

# SHREWSBURY ABBEY

Studies in the archaeology and history  
of an urban abbey

Edited by Nigel Baker

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p.85: tanners.  
p.100: masonry plan  
looking SW, abbey.  
" 14th c metal residues  
paving slabs etc.

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## Chapter 1

# SHREWSBURY ABBEY IN CONTEXT

### 1. An introduction to Shrewsbury Abbey by *Nigel Baker*

The Benedictine Abbey of St Peter and St Paul was a Norman foundation of the 1080s, built just across the river from the Anglo-Saxon town (NGR: SJ 498124). It stood there for nearly five hundred years, dominating the town's eastern approach at the river crossing, within its own independent feudal jurisdiction, the suburb of Abbey Foregate. The later history and the present condition of the site reflect this suburban situation. It is not well preserved above ground. The surviving abbey church represents only half of the medieval structure, the western arm having been preserved at the Dissolution for the use of the parish while the remainder was stripped of its roofs, left to decay, or quarried for its sandstone and eventually levelled. The same fate befell most of the claustral and other buildings: some were retained – inhabited, or given new commercial uses – but these, with two exceptions, failed to survive the industrialisation of the area by mid-Victorian railway companies. The need to improve the 19th-century town's communications had already had a damaging impact on the site. The former precinct lay next to a main arterial road that was part of the increasingly important route between London and Holyhead, and ultimately Dublin, the road then still bending around the monastery walls. In 1836 Thomas Telford improved this section of the route by driving a new short cut straight across the former precinct and through the remains of the cloisters, severing the church from the few remaining monastic buildings to the south. A generation later, the railways arrived. Today, only the reader's pulpit from the refectory and a single domestic building survive. Until the mid-1980s the severed portion of the old precinct area was given over to commercial and light industrial use, in part a legacy of the railways, but in part also a remote but distinguishable legacy of monastic watermilling.

Since the major excavations that took place in the 1980s, the site of the precinct has been designated as a Scheduled Ancient Monument (SA 359). Much of the area formerly occupied by the railway station and works is now given over to car parking. The western half of the site was developed as a visitor centre in 1994, featuring the surviving monastic building and an early 18th-century house, and dedicated to the exhibition of medieval monastic life – in its reality, and in its popular fictional form.

#### **This volume: its purpose, history, and format**

##### *Purpose*

Central to this volume are the results of the major excavations of 1985 – 1988, principally the Queen Anne House site and the Abbey Mill site. The volume also contains summary accounts of subsequent smaller-scale excavations, and of the archaeological/architectural analysis of the surviving monastic buildings.

No comprehensive account of the remains of Shrewsbury Abbey and the development of its precinct has previously been published, so the opportunity has been taken to gather together the most significant relevant sources. However, no attempt has been made to look at the full range of contemporary documentation for the abbey's institutional and economic development and the acquisition and management of its substantial rural estates and numerous urban properties. The full extent of the surviving documentation, particularly for urban properties, is only now becoming apparent, particularly through the work of Bill Champion and Dorothy

