

Fig. 1: Engraving of an Angora rabbit, from de Buffon & Daubenton *Histoire Naturelle*, vol. VI (1756), Pl. LIII: 340.

## Remains of an Angora Rabbit from a late 18th century pit at Crosswall

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THIS ARTICLE DESCRIBES the skull and post-cranial skeleton of a domestic rabbit discovered in a post-medieval deposit at Crosswall, City of

London (TQ 3358 8101)<sup>2</sup>. For the reasons discussed below, the skeleton is believed to be an Angora rabbit and its identification provides a

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2. Site supervisor: John Maloney. Excavations on the site were carried out between Sept. 1979 and March 1980.

rare example where an archaeological specimen may be ascribed to a particular breed<sup>3</sup>. The specimen is held in the collections of the Museum of London, where it may be inspected on request. Under the British Museum (Natural History) catalogue scheme, the skeleton has been assigned the following registration number: ARC 1981. R5000.

#### Late 18th Century Cess Pit at Crosswall

The skeleton came originally from a mixed deposit of demolition debris and domestic refuse forming the in-fill to a brick lined cess pit (Context 220)<sup>4</sup>. On the evidence of the associated pottery and glassware, the rabbit skeleton is dated to the third quarter of the 18th century, probably c 1770. Amongst the other objects recovered from the cess pit are a number of virtually complete pottery and glass vessels. According to Alan Vince, Finds Section, D.U.A., this pattern of survival suggests that all the material found in the pit (including the Angora rabbit) was probably dumped over a short period of time and may possibly represent the wholesale clearance of a household (or ? households) rather than an accumulation over a prolonged period of rubbish from many sources<sup>5</sup>.

The assemblage is also unusual in one other respect. The composition of the faunal remains from the cess pit is atypical of material recovered from other post-medieval sites in London. With all the other sites that I have examined so far, it is the cattle, sheep and pig bones which form the bulk of each assemblage, and relatively few bird bones are present (usually less than one per cent of the total weight of identified bone). The faunal remains from Context 220, Crosswall, on the other hand, includes a very high proportion of bird bone (29 per cent of the total weight of identified bone).

With the exception of the skeleton of the Angora rabbit and one bone of a linnet *Acanthis cannabina*<sup>6</sup>, both thought to be the remains of pets (see below), all the faunal material from the cess pit is identified as kitchen refuse, consisting of the bones from joints of pork, mutton and beef, together with those from chickens and fish

(cod *Gadus morhua*, haddock *Melanogrammus aeglefinus* and plaice *Pleuronectes platessa*)<sup>7</sup>. A full list and description of the faunal remains is available on request, in the form of a level III archival report, from D.U.A., Museum of London.

#### Rabbit Skeleton from Crosswall

##### General osteological description

Approximately three quarters of the skeleton was recovered by the excavators. A list of the bones present is given below:-

1 skull	2 femora
2 mandibular rami	2 tibiae
2 scapulae	2 calcanea
2 humeri	12 metapodial bones
2 radii	1 phalanx
2 ulnae	22 ribs
2 innominate bones	18 vertebrae

There is no evidence of either butchery or skinning and apart from the slight evidence of pathology on the two humeri, described below, all the elements of the skeleton appear perfectly healthy. All the bones are pale yellow in colour and some of them have brownish streaks and appear shiny; a condition observed in animal bones that were buried with the flesh still on them, and later unearthed after the skin and muscle had decomposed. The general appearance of the skeleton suggests that at the time of disposal, the rabbit was a complete carcass and that no attempt had been made to first cut off either the skin or flesh before it was discarded.

##### Age

The rabbit is a fully grown adult. The apophysis of the tibia is completely joined to the proximal epiphysis and the shaft, showing that this animal was certainly over 9½ months at time of death<sup>8</sup>.

##### Pathology

Each humerus has a lesion involving the superficial sub-periosteal bone immediately below the articular head. In both of the bones, it is the medial aspect which is afflicted. The aetiology of this bilaterally symmetrical lesion is unclear<sup>9</sup>.

3. As discussed by Dr Juliet Clutton-Brock, the characters that distinguish one breed from another will not generally be reflected in the anatomy of the skull of an animal unless they are extraordinarily developed, as for example in the Pekingese dog. The confirmation of any breed of domestic animal is more usually determined by such superficial features as the colour of the coat and form of the ears etc. 'It is therefore always difficult and sometimes impossible to trace the history of a particular breed from the archaeological record', — J. Clutton-Brock, *Domesticated Animals from Early Times*, London (1981) 26.

