Ancient Monuments Laboratory
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ANIMAL BONES FROM BAINESSE FARM, A ROMAN ROADSIDE SETTLEMENT NEAR CATTERICK (YORKSHIRE), EXCAVATED IN 1980 AND 1981.

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Summary

A collection of animal bones from the roadside settlement at Bainesse Farm, dating to the 1st - 3rd centuries AD, includes 22 species. Most of the animal bones are of cattle, sheep and pig and probably derived from kitchen waste. There is no evidence that sheep changed in size during the occupation of Bainesse Farm. Most of the sheep were young and most of the cattle were adult, but not old. There is no very clear-cut evidence to indicate whether Bainesse Farm was a producer or a consumer site. The presence of some whole animal skeletons and some very young animals may argue for production.

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ANIMAL BONES FROM BAINESSE FARM, A ROMAN ROADSIDE SETTLEMENT NEAR CATTERICK (YORKSHIRE), EXCAVATED IN 1980 AND 1981

INTRODUCTION

The Roman roadside settlement at Bainesse Farm in North Yorkshire was excavated in 1980 and 1981 by P.R. Wilson of the Central Excavation Unit of the Department of the Environment (Wilson, 1984). The settlement straddled Dere Street - a Roman road which connected York to Hadrians Wall - and was three kilometers south-east of the Roman fort and town of *Cataractonium* (today Catterick). Unlike the fort at Catterick, which is believed to have been abandoned in the early second century AD, there is no evidence for any break in the occupation at Bainesse Farm: it was probably occupied continuously from c. 80 AD to the end of the third century. According to Wilson (pers. comm.) all the buildings are Romanised in style. There is no evidence for any Iron Age (i.e. native) type buildings. Bainesse Farm then, seems to have been a new settlement or "roadside village" which sprang up by the side of Dere Street.

The aim of this report is to describe the animal remains from this site.* Their particular interest is that they come from the northern part of Roman Britain which allows comparisons with contemporary animal bones from southern and central England.

METHODS

Bones were recorded by area and context using the Ancient Monuments Laboratory Osteometry Data Capture Program (Jones et al., 1980). Areas and contexts were divided into the following categories: pit, ditch and gulley fills, layers and structures**. Animal bones were identified to species and part of anatomy wherever possible. Ribs and vertebrae, however, were not identified to species but were merely placed in one of two categories "Large Ungulate" (ie, cattle, red deer and horse) and "Small Ungulate" (sheep, goat, pig and roe deer; see table 3).

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* The animal bones from Bainesse Farm are in the Yorkshire Museum, York. Archive catalogues providing full details of the identifications of bones and their measurements are available in the Ancient Monuments Laboratory, the Central Excavation Unit of English Heritage and the National Monuments Registry.

** Layers are "spreads and occupational deposits usually around the area of the buildings". Examples of structures are fills of post holes and foundation trenches.

Some sheep and goat bones could be distinguished using the criteria described by Boessneck (1969). However, in general no attempt was made to distinguish between bones of these two species and caprine bones were recorded as "sheep/goat". In addition the measurements recommended by Payne (1969) for separating sheep and goat metacarpals were plotted in order to determine the approximate ratio of sheep to goat.

Detailed phasing information of contexts was unfortunately not available untill after these bones were analysed and insufficient time prevented a general re-analysis of the data by phase. One exception is the pilot analysis of size variation. The measurements of several frequently occuring parts of the anatomy such as distal tibia were analysed by phase in order to determine whether animal size changed during the first to third centuries.

Grant's (1975, 1982) eruption and wear stages were recorded for cattle, sheep/goat and pig teeth when two or more teeth were present in a mandible. The wear stages of single and isolated teeth were not generally recorded, most of these teeth were counted in an "unassigned" category. The state of fusion of limb-bone epiphyses was also recorded. Measurements taken follow those suggested by von den Driesch (1976) and Jones et al., (1980).

RESULTS and DISCUSSION

Species present and their frequencies

Most of the 25,042 recorded bones and teeth from phased contexts (table 1) belong to large and small ungulates, i.e., cattle and sheep/goat. Few of the latter were identified to species. Among the fragments of skulls and horn cores 21 were recognised as sheep and 7 were recognised as goat. However, this probably does not represent the true proportion of goat at Bainesse Farm but merely reflects the more easily recognisable goat-skull fragments. A more accurate estimate of the ratio of goats to sheep is supplied by the identifications of the distal metacarpals. A plot (fig 1) of measurements taken of 19 sheep/goat distal metacarpals and one goat distal metacarpal indicates that the 19 belonged to sheep, and confirms that the other indeed belonged to a goat. It is most likely that goats were rare. Bones of pig, horse and dog (some of which were rather small and had to be recorded in table 1 as dog/fox) are also fairly well represented. Other mammals are present in small numbers and are listed in table 1. Altogether 12 different bird species/groups are represented (tables 1 and 1a) and of especial note is the presence of a single bone of the golden eagle*. Most, perhaps all, of 81 galliform bones probably belonged to chicken, but their identification as one of the other Galliformes such as pheasant cannot be ruled out. The presence of frog and toad is also noted. There is no substantial evidence for hunting on this site given the very small quantity of (?red) deer bones (three of the four deer bones found are antlers) and there is no metrical evidence to suggest that any of the pig bones belonged to wild boar.

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* Its identification was confirmed by Graham Cowles, curator of birds at the British Museum (Natural History), Tring.

Recovery bias has no doubt resulted in some over-representation of the cattle and horse and it is difficult to estimate what the relative importance of the different species of livestock was to the occupants of Bainesse Farm. Cattle are generally very abundant in unsieved Romano-British assemblages. Pigs, sheep and other smaller animals were probably more important than their numbers in table 1 indicate, but not to the extent that more mutton was consumed than beef: it is probably safe to assume that beef was the most common meat consumed at Bainesse Farm. This pattern fits in well with the scheme suggested by King (1978) in his review of zoo-archaeological assemblages from Roman Britain. He noted that native sites, continuing the Iron Age pattern, have more sheep, while Romanised ones have a high proportion of cattle. Recovery bias has probably affected both sheep and pig to the same extent, so that sheep probably considerably outnumbered pigs.

Condition and distribution

Preservation of the bone could be described as moderate. Bones were recovered by hand-picking, without any sieving (Wilson pers. comm.), which may explain why small bones such as carpals and tarsals and bones of animals such as rodents are relatively scarce. An analysis of the frequencies of different species found in each of the context categories (table 2) reveals, for example, that dog remains are more common in pits and horse and cattle remains are more common in ditches and gullies, and sheep, pig and birds are slightly more common in layers. Ditches and gullies were excavated with as much care as layers and structures (Wilson, pers. comm.), so that the discrepancies in cattle and horse distribution may reflect a tendency for large animal bones to have been cleared away in antiquity. Several skeletons and partial skeletons of mammals were found in pits and gullies, 2 bird skeletons were found in layers (see appendix 1).

Body-part frequency

Examination of the relative abundance of different parts of the skeleton present (table 3) shows a marked under-representation of small elements such as sheep phalanges probably due to recovery bias. If allowance is made for such recovery biasses, examination of the numbers of different parts of the skeleton indicates that all parts of the carcass are fairly equally represented. No particular parts of the skeleton are over-abundant such as skulls and limb extremities indicating primary butchery waste. The bulk of the bone assemblage from Bainesse Farm is, therefore, assumed to derive from general kitchen waste.

Measurements (appendix 2)

Plots of the distal widths of the cattle metapodials (fig. 2) indicate that the cattle at Bainesse Farm were similar to cattle found in several Roman sites in southern and central England as well as those from Piercebridge in county Durham. If we assume that cow metapodials are narrower than those of bulls, then the distribution of cattle metapodials at Bainesse Farm indicates rather more cows than bulls although not to the extent indicated by the plots (fig. 2) from Sheepen and Dodder Hill where most of the cattle metapodials probably belonged to cows. Roman cattle in England were, according to Grigson (1982) and Armitage (1982) smaller than Neolithic cattle and slightly larger than Iron Age ones.

Sheep at Bainesse Farm were small - similar in size to the modern Soay breed. Most of the dogs from Bainesse Farmm were rather similar in size and, compared to the Romano-British dogs discussed by Harcourt (1974), fall within the smaller end of his scale. A plot (figure 3) of sheep/goat distal tibia widths from phases 3 to 8 indicates that sheep at Bainesse Farm remained similar in size during the 2nd and 3rd centuries AD.

