

Foxy in furs? A note on evidence for the probable commercial exploitation of the red fox (*Vulpes vulpes* L.) and other fur bearing mammals in Saxo-Norman (10th-12th century AD) Hertford, Hertfordshire, U.K.

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ABSTRACT: Recent study of a large assemblage of animal bones from Saxo-Norman (10th-12th century AD) deposits recovered at Millbridge, Hertford, identified the remains of several fur bearing mammals and in particular foxes. The bones are from multiple contexts and mostly comprise elements of the foot and tail. It is suggested that these remains constitute rare archaeological evidence of commercial exploitation during this period.

KEYWORDS: RED FOX, SAXO-NORMAN, ARCHAEOLOGICAL EVIDENCE, COMMERCIAL EXPLOITATION, HERTFORD

RESUMEN: Un reciente estudio de una asociación ósea de restos animales recuperada en los depósitos sajones-normandos (siglos X-XII d.C.) de Millbridge, Hertford, detectó restos de varias especies de mamíferos de interés peletero, fundamentalmente zorros. Los huesos proceden de diversos contextos y en su mayor parte incluyen elementos de los pies y la cola. Se sugiere que estos restos constituyen una evidencia arqueológica infrecuente relativa a la explotación comercial de esta fauna durante el periodo considerado.

PALABRAS CLAVE: ZORRO COMÚN, SAJÓN-NORMANDO, EVIDENCIA ARQUEOLÓGICA, EXPLOTACIÓN COMERCIAL, CONDADO DE HERTFORD

INTRODUCTION

The following note is based on the recent study by the authors of a large assemblage of animal bones excavated by Hertfordshire Archaeological Trust from a site at Millbridge, situated on the river Lea waterfront near Hertford Castle, Hertford, Hertfordshire, U.K. (Figure 1, Baxter 2001). Hertford, the county town of Hertfordshire, is an

Anglo-Saxon foundation in the SE Midlands and the location of a castle built around 1100 AD which was closely connected with royalty until the reign of Elizabeth I (16th century AD). A total of 12,468 fragments of animal bones were recovered from the site, originating from deposits dating from the Romano-British period to the late post-medieval (18th century AD). Of this total, 2,253 fragments could be identified and "counted" according to the criteria published by Davis