4. Excavation of the cess pit was supervised by Geoff Egan, D.U.A.

5. A. Vince, 'Recent Research on Post-Medieval Pottery from the City of London,' *London Archaeol* 4, No. 3 (1981), 74-80.

6. Bird species identified by Barbara West, D.U.A.

7. Fish species identified by Alison Locker, D.O.E.

8. Methods of ageing rabbits by epiphyseal fusion are discussed by H. V. Thompson & A. N. Worden, *The Rabbit*, London (1956) 36-39.

MODERN	N	M	Length (GL) <sup>a</sup>	
			Range	SD
(1) Domestic <sup>b</sup>	10	76.2	69.5 – 83.6	4.6
(2) Wild <sup>c</sup>	5	63.9	60.9 – 66.1	–
POST-MEDIEVAL				
(1) Crosswall, London c1770	1	–	72.6	–
(2) Aldgate, London early 18th century	2	–	61.1 & 62.5	–
(3) Baynard's Castle, London, c1520	36	61.6	57.3 – 65.5	1.9
(4) Nonsuch Palace, Surrey <sup>d</sup> , late 16th century	35	60.7	56.7 – 64.0	1.9

NOTES: (a) Abbreviations: N = number of specimens; M = mean; SD = standard deviation.

(b) Domestic breeds: Lop-eared, Flemish giant, Spanish rabbit, Silver-grey, Black & white, Black & tan, Angora.

(c) Wild: from various localities throughout the British Isles.

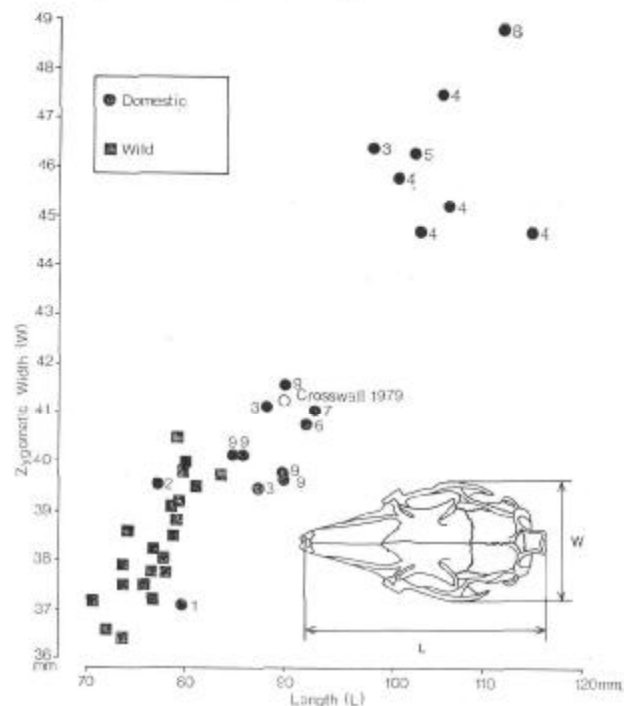
(d) Information from Alison Locker, *pers. comm.*

**Table 1: Length (mm) of humerus in modern domestic and wild rabbits compared with specimens from post-medieval sites in the City of London and Surrey.**

### Size

Measurements were taken of the skull and limb bones using dial calipers, the points of measurement following those described by von den Driesch (1976)<sup>10</sup>. These measurements are given in the appendix to this article.

In Table 1 the length of the humerus in the Crosswall rabbit is compared against rabbits from other British post-medieval sites. Unfortunately, I was unable to discover from my search through the literature any comparative data on rabbits from other late 18th century archaeological sites in Britain, and enquiries made to fellow archaeozoologists revealed that such material is still awaiting study and publication. The latest material that I could find, from Aldgate, London (Phase 3 bii)<sup>11</sup> is dated to the late 17th and early 18th century, between c 1680 and 1710; at least half a century earlier than the Crosswall rabbit. Nevertheless, from the measurements that are available it is clearly demonstrated that the Crosswall rabbit is far larger than any rabbit previously published from other British post-medieval sites (where the animals are all of similar size to the modern wild rabbit) and that its size compares favourably with modern domestic rabbits. Comparison of the skull of the Crosswall rabbit with those of modern wild and



