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# Report on the biological remains from the Former Female Prison, York (Site code 1998.32)

by

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#### **Summary**

A single sediment sample, 7 spot samples and 14 boxes of vertebrate remains were recovered from excavations at the Former Female Prison site in York. Pottery dated the deposits from the Roman period through to the present day.

Plant macrofossils were mostly scarce, although small charcoal fragments were frequent. The limited nature of the assemblage precludes any detailed interpretation. None of microfossil 'squashes' contained eggs of internal parasites and cannot therefore contribute any information of interpretable value.

Three complete and two part inhumations, together with a quantity of human charnel material, was examined. Skeleton 9053 showed evidence of having undergone an autopsy. Skeleton 9056 displayed pathologies consistent with occupational stress in the wrist. Robust muscle insertions were noted on Skeleton 9075 and also moderate to severe osteophyte growth around the lumbar vertebrae. The charnel material contained a high proportion of leg bones, particularly femora.

The two boxes of animal remains were of variable preservation, suggesting a high degree of reworking of the deposits and the presence of much residual material.

Keywords: Former Female Prison; York; Human Remains; Inhumations; Charnel; AUTOPSY; PATHOLOGY; ANIMAL REMAINS; SEDIMENT; COFFIN WOOD; POST-MEDIEVAL; ANGLO-**SCANDINAVIAN** 

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#### Introduction

An excavation was carried out by York Archaeological Trust during May 1998 at the site of the Former Female Prison, now part of the Castle Museum. Spot dates, provided by the pottery, suggested a chronology from the Roman period through to the twentieth century.

Five human inhumations (complete and incomplete), together with a quantity of human charnel material, amounting to 12 boxes (seven of approximately 34 litres per box and five of 20 litres per box), were presented for analysis. In addition, three boxes (each box approximately 20 litres) of animal bone, a single 'GBA' sample (sensu Dobney et al. 1992) and seven spot samples (three for parasites, four for wood identification) were presented for examination.

### Methods

# Samples

A description of the lithology of the GBA sample was recorded using a standard *pro forma* and a subsample of 2 kg taken for extraction of macrofossil remains, following procedures of Kenward *et al.* (1980; 1986).

Three spot samples were examined for the eggs of parasitic nematodes using the 'squash' technique of Dainton (1992).

The remaining four samples, containing fragments of wood and nails from the coffins, were briefly surveyed.

#### Human remains

Whole and partial skeletons were recorded using a standard *pro forma*, whilst disarticulated material was recorded bone by bone. Age at death was estimated using epiphysial fusion, dental eruption and dental wear stages after Brothwell (1972). Sexing was undertaken using standard criteria on the skull and pelvis and stature was estimated using the formulae of Trotter and Gleser (1952; 1958; quoted in Bass 1987).

#### Animal remains

Animal bone was recovered from a total of 42 deposits, 29 of which were recorded in detail. The remaining material, dated to the 19th or 19/20th centuries or with no spot dates, were merely scanned.

Semi-subjective data were recorded for each context regarding the state of preservation, colour and appearance of broken surfaces ('angularity'). In addition, semi-quantitative records were made concerning the size of the fragments, dog gnawing, butchery, fresh breakage and burning.

Identification was carried out using the reference collections of the Environmental Archaeology Unit. Fragments not identifiable to species were grouped into categories: large mammal (assumed to be cattle, horse or large cervid), medium-sized mammal (assumed to be caprovid, pig or small cervid), and bird. In addition to counts of fragments, weights of identifiable species and unidentified categories were recorded.

#### Results

Sediment samples

Context 9014 [19th Century] Sample 1 (GBA)

A moist, mid-dark grey, crumbly (working soft, rubs black), slightly sandy clay silt with clasts of lightmid brown clay, containing ?rotted mortar.

The rather small washover (<1% of the original sample by volume) contained a varied inorganic fraction including coarse quartz sand, small pieces of brick/tile, mortar fragments (to 3 mm), coal and amorphous carbonised material. Very few plant remains were recovered although small pieces of charcoal (to 10 mm) were frequent. The uncharred plant remains consisted of several scrolls of bark (to 5 mm), occasional poorly preserved herbaceous rootlets, a single sedge nutlet (*Carex* sp.), several raspberry (*Rubus idaeus* L.) seeds and a fragment of an elder seed (*Sambucus nigra* L.). There were no invertebrate remains.