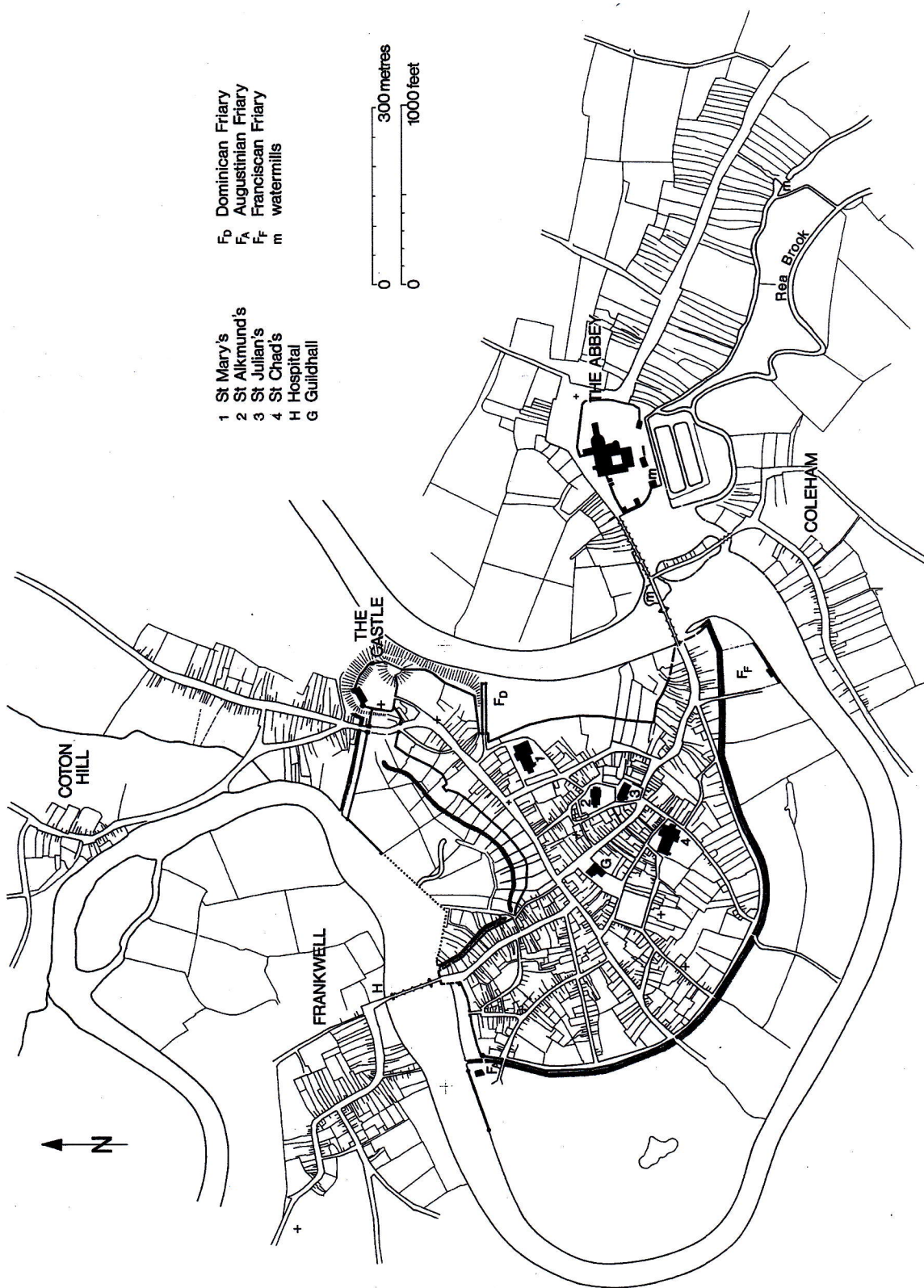


Fig. 4. Medieval Shrewsbury and the abbey



## Chapter 8

# THE EXCAVATED FAUNAL REMAINS

### 1. The Animal Bones by Gillian G.Jones

#### *Summary*

The excavated animal bones, of 12th – 16th-century date, were mainly from cattle and pigs, though the commonest animal recorded on the Shrewsbury Abbey demesnes was sheep. All parts of the carcase were found but there was some selection of preferred parts (like pig head meat) and likely trade in other parts (cattle horncores, for example) to elsewhere. Goat horncores were common in the earlier samples. Wild species included a few deer bones, with fallow present in early contexts, and one pole-cat bone. Dogs were of varied size; one bore a spinal injury suggesting rough use; and a cat skull bore skinning marks. Bones from the 15th – early 16th-century groups differed from the earlier groups, with cattle even more dominant, the presence of calves and more old cattle (cows?) suggesting veal production and dairying; and there were more frequent bone pathologies. There was a greater range of species including wild birds and, possibly, wild pig.

