Ancient Monuments Laboratory
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Summary

59 fragments of bones and teeth from two Bronze Age barrows were studied. The species identified in both barrows A and C are cattle, caprine (probably sheep only); in barrow A, horse/pony and dog; and in barrow C, ?red deer and ?pig. Cattle remains are most common, followed by those of sheep and horse/pony. Species frequencies probably reflect the methods used to recover faunal remains. The anteroposterior crown lengths of two cattle lower third molar teeth measure 39.6 and 39.4mm - equivalent to large British Bronze Age cattle. Measurements of several bones and teeth are provided. The enamel folds of a well preserved horse/pony upper (?third) premolar tooth are figured.

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ANIMAL BONES FROM SITES A & C AT WILSFORD

A small collection of animal bones and teeth (to be housed in the Salisbury museum) has been entrusted to me for identification by Dr Edwina Proudfoot. They were excavated in 1960 from the Bronze Age Pond-barrows at Wilsford, Wiltshire, southern England - map reference SU/118398. These barrows are dated to c. 1700-1400 bc. (Among them a shaft - referred to as site B - was discovered which was excavated by Proudfoot and Ashbee. Bones from this shaft are reported separately by Caroline Grigson.)

I have been able to identify 59 fragments of bones and teeth (table 1). Most belong to cattle, horse and sheep (?and goat). Deer, pig and dog, while rare, are also present. Preservation and retrieval biasses have undoubtedly affected the frequencies of species within the assemblage, and large animals are probably over-represented. Bone preservation is fair. Several bones exhibit gnaw marks, and most of the long bones had lost their epiphyses; probably a result of the activity of dogs.

With such a small sample it is difficult to draw any far reaching conclusions. But cattle appear to be more common than sheep, and both are more common than horse. In southern Britain sheep remains become more common relative to cattle in the Iron Age. In the shaft at Wilsford, Grigson found that sheep outnumber cattle by 4:1 which, she suggests, gives it an "Iron Age look". However, a relative scarcity of sheep at Wilsford A and C (and notwithstanding recovery biasses) indicates a Bronze Age for these two barrow assemblages.

A comparison of assemblage A with assemblage C (table 1) reveals the absence of horse from site C, but in view of the smallness of the samples, this observation may be of little significance. Similarly, there are insufficient bones to test whether the human inhabitants at Wilsford had a preference for any part of the anatomy of these animals.

The lengths of two complete cattle lower third molars are compared with M3s from other Bronze Age and Neolithic sites (fig 1). The two Wilsford teeth are large.

A well preserved equid upper pre-molar tooth - probably P^3 - came from site A. The enamel pattern of its occlusal surface, depicted in figure 2, shows an elongated protocone; typical of horse/pony, *Equus caballus*. The Wilsford equid tooth is slightly larger than the P^3 from the Iron Age pony found at Hook, Hampshire (Davis, forthcoming; see table 2). With a crown height of 39 mm this Wilsford equid was probably aged between 9 and 13 years at death (see Levine, 1982). Another equid tooth from site A - an upper molar - is very worn and must have come from a very old animal. Perhaps these were ponies used for transport.

Measurements (see table 3 for miscellaneous teeth and bones) and figures are provided here in order to facilitate comparison with data from other sites in this part of England.

Table 1
Animal bones and teeth from Wilsford A and C according to anatomical provenience and species

	SITE A		SITE C	
	L	R	L	R
CATTLE				
horn core	–	–	1	–
zygomatic bone	–	–	1	–
upper premolar	1	–	1	1
upper molar	1	1	1	–
P_4	1	–	–	–
$M_{1/2}$	–	–	–	1
M_3	1	–	1	1
humerus shaft	–	–	–	1
radius prox	–	–	1	–
radius shaft	–	–	1	–
ulna	–	–	–	1
dist metapodial fragment	1		–	
second phalanx	–	1	–	–
SHEEP/(GOAT)				
upper molars	7		–	
lower molars	2	3	1	–
humerus shaft	–	1	–	–
humerus distal	–	1	–	–
metacarpal shaft	1		–	
acetabulum	–	1	–	–
tibia shaft	–	1 1	–	1
tibia distal	–	1	–	–
metatarsal shaft	–		1	
HORSE/PONY				
incisors	3		–	
P^3	–	1	–	–
M^3	–	1	–	–
upper molar	–	1	–	–
scapula	1	–	–	–
calcaneum	1	–	–	–
?RED DEER				
antler tine	–		1	
PIG				
upper canine frag	–		1	
DOG				
tibia distal	–	1	–	–
LARGE UNGULATE				
occipital condyle	1		–	
vertebra	1		2	
rib	1		–	
scapula	–	–	1	–
ilium	1	–	–	–