Ageing (tables 4 to 7)

a) Cattle. Cattle tooth-eruption/wear stages and limb-bone fusion states indicate that most of the cattle were slaughtered as adults. Early fusing bones (table 7a) indicate only 1% of the cattle were under 2 years at slaughter and only 5/120 of the mandibles had unworn M_2s (table 4); i.e. were less than 1-1.5 years (See Sisson and Grossman, 1975). Consideration of the bones which fuse between 2 and 2.5 years indicates that 7% of the cattle belonged to this age-group (i.e. were juvenile). Consideration of bones which fuse between 3 and 4 years indicates that 20-22% were in this age-group. 20% of the mandibles are less than approximately 3 years (as indicated by their having erupted adult teeth). Consideration of the vertebrae recorded as "cattle sized mammal" indicates that over half were probably older than 5 years at slaughter. Given this age distribution and the wide range of metapodial measurements shown in figure 2, cattle brought to Bainesse Farm may have consisted of animals which previously served as dairy cows and steers/bulls used for traction, though few cattle were very old. Interpretation of the cattle tooth-wear data have to be treated with caution due to the large proportion (36%) which were not assigned to any wear-stage (most of these were isolated teeth).

b) Sheep. Many of the sheep were slaughtered at a rather younger age than the cattle. The sheep mandibles indicate that 5% have unworn M_1s (i.e. were 5-6 months old at slaughter; Sisson and Grossman, 1975) and 16% (with unworn M_2) were less than 18 months. The early fusing bones indicate that 11% of the sheep were under 20 months at slaughter but 59% were under 2 years. Perhaps 45% were slaughtered between the ages of 15 and 24 months. 50% of the mandibles were 18-36 months old and 70% were under c. 3 years.

c) Pig. 44/80 mandibles have unerupted or unworn M_3s and must have been slaughtered before 20 months (see Sisson and Grossman, 1975) and in those with M_3 "in wear" wear is very slight. Epiphysial fusion data indicate that 84% of the pigs were slaughtered by 24 months. This is not surprising for an animal with a high reproductive rate and exploited primarily for its slaughter products (meat, skin and lard).

Pathology and traits

On the whole the animal bones exhibit little pathology. Two cattle pelves show abrasion on the ventral joint surfaces of the acetabulum and one caput femoris is eburnated with exostoses around the articulation. Two cattle metacarpals have exostoses on their distal shafts and one has an abraded medial articulation. A cattle first phalanx with exostoses around its distal end and a centroquartal fused to a distal tibia were also observed. 7/74 cattle M_3s had missing third columns (hypoconulid). Cases of pathology in sheep were even more rare. One sheep horn core was distorted, and two metatarsals and one metacarpal had exostoses around their proximal articulations. Very little pathology was observed on the dog bones: one skull from a dog skeleton in pit 84 (area 2/4) had lost its incisors during life and probably suffered abscesses in the right I^3 and P^3 regions. The corresponding mandible also showed incisor loss as well as loss of the right M_2 and M_3. One healed fracture in a tibia was observed and some slight exostoses on the other tibia and on the two ulnae.

Butchery

Cattle bones were fairly heavily butchered though bones found in ditches tend to be less so. Sheep bones however were less thoroughly butchered. For example while cattle were heavily butchered around the distal articulation of the tibia, calcaneum and astragalus, sheep tibia were often butchered midshaft leaving the astragali undamaged. Pig bones were butchered a little more than sheep. The majority of horse bones showed no signs of butchery. The horse was probably not eaten.

CONCLUSIONS

The animal bones from Bainesse Farm belonged to 22 species. Nearly 90% of the identified animal bones probably derive from general kitchen waste. Some variation has been observed of the distribution of species according to context type. As on many Romanised sites in Britain, most of the meat consumed was beef (from adult cattle), with some mutton (from young sheep), pork and fowl. There is little evidence for any hunting. The abundance of young sheep and pigs and adult, but not senile cattle, suggests that Bainesse Farm may well have been a place of consumption. However the presence of some very young animal skeletons and skeletons of whole animals both argue for "production" on site. Also all parts of the skeleton are represented. It is therefore difficult to classify Bainesse Farm as having been at either end of a producer-consumer scale. It was probably somewhere in between. The cattle were not significantly different in size from contemporary cattle in both southern and northern England, and there is no evidence that the sheep or cattle underwent any change in size during the period Bainesse Farm was occupied. Measurements of animal bones and tooth wear data for the cattle, sheep and pig are given and should serve as a contribution towards the growing corpus of zoo-archaeological data.

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Figure 1

Metric separation of sheep from goat metacarpals (after Payne, 1969). A scatter diagram of 'width of medial condyle' (Jones' et al. measurement 11; horizontal axis) against 'minimum medial depth of distal condyle' (Jones' et al. measurement 7; vertical axis).

Key: "**s**" = modern sheep in the AM Laboratory comparative collection (most are Soay sheep), **G** = four modern goats in the AM Laboratory comparative collection, **closed circles** = specimens from Bainesse Farm (the arrowed specimen was also identified on morphological grounds as 'goat').

Figure 2

Measurements of cattle distal metapodial widths from the Roman period in southern and northern England plotted from the following sites:

Piercebridge, Durham	3rd cent. AD	(Gidney & Rackham, 1986)
Catterick Bridge, N. Yorks.	1st - 2nd cent. AD	(Meddens, this vol.)
Bainesse Farm, N. Yorks.	1st - 3rd cent. AD	(this report)
Colchester, Essex	1st - 5th cent. AD	(Luff, 1982)
Winchester Northern Suburbs, Hants.	3rd - 4th cent. AD	(Maltby, 1987)
Owslebury, Hants.	3rd - 4th cent. AD	(Maltby, 1987)
Owslebury, Hants.	1st - 2nd cent. AD	(Maltby, 1987)
Sheepen, Essex	1st cent. AD	(Luff, 1982)
Dodder Hill, Hereford & Worcester	1st cent. AD	(Davis, 1988)

Figure 3

Measurements of sheep/goat distal tibiae from Bainesse Farm. A plot of tibia Bd from phases 3 and 4 (117-150 AD); 5 and 6 (150-200 AD); 6/7; and 7 & 8 (200-340 AD).

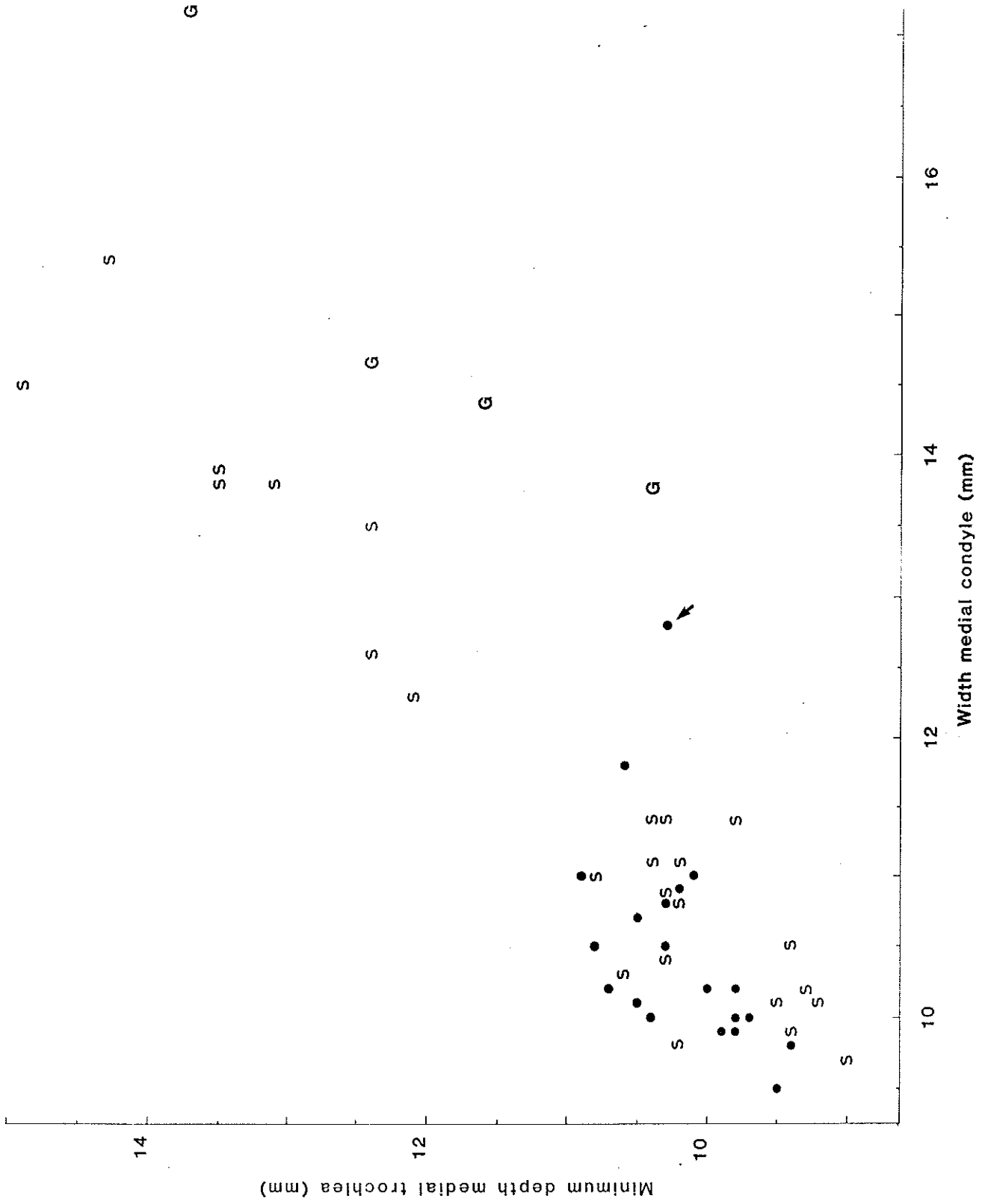
Minimum depth medial trochlea (mm)
14
12
10
Width medial condyle (mm)
10
12
14
16
G
S