#### Introduction

The animal bones from the pre-Dissolution phases (1-4) of the Queen Anne House site were studied. The collection is a significant one in that few excavations in the Shrewsbury area have produced bone of this date. And, although derived from only a small sample of the precinct as a whole, the site's position on the edge of the western court, and other evidence (see pp.200-205), suggests that the bone assemblage may derive from activities (including the phase 3 kitchen) that were not associated solely with the monastic community.

Bones from phases 1 (12th – 14th-century) and 2 (14th-century) were mainly from the water lain deposits to the south of and just outside the precinct wall. Smaller quantities came from within the wall, including a few from the four post holes which are the earliest features on the site (see pp.72-73). The water lain deposits appeared to have built up gradually, and there may have been some water action affecting the bones which have survived, perhaps causing the loss of small and fragile bones.

The waterlogged nature of the site and its liability to flooding during excavation were constraints on the work. Most bone was hand-collected. Bulk samples were taken from contexts with good archaeological potential (i.e. they appeared non-residual) and part of these was wet sieved (to a mesh size of 44 squares per cm<sup>2</sup>). In addition, an 'environmental column' was taken, passing through the organic, dumped material/water lain deposits, and wet sieved. Nearly all the sieved bones are from phase 1. The phase 1 group provides the most reliable data and was studied in more detail than the groups from phase 2 and 3, where residual earlier bone was present (see chapter 5), and from phase 4.

The phase 3 bone was from the construction layers for the square building, probably a kitchen, built in the early 15th century. The material had been excavated nearby, within and outside the precinct wall, in order to raise the level of the new floor above flood level (see p.80). The phase 4 bone was from outside the precinct wall. The bones from phase 5 were scanned to see if there was evidence relating to the tanning pits, but no unusual characteristics were observed. Bones were from cattle, sheep, pig, dog, hare, fowl and fish.



### Method

Before study, the bone was physically sorted into phase, and, within each phase, bags were sorted according to the site matrix (the ordered context diagram), so that adjacent contexts were studied in sequence. Bones were recorded directly onto computer using Levitan's 'Bonerec' (Jones 1992).

Identifications were made using the author's collection; and grateful acknowledgement is made to Enid Allison and the Environmental Archaeology Unit, York for bird bones, fox and small mammals, to Peta Sadler for deer, and to Terry O'Connor for the pole-cat identification (at the Ancient Monuments Laboratory, London). Acknowledgement is also due to Terry O'Connor and Peta Sadler for very helpful comments on a draft of this report.

For phases 1 and 2, all bone was recorded. The following information was recorded: context, matrix order number, specimen number (added automatically by the program), species, anatomy, zone, fragmentation, tooth eruption and wear, epiphysal fusion, measurements, presence or not of butchery marks, chewing, burning, pathology and general comments. For each phase, two lists were produced (using programs written in dBASE III PLUS) which show all bones recorded, one in species order, the other in context order. These show all data, including comments, except for tooth eruption stages and measurements, which are shown on separate lists. For each phase and, where relevant, each sub-group of material, a detailed anatomical analysis was made (cf. table 7). The amount of information thus generated was considerable, and the report which follows is necessarily selective in presenting and commenting on it. Raw measurements are contained in the site archive.

For most long bones, the parts of the bone present were recorded using six zones consisting of the proximal and distal epiphyses (zones 1 and 6), the proximal and distal metaphyses (zones 2 and 5) and the upper and lower diaphysis, the compact bone of the shaft (zones 3 and 4). Zones for other bones were as follows:

Mandible: 1: incisor teeth and their tooth sockets; 2: the area between the incisors and premolars; 3 and 4: the premolar and molar regions; 5: the distal part of the jaw except 6: the condyle.

Scapula: 1: the glenoid process; 2: the neck up to the base of the spine; 3: the rest of the bone;

Ulna: 1 and 2: the olecranal epiphysis and metaphysis; 3: the articulation; 4: the diaphysis; 5 and 6: as other long bones.

Pelvis: 2, 3 and 5: the iliac, ischial and pubic parts of the acetabulum; 1: the proximal half of the ilium; 4: the distal half of the ischium.