The moderately small residue (15% of the original sample by volume) was mainly composed of coarse quartz sand with rare clasts of rotted mortar. Gritstone pebbles (to 40 mm), oolitic limestone (to 35 mm), brick/tile, and coal were also present. A single piece of glazed pottery (to 35 mm) was noted and retained. Charcoal fragments were the only plant remains present in the residue.

The following samples were all taken from deposits surrounding the pelvic/stomach area of the skeletons.

**Context 9053** [late 18th/early 19th C] Sample 2 (Spot - 1300 g)

The microfossil 'squash' was mostly inorganic with a little organic detritus. No eggs of intestinal parasites were seen.

**Context 9056** [late 18th/early 19th C] Sample 4(A) (Spot - 800 g)

The microfossil 'squash' was mostly inorganic with a little organic detritus. No eggs of intestinal parasites were seen.

Context 9056 [late 18th/early 19th C]

Sample 4(B) (Spot - 1400 g)

The microfossil 'squash' was mostly inorganic with a little organic detritus. A few fungal spores were noted. No eggs of intestinal parasites were seen.

**Context 5067 ??9067** [late 18th/early 19th C] Sample 8 (Spot - 550 g)

The microfossil 'squash' was mostly inorganic with some organic detritus. A few phytoliths (grass type) and a live soil nematode were noted. No eggs of intestinal parasites were seen.

Wood samples

The wood samples from Contexts 9050, 9051, 9052 and 9054 were all briefly examined. It is possible that the wood from Context 9050 (Sample 6) may represent very decayed oak, but it was felt that these samples, which included a number of coffin nails, should be returned for conservation. Identification of the wood may be possible during conservation or once it has been completed.

Human remains

Tables 1 and 2 list the elements present in the inhumations and charnel material respectively.

In general, the complete and part skeletons were well-preserved, although vertebrae, pelves, scapulae and, to some extent, ribs from the individuals that had been buried in coffins were less well-preserved than the rest of the material.

#### **Skeletons**

Skeleton 9053 [late 18th/early 19th C-coffin]

Table 1 gives the list of elements present in this inhumation. Standard criteria suggest this individual was ?female, approximately 25 years old with an estimated stature of 159-166 cm (5'2" - 5'5").

Several abnormalities and pathologies were noted on this skeleton. Only one 3rd molar was erupting. The other three were possibly congenitally absent, although this would need to be confirmed by x-ray. The anterior teeth displayed numerous enamel hypoplasia lines and slight supragingival calculus was noted on the labial surface of the lower incisors. The left mandibular 1st molar had been lost some time antemortem as the tooth socket had completely

remodelled.

Schmorl's nodes (depressions in the articular surfaces of the vertebral bodies) were noted on both surfaces of vertebrae from the 5th thoracic to the 2nd lumbar. The depressions were centrally placed, most being circular and quite deep, but larger and less regular on the 11th thoracic to 2nd lumbar. Although the exact cause of this pathological condition is unknown, it is unusual to find such an extensive example on a young individual as it is more normally associated with aged individuals (D. Brothwell pers. com.).

An unusually large number of wormian bones were noted on the skull. [Wormian bones are small, separate bones located within cranial sutures, and their occurrence is probably genetically linked]. Two were located in the coronal suture, symmetrically placed one either side of the sagittal suture. Numerous wormian bones were present in the lambdoid suture, at, and to both sides of, the sagittal/lambdoid junction. These are more usual than those situated along the coronal suture.

The skull of this individual had been crudely sawn through (horizontally) to give access to the cranial vault. The splayed position of the ribs in the ground (noted during excavation) suggested that the chest cavity had also been opened. No cut marks were visible on either the sternum or the ribs so opening the chest was probably achieved by cutting through the costal cartilage. It appears that an autopsy had been performed on the body prior to interment.

Skeleton 9056 [late 18th/early 19th C-coffin]

Table 1 gives the list of elements present in this inhumation. Standard criteria suggest this individual was ?male, more than 25 years old, with an estimated stature of 171-177 cm (5'7" - 5'10").

Several abnormalities and pathologies were noted on this skeleton. A small caries cavity was observed on the occlusal surface of the right mandibular 2nd molar and calculus was present on most teeth, being more severe on the right mandibular 1st and 2nd molars. Numerous enamel hypoplasia lines were recorded on the anterior teeth and one quite severe line was also visible on the posterior teeth.

Obvious mandibular tori were present on both sides of the dental arch and a lump (probably of traumatic origin) was present on the lower margin of the mandible, anterior to the gonial angle.

