

## APPENDIX 9: ASSESSMENT OF ANIMAL BONE

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### 1. Introduction

1.1 Animal bones were recovered during excavation works at Parsonage Farm (ARC PFM 98).

1.2 Animal bones were recovered by hand-collection on site and through wet-sieving bulk samples taken in the field. All hand-collected animal bones were washed and air-dried, then bagged and labelled as context groups. Bulk samples were washed using a modified Siraf tank fitted with 1.0mm and 0.25mm flexible nylon mesh to retain the residue and flot fractions respectively. These fractions were visually sorted for floral and faunal remains and labelled as individual sample groups.

1.3 The material was analysed to study the following fieldwork event aims,

- *to investigate patterns of natural resource exploitation through the recovery of economic indicators such as faunal and charred plant remains.*
- *to determine the landscape setting of the site and its interaction with the contemporary local environment, and recover palaeo-economic indicators from a well-dated sequence, including ditches and the moat.*

### 2. Methodology

2.1 All contexts containing faunal remains were analysed and recorded onto the MoLAS ORACLE CTRL animal bone database. No sub-sampling of contexts was carried out.

### 3. Quantification

3.1 A total of 9.01kg, approximately 791 fragments, of animal bones were recovered from 77 contexts, including seven soil samples. Of the total fragment count, 430 fragments were identifiable to species and body part. This included 79 bones with potential for ageing data, 33 that can be measured and 60 with butchery marks. No worked bones were recovered and one bone showed evidence of pathology. The tables show this information by main feature type, including the number of contexts for each, along with a selection of the larger contexts containing useful analysis data. The tables also show the percentage of identifiable fragments represented by all of the specified species groups.

3.2 All contexts are recorded in the tables, including material from environmental samples. It is evident that cattle represent the most consistently high percentage of identifiable fragments, with sheep/goat then pig containing the next highest percentages.

#### 4. Provenance

- 4.1 Most of the material is generally in good preservation, with 64 of the 82 hand-collected and wet-sieved contexts and samples containing material in good condition. Fifteen of the contexts were recorded as being in moderate condition, with some surface abrasion, and only three contexts containing material in poor preservation with considerable surface abrasion. This indicates that there was minimal disturbance to the faunal material from most contexts after deposition. Mixing of preservation types was only observed in one context; this indicates that only one feature showed clear evidence of redeposition. The remaining contexts are likely to have been undisturbed after discard. Fragmentation of the bones indicates that they were mainly over 75mm in size and therefore are unlikely to have resulted from scatters of residual material, which is usually fragmented over time when exposed to the elements.
- 4.2 Most of the animal bones were recovered from medieval contexts, mainly associated with the moated manor dating to *c* 1150-1350. Only one context containing animal bones, from the moat fill, was dated to the post-medieval period.
- 4.3 The largest number of identifiable bones were recovered from pits. Over half of these bones were from pit sub-group 81, including a large number from sampled and hand-collected bones from fill [601]. The pit group contained a large range of species with emphasis on fish and birds, possibly indicating good quality food waste. The remainder of the pits contained moderate assemblages with emphasis on cattle bones. Exceptions include sub-group 387 where sheep/goat was most common and a small number of deer species remains were recovered. Pit sub-group 114 contained a context dominated by the partial remains of a piglet. Butchery marks indicate that the infant was eaten, and the stocky bones may suggest an improved breed.
- 4.4 A number of features associated with the moated manor, including occupation debris, postholes and destruction debris, contained faunal remains. The three main domestic species, cattle, sheep/goat and pig, dominated all of the features. A large accumulation of bones from occupation layer sub-group 359 contained a dominance of cattle bones, interpreted as possibly deriving from cattle butchery waste. A number of the bones showed evidence of ageing which could provide data relating to the use of the animals, for example whether they were bred primarily for meat or whether they were eaten after their use for by-products such as milk production. Further evidence of food consumption was recovered from sub-group 116, a structural cut associated with a wall, where the presence of fallow deer remains indicates the addition of game to the diet, possibly indicating high status food consumption. The remainder of the demolition layers and robber trenches also contained a mix of mainly domestic species, dominated by cattle. The backfill within a robber cut (sub-group 95) contained the redeposited remains of domestic birds including fowl and duck, suggesting some diversity of diet.