**Fig. 2: Size of skull in modern wild and domestic rabbits compared with the specimen from Crosswall, London (BM(NH) reg. no. ARC 1981.R5000). Domestic breeds: 1. White Moscow; 2. Belgian hare; 3. Angora; 4. Lop-eared; 5. Spanish; 6. Silver-grey; 7. Black and tan; 8. Flemish giant; 9. No history. Wild rabbits: from various localities throughout the British Isles.**

9. Dr E. Appleby, *pers. comm.*

10. A. von den Driesch, *A Guide to the Measurement of Animal Bones from Archaeological Sites*, Peabody Museum Bulletin No. 1 (1976).

11. Site supervisor: Alan Thompson, D.U.A.

domestic rabbits in the collections of the British Museum (Natural History)<sup>12</sup> points to the same conclusion (Fig 2).

The disparity in size between the Crosswall rabbit and those from the post-medieval levels at Baynard's Castle, Nonsuch Palace and Aldgate may be explained by the different ways of keeping these animals. As observed by Markham (1631)<sup>13</sup> tame rabbits that were raised in close confinement, in hutches or barns (e.g. Crosswall specimen), were 'much fatter and larger' than their relatives reared under the free-range conditions of the warren<sup>14</sup> (e.g. specimens from Baynard's Castle, Nonsuch Palace and Aldgate). In the warren, rabbits were left free to breed on their own and no attempt was made to artificially select for larger sized animals. As a consequence of this neglect, such rabbits were mostly 'very small and weakly'<sup>15</sup> and retained many of the characteristics found in the wild rabbit<sup>16</sup>. Only in the herds of caged tame rabbits were conditions conducive to improvement. In these animals, improvement in size and con-

formation was brought about by the controlled mating of selected animals combined with the feeding of highly nutritious foodstuffs<sup>17</sup>.

#### Identification of breed

Of the eight breeds represented by the series of skulls in the BM(NH) collections, the Crosswall rabbit most resembles the Angora. One of the main reasons for believing that the Crosswall rabbit is an Angora is the particularly narrow width between the supraorbital fissures in the skull<sup>18</sup> (Fig. 3). According to Darwin<sup>19</sup> it is this feature that distinguishes the skull of the Angora from those of the other breeds of domestic rabbit:

'It [i.e. the Angora rabbit] presents one singular character; though considerably longer than the skull of the wild rabbit, the breadth measured within the supraorbital fissures is nearly a third less than in the wild.'

From my own observations it is apparent that this feature described by Darwin may not always be used to identify the skull of an Angora; as the

12. The collection includes specimens donated to the BM(NH) by Charles Darwin in 1868 and 1869.
13. G. Markham, *Cheape and Good Husbandry*, London (1631) 140.
14. Warrens in Britain often covered large tracts of land. Those at Oxhey and Cassiobury in Hertfordshire (17th century) for instance, were each of 120 acres (50 hectares) — G. Longman, *A Corner of England's Garden 1600-1850*, Bushey (1977) I, 8.
15. K. W. Knight, *The Book of the Rabbit*, London (1889) 401.
16. F. E. Zeuner, *A History of Domesticated Animals*, London (1963) 412-4.
17. G. Markham, *op cit* fn. 13, 140, recommended that the 'best food you can feed a cony with, is the sweetest, shortest, softest and best hay you can get . . . [and] In the troughs under their boxes, you shall put sweet oats, and their water . . .' The diet of caged rabbits also included green herbage and carefully selected kitchen refuse — K. W. Knight, *op. cit* fn. 15, 2 .
18. supraorbital fissure = *incisura supraorbitalis caudalis*, see R. Barone *et al*, *Atlas of Rabbit Anatomy*, Paris (1973) Plate 3: 8.
19. C. Darwin, *The Variation of Animals and Plants Under Domestication*, London (1868 reptd. 1905) I, 146.

