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

Animal bone from Little Stock Farm, Mersham, Kent

by Jennifer Kitch

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1 INTRODUCTION

1.1 The site

Wessex Archaeology was commissioned by Union Railways (South) Limited (a subsidiary of London and Continental Railways) to undertake a 'Strip, Map and Sample' excavation at Little Stock Farm (OS NGR 606646 138531) and evaluation at Park Wood Cottage, located either side of the bridging point for Station Road across the Ashford to Folkestone railway, near the village of Mersham. This work formed part of an extensive programme of archaeological investigation carried out in advance of the construction of the Channel Tunnel Rail Link (CTRL) which included environmental assessment, geophysical survey, fieldwalking and two field evaluations using trial trenching.

The earliest activity was represented by isolated pits of middle Neolithic date and two pits of late Bronze Age-early Iron Age date were also found, one containing several pots in a placed deposit.

Most of the evidence was of Iron Age date; enclosures, droveways and a small enclosure containing a possible roundhouse were found, as well as two burials. With the exception of a later Iron Age four-post structure, other post-built buildings were difficult to identify from the array of post-holes. The enclosures were re-worked several times and it seems likely that ditches found in the evaluation of Park Wood Cottage immediately to the east represent further enclosures.

Activity seems to have continued at Park Wood Cottage into the early Roman period but an apparently isolated cremation burial of Romano-British date may be associated with the settlement at Bower Road 400 m to the west. A single probable Sunken Featured Building of Anglo-Saxon date was found, as was a medieval quarry and ditches.

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).

2 RESULTS

2.1 The animal bone

A total of 426 (3886g) fragments of animal bone were recovered during the excavations at Little Stock Farm. A further 269 (112g) fragments were recovered from environmental samples.

Tables 1 and 2 summarise the number of identified fragments from the Little Stock Farm assemblage. Sheep/goat and cattle fragments dominate the assemblage, closely followed by relatively equal small numbers of pig, equid and dog. The majority of the dog bones belong to a partially articulated skeleton from a late Iron Age ditch. Very few wild species are present within the assemblage, a single fragment of mole (possibly intrusive) from a late Iron Age Ditch and a partially articulated corvid skeleton from a late Iron Age gully.

Table 3 summarises the minimum number of individuals (MNI) represented within the assemblage. Although the small assemblage only indicates the presence of most domestic species within each relevant phase the data indicates that sheep/goat are the most frequent occurring species within the assemblage. Within a poorly preserved assemblage larger mammals are more likely to survive through the robust nature of the bone. For smaller more fragile sheep/goat bones to survive to such numbers, this would indicate that sheep/goat were much more frequent that other species in the post depositional assemblage.

2.2 Taphonomy

Condition

The condition of the animal bone assemblage is outlined in table 3. The majority of the bone from the assemblage has been graded as 3 on the Lyman (1996) criteria, for the hand collected remains. The sieved remains are more poorly preserved, averaging at grade 4.

Burning

A total of 19 fragments had been burnt. Most of the burnt bone was from ditch and posthole deposits. Very little information can be gained from the small number of fragments that were recovered.

Butchery

All of the butchered remains from this assemblage were recovered from ditch deposits, with the exception of a single roe deer antler fragment from an early/middle Iron Age grave [2037]. A single fragment of red deer antler was recovered from an early/middle Iron Age

ditch displaying cut marks and sawn through the base, this may indicate antler working preparation or waste.

The majority of the remaining 7 fragments were cattle remains, with a single sheep/goat humerus, displaying disarticulating chop marks and defleshing cuts. The butchered remains were recovered from early, middle, late Iron Age and medieval features. The small number of bones does not allow for any interpretation of butchery patterns through the phases.

Gnawing

A total of 12 fragments of bone had been gnawed, mainly by carnivores where identifiable. Most of the gnawed fragments were from Iron Age and Medieval ditches. Two fragments were recovered from a late Iron Age and a medieval hearth. Very little further information can be gained from this small number of fragments, but they do show that at least some bone was available to scavengers for some time after discard.