- 4.5 Animal bones were recovered from demolition debris in a drain (sub-group 270). The fill contained a mixed assemblage including domesticates as well as fish, bird including dove, and fallow deer. These bones are indicative of some high status food consumption. The moat contained some post-medieval pottery, indicating that the infill was carried out over a long period of time. Gnawing and some burning on the few fragments of bone within the moat fill indicate that it was also probably residual material and therefore has no archaeological value. The small quantity of bones may indicate that the moat was cleaned out at intervals to stop it from silting up. This would also remove the faunal remains that would no doubt have accumulated over time.

## **5. Conservation**

- 5.1 It is recommended that all material be retained for the next stage of analysis and for any future comparative work.

## **6. Comparative material**

- 6.1 A number of moated farmsteads and manors dating from the medieval period have been excavated within Britain. Comparison with sites such as Darenth, Fawkham, Otford, Old Soar and Wilmington Manor would be valuable in ascertaining whether the food consumption, and status indicated by the wild animal remains, at Parsonage Farm were similar to the local region. Very little faunal material was recovered from the moat, indicating that it was probably cleaned at regular intervals.
- 6.2 Wood Hall in North Yorkshire has been systematically excavated over a number of years and would provide a valuable comparative faunal assemblage from another part of England.

## **7. Potential for further work**

- 7.1 Most of the faunal remains recovered from excavations at Parsonage Farm are in good preservation. Approximately half of the assemblage was identifiable to species and body part, with many of the remaining bones identifiable to cattle- or sheep-sized elements, namely vertebrae and ribs. Many features contained only small quantities of bones; these features have only limited potential for further work.
- 7.2 The bone assemblage has some potential for addressing the fieldwork event aims. The study of species present will provide evidence that can be used to investigate patterns of natural resource exploitation, and will provide an indication of the social status of the inhabitants of the moated farmstead. The enclosed nature of the farm means that the evidence is all associated with a specific residence, therefore all information is related directly to the inhabitants.

- 7.3 The ageing of the domesticates will provide evidence of the quality of the meat and give an indication of the exploitation of the animals for other uses such as milk production, traction or wool production. The quantification of game species will also provide an indication of the level of exploitation of the area surrounding the farmstead. Species such as rabbit, from pit sub-group 81, provide evidence of possible high-status food consumption.
- 7.4 The game species recovered provide some indication of the local environment within the vicinity of the farmstead. The presence of species such as woodcock and partridge indicate that the environment around the manor would have consisted of a mixture of damp woodland and pasture. Deer are also likely to have been hunted in woodland or hunting parks. Documentary evidence shows there was a deer park situated just north of the manor site (Documentary Assessment). Unfortunately no small mammal remains were recovered to give an indication of the habitat within the immediate vicinity of the manor.
- 7.5 Further work on this material would require the full analysis and recording of all bones from dateable contexts with interpretation of feature type. This would require bone by bone recording of species and body part, including measurements, evidence of butchery, ageing data and cases of modification such as pathology or burning. It is recommended that bones unidentifiable to species should be weighed and recorded by species group i.e. sheep-size, cattle-size, chicken-size, and body part where possible. This would mean that ribs and vertebrae would be ignored, as these bones are rarely identifiable to species.

## 8. Bibliography

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- Norton, E, 1988, The moated manor house at Platform Wharf, Rotherhithe. *London Archaeologist* Vol.5, No. 15, 395-401

*Table 1: Assessment of animal bone – quantity of identifiable bones, age, measurements and butchery from each main feature type.*

(All material derived from medieval features, except one ageable bone and one bone with butchery from a later, post-medieval moat fill)

<b>Interpretation</b>	<b>N. contexts</b>	<b>N. ident.</b>	<b>N. Ageable</b>	<b>N. Meas.</b>	<b>N. Butch.</b>	<b>N. Worked</b>
Ditches	8	44	8	2	11	0
Dumped material	6	14	4	1	2	0
Occupation debris	1	42	10	5	3	0
Pits	22	202	23	9	17	0
Robber trenches	11	43	11	6	7	0
Structures/destruction	22	68	19	10	16	0
Unspecified features	7	17	4	0	4	0

N. – number

*Table 2: A selection of contexts with moderately high numbers of identifiable bones and useful analysis*