Figure 1

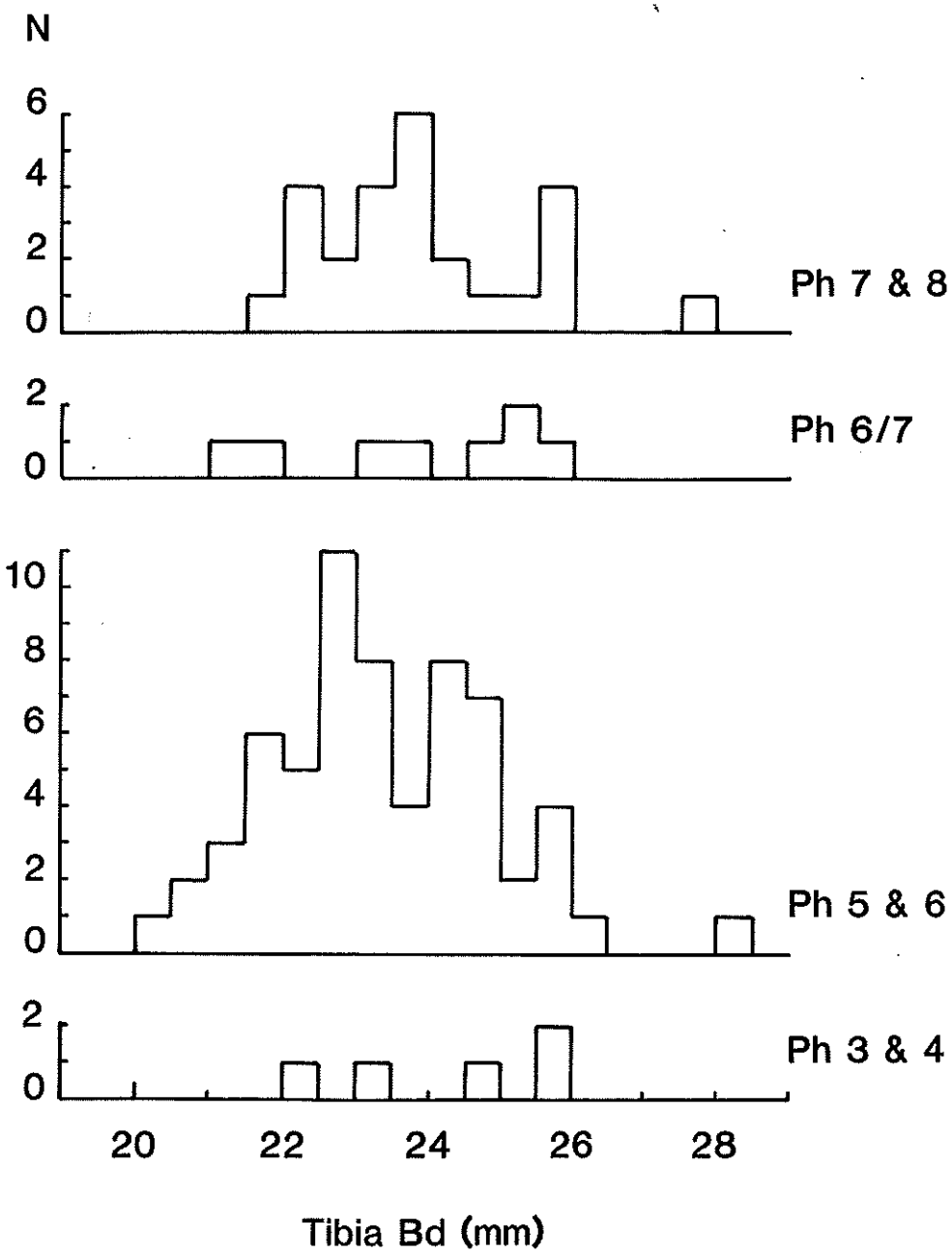
N
6
4
2
0
Ph 7 & 8
2
0
Ph 6/7
10
8
6
4
2
0
Ph 5 & 6
2
0
Ph 3 & 4
20
22
24
26
28
Tibia Bd (mm)

Figure 3

Table 1.

Bone counts of each species and category from each area at Bainesse Farm CRU 46.

	Area 1	%	Area 2/4	%	Area 14/20	%	Area 5	%	Area 13	%	Area 12	%	Area 10	%	Total	%
Cattle	1687	13	400	9	222	22	86	14	301	14	72	14	516	16	3284	13
Horse	239	2	228	5	4	-	43	7	104	5	32*	6	114	4	764	3
Red deer	1	+	-	-	1	+	-	-	1	+	-	-	-	-	3	+
Red/fallow deer	1	+	-	-	-	-	-	-	-	-	-	-	-	-	1	+
Large ungulate	3682	28	2340	51	367	37	196	33	735	33	285	57	1300	40	8907	36
Sheep	17	+	2	+	-	-	-	-	-	-	-	-	2	+	21	+
Goat	5	+	1	+	-	-	-	-	1	+	-	-	-	-	7	+
Sheep/goat	1433	11	178	4	86	9	65	11	301*	14	15	3	118*	4	2196	9
Pig	564	4	91	2	48	5	19	3	116	5	7	1	81	3	926	4
Small ungulate	3261	25	407	9	195	20	90	15	467	21	30	6	337*	10	4787	19
Dog	72*	1	170*	4	1	+	70*	12	22	1	2	+	21	1	358	1
Dog/fox	3	+	14	+	-	-	-	-	2	+	-	-	5	+	24	+
Hare	2	+	-	-	-	-	-	-	-	-	-	-	-	-	2	+
Cat	3	+	-	-	-	-	-	-	-	-	-	-	-	-	3	+
Water vole	3	+	-	-	-	-	-	-	-	-	-	-	-	-	3	+
Unidentified mammal	1819	14	695	15	55	6	25	4	158	7	55	11	726	22	3533	14
cf Domestic fowl	57	+	4	+	2	+	8	1	7	+	-	-	3	+	81	+
Domestic goose	5	+	1	+	1	+	-	-	-	-	-	-	-	-	7	+
Domestic duck/mallard	2	+	3	+	-	-	-	-	-	-	-	-	-	-	5	+
Duck	1	+	-	-	-	-	-	-	-	-	-	-	-	-	1	+
Golden eagle	1	+	-	-	-	-	-	-	-	-	-	-	-	-	1	+
Plovers	2	+	1	+	1	+	1	+	-	-	-	-	-	-	5	+
Pigeon	1	+	-	-	-	-	-	-	12*	1	-	-	-	-	13	+
Barn owl	2	+	-	-	-	-	-	-	-	-	-	-	-	-	2	+
Finch	-	-	-	-	-	-	-	-	1	+	-	-	-	-	1	+
Jackdaw	1	+	-	-	-	-	-	-	-	-	-	-	-	-	1	+
Crow	45*	+	-	-	1	+	-	-	-	-	-	-	1	+	47	+
Raven	6	+	6	+	-	-	-	-	-	-	-	-	-	-	12	+
Unidentified bird	34	+	3	+	4	+	-	-	1	+	-	-	3	+	45	+
Frog/toad	-	-	-	-	-	-	-	-	-	-	-	-	2	+	2	+
Total	12949	100	4544	100	990	100	603	100	2229	100	498	100	3229	100	25042	100

Large ungulate includes cattle, horse, and red or fallow deer.

Small ungulate includes sheep, goat, pig.

Articulated bones:-

Area 1 * = dog 9 bones, crow 41 bones.

Area 2/4 * = dogs of 62, 36, 44, 2, 4, and 9 bones.

Area 5 * = dog 69 bones.

Area 10 * = sheep 28 bones (and 48 small ungulate probably the same individual.

Area 12 * = horse 15 bones.

Area 13 * = sheep/goat 53 bones, pigeon 12 bones. sheep skeleton 4 - check mandible counts for error of 10 too many

Totals are inclusive of articulated bones.

Table 1a.

Bone counts of each species and category from each area at Balnesse Farm CEU 46, excluding unidentified bones and articulated bones.

Species	Area 1	%	Area 2/4	%	Area 14/20	%	Area 5	%	Area 13	%	Area 12	%	Area 10	%	Total	%
Cattle	1687	41	400	43	222	60	86	39	301	38	72	64	516	62	3284	45
Horse	239	6	228	24	4	1	43	19	104	13	17	15	114	14	749	10
Red deer	1	+	–	–	1	+	–	–	1	+	–	–	–	–	3	+
Red/fallow deer	1	+	–	–	–	–	–	–	–	–	–	–	–	–	1	+
Sheep/goat	1459	35	181	19	86	23	65	29	239	30	15	13	92	11	2133	29
Pig	564	14	91	10	48	13	19	9	116	15	7	6	81	10	926	13
Dog/fox	66	2	19	2	1	+	1	+	24	3	2	2	26	3	139	2
Hare	2	+	–	–	–	–	–	–	–	–	–	–	–	–	2	+
Cat	3	+	–	–	–	–	–	–	–	–	–	–	–	–	3	+
Water vole	3	+	–	–	–	–	–	–	–	–	–	–	–	–	3	+
cf Domestic fowl	57	1	4	+	2	1	8	4	7	1	–	–	3	–	81	1
Domestic goose	5	+	1	+	1	+	–	–	–	–	–	–	–	–	7	+
Duck	3	+	3	+	–	–	–	–	–	–	–	–	–	–	6	+
Golden eagle	1	+	–	–	–	–	–	–	–	–	–	–	–	–	1	+
Plovers	2	+	1	+	1	+	1	+	–	–	–	–	–	–	5	+
Pigeon	1	+	–	–	–	–	–	–	–	–	–	–	–	–	1	+
Barn owl	2	+	–	–	–	–	–	–	–	–	–	–	–	–	2	+
Finch	–	–	–	–	–	–	–	–	1	+	–	–	–	–	1	+
Jackdaw	1	+	–	–	–	–	–	–	–	–	–	–	–	–	1	+
Crow	4	+	–	–	1	+	–	–	–	–	–	–	1	+	6	+
Raven	6	+	6	+	–	–	–	–	–	–	–	–	–	–	12	+
Frog/toad	–	–	–	–	–	–	–	–	–	–	–	–	2	+	2	+
Total	4103	100	934	100	367	100	223	100	793	100	113	100	835	100	7368	100

Table 2.
Bones counts of the different species from the main types of feature/context from Rainesse Farm CEU 46.