Calcaneum, first and second phalanx: 1 and 2: the proximal epiphysis and metaphysis; 3: the distal half of the bone.

Vertebra, carpal, tarsal (except calcaneum), 3rd phalanx and sesamoid: a single zone.

Bones where no zone was more than half present (more than a quarter for cattle) were classed as fragments. Ribs were not identified, except as large, medium or small mammal-size or bird, nor were vertebrae except when fairly complete. The sieved unidentified bone was not separated into size groups or into vertebra/rib/other (hence the group called 'mammal' on table 4).

For the identified bone (and some groups of ribs) presence or absence of butchery marks was noted, and comments recorded. For phase 1 only, marks were recorded onto sketches of the whole skeleton, as chopmarks which broke through the bone or lighter chopmarks/ knifemarks, and as marks done in a lateral or medial direction.

**Table 4 Summary of Mammal and Bird Bone**

Figures show the total number of fragments found for Phases 1 and 2; \* Phases 3 and 4 were recorded using a brief method, see method section. Abbreviations: e. – early; hand-c. – hand collected (i.e. excluding sieved); p – present but not a counted bone element; dom. – domestic.

Phase	1 12th C.- e.14th	1 hand-e.	2 14th C.	3* 14th- e.15th	4* e.15th- mid 16th
Cattle	547	426	278	100	237
Sheep	14	14	6	6	5
Goat	22	20	9	p	1
Sheep/goat	142	99	69	37	66
Pig	334	212	110	97	101
Horse	23	21	4	11	3
Dog	49	47	37	27	7
Cat	16	10	3	3	1
Red deer	8	8		4	2
Roe deer	12	12	4	6	2
Fallow deer	6	6	3	4	13
Deer	5	3			1
Rabbit					1
Hare	2	2	1		2
Water vole					15
Field vole	1				
Black rat	1				2
Fox	1	1	2	4	
Polecat				1	

Phase	1 12th C.- e.14th	1 hand-e.	2 14th C.	3* 14th- e.15th	4* e.15th- mid 16th
Unidentified					
cattle-size	854	711	277		
sheep-size	489	298	157		
small mammal	17		3		
mammal	1203				
Fowl	62	11	19	17	28
Goose, cf.dom.	27	18	9	7	16
Duck, cf.dom.	1	1			2
Grey heron					1
Mute swan					2
Teal				1	
Partridge	1	1			1
Woodcock	2	1		2	1
Raven					4
Unident. bird	157	8	6		
Ident.	2670	1276	913	553	327
Total	5833	3996	1930	996	514

**Table 5 Percentages of the Main Species**

1\* Brief recording method.

Phase	1 12th C.- e.14th Total	1 12th C.- e.14th Hand-c.	2 14th C. Total	1* 12th C.- e.14th Brief	3* 14th - e.15th	4* e.15th- mid 16th
Sample size	1059	771	471	282	240	410
Cattle	52	55	59	40	42	58
Sheep + goat	17	17	18	21	18	18
Pig	32	27	23	39	40	25



The bones from phases 3 and 4 were studied using a brief recording method, based on that used by Payne at Catterick Site 434 (1990). Only the following bones or parts of bones were recorded and counted (manuscript notes being made of other bones of interest):

Mandible: if at least one tooth more-than-half present;

Lower tooth: if more-than-half present;

Long bone elements: if part of the articular or fusion surface was present—

distal scapula

distal humerus

distal radius

acetabulum of the pelvis

distal tibia

astragalus

distal metapodial

2nd phalanx

Birds were recorded as above except:

distal ulna not radius

distal femur

no phalanges

Note that on table 5, the phase 1 hand-collected bone is shown using the same method. The sample size is reduced to a quarter. The proportion of sheep/goat and, especially, pig bones relative to cattle is greater in comparison with the 'number of fragments' method.