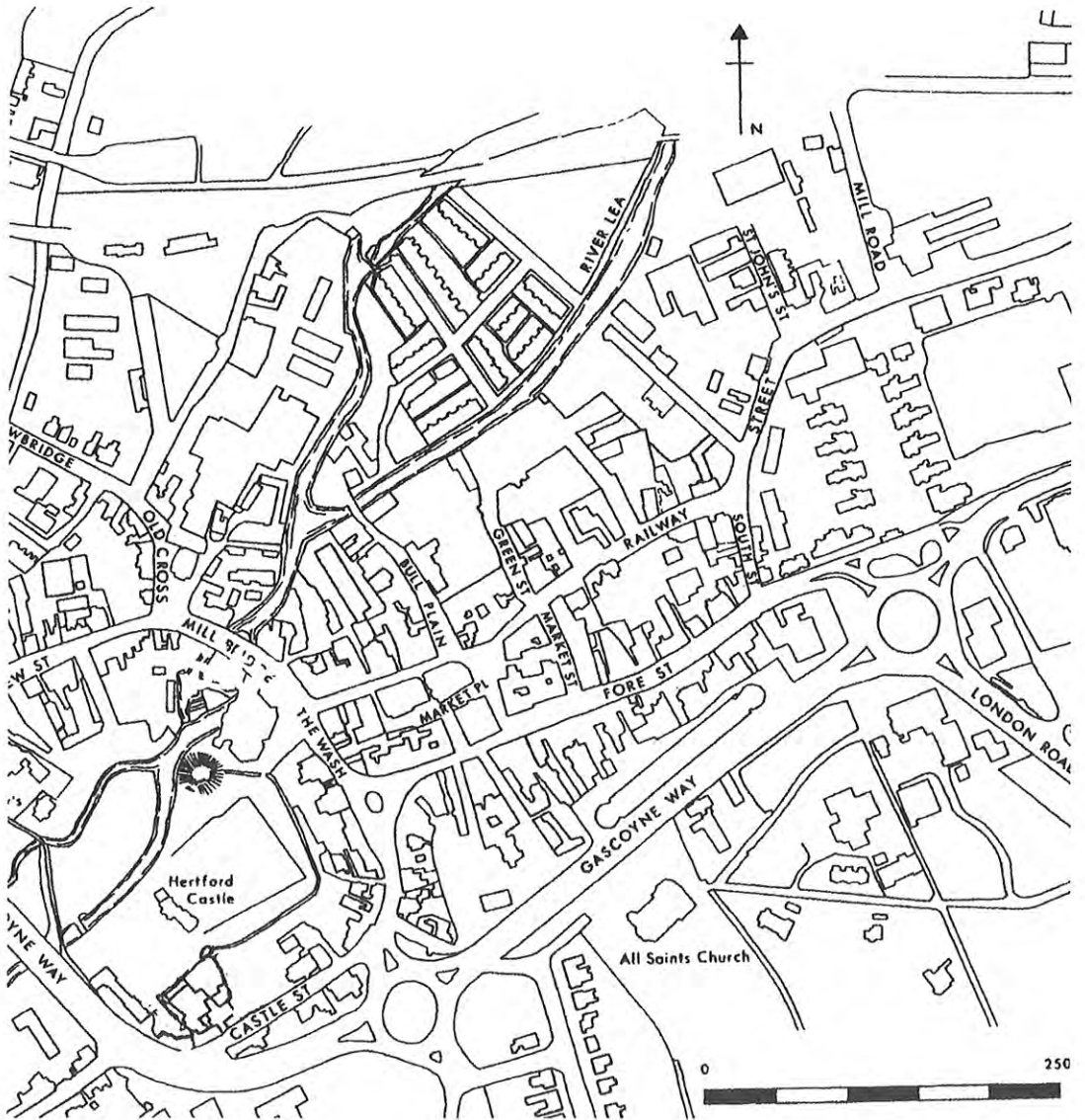


FIGURE 1
Map of Hertford with site location indicated.

(1992). Very few environmental samples were taken and the only significant assemblages were hand-collected. Material dated to the Saxo-Norman period (10th-12th century AD) amounts to slightly less than 90% of the total. In common with the majority of urban sites of this period the common domesticates (cattle, sheep/goat and pig) comprise the majority of bone fragments recovered (Table 1).

DISCUSSION

After a hiatus following the Roman period, human activity resumed at Millbridge in the tenth or eleventh century. Human activity appears to commence or recommence on most sites in Hertford at this time, probably in connection with the founding of the northern *burh*, and probably the

Taxon	Period							Total
	Romano-British	10 th -12 th AD	10 th -14 th AD	12 th -14 th AD	Late Medieval (15 th -16 th AD)	17 th -18 th AD	18 th AD	
Cattle (<i>Bos</i> f. domestic)	6	716 ¹	29	26	11	8	6	802
Sheep/Goat (<i>Ovis/Capra</i> f. domestic)	7	603	36	31	1	8	4	690
Sheep (<i>Ovis</i> f. domestic)	(-)	(152)	(16)	(13)	(-)	(2)	(2)	(184)
Goat (<i>Capra</i> f. domestic)	(-)	(21)	(4)	(1)	(-)	(-)	(-)	(26)
Roe deer (<i>Capreolus capreolus</i>)	-	2	-	-	-	-	-	2
Red deer (<i>Cervus elaphus</i>)	1	1	-	-	-	-	-	2
Deer sp. (<i>Cervus/Dama</i>)	-	+	-	-	-	-	-	+
Pig (<i>Sus</i> f. domestic)	1	496	11	15	-	-	4	527
Horse (<i>Equus caballus</i>)	2 ²	9 ²	3	10	-	1	1	26
Dog (<i>Canis familiaris</i>)	-	15 ³	-	+	-	-	-	15
Cat (<i>Felis catus</i>)	-	4	-	-	-	-	-	4
Red fox (<i>Vulpes vulpes</i>)	-	20 ⁴	-	-	-	-	-	20
cf. Red fox (<i>Vulpes vulpes</i>)	-	1	-	-	-	-	-	1
Pine marten (<i>Martes martes</i>)	-	1	-	-	-	-	-	1
Otter (<i>Lutra lutra</i>)	-	1	-	-	-	-	-	1
Hare (<i>Lepus</i> sp.)	-	2	-	-	-	-	-	2
Domestic fowl (<i>Gallus</i> f. domestic)	2	132	4	3	-	-	-	141
Domestic goose (<i>Anser</i> f. domestic)	-	4	-	1	-	-	-	5
Duck/Mallard (<i>Anas platyrhynchos</i>)	-	1	-	-	-	-	-	1
cf. Tufted duck (<i>Aythya fuligula</i>)	-	2	1	-	-	-	-	3
Goshawk (<i>Accipiter gentilis</i>)	-	-	-	1	-	-	-	1
Partridge (<i>Perdix perdix</i>)	-	1	-	-	-	-	-	1
Domestic pigeon (<i>Columba livia</i>)	-	3 ⁵	-	-	-	-	-	3
Woodcock (<i>Scolopax rusticola</i>)	-	2	-	-	-	-	-	2
cf. Fieldfare (<i>Turdus pilaris</i>)	-	1	-	-	-	-	-	1
Bird (<i>Aves</i>)	-	1	-	-	-	-	-	1
Amphibian (<i>Amphibia</i>)	-	1	-	-	-	-	-	1
Toad (<i>Bufo bufo</i>)	(-)	(1)	(-)	(-)	(-)	(-)	(-)	(1)
Total	19	2019	84	87	12	17	15	2253