Schmorl's nodes were present on the superior faces of the 2nd and 3rd lumbar vertebrae and the inferior faces of the 4th and 5th lumbar vertebrae. Slight ossification of the spinal ligaments was also identified in the lumbar region.

Marginal osteophyte growth was noted around the distal articulations of both radii and the proximal articulation of the left 2nd metacarpal. The left capitate displayed eburnation and pitting of the articular surfaces. These probably indicate occupational stress. A single incidence of osteochondritis was noted on the distal articulation of the left humerus and was possibly related to the aforementioned wrist pathologies.

Skeleton 9067 [late 18th/early 19th C-coffin]

Table 1 gives the list of elements present in this inhumation. Standard criteria suggest this individual was female, 17 to 23 years old, with an estimated stature of 159-167 cm (5'3" - 5'6").

Only dental abnormalities and pathologies were noted on this skeleton; enamel hypoplasia lines were visible on the anterior teeth and a caries cavity was present on the mesial face of the left upper 2nd molar.

Skeleton 9075 [11th C]

The recovered elements of this incomplete skeleton are given in Table 1. Standard criteria suggest this individual was male, more than 35 years in age, with an estimated stature of 158-164 cm (5'2" - 5'4").

Several pathologies were noted on this skeleton. Schmorl's nodes were present on some thoracic vertebral centra fragments. Moderate osteophyte growth was displayed around the periphery of all lumbar and lower thoracic vertebral bodies and around some spinous facets. Osteophyte growth was severe around both borders of the 2nd lumbar vertebra, the inferior surface of the 1st and the superior surface of the 3rd lumbar vertebrae, and slight on the sacrum.

All the long bones, including the metapodials, displayed very robust muscle insertions.

Skeleton 9078 [late 18th/early 19th C-coffin]

The elements of this incomplete skeleton are given in Table 1. No sex, age or stature estimations were possible for this individual.

#### **Charnel material**

A further 23 contexts contained human bone, of which 21 also included animal bone fragments. Table 2 gives a list of the human fragments present in each of these contexts. Most contexts contained less than ten fragments and ten deposits produced only single fragments.

The largest amount of charnel material was recovered from three contexts (9049, 9051, 9074) and included mainly long bones, with a few skulls. Vertebrae, ribs and pelves were noticeably less well represented and there were more leg bones than arm bones.

A number of pathological abnormalities were noted on the incomplete skull recovered from Context 9049. Calculus was identified on the anterior teeth, whilst extensive remodelling of the 4th premolar and the 1st molar root sockets suggest that these teeth had been lost some time prior to death. Almost no crown remained on the 3rd premolar and 2nd molar, the former being abnormally worn, the latter heavily worn.

Skull 1 from Context 9051 was reasonably complete enabling sex and age to be established (female, 35-45 years old). The right lower 3rd molar and upper 2nd and 3rd molars were lost antemortem and the tooth sockets were actively remodelling at the time of death. All lower teeth had moderate calculus deposits on both sides, although heavier on the lingual aspect and a caries cavity was evident on the distal surface of the left lower 2nd molar. The cranial vault appeared to be slightly abnormally thickened although no diploe were visible.

Skulls 2 and 4 from the same context (9051) were probably from male individuals, although neither was sufficiently complete for this to be established precisely. Skull 3 possibly represented a female individual, although again this could not be confidently determined.

Several almost complete femora recovered from these deposits were of use for stature estimation. As sexing individual femurs is not possible figures for both male and female estimations are given in Table 3. Bone 1 from Context 9049 was unusually gracile

for its length and the linear aspera, although prominent, was round in profile rather than square.

These two contexts (9049 and 9051) contained the remains of at least 12 individuals (including at least one juvenile and one neonatal from Context 9049).

The bones from Context 9074, initially thought to represent a single individual, were, on closer examination, the remains of at least three individuals.

#### Animal remains

A total of 1025 animal bone fragments (14714 g) were recovered from the 27 contexts recorded in detail, of which 295 fragments (9300 g) were identifiable to species or species group. Table 4 gives the numbers of fragments by species and by pottery spot date.

Preservation of the recorded bone groups was mostly extremely variable. Nearly every deposit contained differing amounts of battered and/or rounded fragments, in addition to well-preserved bones. Very eroded bone surfaces were noted in material from some contexts; particularly noticeable in Contexts 9064, 9080 and 9134. Variation of colour also existed within material from individual deposits. Twenty-one of the recorded assemblages included fragments of human bone.