MODERN	N	Min. width between supraorbital fissures <sup>a</sup>		
		M	Range	SD
(1) Domestic breeds:				
Lop-eared	6	14.3	13.0 - 15.1	-
Flemish giant	1	-	13.6	-
Silver-grey	1	-	12.8	-
Black & tan	1	-	12.6	-
Angora	4	12.2	9.5 - 13.8	-
(2) Wild <sup>b</sup>	21	11.8	10.6 - 12.7	0.6
LATE 18th CENTURY				
(1) Crosswall, London	1	-	11.9	-

NOTES: (a) and (b) see Table 1 (note a & c)

**Table 2: Measurements (mm) of the minimum width between the supraorbital fissures in skulls of modern domestic and wild rabbits compared with the specimen from Crosswall, London (BM(NH) reg. no. ARC 1981. R 5000).**

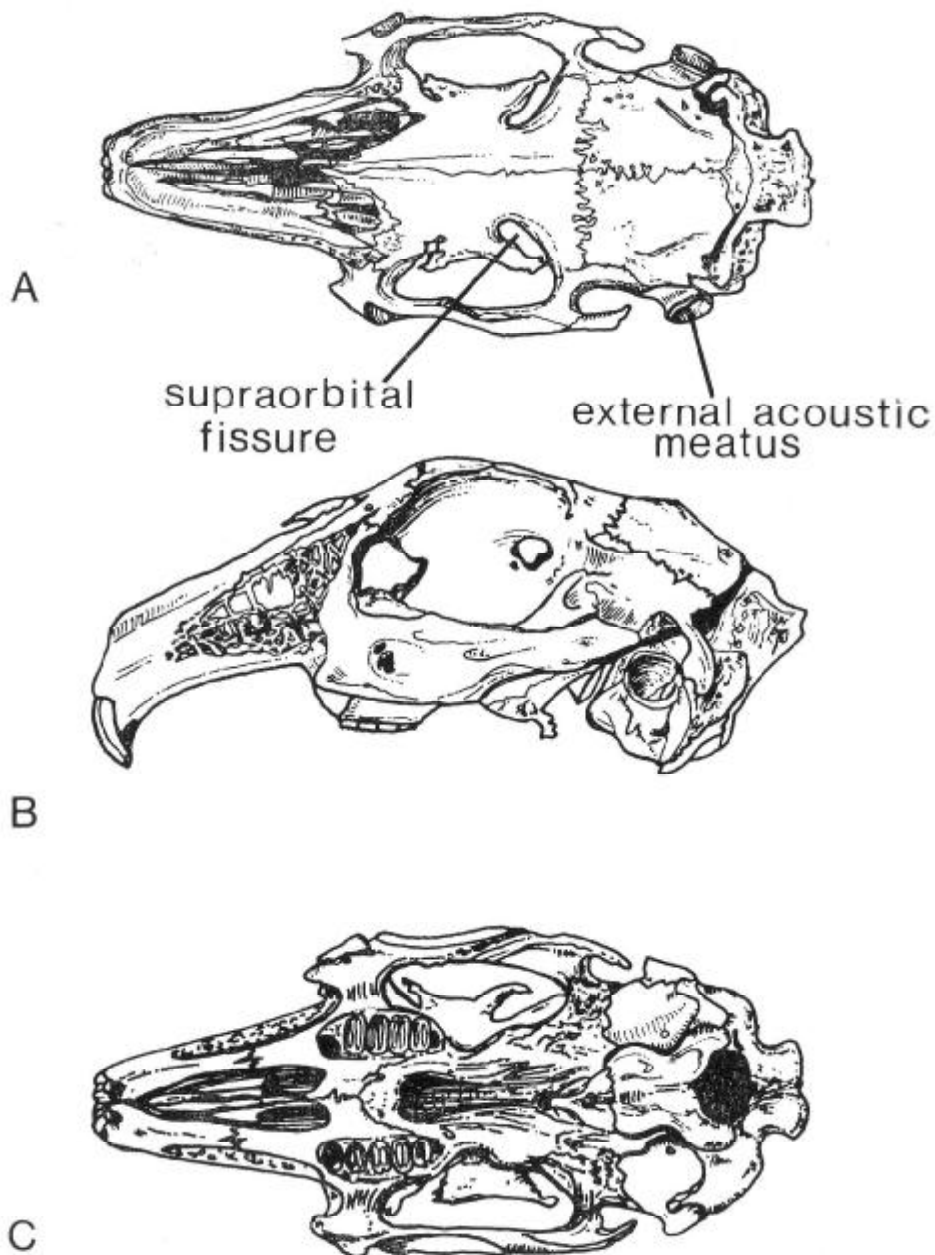


Fig. 3: Drawings of the skull of the Angora rabbit from the late 18th century cess pit, Crosswall, London (BM(NH) reg. no. ARC 1981. R5000): (A) dorsal view; (B) left lateral view; (C) palatal view. The narrow width between the supraorbital fissures identifies the specimen as Angora.