“Sheep/Goat” also includes the specimens identified to species. Numbers in parentheses are not included in the total of the period. “+” means that the taxon is present but no specimens could be “counted”.

¹four bones from a partial skeleton

²two and two bones from partial skeletons

³two bones from a partial skeleton and a skull (cranium and hemi-mandible)

⁴three, four and fifteen bones from partial skeletons

⁵two bones from a partial skeleton

“Deer sp.” consists exclusively of antler off-cuts from craft working

TABLE 1

Hertford Central: Millbridge. Number of hand-collected mammal, bird and amphibian bones (NISP).

reconstruction of the southern *burh*, by Edward the Elder in 911. The earliest features of this date included a waterlogged cess-pit and a drainage gully. However, little structural evidence was found. Two phases of activity were recorded in the eleventh and twelfth centuries. The first of these consisted of a series of layers of dumped material, possibly connected with the construction of Hertford castle in the eleventh century. The second has been identified as four beam slot-founded timber structures, possibly sheds or outbuildings to the rear of houses facing St Andrew Street. Associated with these were a large number of pits. Between the thirteenth and seventeenth centuries there appears to have been a decline in human activity, evidenced by increasing areas of open, waste ground in the centre of the town. This is probably associated with the Black Death, and the decline of Hertford as a centre of communication and trade in the region, in the face of the development of Ware.

An unusual aspect of this site is the wide range of fur bearing mammals represented in deposits dating from the Saxo-Norman period (10th-12th century AD), including domestic cat (*Felis catus*), pine marten (*Martes martes*), otter (*Lutra lutra*), red squirrel (*Sciurus vulgaris*), hare (*Lepus* sp.),

rabbit (*Oryctolagus cuniculus*), mole (*Talpa europaea*) and red fox (*Vulpes vulpes*) (Table 1). While isolated fragments represent most of these species, fox comprises 36 bones of several individuals from multiple contexts (Figures 2-3, Table 2). Fox metapodials are easily distinguished from those of domestic dogs of similar size by being significantly narrower relative to their length (Ratjen & Heinrich, 1978). Measurements of the Millbridge fox metapodials are presented in Table 3. The only bone seen with cut marks is a squirrel distal tibia.

It is recognised that remains of these animals can occur as chance finds, culls of vermin, food remains, and animals (particularly cats) living on site; it is not implied that all were remains of animals skinned for fur, only that they might be. Cat, hare and rabbit are relatively common on medieval town sites, fox and the other species less so. Pine marten, otter and squirrel are rather rare, and in the case of red squirrel this situation is made worse by the small size of bones which are normally recovered only by sieving. This can also count against the typical fur remains of paws and tail, which are in any case small elements.