Four cat bones were identified from Context 9011, a deposit with an 11th century pottery spot date of. Other cat fragments were recovered from deposits 9000 and 9004, tentatively dated to the 19th century (scanned material). The bones from all three deposits probably represent the same cat on the basis of the large size of the animal represented and on the similarities of the preservation and colour of the bones.

Mammal species present included the major domestic species; cattle, caprovid, pig and horse. Cat and rabbit (*Oryctolagus cuniculus* (L.)) were also noted. Deer were represented by a single antler fragment (9045), which was tentatively identified as red deer (*Cervus elaphus* L.)

Bird species included single fragments representing goose (*Anser* sp.), duck (*Anas* sp.), and cf. Turdidae (blackbird family), along with eight chicken bones.

Seven fish fragments were recovered, including a

?whiting (cf. Merlangius merlangus (L.)) post-temporal.

#### Discussion

## Sediment samples

The inorganic component of the GBA sample is a mixed assemblage of building debris. Much of the coarse quartz sand probably represents rotted mortar. The raspberry seeds could represent a trace of food waste; however, the very limited nature of the plant macrofossil assemblage and absence of invertebrates prevents any further interpretation.

None of microfossil 'squashes' contained eggs of internal parasites or any other interpretatively significant remains.

#### Human remains

There are not enough burials for any group analysis to be undertaken, particularly as they are apparently not all contemporaneous. The human bone fragments from the very mixed contexts are of little interpretative value other than as an indicator of the reworking of deposits.

Contexts 9049, 9051 and 9074 appeared to contain material that had been disturbed and deliberately reburied as a group as opposed to accidental disturbance and incorporation into deposits. Material from all three contexts was dated to the 10th/11th or 11th centuries but 9049 and 9051 were both the backfills of late 18th/early 19th century graves. This suggests that the new grave cuts were filled with deposits containing the remains of 10th to 11th century individuals. Context 9074 is the backfill of an 11th century grave and the mixed preservation of fragments from this deposit suggests the

inclusion of disturbed earlier material.

The unequal representation of elements in the charnel deposits is most likely a result of taphonomic factors, and the fact that the material has been thoroughly disturbed and redeposited.

#### Animal remains

The condition of the animal bone also appears to imply the inclusion of redeposited or residual material. It seems likely that the digging of graves in the 18th century has led to much disturbance of the underlying features and material. Even though pottery spot dates suggest that some deposits can be reasonably tightly dated to the 10th and 11th centuries, the animal bone seems to be of very mixed origin. With this in mind, further analysis of this assemblage would provide little information of use for either archaeological or zooarchaeological interpretation.

# Retention and disposal

It is recommended that all the vertebrate remains are kept for the present.

#### **Archive**

All material is currently stored in the Environmental Archaeology Unit, University of York, along with paper and electronic records pertaining to the work described here.

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Table 1. Articulated human remains from the Former Female Prison, York. Key: unid = unidentified; frag/s = fragment/s; M = molar; P = premolar;  $DP = deciduous\ premolar$ ; I = incisor; L = left; R = right; dist = distal; prox = proximal.