Records were made of the state of eruption and wear of mandibles and loose lower teeth using the methods of Grant (1982) for cattle and pigs, and Payne (1973) for sheep. For cattle, the status of the cement-enamel border (CEJ) was also recorded, and this proved a useful way of making a simple division within the group of mandibles where the third molar was in full wear. Some concern was felt about the variability in shape of the accessory pillar on which Grant's later stages depend (Grant 1982, 95). The CEJ was recorded as either above or below the alveolar border, on the lingual side at the point above the root arch. It was found that the CEJ began to be visible at Grant's mandible wear stages j and k. The 'elderly' stage is thus closely comparable to that used by O'Connor 1991, table 67.

Measurements were generally taken following von den Driesch (1976) (and see measurements tables for other references).

#### The archive

The material and records are curated with the rest of the excavation archive by the Shrewsbury Museums Service. The records include computer disks with data files (dBASE III PLUS) and text files (WordPerfect 5.0 and ASCII). The database also exists in a Microsoft Access 97 version. All information recorded on computer also exists in ordered, printed versions, held by the author and in the site archive. Context lists show storage box numbers.

## General description

**Table 6 Bone from Different Areas of Phase 1 (12th-early 14th century)**

	Cattle	Sheep	Goat	Sh/gt	Pig	Deer	Other	Bird	Total ident. Total bone
Post holes in the NE corner (early)	4		3	7	13		horse 1 cat 3	goose 1	32 84
1458 redeposited natural (early)	17	3		16	18	roe 3 fallow 3 deer 1	horse 1 dog 4	fowl 1 goose 2 partridge 1	70 155
Lowest flood deposit layers	51	1	9	35	42	roe 1 fallow 2 deer 1	horse 7 dog 3 cat 2 hare 1	fowl 11 goose 10	176 292
Green sandstone wall F262	4	3		4	19		horse 1 dog 3 fox 1		35 62
Gully F187, within precinct wall	6	1		2	15			fowl 1 goose 1 duck 1 woodcock 1	28 75
Environmental Test Area 2	32			13	28	roe 1	horse 3 cat 1	fowl 3 goose 2	83 347
1424 and 1557 occupation/marsh deposits	249	4	3	19	86	red 5 roe 6 fallow 1 deer 1	horse 4 dog 34 cat 1 hare 1	fowl 2 goose 3	419 1027

Contexts. Post holes in NE corner: Features 302, 303, 304, 323 and 324, contexts 1763, 1767, 1772, 1791, 1796; lowest flood deposit layers: 1748, 1559, 1659, 1560, 1749, 1827, 1825, 1814, 1661, 1429, 1430, 1406; green sandstone wall F262: 1638, 1641, 1640, 1637, 1611; gully F187: 1479; environmental test area 2: 1827, 1825, 1814, 1782, 1783, 1768, 1753.

The majority of the bones were in good condition, with few modern breaks. The waterlogged material, i.e., most of the bones from phases 1, 2 and 4, was hard and dark brown in colour with little surface erosion. That from phase 3 was also generally well-preserved, but of a lighter colour; burnt bones were rare.

The bones found are summarised in table 4, with the percentages of the main species shown in table 5. Of particular note was the high proportion of pig bones, which continued for most phases, reducing only in the 15th – and early 16th-century sample. The sieved groups (mostly phase 1) were valuable especially for the small mammal bones, bird bones and fish, (see Fish Bones, below p.158).

Bones from different areas within phase 1 are shown in table 6. The earliest features containing bone were the four large post holes



(p.72). Other early contexts within phase 1 were the lowest water-lain layers and context 1458. It can be seen that numbers of pig and sheep (and/or goat) were similar, whereas for the site as a whole, pig bones greatly outnumbered caprines. This may suggest that the change towards a greater use of pork occurred as the wealth of the abbey increased, during the 13th century. Eleven goat horncores were found in these early contexts, which probably means there was a horn workshop in the vicinity (see Goat section). Numbers of cattle bones are lower in the early water-lain deposits than in phase 1 as a whole. And fallow deer bones were found in these late 12th – or early 13th-century contexts.

