would not be unusual in the Kent area at this time.

4 BIBLIOGRAPHY

ADS, 2006 CTRL Digital Archive, Archaeology Data Service, http://ads.ahds.ac.uk/catalogue/projArch/ctrl

Lyman, R L, 1996 Vertebrate Taphonomy, Cambridge