(Drawings by Katharine Armitage)

larger individuals of this breed have supraorbital widths which lie well outside the upper limit of the size range of the wild rabbit (Table 2). In the Crosswall skull, however, the value, 11.9 mm, for this point of measurement compares very favour-

ably with the mean value of 11.8 mm established for the series of modern British wild rabbits in the collections of the BM(NH) and in my opinion there can therefore be little doubt that this specimen is indeed an Angora.

In all other dimensions the Crosswall skull is considerably larger than that of the largest wild rabbit in the BM(NH) collections, except for the neurocranial width, which is smaller. This last feature is commonly found also in the other breeds of domestic rabbit (e.g. Silver-grey, Lop-eared and Flemish giant) and is a manifestation of the process of domestication<sup>20</sup>.

Like the modern Angora, the maximum diameter of the external acoustic meatus in the Crosswall skull (Fig. 3) is intermediate in size between the wild rabbit and the domestic lop-ear (Table 3).

### Discussion

The skeleton from the late 18th century deposit at Crosswall, described in this article, is an exciting find as it represents the first archaeological record in Britain of an Angora rabbit.

### Early history of the Angora rabbit in Britain

According to Zeuner<sup>21</sup> this breed of rabbit first made its appearance in Europe about 1723 when

British sailors transported live Angora rabbits from the Black Sea area to Bordeaux. Zeuner does not quote the source of this story and, in the light of the evidence discussed below, there must be serious doubt about the authenticity of this supposed traffic in Angora rabbits at this date. Indeed, the reference made by Mortimer<sup>22</sup> to a 'White Shock Turkey Rabbet' strongly suggests that the Angora rabbit was well known in Britain at least as early as 1707. As discussed by Murray<sup>23</sup> the word 'shock', as used by Mortimer, means having long, shaggy hair. The long silky fur of the Angora rabbit is this animal's most conspicuous feature<sup>24</sup>, one which sets it apart from the other breeds of domestic rabbit (Fig. 1), and it is therefore likely that Mortimer was describing what we now call the Angora rabbit.

The earliest reference that I know from Europe that mentions this breed of rabbit specifically by the name *Angora*, is found in de Buffon & Daubenton (1756)<sup>25</sup>. In Britain, the earliest occurrence of this name in the literature that I have been able to discover so far is by Pennant (1771)<sup>26</sup>.

20. Under domestication, the facial part of the rabbit skull has lengthened and the zygomatic width has become broader, whilst the brain case (neurocranium) has been reduced in size. This reduction in the size of the brain case is reflected in the relative weight of the brain in domestic and wild rabbits. In the domestic form the brain weighs 22% less than that in the wild animal — S. Bokönyi, *History of Domestic Mammals in Central and Eastern Europe*, Budapest (1974) 334.
21. F. E. Zeuner, *op cit* fn. 16, 414.
22. J. Mortimer, *The Whole Art of Husbandry, or, The Way of Managing and Improving of Land*, London

(1707) 188.

23. J. A. H. Murray, *A New English Dictionary on Historical Principles*, Oxford (1888) Vol VIII Q to SH, Part I Q and R : 720.
24. The preferred colour is white, but the Angora rabbit also comes in a variety of other colours: black, grey, honey, as well as various shades of brown (chestnut, tan and fawn).
25. G. L. de Buffon & L. J. M. Daubenton, *Histoire Naturelle*, VI, Paris (1756) 312-340.
26. T. Pennant, *Synopsis of Quadrupeds*, Chester (1771) 252

MODERN	N	Max. diameter of external acoustic meatus <sup>a</sup>		
		M	Range	SD
(1) Domestic breeds:				
Lop-eared	5	7.9	7.2 - 8.2	-
Angora	4	6.1	5.5 - 6.7	-
Flemish giant	1	-	6.0	-
Silver-grey	1	-	5.4	-
Black & tan	1	-	4.5	-
(2) Wild <sup>b</sup>	20	4.4	4.0 - 4.9	0.2
LATE 18th CENTURY				
(1) Crosswall, London	1	-	6.3	-

NOTES: (a) and (b) see Table 1 (note a & c)

Table 3: Maximum diameter (mm) of the external acoustic meatus in modern domestic and wild rabbits compared with the specimen from Crosswall, London (BM(NH) reg. no. ARC1981.R5000).