table 2

Measurements, taken across the occlusal surface, of the Wilsford equid P^3 with those of the Iron Age pony from Hook, Hampshire

		L	Lp	W
Hook left	P^3	26.1	11.2	25.4
Hook right	P^3	26.4	12.0	21.9
Wilsford	$P?^3$	27.7	14.1	27.7

(L = mesio-distal length of crown

Lp = maximum length of protocone

W = bucco-lingual width of crown)

Table 3. Measurements (in millimetres)

Cattle second phalanx: (site A) proximal width = 25.8

Cattle M_3:

	l	w.ant	w.cent	ht
(site C) "34"	-	15.9	15.1	29.6
(site C) "21"	39.6	16.3	15.3	44.7
(site A) "11"	39.4	15.4	13.8	32.1

(l = antero-posterior crown length, w.ant = maximum bucco-lingual width of first cusp, w.cent = maximum bucco-lingual width of the central cusp, ht = crown height measured up the buccal surface of the central cusp)

Cattle horn core (site C)
Minimum and maximum diameters at base = 57 X 65

Dog tibia distal fragment (site A):
width (Bd) = 21.9 height (antero-posterior width; Td) = 15.9

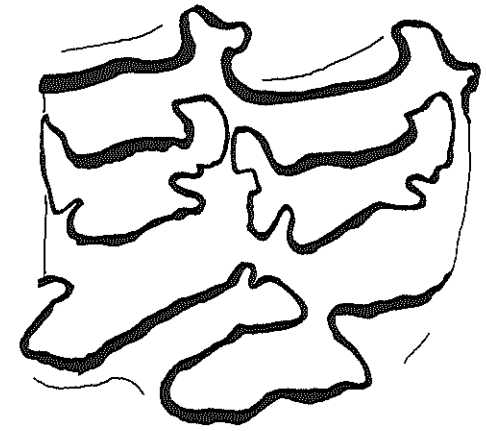
Legends to figures.

Figure 1

British Neolithic and Bronze Age cattle size. The antero-posterior lengths of the two cattle lower third molars from Wilsford (shown as black squares) are plotted with other Bronze Age (stippled) and Neolithic (line) British cattle. Data from Grigson, 1986.

Figure 2

Occlusal view of the equid upper tooth, probably P^3 from site A of Wilsford (SW "37" S30' W24'6" depth 1'2" layer BDS). The enamel is shown black. Note the elongated protocone which identifies it as *Equus caballus* - horse or pony.



3 cm

FIG 2.