A few bones were found associated with the green sandstone precinct wall. By this stage, pig bones were commoner than sheep. The same can be said of a gully (F187), which was the only significant feature within the precinct wall containing bone. The bones from the gully probably originated from nearby occupation, with four species of bird present, including woodcock. Cattle bones were few (and large/unidentified fewer than medium-sized/unidentified), which may be an effect of disposing of large bones away from the precinct. Nor were any horse, dog or cat bones found – species that are less likely to accumulate in the immediate vicinity of occupation.

The material from the environmental test pit 2 was sieved, which, although the bones were not numerous, provided a useful check on the phase 1 bone as a whole. It is expected that the circumstances of deposition and excavation acted against the recovery of small bones, and if sheep bones were more fragmented than pig, this might explain the greater number of pig bones found compared to sheep. For test pit 2, the proportion of sheep bones classed as fragments was indeed higher than for pig, and this was also true of the bones from sieving, taken as a group. In the sieved group, 22% of 43 sheep (and/or goat) bones and 16% of 122 pig bones were classed as fragments, while in the hand-collected group, 5% of 133 caprine bones and 10% of 212 pig bones were classed as fragments. That is, there appeared to be greater loss of fragmented caprine than pig bones in the non-sieved material, but notwithstanding, the dominance of pig over sheep/goat is confirmed.

The test pit contained a lower proportion of cattle bones than phase 1 as a whole, which probably indicates a recovery bias in favour of cattle in the hand-collected material, but is also partly because the test pit included several early layers. More fragments of cattle bones were recovered (44% of 32 bones; cf. 31% of 426 hand-collected cattle bones). The test pit contained a higher proportion of bird bones than phase 1 as a whole but, surprisingly, this did not add to the species list. Most of the unidentified bird bones appeared to be from fowl or goose.

Two contexts, 1424 and 1557, both from the water-lain deposits outside the precinct wall, and fairly late in phase 1, produced a third of the identified bone from the phase. Cattle bones were commoner than in the earlier groups or the environmental test pit 2 and there were many cattle-sized ribs. Lower jaws from at least ten cattle were found in context 1557, all but one from fully adult animals. Pig bones were numerous, a quarter of them from pigs' heads. The thirty-four dog bones were probably all from five individuals.

The differences that can be seen between different groups of contexts – variation due to date, type of deposit, recovery methods or chance – point up the processes which make interpretation of the bones, taken as a whole, difficult. However, most of the phase 1 bone is from the water-lain deposits outside the precinct wall, and there is some value in looking at them together (tables 4, 5 and 7).

The bones found suggest that, when meat was eaten, it was most likely to have been beef. Most parts of the cattle carcass were present, with bones of the head, main body and foot all present (table 7). Slaughter and primary butchery probably occurred nearby, as doubtless did storage, cooking and consumption. Survival is an important factor and can be seen, for example, in the much higher number of the strong shafts of femur and tibia (zones 3 and 4) present, compared to the knee joint, where the structure of the bone is much more susceptible to decay and destruction (femur zones 5 and 6; tibia zones 1 and 2; no patellae were found). The low number of astragali compared to distal tibiae (zone 6) found is difficult to interpret except as poor survival and recovery, as the two were probably deposited together. Numbers of horncores and phalanges were low: only five horncores, though fifty skull bones were found, so these may have been deposited elsewhere in connection with the horn and leather trades. Extremely few groups of articulated bones, of any species other than dog, were found. Further points are made below, in the Butchery section.

Most of the sheep bones found were from the main body. There were few bones from the head, not even the quite robust mandible, and only one sheep horncore, so it is possible that these were deposited elsewhere: sheep's heads may not have been wanted by the abbey kitchens, but may have found a market in the town. This contrasts with the findings for pig, where the numbers of bones from the head were almost as high as from the main body. Loose pig teeth were quite numerous, an indicator that rarity of smaller bones should not be attributed entirely to low survival and recovery.

The phase 2 bone was broadly similar to that from phase 1. Cattle were rather more numerous relative to sheep, goat and pig, as also were unidentified/large fragments compared to unidentified/medium-sized fragments. Skeletal elements of cattle were similar, though no horncores were found. Pig bones were again more numerous