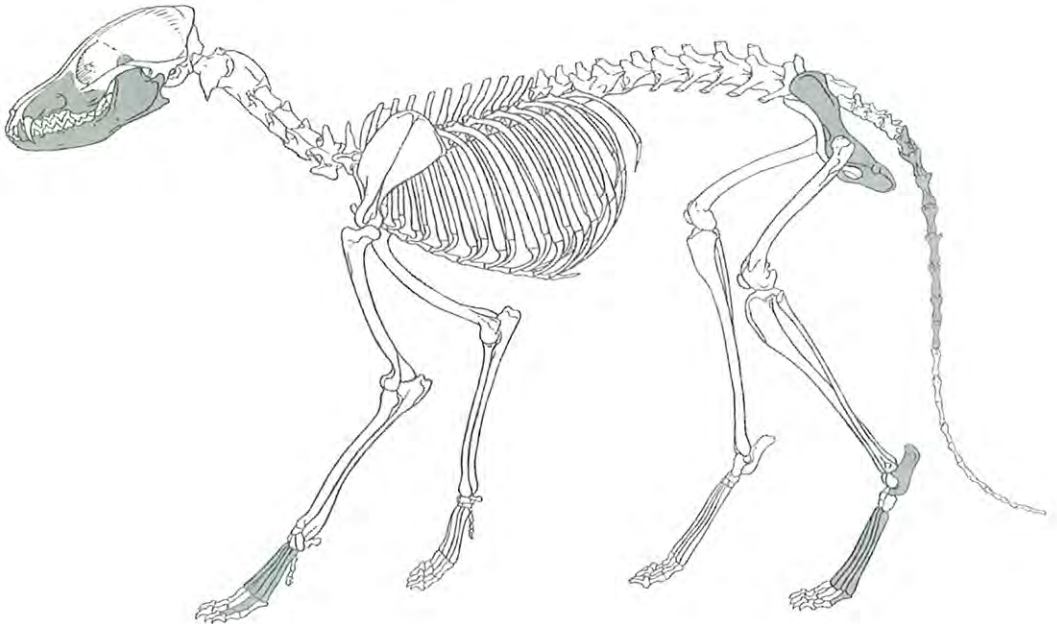


FIGURE 2

Fox skeleton showing elements recovered from Millbridge.

Millbridge, Hertford. Saxo-Norman (C10th-12th AD) contexts containing the remains of fur bearing mammals.

Context	Type	Species	Element	Comments
AFC2	Layer/Feature	Cat	radius	
AFC2	Layer/Feature	Fox	Mt.IV	
AFC5	Layer/Feature	Cat	humerus	unfused diaphysis
AFC8	Layer/Feature	Pine Marten	ulna	
AGQ2	Slot	Cat	pelvis	
AGS2	Pit	Cat	humerus	
AGY1	Pit	Fox	Mc.III	
AGY1	Pit	Fox	Mt.III	
AGY2	Pit	Fox	pelvis	
AHK1	Slot/Pit	Fox	mandible	
AHQ1	Post hole	Cat	mandible	
AHY1	Layer	Hare	metacarpal	
AJD3	Pit	Fox	maxilla+ Mt.IV-V	
AJD3/S51	Pit	Rabbit	upper incisor	
AJD4	Layer	Fox	2 caudal vertebrae	
AJD5	Pit	Fox	Mc.II-V + 8 caudal vertebrae	} probably same animal
AJD5/S104	Pit	Fox	phalanx 1+2xphalanx 2	} pathological
AJD9	Pit	of Fox	calcaneum	
AJK2	Layer	Otter	mandible	
AJL1	Slot/Pit	Fox	Mt.V	
AJL1	Layer	Fox	phalanx 1	
AJL2	Layer	Fox	Mc.IV	
AJL4	Layer	Fox	Mt.II-V	
AJL5	Layer	Fox	Mc.III	same animal
ALF1/S38	Layer	Red Squirrel	tibia	
ALF2	Layer	Hare	calcaneum	
ALZ2/S98	Pit	Mole	ulna	
FJ	Layer	Fox	lower C	
FM1	Layer	Fox	Mt.IV	

TABLE 2
Saxo-Norman contexts containing the remains of fur bearing mammals.

Another factor to be taken into account is the place of pelt processing. In medieval Novgorod (Russia) even sieved material offers almost no bones of fur animals (Maltby & Hamilton-Dyer, 2001) yet these, particularly squirrels, were known from manuscripts to be an integral part of the trade/tribute system (Rybina, 2001). In this case the pelts were almost certainly prepared outside the town. Also, not every style of processing includes the feet, with or without the bones.

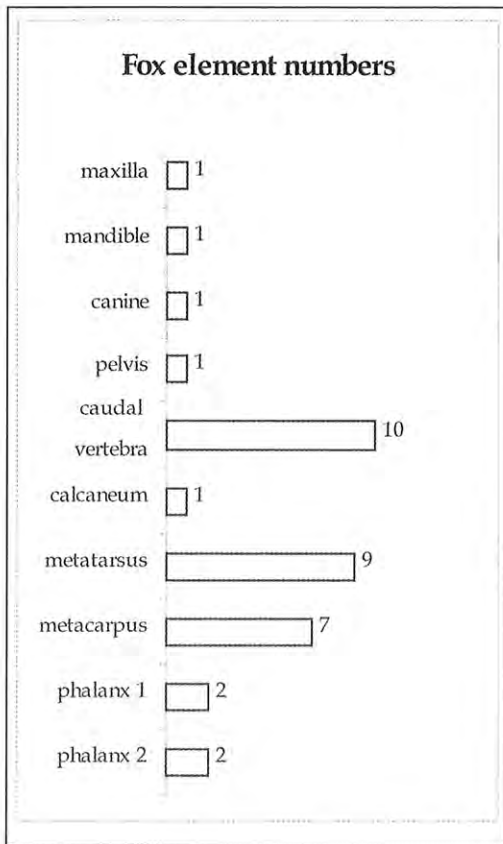


FIGURE 3

Numbers of fox elements recovered at Millbridge.