Skeletal Representation

The small number of identifiable fragments shows a good range of skeletal elements suggesting that entire carcasses were present on site. However, comparisons within such a small assemblage will provide little useful information.

2.3 Species descriptions

Sheep/Goat

Sheep/Goat are the most abundant taxon in the assemblage. There was no positive evidence for goat within the assemblage, so sheep/goat will be further referred to as sheep. Most skeletal elements are represented suggesting the entire carcass was originally present. A single humerus from the late Iron Age ditch [5005] displays cut marks consistent with meat removal.

The assemblage is too small to construct age profiles, but the presence of juvenile to older individuals would suggest that Little Stock Farm was a producer site. Sheep are important in mixed farming systems in utilising grazing and supplying manure, as well as wool, milk, and meat and other carcass products.

Cattle

Cattle remains are almost as frequent within the assemblage as sheep/goat. Most skeletal elements are represented, suggesting that the whole carcass was originally present. Five cattle bones display signs of butchery, all consistent with disarticulation and meat removal.

There was not enough ageable material to produce a formal age profile. No tooth wear data was available within the assemblage, a single unfused metacarpal suggest skeletally

immature individuals were present on site. This suggests, as with sheep, Little Stock Farm was a producer site, where cattle were raised and utilised for milk traction, horn and meat.

Pig

The proportion of pig was very low. This may partly be due to preservation factors. A total of 12 fragments of pig remains were recovered from the hand collected assemblage. Within the sieved remains several juvenile bones were recovered, possibly indicating a collection bias towards the bigger adult bones. The presence of both juvenile and adult bones suggests the rearing of pigs for meat with a few adults retained for breeding.

Dog

A total of 13 dog bones were recovered from this site. The rear limbs of a partially articulated dog were recovered from a late Iron Age ditch [362715]. Further scattered dog remains were recovered from middle/late Iron Age ditches [5006] and [5016]. Three fragments of dog were also recovered from a late Iron Age ditch [5005]. A tibia from ditch [5005] displayed a fairly well healed non-union fracture on the mid-shaft, indicating that the animal survived this injury for some time. This may support evidence that the animal was a pet or working animal. Due to the high fragmentation none of the bones were complete enough to take measurements.

Equid

A total of three fragments identified as equid were recovered from the assemblage. A single humerus from a late Iron Age pit [354606], a tooth and a mandible fragment from the middle /late Iron Age ditches [5003] and [362704]. Little further information could be gained from these few fragments.

Wild Species

A total of three fragments of red deer antler were recovered from the assemblage from within early to middle Iron Age ditches [5008] and [5019]. One antler fragment from ditch [5008] has been sawn off the main beam and a single cut mark is visible at the base. A single fragment of roe deer fragment was recovered from the fills of the early to middle Iron Age grave [2037]. On the roe antler several chop marks were noted at the burr, where the antler would have attached to the skull, this was possibly in preparation for working. The presence of antler suggests that the local environment supported deer within close proximity of the site, however, with no evidence of post-cranial bones or un-shed antler within the assemblage there is no evidence that deer were actually utilised for meat.

A single fragment of mole was recovered from a late Iron Age ditch [5005], but may well be intrusive.

Birds

A partially articulated corvid skeleton from a late Iron Age gully [5010] accounts for most of the bird remains. There is no evidence to suggest if there is any human involvement with the presence of this species within the assemblage. Several instances of corvids have been recorded at archaeological sites e.g. Danebury, where corvid remains were recovered from pit deposits. The presence of the corvid remains has been attributed to the birds' scavenger nature. Additionally a single bird tibio-tarsus fragment was recovered from the sieved samples of medieval hearth [2421].

2.4 Features of interest

Grave [2037]

Within the grave fill a single roe deer antler fragment with several cuts around the base of the burr, and a fragment of cattle mandible were recovered. It is uncertain whether these are deliberate deposits within the grave or waste materials mixed within the spoil.