There is some confusion over the etymology of the word *Angora*. Many of the earlier writers on natural history clearly believed that the word stemmed directly from what they presumed to be the traditional home of the breed; the city of Angora (present day Ankara) in Anatolia, Turkey. This myth survives in the works of more recent authors of popular books and articles dealing with the Angora rabbit. The following passage by Knight<sup>27</sup> may be quoted to illustrate this:

'The Angora rabbit was originally found in Asia Minor, to which country or to Persia it is probably indigenous. In these countries it has been found in large numbers and in a very advanced stage of perfection. The name "Angora" was given to the variety owing to its being so much kept in the neighbourhood of the town of that name, and it is interesting to note that the name has been given to other and larger animals from the same neighbourhood, which all, more or less, possess the same characteristics, being very plentifully supplied with fine silky wool. The Angora goat and Angora sheep may be mentioned among these . . . ; while the Angora cat provides an example with greater resemblance in size.'

This popular misconception of a Turkish origin was commented on by Zeuner<sup>28</sup> who believed that whilst the name of the rabbit derived from the Angora goat this did not imply any direct association with the city of Angora. This is the same conclusion reached by Thébault<sup>29</sup> who points out that although the early records from Turkey confirm the existence in the region around Angora of cats and goats with exceptionally long hair, nowhere is any mention made of long-haired rabbits. Thébault proposes that it is most likely that the name *Angora* when first adopted in the mid 18th century was used as a synonym for 'long-haired'; the word being 'borrowed' from two long-haired animals recently introduced into Europe from Turkey — the Angora goat and Angora cat. Further research into the geographical distribution of the Angora rabbit in historic times is required before any conclusion may be reached concerning its origins.

#### Reasons for keeping Angora rabbits

Among the raw materials widely used in the textile industry, the soft silky fur of the Angora

rabbit is one of the most highly prized<sup>30</sup>. Angora fur is removed from the living animal either by combing or plucking<sup>31</sup>, after which it is blended with wool and then spun into lengths of yarn ready for knitting into such garments as socks, hats, mittens, sweaters and shawls<sup>32</sup>. The softness of the material makes it particularly suitable for use in the manufacture of articles of clothing for babies.

The value of Angora fur was recognised early on (and was specially selected for) and shortly after its introduction into Europe, in the 18th century, there developed in France and Switzerland an extensive cottage industry based on the Angora rabbit. In many villages throughout France and Switzerland, peasants bred large numbers of Angora rabbits for their fur. These animals were housed in barns, hutches and even, in some instances, in disused pigstyes and stables<sup>33</sup>.

Paradoxically, this form of keeping herds of Angora rabbits on a commercial scale never became established in Britain, where this breed remained relatively uncommon right up to the present day. The comparative rarity of the Angora in this country is well illustrated by the statement made by Brent in 1861<sup>34</sup>:

'They [i.e. the Angora] are the most beautiful of all the breeds of rabbits . . . but they are not much known, the pure breed being scarce and fetching a high price.'

Further affirmation of this point was provided in the same year<sup>35</sup>:

'Their skins are much sought by furriers, and when in quantity and good condition realise high prices; and it is somewhat surprising to see how little this interesting kind has been encouraged and cultivated in this country.'

The virtual absence in Britain of a textile industry based on the Angora rabbit means that it is unlikely that the inhabitants of the Crosswall site were engaged in the breeding of these rabbits for the fur trade. As an alternative explanation, it may be suggested that they were fattening Angora rabbits for the table and for some undetermined reason one of the animals died prematurely and its body thrown away in the cess pit: the

27. K. W. Knight, *op cit* fn. 15, 1-2.

28. F. E. Zeuner, *op cit* fn. 16, 414.

29. R.G. Thébault, 'Le lapin Angora', *Ethnozootecnie* No. 27 (1981) 71-79.

30. A. B. Wildman, *The Microscopy of Animal Textile Fibres*, Leeds (1954) 150-152.

31. This operation is carried out just prior to moulting, which takes place four times a year. In the other breeds of rabbit, each animal has first to be killed before their fur may be removed, by skinning.