premoia	T, D1 decidious premotar, 1 theisor, E tejt, K Tight, dist	CILD	ui, p	ron pr	Oxiniui.
Context No.	Bones present	Sex	Ag e	Stature	Notes
9053	Cranium, R maxilla I1-M2, L maxilla I1-M2; R mandible I1-M3, L mandible I1-PM4, M2; 7 cervical, 12 thoracic and 3 lumbar vertebrae; numerous rib frags; L&R clavicles, scapulae, humeri, radii & ulnae; all R carpals, metacarpals & 10 phalanges; 6 L carpals, all metacarpals & 7 phalanges; frags both pelves; L&R femora, patellae, tibia & fibulae; all R tarsals, metacarpals and 6 phalanges; 6 L tarsals, all metacarpals and 9 phalanges.	F	~25	162.7c m +/- 3.55	Unclear if rest of M3s would have developed or were congenitally absent. Lower LM1 lost antemortem, well remodelled. Many hypoplasia lines on anterior teeth. Slight calculus labial surface lower incisors. Schmorl's nodes from T5-L2 both surfaces. Skull sawn in half horizontally. Many wormian bones in lambdoid suture, 2 in coronal suture.
9056	Cranium (except sphenoid area), R maxilla I1-P3, M2-3, L maxilla I1-P4, M1,M3, R mandible I1-M3, L mandible I1-M3; 7 cervical, 9 thoracic & 5 lumbar vertebrae; numerous rib fragments; L&R clavicles, scapulae, humeri, radii & ulnae; 3 R carpals, all metacarpals & 9 phalanges; 3 L carpals, all metacarpals & 7 phalanges; part sacrum, most R pelvis, part L pelvis; L&R femora, patellae, tibia & fibulae; all L&R tarsals & metatarsals, 6 L &7 R phalanges.	?M	>25	174.0c m +/- 2.99	Caries cavity occlusal surface R lower M2. Hypoplasia lines on anterior teeth, few on posterior. Calculus most teeth, worst on R lower M1&2. Schmorls nodes-L2-5. Ossification of spinal ligaments. Osteophyte growth dist articulations of both radii and prox articulation of L 2nd m/c, eburnation on capitate. Osteochondritis dist humerus. Mandibular tori. Lump on lower mandibular border.
9067	Cranium, R maxilla II-M3, L maxilla II-P3,M1-3, R mandible II-M3, L mandible II-M3; 7 cervical vertebrae & numerous centrum and spine fragments; numerous rib fragments; L&R clavicles, scapulae, humeri, radii & ulnae; all L&R carpals & metacarpals, 14L&7R phalanges; both pelves almost complete; L&R femora, patellae, tibia & fibulae; all L&R tarsals & metatarsals, 7L & 9R phalanges.	F	17- 23	163.0c m +/- 3.55	Enamel hypoplasia lines on anterior teeth. Caries cavity on mesial face L upper M2.
9075	3 thoracic centra, T11&12, 5 lumbar vertebrae; part of sternum; numerous rib fragments; R dist humerus, R radius & ulna, L dist radius & ulna; 1 R carpal, 3 metacarpals & 3 phalanges; 5 L metacarpals & 6 phalanges; part sacrum, most both pelves; L&R femora, tibia & fibulae; all L&R tarsals & metatarsals, 6L & 7R phalanges. Small piece of ischiopubic ramus of another individual	M	>35	160.8c m +/- 2.99	Osteophyte growth on lumbar and lower thoracic vertebrae and around spinous facets. Severe around L2 both borders, L1 inferior and L3 superior, very slight on sacrum. Schmorls nodes on some thoracic centra fragments. Very robust muscle insertions on all long bones and also on metapodials.

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9078	Dist frag R femur, L&R patellae, tibia & fibulae; 6R tarsals, 4 metatarsals; 3L		
	tarsals, all metatarsals; 10 phalanges		

Table 2. Disarticulated human material from the Former Female Prison, York. Key: unid = unidentified; frag/s = fragment/s; M = molar; P = premolar;  $DP = deciduous\ premolar$ ; I = incisor; L = left; R = right; dist = distal; prox = proximal.

Context No.	Bones present	Se x	Age	Notes
9000	Vertebral body fragment, R calcaneum, L femur shaft, fibula shaft frag			
9002	1 shaft frag			
9007	L dist humerus, L radius shaft, R metatarsal 2			
9014	1 skull frag			
9017	1 phalanx			
9032	1 shaft frag			
9035	1 skull frag			
9037	1 metapodial frag			
9047	Pelvis frags, vertebral body, L tibia, L astragalus, R calcaneum, 3 phalanges			Probably more than one individual.
9048	1 R tarsal, 1L&1R metatarsal, 2 vertebra frags, 1 prox tibia frag, 10 unidentifiable shaft frags.			