Feature / Context	Pits	Ditches/ Gullies	Structures	Layers	Other	Total
Cattle	602	826	119	1680	57	3284
Horse	159	421	15	165	4	764
Deer	-	-	-	4	-	4
LAR	1516	3184	285	3790	132	8907
Sheep/goat	421	259	138	1383	23	2224
Pig	132	161	42	584	7	926
SAR	690	586	286	3151	74	4787
Dog	164	97	9	107	5	382
Cat	1	-	-	2	-	3
Hare	1	1	-	-	-	2
Rodent	-	-	-	2	2	4
UNM	543	1205	64	1657	63	3532
All Bird	34	24	17	143	3	221
Amphibian	-	2	-	-	-	2
TOTAL	4263	6766	975	12668	370	25042

Table 2a.
Proportion of each species within each feature/context type expressed as a percentage of the total for each species.

Feature / Context	Pits	Ditches/ Gullies	Structures	Layers	Other	Total
Cattle	18	25	4	51	2	100
Horse	21	55	2	22	1	101
LAR	17	36	3	43	1	100
Sheep/goat	19	12	6	62	1	100
Pig	14	17	5	63	1	100
SAR	14	12	6	66	2	100
Dog	43	25	2	28	1	99
UNM	15	34	2	47	2	100
All Bird	15	11	8	65	1	100
TOTAL	17	27	4	51	1	100

LAR = Large ungulate which includes cattle, horse, and red or fallow deer.
SAR = Small ungulate which includes sheep, goat, pig.
UNM = Unidentified mammal.

Table 3.

Bone counts from different parts of the body from the mammals at Barnesse Farm (LBU 96).

Species	Cow	Horse	Deer	LAR	Sheep	Goat	Sh/G	Pig	SAR	Dog	Cat	Hare	UNM
Skull	486	170	-	868	13	2	202	121	170	18	3	-	9
Horncore	111	-	-	-	8	4	15	-	-	-	-	-	-
Antler	-	-	2	-	-	-	-	-	-	-	-	-	-
Mandible	382	50	-	355	-	-	288	143	137	22	-	-	-
Loose Teeth	444	187	-	5	-	-	361	127	2	13	-	-	1
Scapula	264	7	-	476	-	-	69	61	182	9	-	-	3
Humerus	85	19	-	101	-	-	108	50	118	25	-	1	-
Radius+Ulna	183	29	-	73	-	-	162	74	209	48	-	-	-
Pelvis	144	43	1	158	-	-	77	67	83	13	-	-	-
Femur	78	18	-	78	-	-	37	32	143	14	-	-	-
Patella	8	1	-	-	-	-	1	-	-	-	-	-	-
Tibia	69	27	1	90	-	-	229	49	330	17	-	1	-
Fibula	-	-	-	-	-	-	-	29	-	4	-	-	-
Metacarpal	179	18	-	1	-	1	236	17	12	-	-	-	-
Carpals+Ses.	18	6	-	4	-	-	-	-	-	-	-	-	-
Metatarsal	162	11	-	3	-	-	265	13	10	1	-	-	-
Tarsals	45	7	-	3	-	-	5	4	-	1	-	-	-
Calcaneum	91	7	-	10	-	-	35	23	4	1	-	-	-
Astragalus	98	8	-	-	-	-	21	9	1	-	-	-	-
Phalanges	345	38	-	3	-	-	54	22	7	2	-	-	-
Metapodials	20	13	-	3	-	-	7	32	-	26	-	-	-
Atlas	34	6	-	6	-	-	7	17	2	1	-	-	-
Axis	30	5	-	6	-	-	22	1	1	3	-	-	-
Cervical	-	25	-	154	-	-	-	7	42	8	-	-	1
Thoracic	1	1	-	302	-	-	1	14	81	12	-	-	-
Lumbar	-	10	-	283	-	-	1	9	96	11	-	-	-
Sacrum	5	11	-	10	-	-	-	-	11	2	-	-	-
Caudal	1	-	-	6	-	-	-	-	2	-	-	-	-
Unid.Vertebra	-	-	-	121	-	-	-	-	22	15	-	-	1
Ribs	1	38	-	2455	-	-	15	2	1453	86	-	-	9
LB fragments	-	9	-	2397	-	-	-	2	1570	-	-	-	60
Unid.frag.	-	-	-	936	-	-	6	1	79	6	-	-	3436
TOTAL	3284	764	4	8907	21	7	2224	926	4787	358	3	2	3520

LAR = Large ungulate which includes cattle, horse, and red or fallow deer. Sh/G = Sheep/Goat.
SAR = Small ungulate which includes sheep, goat, pig. UNM = Unidentified mammal.
Ses.= Sesamoids. Unid.= Unidentified. LB = Long bone.
Birds, amphibians, rodents, and dog/fox have not been included in this table.

Table 4.
Tooth Wear Patterns on the Cattle Mandibles from Balnesse Farm (CEU 46).

wear patterns recorded by letter (after Grant 1975,1982)
MWS = numerical value (after Grant 1975,1982)
wear = tooth in wear but pattern not recorded
% = PM2 absent, ^ = third cusp of m3 absent
- = alveolus only, brok = tooth with broken crown present

Context	PM2 (dpm2)	PM3 (dpm3)	PM4 (dpm4)	M1	M2	M3	Value MWS
767	(U)	(U)	(U)				Perinatal
329			(h)	b	-	C	
2569			-	f	1/2	C	16
1787			(wear)				
733					U		
2565			(-)	wear	b	V	
773				g	1/2	E	19
812			(j)	g	f	1/2	27
251		E	(j)	g			
2836				g	f		
2833		brok	(j)E	g			
3366		(wear)	(m)	j	f	1/2	29
761			(l)	g	f	b	30
2044			E	g	g	c	32
4447	U	wear	(l)E	h	g	c	33
2173		wear	(k)	k			
3372		(wear)	(n)	k	q		
1788		U	a				
2179	a	wear					
655						c	
2510		a					
3675	%	b	1/2	j	f	c	33
2588	U	U					13 U
560	U	a	U				
583	U	f	b	k	g	c	35
2660		e	-	g	g		
561				g	g	d^	33
1704					g	d	
744					h	d	
2061			e	k	g	f	38
2570		wear	e	k	g	w^	
2628				k	j	f	40
809	U	e	e	k	j	f	40
674		f	g	k	k	f	41
2158			g	k	k		
2173	%	wear	h	k	k	-^	
808			g	l	k	f	42
1086	a	f	g	l	j	g^	42
773		f	g	l			
93		wear	e	k	g	g	39
2620		f	g	k	g	g	39
1088					j	g	
9457		wear	e	k	j	g	41
674		wear	g	k	j	g	41
713		wear	e	k	j	g	41
2172				k	j	g	41

667	$	f	g	k	k	g	42
361			g	k	k	g	42
781		f	-	-	k	g	
1626			e	l	k	g	43
37			f	l	k	g	43
936		f	f	l	k	g	43
1749				l	k	g	43
2720				l	k	g	43
83	wear	f	e	l	k	g	43
291					k	g^	
2173	wear	wear	g	l	k	g	43
2074					k	g	
1664			g	m	l	g	45
2222						h	
291						h	
361			f	k	k	h	43
4416				k	k	j	44
562			g	l	k	j	45
667		f	g	l	k	j	45
2561					k	j	
713				l	k	j	45
2256			f	k	k	k	45
2565						k	
4404					k	k	
291					k	k	
812		e	f	l	k	k	46
2171			f	l	k	k	46
2172			f	l	k	k	46
1768		e	f	l			
2170		e	f	l	k	-^	
1051	$	wear	f	l	k		
2660		f	g	l	k		
359	$	wear	g	l	k		
3363				l	k		
89	$	wear	f	m	l	k	48
73					l	k	
892	$	f	g	m	l	k^	48
2570		wear	g	n	k		
72		wear	f	n	l		
2044				o	k	k	49
2570	wear	wear	-	o	k	k	49
2172			g	-	l	l	
85				wear			
2044				wear			
3647				k			
361				wear			
1682				wear	wear		
2171				wear	wear		
1682				wear	wear		
3363					wear		
732					wear		
1380					wear		
2612		wear					
69		wear					
1481		wear	wear				
1749		wear	wear				
2615		wear	wear				
69		wear	wear				
361		wear	wear	wear			

2589	wear	f	g						
682	wear	wear	wear						
590			wear	-	wear				
4446					wear	wear			
416						wear			
3669						wear			
713						wear			
2171						wear			
806						wear			
2178						wear			
2044						wear			
1429						wear			
2601		-	-	-	-	-			
1704	-	-	-	-	-	-			
2601						brok			
1209							I2 U		
1977							I3 V		

Table 4 cont.

Table 4a.
Cattle Mandibular teeth from Bainesse Farm (CEU 46)

wear patterns recorded by letter (after Grant 1975,1982)
UW=unworn, UA=unassigned, W=worn.