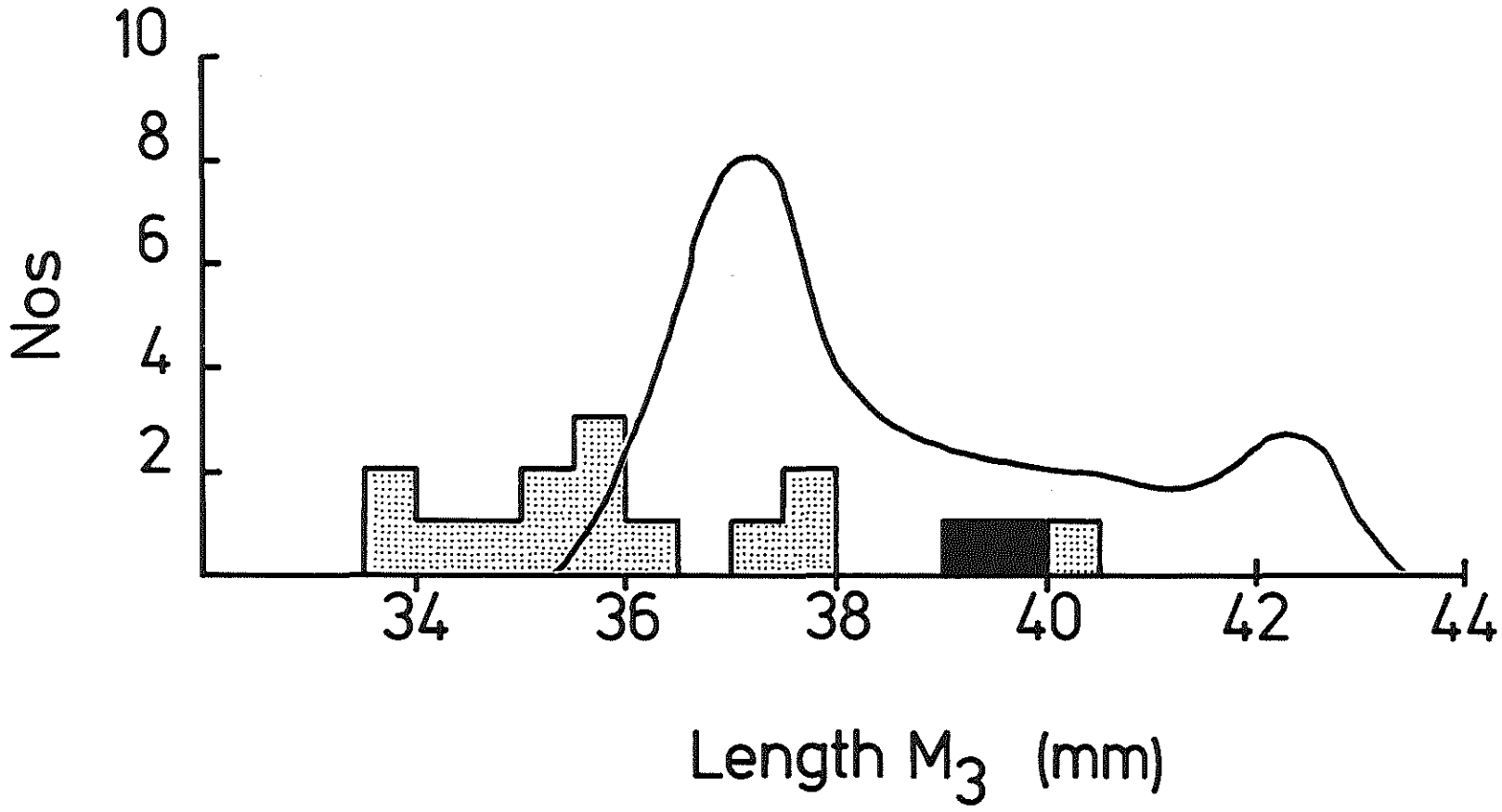


FIG 1.

GB Bos RM3 Line = early + late Neolithic Stippled = Bronze Age.

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ANIMAL BONES FROM SITES A & C AT WILSFORD

INVENTORY (KEY; numbers enclosed in a triangle are here placed in double inverted commas L and R refer respectively to the left and right side of the limb or animal)

SITE A
X8W "50" S34 W17'6 D1'6 layer BD5
shaft frag tibia small ungulate
shaft frag ? large ungulate

IX "27" S37'9" W12'8" depth 1'7" layer BDS
occipital condyle ?cattle L

VIII "26" S18'6" W31'8" depth 1'9" layer BDS
ilium part of pelvic girdle cattle L
small rib

X SW Quad "52" D1'7" layer BDS
upper molar tooth sheep/goat
middle part of mandible (L) with M1 and M2

X "36" SW S27' W30'6" depth 1'4" layer BDS
acetabulum+pubis/ilium/ischium sheep/goat R
three upper molars sheep/goat L
distal radius shaft frag ??pig