<b>Interpretation</b>	<b>Context</b>	<b>Origin</b>	<b>N. ident.</b>	<b>N. Ageable</b>	<b>N. Meas.</b>	<b>N. Butch.</b>	<b>N. Worked</b>
Ditch	231	Mixed	24	3	2	3	0
Ditch	1053	Mixed	10	2	0	4	0
Ditch	1069	Mixed	5	1	0	2	0
Occupation debris	382	Mixed, cattle butchery	42	10	5	3	0
Pit	280	Mixed	47	1	3	3	0
Pit	569	Mixed	14	8	0	1	0
Pit	601	Mixed	91	3	1	3	0
Pit	883	Mixed	7	3	1	3	0
Rubbish pit	918	Mixed	18	5	1	3	0
Robber cut fill	361	Mixed	7	2	1	1	0
Robber cut	558	Mixed	20	8	3	5	0
Destruction debris	207	Mixed	15	5	4	2	0
Destruction debris	480	Mixed	8	1	0	2	0
Posthole	517	Mixed	5	2	1	1	0
Posthole	585	Mixed	18	4	3	6	0
Posthole	935	Mixed	4	2	1	4	0

Origin - source of the material, eg food, butchery, working waste. 'Mixed' indicates that the material may have derived from more than one source.

Table 3: Assessment of animal bone - species, quantity and interpretation

Context	Sample	Interp.	Period	% identified fragments									Count	Weight
				S/G	Cattle	Pig	Horse	Dog	S. mam	Bird	Fish	Other		
114	0	WA	MD	100	0	0	0	0	0	0	0	0	5	0.02
176	0	SP	MD	0	100	0	0	0	0	0	0	0	2	0.03
197	0	D	MD	0	100	0	0	0	0	0	0	0	1	0.05
207	0	DS	MD	33	20	33	0	0	0	14	0	0	30	0.24
208	0	PC	MD	0	50	0	0	0	0	50	0	0	4	0.02
225	0	#N/A	MD	0	50	50	0	0	0	0	0	0	3	0.3
231	0	D	MD	10	30	10	0	0	0	25	10	15	40	0.3
231	17	D	MD	75	0	0	0	0	0	0	25	0	6	0.02
255	0	P	MD	100	0	0	0	0	0	0	0	0	3	0.01
279	0	ED	MD	100	0	0	0	0	0	0	0	0	3	0.02
280	0	P	MD	11	6	29	0	0	0	35	6	13	40	0.25
280	19	P	MD	0	3	0	0	0	0	3	91	3	70	0.02
306	0	P	MD	0	100	0	0	0	0	0	0	0	3	0.01
307	0	SN	MD	0	25	0	0	0	0	75	0	0	10	0.04
310	0	WA	MD	0	0	100	0	0	0	0	0	0	1	0.01
311	0	D	PM	0	100	0	0	0	0	0	0	0	1	0.09
312	0	D	MD	0	100	0	0	0	0	0	0	0	3	0.12
345	0	ED	UN	0	0	100	0	0	0	0	0	0	2	0.03
346	0	DS	UN	0	0	0	100	0	0	0	0	0	1	0.08
350	0	SN	MD	100	0	0	0	0	0	0	0	0	6	0.02
356	0	WA	MD	0	50	50	0	0	0	0	0	0	2	0.03
358	0	SN	UN	100	0	0	0	0	0	0	0	0	5	0.02
361	0	SN	MD	14	71	0	0	0	0	15	0	0	11	0.19

Context	Sample	Interp	Period	% identified fragments									Count	Weight
				S/G	Cattle	Pig	Horse	Dog	S. mam	Bird	Fish	Other		
380	0	EM	MD	0	100	0	0	0	0	0	0	0	5	0.06
382	0	OC	MD	19	62	19	0	0	0	0	0	0	70	1.35
383	0	PS	MD	0	100	0	0	0	0	0	0	0	1	0.02
390	0	P	MD	0	100	0	0	0	0	0	0	0	7	0.13
394	0	SN	MD	0	0	100	0	0	0	0	0	0	1	0.02
451	18	D	MD	0	0	100	0	0	0	0	0	0	4	0.01
467	0	MU	MD	50	0	0	0	0	0	50	0	0	2	0.03
468	0	SN	MD	0	66	0	0	0	0	34	0	0	3	0.06
471	0	P	MD	0	100	0	0	0	0	0	0	0	2	0.04
474	0	P	MD	0	100	0	0	0	0	0	0	0	4	0.05
480	0	DS	MD	0	25	75	0	0	0	0	0	0	15	0.16
481	0	P	MD	0	100	0	0	0	0	0	0	0	7	0.06
495	0	D	MD	100	0	0	0	0	0	0	0	0	1	0.01
508	0	SP	MD	0	0	0	0	0	0	0	0	0	3	0.01
514	0	SP	UN	100	0	0	0	0	0	0	0	0	1	0.01
517	0	SP	MD	0	0	100	0	0	0	0	0	0	5	0.03
521	0	P	MD	0	100	0	0	0	0	0	0	0	2	0.09
540	0	SP	MD	0	0	0	0	0	0	0	0	0	1	0.01
558	0	SN	MD	5	40	55	0	0	0	0	0	0	23	0.63
569	0	P	MD	7	0	93	0	0	0	0	0	0	15	0.11
577	0	WA	MD	50	0	50	0	0	0	0	0	0	2	0.05
578	0	SN	MD/PM	0	100	0	0	0	0	0	0	0	1	0.03
585	0	SP	MD	12	38	18	0	0	0	31	0	1	35	0.55
585	21	SP	MD	0	0	0	0	0	0	100	0	0	5	0.01
600	0	P	MD	0	0	0	0	0	0	0	0	0	2	0.02
601	0	P	MD	18	10	18	0	0	0	44	0	10	25	0.23
601	24	P	MD	6	0	6	0	0	0	4	84	0	140	0.14