	C	V	E	I/2	U	a	b	c	d	e	f	g	h	j	k	l	m	n	o	UW	UA	W	Total
Incisor	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	16	-	16
I2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	1
I3	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	2
dp2	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
dp3	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	3
dp4	-	-	-	-	1	-	-	-	-	-	-	-	1	3	1	2	1	1	-	-	1	1	12
Premolar	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	-	3
P2 (87)	-	-	-	-	5	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5	12(7)
P3	-	-	1	-	2	2	1	-	-	5	13	-	-	-	-	-	-	-	-	-	1	24	49
P4	-	-	3	1	1	1	1	-	-	8	12	19	1	-	-	-	-	-	-	-	-	7	54
Molar	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	1
M1	-	-	-	-	-	-	1	-	-	-	1	9	1	2	22	22	3	2	2	-	1	8	74
M2	-	-	-	2	1	-	1	-	-	-	5	11	1	8	36	6	-	-	-	-	2	8	81
M3	2	1	1	2	-	-	1	5	3	-	5	21	3	5	12	1	-	-	-	-	2	10	74
Lower tooth	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	176	-	176
Total																					203(36%)		559

Table 5.
Tooth Wear Patterns on the Sheep/Goat Mandibles from Balnesse Farm (AU 46.

wear patterns recorded by letter (after Grant 1975,1982)
MWS = numerical value (after Grant 1975,1982)
(est) = estimated value for MWS, wear = tooth in wear but pattern not recorded
- = alveolus only, brok = tooth with broken crown present
+ = extra pillar on dpm4

Context	PM2	PM3	PM4	M1	M2	M3	Value
Value	(dpm2)	(dpm3)	(dpm4)				MWS
4428	(U)	(wear)	(e)	E			3
1779	(i)	(wear)	(f)	E	0	0	3
1450	(a)	(wear)	(f)	E			3
900	(U)	(wear)	(f)	E	0		(3est)
780			(f)	1/2	C		5
782	(wear)	(wear)	(f)	1/2	C		5
900	(wear)	(wear)	(f)	1/2	C		5
95	(a)	(wear)	(f)	1/2	C	0	5
95	(a)	(wear)	(f)	1/2			(5-6est)
1474	(i)	(wear	(f)	1/2			(5-6est)
2074				1/2			(5-6est)
532	(U)	(wear)	(f)	b			
2744	(U)	(wear)	(e)				
2074	(1/2)	(wear)	(d)				
642	(U)	(wear)	(f)				
1509	(wear)	(wear)	(h)	b			
1477	(wear)	(wear)	(g)	b	C		8
1561	(wear)	(wear)	(g)	c	C	0	9
90	(a)	(wear)	(h)	c	C	0	9
777		(wear)	(g)	c	V		10
1768	(wear)	(wear)	(g)	c	V		10
1664	(wear)	(wear)	(g)	c	V		10
361	(wear)	(wear)	(g)	d	V		(10est)
2578		(wear)	(h)	d	E		11
1906	(wear)	(wear)	(g)	c	E		11
2389	(wear)	(wear)	(g)	c	E		11
642	(wear)	(wear)	(h)	c	E		11
732	(wear)	(wear)	(g)	c			
732			(g)	c			
2222	(a)	(wear)	(g)	d			
4416	(-)	(-)	(g)	f	E	-	(15est)
773					E	C	(15est)
3372		(wear)	(j)	f	1/2		(16est)
1778			(h)	f	b		(19est)
777				g	b	C	20
1787			(i)	g	b	C	20
3672				g	c	C	21
1985		(h)	V	g	d	C	22
72	(wear)	(wear)	(h)	g	d	C	22
90				g	d	C	22
90		(wear)	(a)	g	e	C	23
72			V	g	f	C	24
3669			(n)	g	f	C	24
2257					b	V	(22-24est)
2678		(wear)	(h)	g	c	V	22 (2=U
37	(wear)	(wear)	(h)	g	c	V	22

1508		(wear)	(n)	g	c	V	22	
1684		(wear)	(h)	g	c	V	22	
1561		V	V	g	c		(21-23est)	
1663		(wear)	(j)	g	c			
773		(wear)	(l)	g	c		(21-23est)	
4549			(wear)V	g	c		(21-23est)	
1591			V	g	c		(21-23est)	
642		(wear)	(h)	g	c		(21-23est)	
773		(wear)	(h)	g	c		(21-23est)	
773			(-)	g	c		(21-23est)	
2733				g	c		(21-23est)	
732		(wear)	(h)	g	d	V	23	
1988		(wear)	(k)	g	d	V	23	
936				g	d	V	23	
329			(k)	g	e	V	24	12=U
237					wear	V	(22-24est)	
777						V	(22-24est)	
1991				wear	wear	V/E	(22-24est)	
2257	(-)	(-)	(-)	g	c	E	23	
1606		(wear)	-	g	c	E	23	
2552				g	c	E	23	
3552			(j)	g	c	E	23	
363				g	c	E	23	
4406			(k)	k	c			
63	(wear)	(wear)	(h)V	f	d	E	23	
773		(wear)	(h)	f				
336				g	d	E	24	
270				g	d	E	24	
1509				g	d	E	24	
361			(h)	g	d	E	24	
4420			(i)	g	d	E	24	
4420			(-)	g	d	E	24	
2061	(wear)	(wear)	(g)	g	d	E	24	
806		(wear)	(k)	g	d	E	24	
2621			V	g	d	E	24	
732	(wear)	(wear)	(k)	g	e	E	25	
793		(wear)	(k)	g	e	E	25	
4501	E	(wear)	(l)	g	e	E	25	
976		(wear)	(n)	h	e	E	26	
2725				g	e	E	25	
1225	V	V	E	g	f	E	26	
2044			E	g	f	E	26	
667				g	f	E	26	
1779						E	(23-26est)	
337		V	-	g	d	1/2	25	
641				g	d		(22-28est)	
2630		(wear)	(l)	g	d		(22-28est)	13=U
642		(wear)	(h)	g	d		(22-28est)	
503		(wear)	(h)	g	d		(22-28est)	
642	(wear)	(wear)	(l)	g	d		(22-28est)	
667	(wear)	(wear)	(n)	g	d		(22-28est)	
4405		(wear)	V	g	d		(22-28est)	
361			(h)	g	d		(22-28est)	
171			(l)	g	d		(22-28est)	
808			(i)V	g	d		(22-28est)	
361			(g)	g	d		(22-28est)	
3684			(m)	g	d		(22-28est)	
2660		(wear)	h	g	e		(25-29est)	
777			E	g	e		(25-29est)	

Table 5 cont.

2257	(wear)	(wear)	(n)	g	e		(25-29est)
1491			(i)	h	e		(26+est)
1779		(wear)V	(j)	--	e	-	
1831		(wear)	(k)	g	f		(24-31est)
2620			(m)	g	f		(24-31est)
2720			(wear)	g	f		(24-31est)
2433			(l)	g	f		(24-31est)
674	(wear)	(wear)	(n)	g			
4404			(h)	g			
1189			(l)	g			
379			(n)	g			
90	(a)	(wear)					
777	(a)	(wear)	(wear)				
777	(a)	(wear)					
2565	(wear)	(wear)					
891		(-)V	(-)V				
352		(wear)	V				
271		(wear)	(wear)				
777		(wear)					
1684		(wear)	(f)+				possible goat
1831		(wear)					
392		(wear)					
1222	(wear)	(wear)	(wear)				
986		(wear)					
713		(wear)					
713	(wear)	(wear)					
713	(wear)	(wear)	(+)				
744	(brok)	(brok)	(brok)	-			
1811		(wear)	(f)				
2222	(wear)						
361	(wear)	(wear)					
361			(wear)	wear			
693			(f)				
713			(wear)	wear			
667			(-)	wear	wear		
1184	a	wear	a	g	f	1/2	27
290						1/2	(25-27est)
761						U	(25-28est)
1682	a	wear	e	g	f	b	30
2222	a	wear	e	g	f	b	30
1990			e	g	f	b	30
269				g	f	b	30
1749		wear	h	g	f	b	30
2628					f	b	(30est)
2565		a	f	g	f	c	31
361	a	wear	wear	a			
642				g	f		(24-31est)
2387		wear	e	g	f		(24-31est)
777		wear	f	g	f		(24-31est)
72	V	V	1/2	g	f		(24-31est)
1429					f	c	(31-32est)
1216		wear	e	h	g	b	32
1198	a	wear	f	g	g	c	32
171		wear	g	g	g	c	32
684		U	U	h	g	c	33
82		wear	g	h	g	c	33
773		wear	f	h	h	c	34 13=U
777	wear	wear	f	g	g	d	33
2270		wear	f	h	g	d	34

Table 5 cont.