32. D. Ripley, 'Little fur factories', *Yankee* 45 (No. 1) (1981) 168-9.

33. Anon. 'The rabbit (*Lepus cuniculus*). Its history, varieties, and management.' *The Cottage Gardener and Country Gentleman* 25 (1861), 248-50, 294-5, 326-7, 358-9, 375, 388-9; K. W. Knight, *op cit* fn. 15, 2.

34. B. P. Brent, 'Varieties of rabbits', *The Cottage Gardener and Country Gentleman* 25 (1861) 263-4.

35. Anon, *op cit* fn. 33, 388-9.

cause of death (possibly from disease) making its flesh unfit for human consumption. There would seem, however, to be two very good reasons for rejecting the idea that the Crosswall rabbit was originally intended to be exploited as a source of meat. Firstly, the comparative rarity of the Angora at this time in England argues against so valuable an animal being maintained simply for its flesh; especially when there was a plentiful supply of rabbits provided by the warrens<sup>36</sup>. Secondly, the flesh of the Angora rabbit is said to be tough and unpalatable, comparing poorly with that obtained from other tame rabbits<sup>37</sup>. It should be mentioned, however, that not all authorities are in agreement on this point. Mortimer, writing in 1707<sup>38</sup>, for instance, singles out the Angora<sup>39</sup> as being particularly good eating.

If one accepts the premise that the Crosswall rabbit was kept neither for its fur nor its flesh, there is only one explanation remaining to account for its presence in a deposit of domestic refuse: the rabbit must have been a pet. The discovery in the same deposit of a glass bird feeder and the remains of a cage bird (linnet)<sup>40</sup> supports this interpretation; both of these finds clearly show that

the inhabitants of the site were fond of animals. Furthermore, it is well known that Angora rabbits, with their quiet and docile behaviour, make fine pets and are considered especially suitable as 'ladies' pets'<sup>41</sup>. In view of the restricted numbers of Angora rabbits that have been kept in this country (see above) the possession of such an animal suggests that the Crosswall inhabitants were reasonably well-off. This observation is in accordance with the evidence provided by the other finds from the cess pit, which include fine quality Chinese porcelain and equally fine glassware.

#### Acknowledgements

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36. In the 17th and 18th centuries, the London meat markets were supplied with rabbits from warrens in Hertfordshire, Essex, Oxfordshire and Suffolk — G. E. H. Barrett-Hamilton & M. A. C. Hinton. *A History of British Mammals* Vol. II, London (1911-14) 187; A. Everitt, 'The marketing of agricultural produce' In J. Thirsk (editor) *The Agrarian History of England and Wales, IV 1500-1640*, Cambridge (1967) 466-589.
37. Anon, *op cit* fn. 33, 388.
38. J. Mortimer, *op cit* fn. 22, 188.
39. I have presumed here that Mortimer's 'White Shock Turkey Rabbit' is in fact the Angora (see discussion above).
40. The keeping of caged birds was popular in late 18th century London: 'In the 1770's song birds were taken alive on the outskirts of London, with the aid of nets and tame decoys, to be sold not as food but as cage-birds.' C. A. Wilson, *Food and Drink in Britain*, Harmondsworth (1973) 117. Of all the cage birds, the linnet was the most highly prized: 'Of all house birds, this, from the softness and flute-like sound of its voice gives the airs that it is taught in the neatest and most agreeable manner.' J. Bechstein, *The Natural History Of Cage Birds*, London (1812) 143. I am indebted to Barbara West for drawing my attention to these references.
41. K. W. Knight, *op cit* fn. 15, 10.

## Appendix

Measurements of the skull and post-cranial skeleton of the Angora rabbit from Crosswall, City of London (BM(NH) reg. no. ARC 1981. R5000). All measurements are in mm.