Most of the fox remains are of foot and tail elements. These remains are highly suggestive of those parts left in pelts and it is suggested that these remains constitute rare archaeological evidence of exploitation for furs during this period. For medieval hunters foxes were included along

with hares and cats (both wild and feral domestic) as "beasts of the warren" (Rackham, 1986: 40). An English law of 1363 forbade the common people from wearing any fur except lambskin, coney (i.e. hare/rabbit), cat and fox (Ewing, 1981: 30).

Good evidence for the activities of furriers is rare in the British archaeological record. The most convincing evidence from Saxo-Norman Millbridge relates to the preparation and/or trading of fox skins. It is uncertain whether the foot and tailbones were removed from the skins before further treatment or re-sale, fox tailbones are easily removable from fresh skins, or perhaps the bones represent discarded pelts. Although trade in fox skins, both within Britain and with continental Europe, is well documented for the medieval period (Serjeantson, 1989) this is probably the first archaeological evidence identified thus far from a British town. The only comparable sites in Western Europe are Haitabu in Schleswig-Holstein (Reichstein, 1984), where large numbers of fox foot bones were found, and Birka in Sweden (Wigh, 1997) which offered huge numbers of squirrel, fox and marten.

The Pine marten is no longer present in southern England. It is rarely reported in archaeological assemblages but has been recorded previously with skinning marks from Anglian levels at York (O'Connor, 1991). Marten skins are also mentioned in the Domesday Book, the survey of England commissioned in 1085 AD by William I to record the disposition of wealth and power in the kingdom over the twenty years since the Conquest in 1066.

There is a lack of references to skinnners in the documentary sources available for England until the end of the 12th century. London became the centre for the manufacture of furs from the 13th century onwards and in addition there would have been trade at a lower scale organised by small traders (Veal, 1966). Veale (op. cit.) mentions that the small pedlar was often an intermediary between village and town.

CONCLUSIONS

These remains of fur bearing mammals at Millbridge are suggestive of the activities of furriers or fellmongers resident during the Saxo-Norman period. Evidence for these kinds of commercial activities is very infrequent in the British archaeo-

Millbridge, Hertford. Measurement of Saxo-Norman (C10th-12th AD) Fox metapodials.
(based on von den Driesch 1976).

Context	Element	Side	GL	SD	Bd	Comments
AFC2	Mt.IV	L	56,0	4,0	5,1	
AGY1	Mc.III	L	42,5	4,1	5,7	
AGY1	Mt.III	L	56,8	4,7	5,9	
AJD3	Mt.IV	R	57,1	3,8	5,8	} same foot + maxilla
AJD3/S52	Mt.V	R	49,7	3,2	5,2]
AJD5	Mc.II	L	39,1	4,7	6,4]
AJD5	Mc.III	L	44,7	4,1	5,8	} same foot + 8
AJD5	Mc.IV	L	43,9	3,9	5,6] caudal vertebrae
AJD5	Mc.V	L	37,8	5,3	6,9]
AJL1	Mt.V	R	55,2	3,6	5,7	
AJL4	MT.II	L	55,9	4,6	5,9]
AJL4	Mt.III	L	55,3	4,4	5,7]
AJL4	Mt.IV	L	55,7	3,8	5,0	} same foot
AJL4	Mt.V	L	51,0	3,6	5,1]
AJL5	Mc.III	L	44,2	4,3	5,6	
FM1	Mt.IV	L	57,9	4,1	5,5	

TABLE 3
Measurements of the Saxo-Norman fox metapodials.

logical record and of their very nature difficult to identify (Anderson, 1981; Rackham, 1982). The most convincing evidence from Saxo-Norman Millbridge relates to the preparation of and/or trading of fox skins. Although trade in fox skins, both within Britain and with continental Europe, is well documented for the medieval period this seems to be the first archaeological evidence identified thus far from a British town.

A poster based on these researches was presented at the 9th ICAZ conference in Durham 23rd-28th August 2002.

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