73		wear	h	g	g	e	34	
737			g	g	g	e	34	
2257				g				
359		V						
713			V	wear	wear			
1831			V					
2620		U					13=U	
4404	U	U						
2468	U	U	U					
773			U					
1509			U					
361	U							
361			U					
2074			g	h	g	e	35	
2589	a	wear	g	h	g	e	35	
329	a							
732		wear	h	h	g	g	37	
360		wear	f	h	g		(32-37est)	
89		wear	h	j	g	g	38	
359		wear	h	j	g	g	38	
1664			h	j	g	g	38	
732		wear	h	k	g	g	39	
773				l	g	g	40	
69		wear	h	l	g	g	40	
2830 ♀		wear	j	l	-	g	(40est)	Skeleton 4
2830 ♀					g	g	(40est)	Skeleton 4
186			h	m	g	g	41	
1428		wear	j	m	g	g	41	
1152			h	m	g	g	41	
337		wear	h	m	g	g	41	
361		wear	j	m	h	g	42	
777		wear	j	m	h	g	42	
732		wear	j		g	g	(37-41est)	
977					m	j	(48+est)	
2570				wear	wear			
780				brok	brok			
786		wear						
329				wear	wear			
361		wear						
361		wear						
361		wear	wear	wear				
361						wear		
773				wear	wear			
776		wear	wear					
808					wear			
897					wear			
976	wear	wear						
361		wear	wear					
767		wear	wear					
777		wear						

Table 5 cont.

Table 5a.
Sheep/Goat Mandibular teeth from Balnesse Farm CKU 46.

wear patterns recorded by letter (after Grant 1975,1982)
UW=unworn, UA=unassigned, W=worn, 0=no crypt visible.

	0	C	V	E	1/2	U	a	b	c	d	e	f	g	h	j	k	l	m	n	o	UW	UA	W	Total
I2	-	-	-	-	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2
I3	-	-	-	-	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2
dp2	-	-	-	-	1	5	8	-	-	-	-	-	-	-	-	-	2	-	-	-	-	1	27	44
dp3	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	1	77	79
dp4	-	-	-	-	-	-	-	-	-	1	2	15	14	19	6	7	9	4	6	-	-	1	7	91
P2	-	-	2	1	-	3	7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	15
P3	-	-	7	-	-	4	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	37	49
P4	-	-	13	3	1	5	1	-	-	-	5	7	5	12	5	-	-	-	-	-	-	-	5	62
Molar	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5	-	5
M1	-	-	-	4	7	-	1	3	10	3	-	5	68	11	3	2	3	6	-	-	-	3	9	158
M2	2	7	4	6	1	-	-	4	20	29	12	22	25	3	-	-	-	1	-	-	-	4	9	147
M3	4	10	11	25	3	1	-	7	7	2	4	-	16	-	1	-	-	-	-	-	-	2	1	90
Lower tooth	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	156	-	156
Total	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	173(19%)		900

Table 6.
Tooth Wear Patterns on the Pig Mandibles from Balnesse Farm CEU 46.

wear patterns recorded by letter (after Grant 1975,1982)
MWS = numerical value (after Grant 1975,1982)
(est) = estimated value for MWS, wear = tooth in wear but pattern not recorded
- = alveolus only, brok = tooth with broken crown present

Context	PM1 (dpa1)	PM2 (dpm2)	PM3 (dpm3)	PM4 (dpm4)	M1	M2	M3	Value MWS
770			(wear)	(d)	**E**			5(est)
361			**C**	(f)	**E**			5(est)
1446				a	**1/2**	**C**		6(est)
2171				(wear)	**U**			
72			(wear)	(f)	a	**V**		9(est)
4444				(e)	b			
86		(wear)	(wear)	(h)	b	**V**		9(est)
329		a	a	-	a	**E**	**C**	10
1038	**U**	-	(wear)	(wear)	b	**E**		11(est)
1216			(wear)	(f)	b	**E**		11(est)
2286				(f)	c	**E**	**C**	12
732				(g)	c	**E**	**C**	12
787				(e)	c	**E**		12(est)
610				(g)	-	**E**		12+(est)
2595	**U**	(-)	(wear)	(m)	e	**E**		14(est)
2678			(wear)	(f)	c	**1/2**		13(est)
361			(wear)	(d)				
713		(wear)	(wear)	(wear)**V**				
767		(wear)	(wear)**V**					
1152	a	(wear)	(wear)					
1607			(a)	(a)				
2622			(wear)	(wear)	wear			
1216		(wear)	(wear)**V**					
2620		**U**						
2620	**U**							
2620	**U**	**V**						
1958		**1/2**	-	a	f	a	**C**	18
780				c	e	a		18(est)
892	a	**U**	a	a	f	a		20(est)
2278					f	a	**V**	19
2836	-	-	a	a	g	a	**V**	20
279		a	wear	b	f	c	**V**	21
361					f	a	**E**	20
329					g	a	**E**	21
361				a	h	a		21(est)
667						a		
361				a	i	b	**E**	21
977				a	g	b		24(est)
1446						d	**E**	23-28(est)
713				d	-	e	**E**	23-28(est)
4447							**E**	
2492					i	b	**1/2**	22
2620						d	**1/2**	28-29(est)
1216				b	d	g	**1/2**	25
4437					g	d		27-29(est)
667			a	a	g	wear		
732				d	i			29+(est)

71						e	a	29-33(est)
2733					m	f	a	34
3367					m	f	a	34
776		a	-	b	m	f	b	35
713				d	m	f	b	35
892			brok	brok	-	brok	a	
976				d	-	-	a	
72						wear	a	
777						f	a	29-34(est)
361						f	a	29-34(est)
674							a	23-35(est)
1198							a	23-35(est)
399						d	b	28-32(est)
667							b	27-37(est)
977						g	c	34-38(est)
2185							d	38+(est)
674					n	k	d	42
773							f	41+(est)
361			a	wear				
681				a				
713	wear							
770	wear	a	wear					
773			a					
780			wear					
1053		wear	wear					
1152				wear				
1491	a							
1719			wear					
1749			wear	wear				
2179			a	wear				
2595					wear			
3351		a	a	a				
2257			wear	brok	wear	brok		

Table 6 cont.

Table 6a.
Pig Mandibular teeth from Balnesse Farm (CEU 46)

wear patterns recorded by letter (after Grant 1975,1982)
UW=unworn, UA=unassigned, W=worn.

	C	V	E	1/2	U	a	b	c	d	e	f	g	h	j	k	l	m	n	o	UW	UA	W	total
Incisor	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	17	-	17
di	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	2
I1	-	2(1)	-	-	-	4(3)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3(1)	6(2)	15(7)
I2	-	1	-	-	2(1)	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2(1)	1	9(2)
I3	-	-	-	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2
dc	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1
C	-	1	-	-	3(1)	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	16	3	25(1)
dp2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5	5
dp3	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13	14
dp4	-	-	-	-	-	1	-	-	2	2	5	2	1	-	-	-	1	-	-	-	-	4	18
P1	-	-	-	-	4	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	-
P2	-	1	-	1	2	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	10
P3	1	2	-	-	-	8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	7	19
P4	-	1	-	-	-	10	2	1	4	-	-	-	-	-	-	-	-	-	-	-	2	5	25
M1	-	-	2	1	1	2	4	4	1	2	7	5	1	-	-	1	4	1	-	-	-	4	40
M2	1	2	8	1	-	9	3	1	4	2	6	2	-	-	1	-	-	-	-	-	3	2	45
M3	4	3	6	3	-	10	4	1	2	-	1	-	-	-	-	-	-	-	-	-	-	-	33
Lower tooth	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	68	-	68
Total																					112(25%)		460

Figures in brackets are where both left and right sides of the same mandible were present. To avoid biasing the data the duplicated teeth are bracketed.

Table 7.
Epiphysial Fusion Data for Cattle, Sheep/Goat, and Pig, from Romanesse Farm CBU 46.
(not including the articulated bones)

Species	Cattle						Sheep/Goat						Pig					
Fusion State	AG	NFX	NF	F	%NF	%F	AG	NFX	NF	F	%NF	%F	AG	NFX	NF	F	%NF	%F
Metapodial shaft (NF only)									2									
Metacarpal proximal	0		-	96	-	100	0		-	134	-	100	0		-	15		
Metatarsal proximal	0		-	82	-	100	0		-	143	-	100	0		-	13		
1st Phalanx distal	0		-	173	-	100	0		-	47	-	100	0		-	15		
2nd Phalanx distal	0		-	97	-	100	0		-	2			0		-	3		
Scapula	1		1	185	<1	99	2		-	50	-	100	1		1	15		
Acetabulum	1		2	82	2	98	2		-	59	-	100	1		6	32	(16)	(84)
2nd Phalanx proximal	2		-	96	-	100	2		-	2			1		-	3		
Humerus distal	2		1	61	2	98	1		2	81	2	98	1		2	11		
Radius proximal	2		-	72	-	100	1		2	59	3	97	1		1	14		
1st Phalanx proximal	2		1	162	<1	99	2		7	38	16	84	2		10	4		
Metacarpal distal	3	1	4	71	5	95	4		28	25	53	47	2		9	1		
Tibia distal	3		-	53	-	100	3		17	138	11	89	2		14	4		
Metatarsal distal	3		5	46	10	90	4		27	16	63	37	2		5	2		
Metapodial distal	3	5	-	11			4	6	-	1			2		19	2	(90)	(10)
Calcaneum proximal	4		7	24	23	77	5	1	14	20	41	59	3		14	2		
Femur proximal	4	7	3	26	21	79	5		8	3			4	1	6	-		
Ulna distal	4		-	-	-	-	5		-	-	-	-	4		1	-		
Ulna proximal	5		2	7			5		17	5			5		5	1		
Radius distal	5	2	2	26	(7)	(93)	5		25	16	61	39	5		5	-		
Femur distal	5	4	2	12			5	1	11	4			5	1	2	-		
Tibia proximal	5	4	5	5			5	3	5	10			5		3	-		
Humerus proximal	5		1	5			5	1	2	3			5		-	-		
Vertebra	6		1	11			6		4	3			6		30	3	(91)	(9)
Vertebra (LAR & SAR)	6	5	192	214	44	56	6	3	109	65	63	37						

F = fused, NF = unfused metaphyis, NFX = unfused epiphysis, n = number of specimens, AG = age group.
Figures in brackets are percentages of n when <40, percentages are not given for n <20.
Where NFX is greater than NF, NFX is used in the % calculations.