IX "18" SW S37'6" W12'3" depth 1'4" layer BDS
lower molar tooth M?1 sheep/goat
central frag of ?horse/pony upper tooth

X SW "37" S30' W24'6" depth 1'2" layer BDS
upper molar tooth cattle R
distal humerus frag sheep/goat R
upper P?3 horse/pony R (see figure 2)

SW "16" S39' W12' depth 1'
frag of parietal ?cattle/horse

X SW W31'6" S23' depth 1'6" layer BDS bottom
upper molar tooth M?3 sheep/goat R
horse/pony incisor
phalanx 2 cattle R

X SW depth 2'8" chalk layer
tibia shaft ?sheep/goat R (very well fossilised unlike the rest of the Wilsford bones; both ends gnawed)

X S25' W29'3" depth 1'7" layer BDS
metacarpal shaft - flattened at the end to make a tool ?sheep
vertebra frag ?cattle/horse

IX SW "33" S36' W12'2" depth 1'9" layer BDS
two incisors horse/pony

"65" ditch in west bank
shaft frag of long bone ?tool ?cattle
shaft of humerus ?sheep/goat R

VIII "22" SW S19'4" W30'9" D1'5" layer BDS
lower molar frag sheep/goat

X "51" SW Quad D.2'app stony layer
upper M3 tooth horse/pony R
lower part of calcaneum *Equus* L

VI SW "10" edge of ditch dark silt S15' W30' depth 14"
distal tibia sheep R (chewed)

IX SW "21" S35'3" W14' D1'6" layer BDS bottom
upper M3 tooth sheep/goat L
lower M?2 tooth sheep/goat
metapodial condyle frag cattle (burnt)

X SW "40" S34' W26' D1'6" layer BDS
rib cattle/horse
upper premolar tooth cattle R
upper molar tooth cattle

cutting VIII "11" W9'6" S3'5" depth 1'3"
isolated lower third molar tooth cattle L
scapula *Equus* L (coracoid fused)

SW ditch VI
lower P4 cattle L

X SW Quad S37'6" W14'11" D1'7" layer BDS
cranium frag ?parietal bone cattle/horse

XII depth 1'4"
anterior part of mandible ramus horse/cattle R
upper molar tooth *Equus* very old individual R (most of the crown worn down)

IX "29" SW S36'7" W12'4" depth 1'9" layer BDS
proximal part of tibia shaft sheep/goat

X SW "39" S30'5" W27'7" depth 1'2" layer BDS
upper M3 sheep/goat R
distal tibia dog R

SITE C
N60 "59"
fragment of pig upper canine tooth

N60 "7"
antler fragment

"27" depth 8" top of ditch I silting
proximal radius + shaft cattle L
two upper adult premolar teeth L,R

Burial VIII next E "54"
upper molar tooth cattle ?L

Cutting IV top of ditch I silting "16"
ulna cattle R

Cutting III E24' S3'6" depth 1'8"
scapula (half glenoid surface only) cattle L

Cutting V "20" N21'7" E12' depth 8"
radius shaft cattle ?L

Cutting I "8" N12' E5'6" depth 1'1" ditch II
zygomatic bone cattle/horse L

"31" ditch I
lower molar (M1 or M2) tooth cattle

SE Quad "34" top of outer ditch
vertebra cattle/horse
distal half of humerus shaft cattle R
isolated broken lower third molar tooth cattle L

NE Quadrant "19" top of ditch I
upper molar tooth cattle L
vertebra fragment cattle/horse
lower molar tooth sheep/goat

Cutting III "14" E22'8" S3'6" depth 7" layer-top of ditch
shaft of tibia sheep/goat R
metatarsal shaft ?sheep/?roe deer
upper premolar teeth ?P3 and P4 cattle L

VI top of ditch II "22"
broken upper molar tooth cattle

Cutting V "21" top of ditch II
horn core cattle L diameters at base = 57X65 mm
mandible ramus + second and third molar teeth cattle R

Burial VII "45" or "10"
pendant fragment of pig canine tooth

Burial "44" or "10"
ring this is probably bone.