Table 1: Summary of identifiable taxa from hand collected fragments by phase

Taxon	LNeo	E/MBA	LBA	LBA/ EIA	EIA	E/MIA	M/LIA	LIA	LIA/ RB	EMed	Med	PMed	Undated	Total No.Frags
Cattle						12	9	16		1	5		4	47
Sheep/Goat			1	1	1	13	14	19			1		2	52
Pig						4	3	4					1	12
Equid			1				2							3
Dog							2	11*						13
Bird								3						3
Corvid								5*						5
Mole								1						1
Red Deer						3								3
Roe Deer						1								1
Large Mammal			1	1	1	7	6	8						24
Medium Mammal						1	4	5	1				1	11
Small Mammal								1						1
Unidentified	3	1	1	10	7	61	59	87			4	1	12	246
Grand Total	3	1	4	12	9	102	99	160	1	1	10	1	19	422

^{*}At least one partially articulated skeleton

Table 2: Summary of identified taxa in the sieved collection by phase

Taxon	LBA	EIA	E/MIA	M/LIA	LIA	Medieval	Total No. of fragments
Sheep/Goat		1	1		3		5
Pig	1	2		1			4
Bird						1	1
Large Mammal				1			1
Medium Mammal		1					1
Micro Mammal						3	3
Unidentified	3	99	4	22	23	11	162
Grand Total	4	103	5	24	26	15	177

Table 3: MNI of identified domestic species by phase

Species	LBA	LBA/EIA	EIA	E/MIA	M/LIA	LIA	Medieval
Equid	1	0	0	0	1	1	0
Cattle	0	0	0	1	1	1	1
Sheep/Goat	1	1	1	1	1	2	1
Pig	0	0	0	1	1	2	0
Dog	0	0	0	0	1	0	0

Table 4: Condition of the hand collected and sieved bone assemblages

Condition grade	Percentage	Percentage		
(Lyman 1996)	of hand collected assemblage	of sieved assemblage		
1	3.9%	1.5%		
2	17.6%	2.2%		
3	54.9%	18.2%		
4	21.4%	65.4%		
5	2.1%	12.6%		

3 DISCUSSION

Before the Iron Age period the bones within the assemblage are relatively few and the majority unidentifiable.

In the late Bronze Age the entire assemblage of animal bone from this period was recovered from a single pit [354606]. The pit yielded a single equid humerus fragment, a sheep/goat tooth, and a pig metatarsal from an animal under 2 years old. The small number of fragments provides little information for this period, save the presence of the species.

The main period of activity for this site is from the Iron Age period. The pattern of the predominant domestic species appears to remain fairly consistent through out the early to late phases. Sheep/goat remains are the most abundant identified species within the assemblage. Cattle appear to be almost as abundant as sheep/goat and then relatively small numbers of pig remains. Most of the skeletal elements from assemblage appear to be from skeletally mature individuals. This is possibly due more to preservation bias against younger remains rather than a true representation of the post-depositional assemblage.

As juvenile material does exist within the assemblage, it would suggest that Little Stock Farm was a small producer site where animals were raised for milk, traction, manure and slaughtered for meat, leather, fat and horn. Dogs and equids would have also been present as working animals or possibly as a symbol of status, in the case of equids.

In addition to the utilisation of domestic animals the presence of red and roe deer antler suggest that this material was collected for working and use within the site; antler is a versatile medium for working and would have had many uses. As no other red or roe deer bone has been found apart from antler, it is possible that shed antlers were collected for working rather than the animal being hunted.

Beyond the Iron Age little activity is apparent from the faunal remains assemblage. Several fragments of bone were recovered from the medieval phase from this site the majority of these remain are cattle remains displaying disarticulation and defleshing butchery marks and several cases of carnivore gnawing. These few remains are probably from discarded butchery waste.

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