Table 7a.
Summary of Epiphysial Fusion Data for Cattle, Sheep/Goat, and Pig.

Species	Cattle				Species	Sheep/Goat				Species	Pig			
Fusion State	Not Fused		Fused		Fusion State	Not Fused		Fused		Fusion State	Not Fused		Fused	
	n	%	n	%		n	%	n	%		n	%	n	%
Age Group					Age Group					Age Group				
0 birth	-	-	448	100	0 birth	-	-	326	100	0 birth	-	-	46	100
1 7-10 months	3	1	267	99	1 3-4 months	4	3	140	97	1 12 months	10	13	65	87
2 10-24 months	2	1	391	99	2 5-10 months	7	4	149	96	2 24 months	57	81	13	16
3 24-30 months	14	7	181	93	3 15-20 months	17	11	138	89	3 24-30 months	14		2	
4 36-42 months	14	22	50	78	4 20-24 months	61	59	42	41	4 36-42 months	7		-	
5 42-48 months	14	20	55	80	5 36-42 months	82	57	61	43	5 42 months	15		1	
6 very late	193	46	225	54	6 very late	113	62	68	38	6 very late	30	(91)	3	(9)

(Fusion ageing data from Sisson and Grossman 1975)

Appendix 1.

Table i.
Bones counts from the different context types Rainesse Farm CEU 46.

Area	Area 1	Area 2/4	Area 14/20	Area 5	Area 13	Area 12	Area 10	Total
Feature/context								
Pits	1487	1389	152	509	360	257	101	4263
Ditches/gullies	337	3013	-	94	228	241	2853	6766
Structures	731	-	150	-	94	-	-	975
Layers	10304	142	688	-	1334	-	-	12668
Other	90	-	-	-	5	-	275	370
Total	12949	4544	990	603	2229	498	3229	25042

Table ii.
Proportion of bones from different feature/context type expressed as a percentage of the total for each area, figures from the table i.

Area	Area 1	Area 2/4	Area 14/20	Area 5	Area 13	Area 12	Area 10	Total
Feature/context								
Pits	11.5	30.6	15.4	84.4	16.5	51.6	3.1	17.0
Ditches/gullies	2.6	66.3	-	15.6	10.2	48.4	88.4	27.0
Structures	5.6	-	15.2	-	4.2	-	-	3.9
Layers	79.6	3.1	69.5	-	60.8	-	-	50.6
Other	0.7	-	-	-	0.2	-	8.5	1.5
Total	100.0	100.0	100.1	100.0	99.9	100.0	100.0	100.0

Table iii.
Bone counts for the different species from **pits** from each area.

Area	Area 1	Area 2/4	Area 14/20	Area 5	Area 13	Area 12	Area 10	Total	Percent. of TOTAL
Cattle	281	142	31	51	42	53	2	602	14.1
Horse	24	28	1	40	59	6	1	159	3.7
LAR	366	669	68	182	98	127	6	1516	35.6
Sheep/goat	160	82	12	56	73	7	31	421	9.9
Pig	61	37	4	16	7	4	3	132	3.1
SAR	315	160	25	69	49	14	58	690	16.2
Dog	25	(1)56	-	70	-	2	-	164	3.8
Cat	1	-	-	-	-	-	-	1	+
Hare	1	-	-	-	-	-	-	1	+
UNM	232	199	11	18	39	44	-	543	12.7
All Bird	21	5	-	7	1	-	-	34	0.8
TOTAL	1487	1389	152	509	368	257	101	4263	100.0

Table iv.
Bone counts for the different species from **ditches and gullies** from each area.

Area	Area 1	Area 2/4	Area 14/20	Area 5	Area 13	Area 12	Area 10	Total	Percent. of TOTAL
Cattle	38	244	-	35	25	19	465	826	12.2
Horse	80	200	-	3	2	26	110	421	6.2
LAR	88	1632	-	14	99	158	1193	3184	47.1
Sheep/goat	44	91	-	9	24	8	83	259	3.8
Pig	9	40	-	3	25	3	73	161	2.4
SAR	47	236	-	21	40	16	226	586	8.7
Dog	-	(3)69	-	-	2	-	(5)18	97	1.4
Hare	1	-	-	-	-	-	-	1	+
UNM	27	477	-	7	11	11	672	1205	17.8
All Bird	3	13	-	2	-	-	6	24	+
Amphibian	-	-	-	-	-	-	2	2	+
TOTAL	337	3013	-	94	228	241	2853	6766	100.0

LAR = Large ungulate which includes cattle, horse, and red or fallow deer.
SAR = Small ungulate which includes sheep, goat, pig.
UNM = Unidentified mammal.

Table v.
Bone counts for the different species from **structures** from each area.

Area	Area 1	Area 2/4	Area 14/20	Area 5	Area 13	Area 12	Area 10	Total	Percent. of TOTAL
Cattle	90	-	21	-	8	-	-	119	12.2
Horse	14	-	-	-	1	-	-	15	1.5
LAR	203	-	50	-	32	-	-	285	29.2
Sheep/goat	99	-	16	-	23	-	-	138	14.2
Pig	26	-	11	-	5	-	-	42	4.3
SAR	220	-	47	-	19	-	-	286	29.3
Dog	8	-	1	-	-	-	-	9	1.0
UNM	57	-	1	-	6	-	-	64	6.6
All Bird	14	-	3	-	-	-	-	17	1.7
TOTAL	731	-	150	-	94	-	-	975	100.0

Table vi.
Bone counts for the different species from **layers** from each area.

Area	Area 1	Area 2/4	Area 14/20	Area 5	Area 13	Area 12	Area 10	Total	Percent. of TOTAL
Cattle	1270	14	170	-	226	-	-	1680	13.3
Horse	120	-	3	-	42	-	-	165	1.3
Deer	2	-	1	-	1	-	-	4	+
LAR	2995	39	251	-	505	-	-	3790	29.9
Sheep/goat	1135	8	58	-	182	-	-	1383	10.9
Pig	467	6	33	-	78	-	-	584	4.6
SAR	2660	11	125	-	357	-	-	3151	24.9
Dog	(3)37	45	-	-	(2)20	-	-	107	0.8
Cat	2	-	-	-	-	-	-	2	+
Rodent	2	-	-	-	-	-	-	2	+
UNM	1493	19	43	-	102	-	-	1657	13.0
All Bird	118	-	6	-	19	-	-	143	1.1
TOTAL	10304	142	688	-	1534	-	-	12668	100.0

LAR = Large ungulate which includes cattle, horse, and red or fallow deer.
SAR = Small ungulate which includes sheep, goat, pig.
UNM = Unidentified mammal.

Appendix 2

Selected Measurements from Bainesse Farm

Measurements with numbers ie m7 are those as defined in the recording system used in the Ancient Monuments Laboratory (Jones et al 1980). Where these correspond with measurements defined by von den Driesch (1976) her codes are inserted below, and similarly A. Bacher (1976), and K. Erbersdobler (1968). Other measurements can be obtained from the archive. All measurements are in millimetres. Figures in square brackets after context numbers indicate partial skeletons, or bones assessed as being the same individual.

CATTLE

Cattle Skull

Context	Measurement					
	m1	m2	m3	m4	m5	m6
	45	46	47	20	21	22
73	-	-	-	112.6	69.9	44.3
86	39.5	26.4	-	-	-	-
359	40.4	27.1	-	-	-	-
369	63.1	40.5	-	-	-	-
500	49.1	34.6	-	-	-	-
511	41.9	35.9	-	-	-	-
900	-	-	-	-	76.0	-
1115	35.2	25.4	-	-	-	-
1704	62.1	42.5	-	-	-	-
1709	-	-	-	122.5	75.2	47.5
2173	-	-	-	-	-	-
2173	46.1	29.6	-	-	-	-
2434	44.8	30.6	-	-	-	-
2556	59.1	44.9	-	-	-	-
2620	33.2	24.0	66.0	-	-	-
2634	38.6	28.0	-	-	-	-

Horncore

Context	Measurement		
	m1	m2	m3
	45	46	47
360	54.0	40.9	-
674	57.7	-	-
766	40.9	28.0	-
766	49.4	36.1	-
786	39.9	29.6	-
976	42.5	37.5	-
1053	46.5	30.1	117.0
1198	68.5	50.0	-
1429	52.4	35.9	-
1835	-	-	134.0
2061	57.4	45.6	-
2155	37.8	28.7	-
2155	37.2	26.9	-
2170	47.7	36.4	-
2171	44.7	28.9	-
2278	51.5	39.3	-
2278	49.9	37.8	161.5
2278	73.7	42.2	-
2833	57.8	38.4	-
3363	48.7	33.0	144.0
3651	47.3	36.8	-

Maxilla

Context	Measurement		
	m4	m5	m6
	20	21	22
304	-	72.4	-
329	114.5	71.8	41.9
361	-	77.8	-
601	-	72.8	-
767	-	-	53.5
895	122.0	76.1	48.0
1664	-	71.6	-
1684	-	72.2	-
2173	-	75.0	-
2173	-	-	-
2222	-	-	43.2
2735	120.2	73.8	51.1
3372	-	57.5	-