Context	Sample	Interp	Period	% identified fragments									Count	Weight
				S/G	Cattle	Pig	Horse	Dog	S. mam	Bird	Fish	Other		
602	0	P	MD	0	0	50	0	0	0	50	0	0	4	0.04
608	0	SN	UN	0	100	0	0	0	0	0	0	0	1	0.04
610	0	SN	MD	100	0	0	0	0	0	0	0	0	4	0.02
617	0	P	MD	0	100	0	0	0	0	0	0	0	3	0.02
657	0	WA	MD	100	0	0	0	0	0	0	0	0	1	0.02
697	0	#N/A	MD	0	0	0	0	0	0	0	0	0	10	0.04
767	0	#N/A	MD	0	100	0	0	0	0	0	0	0	5	0.08
769	0	#N/A	MD	0	100	0	0	0	0	0	0	0	5	0.12
771	0	P	MD	0	0	100	0	0	0	0	0	0	2	0.05
822	0	#N/A	MD	0	100	0	0	0	0	0	0	0	20	0.34
824	0	XX	MD	0	100	0	0	0	0	0	0	0	1	0.03
836	0	SP	MD	0	100	0	0	0	0	0	0	0	1	0.08
839	0	DS	MD	0	66	34	0	0	0	0	0	0	5	0.09
842	0	SP	MD	0	0	0	0	0	0	0	0	0	1	0.02
854	0	P	MD	66	34	0	0	0	0	0	0	0	5	0.04
862	30	P	UN	0	0	0	0	0	0	0	0	0	3	0.01
883	0	P	MD	43	29	14	0	0	0	0	0	14	8	0.15
913	0	S	UN	0	100	0	0	0	0	0	0	0	3	0.06
914	0	S	UN	0	0	0	0	0	0	100	0	0	1	0.01
918	0	PR	MD	0	94	6	0	0	0	0	0	0	20	0.75
933	0	ES	MD	0	0	0	0	0	0	0	0	0	1	0.03
934	0	P	MD	0	100	0	0	0	0	0	0	0	1	0.03
935	0	SP	UN	0	100	0	0	0	0	0	0	0	7	0.16
946	0	SP	MD	0	100	0	0	0	0	0	0	0	1	0.27
1048	0	SN	UN	0	0	0	0	0	0	0	0	0	3	0.02
1050	0	#N/A	UN	0	0	0	0	0	0	0	0	0	10	0.05
1053	0	D	UN	0	60	40	0	0	0	0	0	0	15	0.31



Context	Sample	Interp	Period	% identified fragments									Count	Weight
				S/G	Cattle	Pig	Horse	Dog	S. mam	Bird	Fish	Other		
1069	0	D	MD	40	60	0	0	0	0	0	0	0	9	0.17
1069	47	D	MD	0	0	0	0	0	0	0	0	0	1	0.001
1113	0	P	UN	0	100	0	0	0	0	0	0	0	2	0.1
1114	0	P	UN	0	0	100	0	0	0	0	0	0	1	0.01
1148	0	MU	MD/PM	0	0	100	0	0	0	0	0	0	3	0.01

Key to interpretation of deposits:

D ditch  
DS destruction debris  
EM external metalling  
ES external surface  
MU make-up  
NA naturally deposited  
P Pit  
PR refuse pit  
SN non-structural cut  
SP structural cut  
Wa wall