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Context No.	Bones present	Se x	Age	Notes
9049	1 skull, cranial vault & R face, R maxilla I2-P3, M2; 4 other skull frags; 18 rib frags, 4 vertebra frags; 2L&1R scapulae, 2L humeri, L&R ulnae, L radii; 3 pelvis frags (1 juvenile), 5L (1 juvenile) & 4 R femora (also 1 NEONATAL femur), 4L & 2 R tibiae (also 1 juvenile tibia frag), L patella, 2L &1R metatarsals, 1R metacarpal, 1 phalanx, L calcaneum, 3 shaft frags, 1 scapula frag, 3 unidentifiable frags.			Skull- I1 and ?M3 lost postmortem, P4, M1 lost antemortem. M2 very abnormal wear, almost no crown, P3 also worn to roots. Calculus on labial surface I2 and C. Calcaneum with marginal lipping on all articular facets. 3 juvenile and 1 neonatal fragments. At least 4 individuals
9051	Skull 1 - left face missing, R maxilla C-M1, R mandible I1-M2, L mandible I1-M3. Skull 2- parietals, occipital and parts of temporals present. Skull 3- frontal. Skull 4 - frontal. Mandible 1 - R side P3-M3 present. Mandible 2 - R side no teeth. R upper M1 and M2 loose teeth. 29 other skull frags. 29 rib frags, 9 vertebra frags. L clavicle, L scapula + 3 frags. L humerus radius and ulna (probably same individual). 1R, 2L humeri, 1L&1R radii, 1L&3 R ulnae, 4 metacarpals and 3 phalanges. L pelvis, sacrum 2 lumbar vertebrae (probably same individual). 3R pelvis frags, 3L&5R femora (+1 shaft), 3R tibiae (+4 frags). 1L&1R astragalus, 1 L calcaneum, 1 cuneiform, 1 metatarsal. 22 unidentifiable shafts.			Skull 1-Female, tooth wear suggests 35-45yrs, cranial vault thickened but no visible diploe, moderate calculus all lower teeth lingual side. R lower M3 & R upper M2&M3 lost antemortem active remodelling, lower LM2 caries cavity distal side. At least 6 individuals.
9054	1R&3L femur frags, 1L&1R tibia, 2 clavicle, R radius, L cuboid, 1 petrous temporal, R temporal, R mandible, R zygomatic, 1 rib, 8 unidentifiable frags			mandible with very worn M3.
9064	R mandible, fibula shaft fragment, 1 phalanx			
9074	1 occipital, 1 frontal, 2 other skull frags; manubrium, 1 vertebra, 18 rib frags; L clavicle, L scapula, R humerus, R ulna, L&R radii, 2R metacarpals, 1 phalanx; sacrum, 3R pelvis, L femur, R patella, L tibia, 1L metatarsal; 9 unidentified frags			at least 3 individuals. Slight joint degeneration in one acetabulum. Exostoses around 1st costal notches and clavicular notches of manubrium.
9099	1 metapodial fragment			
9101	1 skull fragment			
9109	1 skull frag			
9132	1 fibula shaft, 1 metapodial, 1 juvenile tibia			juvenile tibia small and porous

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Context No.	Bones present	Se x	Age	Notes
9134	1 femur frag, 1 vert			
9137	1 phalanx, 1 skull frag, 2 rib frags, L astragalus, L cuboid, R metacarpal 5, R metatarsal 2			both metapodials are distal unfused
9138	1 metapodial frag			
9140	3 rib frags, R ulna, 1 radius shaft			

Table 3. Stature estimations from femora from charnel material from the Former Female Prison, York.

Context no.	ext no. Bone no. Length (mm) Female stature estimation (cm)		Male stature estimation (cm)	
9049	1	480	172.7 +/- 3.72 cm	175.7 +/- 3.27 cm
9049	2	390	150.4 +/- 3.72 cm	154.2 +/- 3.27 cm
9049	3	468	169.7 +/- 3.72 cm	172.8 +/- 3.27 cm
9051	1	406	154.0 +/- 3.72 cm	158.0 +/- 3.27 cm
9051	2	402	153.4 +/- 3.72 cm	157.1 +/- 3.27 cm

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Table 4. Animal remains by pottery spot dates from the Former Female Prison, York. Key: ?A/S = ?Anglo-Scandinavian.

species		Roman	?A/S	9/10thC	10thC	10/11thC	11thC	15thC	16thC	17/18thC	18thC	18/19thC	Total
Oryctolagus cuniculus (L.)	rabbit	-	-	-	1	-	-	-	-	-	1	-	1
Felis f. domestic	cat	-	-	-	ı	-	5	-	-	-	-	-	5
Equus f. domestic	horse	-	-	-	ı	-	3	-	-	-	-	-	3
Sus f. domestic	pig	-	-	-	ı	7	13	-	-	-	1	-	21
cf. Cervus elaphus L.	red deer	-	-	-	-	1	-	-	-	-	-	-	1
Bos f. domestic	cattle	7	-	5	3	60	95	3	-	2	19	-	194
Caprovid	sheep/goat	-	1	1	-	21	20	-	-	-	9	-	52
Anser sp.	goose	-	-	-	-	-	-	1	-	-	-	-	1
Anas sp.	duck	-	-	-	-	-	-	-	-	-	1	-	1
Gallus f. domestic	chicken	-	-	-	1	1	2	-	-	-	4	-	8
cf. Turdidae	?Turdidae	-	-	-	-	-	-	-	-	1	-	-	1
Unidentified fish		-	-	-	-	-	-	-	-	-	7	-	7
Unidentifiable		16	8	8	15	215	282	25	2	13	143	3	730
Total		23	9	14	19	305	420	29	2	16	185	3	1025