BONE ELEMENT	POINT OF MEASUREMENT	DESIGNATION AS IN von den Driesch (1976)	VALUE
Skull	Total length	1	91.2
	Basal length	3	76.2
	Parietal length	6	18.1
	Frontal length	7	39.6
	Viscerocranium length	8	39.5
	Length of cheektooth row	9	15.8
	Width across occipital condyles	12	16.7
	Greatest neurocranium width	14	27.4
	Aboral zygomatic width	17	41.0
	Min. width between supraorbital fissures	-	11.9
	Max. diameter of external acoustic meatus	-	6.3



Mandible *	Length	1	64.0
	Length of cheektooth row	2	15.7
	Length of diastema	4	20.9
	Height of vertical ramus	5a	37.0
Scapula *	Height	HS	65.8
	Width of neck	SLC	6.5
	Length of glenoid process	GLP	12.7
	Width of glenoid cavity	BG	9.2
Humerus *	Length	GL	72.6
	Proximal width	Bp	15.1
	Min. shaft width	SD	5.9
	Distal width	Bd	11.4
Radius *	Length	GL	67.0
	Proximal width	Bp	7.4
	Min. shaft width	SD	5.1
	Distal width	Bd	7.5
Innominate *	Length	GL	86.4
Femur *	Length	GL	95.5
	Proximal width	Bp	17.7
	Min. shaft width	SD	8.7
	Distal width	Bd	16.7
Tibia *	Length	GL	106.4
	Proximal width	Bp	17.9
	Min. shaft width	SD	6.8
	Distal width	Bd	14.6

\* right side only

## Excavations & Post-excavation work

**City**, by Museum of London, Department of Urban Archaeology. A series of long term excavations. Enquiries to DUA, Museum of London, London Wall, E.C.2. (01-600 3699).

**Beddington**, by South West London Unit. Excavation of site of Roman bath-house. Enquiries to Roy and Lesley Adkins, 25 Union Road, Croydon (01-679 7054).

**Brentford**, by West London Archaeological Field Group, Excavation and processing. Enquiries to 71-72 Brentford High Street, Brentford, Middlesex. (01-560 3880).

**Croydon & District**. Processing and cataloguing of excavated and museum collections every Tuesday throughout the year. Archaeological reference collections of fabric types, domestic animal bones, clay tobacco pipes and glass ware also available for comparative work. Hon. Curator, Croydon Natural History & Scientific Society Ltd., Museum Building, Croydon Biology Centre, Chipstead Valley Road, Coulsdon, Surrey. (01-660 3841 or 22 43727).

**Fulham** by Fulham Archaeological Rescue Group. Fulham Palace, Bishops Avenue, Fulham Palace Road, S.W.6. Examination of existing buildings and research work has revealed earlier buildings underneath. Sundays Enquiries to Keith Whitehouse, 86 Clancarty Road, S.W.6. (01-731 0338).

**Hammersmith**, by Fulham Archaeological Rescue Group.

Processing of post-medieval material from Sandford Manor and medieval material from Fulham Palace, Tuesdays, 7.45 p.m.-10 p.m., at Fulham Palace, Bishops Avenue, Fulham Palace Road S.W.6. Contact Keith Whitehouse (see Fulham).

**Inner London Boroughs**, by the Inner London Unit, Several rescue sites in various areas. (01-242 6620).

**Kingston**, by Kingston-up-Thames Archaeological Society. Rescue sites in the town centre. Enquiries to Marion Hinton, Kingston Museum, Fairfield Road, Kingston (01-546 5386).

**North-East Greater London**, by Passmore Edwards Museum. Enquiries to Pat Wilkinson, Passmore Edwards Museum, Romford Road, E.15. (01-534 4545).

**South West London Boroughs**, by the South West London Unit, excavations and processing. Enquiries to Scott McCracken, St. Luke's House, Sandycroft Road, Kew (01-940 5989).

**Southwark**, by Southwark and Lambeth Archaeological Excavation Committee. Several sites from the Roman period onwards. Enquiries to Harvey Sheldon, S.L.A.E.C., Port Medical Centre, English Grounds, Morgan's Lane, SE1 2HT. (01-407 1989).

**Surrey**, by Surrey Archaeological Unit. Enquiries to David Bird, County Archaeological Officer, Planning Department, County Hall, Kingston, Surrey. (01-546 1050 x 3665).

**Vauxhall Pottery**, by Southwark and Lambeth Archaeological Society. Processing of excavated material continues three nights a week. All enquiries to S.L.A.S. c/o Cuming Museum, 155 Walworth Road, S.E.17 (01-703 3324).

*The Council for British Archaeology produces a monthly Calendar of Excavations from March to September, with an extra issue in November and a final issue in January summarising the main results of field work. The Calendar gives details of extra-mural courses, summer schools, training excavations and sites where volunteers are needed. The annual subscription is £4.50 post-free, which should be made payable to C.B.A., 112 Kennington Road, S.E.11.*