Cattle Mandible

Context	Measurement												
	m1	m5	m10	m11	m12	m13	m14	m15	m16	m17	m18	m19	m20
		1	9	8	11	15c			19b			10L	7
37	-	-	-	-	-	-	-	-	-	-	-	36.5	-
69	-	-	-	-	-	40.8	46.9	51.1	-	-	-	-	-
73	-	-	-	-	-	-	-	-	-	-	-	36.8	-
83	-	-	48.8	82.2	-	-	-	-	-	-	-	32.7	-
85	-	-	49.5	-	-	32.3	35.4	40.4	43.7	-	-	-	-
89	-	-	-	89.4	-	-	-	-	-	-	-	36.1	-
93	-	-	-	79.9	-	-	-	-	-	50.3	56.6	33.1	-
251	-	-	-	-	-	-	-	-	-	-	-	31.6	-
291	-	-	50.1	90.1	-	-	-	-	-	-	-	38.4	134.5
359	-	-	42.0	94.8	-	-	45.4	49.4	49.0	60.0	64.8	-	-
361	-	-	-	-	-	-	-	-	-	-	-	32.1	-
361	-	-	-	-	-	37.2	40.8	-	-	-	-	-	-
361	-	-	-	-	-	-	-	-	-	-	-	31.4	-
416	-	-	-	-	-	-	-	-	-	-	-	30.5	-
562	-	-	-	89.1	-	-	-	-	-	56.0	60.6	37.3	-
590	-	-	48.6	-	-	35.3	37.8	42.9	49.8	-	-	-	-
609	41.6	-	-	-	-	-	-	-	-	-	-	-	-
655	-	-	-	-	-	-	-	-	-	-	-	32.3	-
667	-	-	47.2	-	-	37.1	39.8	43.3	47.1	51.8	-	36.4	-
674	-	-	-	85.8	-	-	-	-	-	-	-	34.3	-
674	-	-	41.7	85.0	-	-	-	-	-	-	-	36.1	-
713	-	338.0	45.6	79.2	-	37.1	35.0	39.6	42.5	43.9	-	32.1	126.4
713	-	-	-	-	-	-	-	-	-	-	-	35.6	-
713	-	-	-	86.3	-	-	-	-	-	-	-	-	-
713	-	-	-	-	-	-	-	-	44.6	49.4	56.5	34.7	-
744	-	-	-	-	-	-	-	-	-	-	-	34.6	-
773	50.2	-	-	-	-	-	-	-	-	-	-	-	-
773	-	-	50.7	-	-	-	-	-	-	-	-	-	-
781	-	-	53.0	87.1	-	-	-	-	-	-	-	35.9	131.7
808	-	-	-	78.0	-	-	-	-	-	-	-	33.9	-
809	-	-	47.6	-	-	-	-	-	-	-	-	32.2	-
809	41.5	-	-	-	-	-	-	-	-	-	-	-	-
812	-	-	-	-	-	-	-	-	-	-	-	33.5	-
936	-	-	50.8	85.3	-	39.6	45.4	48.4	50.3	59.8	64.4	37.1	137.5
977	44.9	-	-	-	-	-	-	-	-	-	-	-	-
986	-	-	54.7	88.3	-	-	-	-	-	-	-	-	143.6
1086	-	-	48.2	-	-	-	-	-	-	-	-	-	-
1180	-	-	-	-	-	-	-	-	-	-	-	34.4	-
1410	39.0	-	-	-	-	-	-	-	-	-	-	-	-
1429	-	-	-	-	-	-	-	-	-	-	-	35.1	-
1626	-	-	-	81.6	-	-	-	-	-	-	-	34.7	-
1664	-	-	-	79.8	-	-	-	40.4	43.3	48.4	55.5	36.2	-
1704	-	-	-	84.0	-	-	-	39.1	42.6	52.0	59.4	32.3	-
1704	-	-	51.6	84.3	97.3	40.3	41.5	45.0	48.9	52.0	61.5	-	136.1
1749	-	-	-	-	-	34.2	-	-	-	-	-	-	-
1788	-	-	46.5	-	-	-	-	-	-	-	-	-	-
2044	-	-	-	-	-	-	-	-	-	56.8	76.0	37.8	-
2061	-	-	-	87.3		-		-	45.0	50.9	56.4	33.0	-
2074	-	-		-	-	-	-	-	-		-	34.1	-
2158	-	-	44.1	-	-	29.7	33.4	37.0	43.2	47.8	54.5		
2170	-	-	39.8	74.8	-	-	-	-	-	-	-	-	-
2171	-	-	-	-	-	-	-	-	-	-	-	32.6	-
2171	-	-	43.1	78.0	-	34.3	34.9	40.6	-	44.0	44.4	-	-
2171	-	-	43.7	77.9	-	37.6	39.4	44.2	48.6	54.4	58.6	33.2	-
2171	42.1	-	-	-	-	-	-	-	-	-	-	-	-

Cattle Mandible continued

	m1	m5	m10	m11	m12	m13	m14	m15	m16	m17	m18	m19	m20
		1	9	0	11	15c			15b			10L	7
2172	-	-	51.6	85.2	-	32.5	34.6	41.4	42.9	50.7	58.1	32.3	137.0
2172	-	-	-	78.4	-	-	40.3	37.7	39.8	47.4	55.6	-	-
2172	-	-	44.4	76.3	95.3	38.9	-	45.8	49.2	57.1	61.9	32.4	119.4
2173	-	-	46.2	77.0	-	-	-	-	-	-	-	33.5	121.6
2222	-	-	-	-	-	-	-	-	-	-	-	34.2	-
2256	-	-	-	78.2	-	-	-	-	46.4	50.8	57.5	31.9	-
2269	46.7	-	-	-	-	-	-	-	-	-	-	-	-
2303	38.8	-	-	-	-	-	-	-	-	-	-	-	-
2540	44.0	-	-	-	-	-	-	-	-	-	-	-	-
2561	-	-	35.0	84.4	-	-	-	-	-	-	-	36.4	121.3
2565	-	-	-	-	-	-	-	-	-	-	-	34.5	-
2570	-	-	47.0	75.1	-	-	-	37.0	37.4	41.5	51.7	-	-
2570	-	-	45.9	-	-	37.4	33.7	41.7	43.6	54.2	-	-	-
2570	43.5	-	-	-	-	-	-	-	-	-	-	-	-
2601	-	-	-	81.6	-	-	-	-	37.9	49.0	54.7	-	-
2620	-	-	42.9	79.5	-	-	-	-	-	-	-	-	-
2622	39.5	-	-	-	-	-	-	-	-	-	-	-	-
3397	-	-	49.7	83.6	-	-	-	-	-	-	-	-	133.2
3669	-	-	-	-	-	-	-	-	-	-	-	35.4	-
4404	-	-	-	-	-	-	-	-	-	-	-	36.5	-
4416	-	-	-	-	-	-	-	-	-	-	-	35.4	-
4437	-	-	-	84.8	-	-	-	-	-	50.5	57.9	34.6	-
4446	-	-	-	96.1	-	-	-	-	-	-	63.4	-	-
4485	39.3	-	-	-	-	-	-	-	-	-	-	-	-

Cattle Scapula

Context	Measurement				
	m2	m3	m4	m5	m6
	SLC		GLP	BG	LG
63	40.0	19.6	-	43.5	-
69	45.4	19.6	-	-	48.4
72	45.4	18.8	-	-	52.6
73	43.2	19.9	59.7	-	48.0
73	46.8	22.6	-	46.1	57.3
73	43.7	-	-	-	-
73	49.5	21.9	-	-	51.3
85	58.1	-	-	-	-
92	44.5	20.6	62.7	47.2	52.8
95	46.5	18.9	63.0	-	51.3
100	44.1	19.4	-	-	-
155	47.8	-	-	-	-
251	44.4	21.0	-	-	-
279	42.9	18.4	-	-	-
291	45.5	21.6	-	-	-
291	44.6	20.1	63.2	44.2	53.0
291	48.4	-	-	-	-
315	48.5	20.9	-	-	-
322	41.0	16.7	55.7	40.9	48.4
361	48.3	20.1	-	-	-
361	45.9	19.6	-	44.7	51.5
361	44.2	18.1	-	-	-
361	43.6	19.6	-	40.6	49.3
369	45.3	19.8	-	45.3	-
369	54.3	21.7	72.0	-	-
369	36.9	-	-	-	-
393	59.6	26.7	78.9	-	-

Cattle Scapula continued

	m2	m3	m4	m5	m6
	SLC		GLP	BG	LG
329	47.5	-	-	-	50.9
329	47.4	22.4	-	-	56.4
329	49.3	-	-	-	-
329	49.6	21.4	-	-	-
329	47.8	-	-	46.0	-
329	45.5	-	-	-	-
329	49.1	20.8	69.1	-	56.0
329	-	24.0	72.1	49.4	61.3
329	49.8	21.1	-	-	-
329	52.2	-	-	-	-
329	48.6	21.1	-	45.0	51.1
329	49.3	21.7	-	-	54.0
329	46.2	19.4	-	-	-
352	43.9	18.6	59.1	-	48.2
353	46.6	-	-	-	-
353	46.1	19.0	-	-	-
359	52.5	23.1	-	-	-
359	42.6	18.6	-	44.3	50.6
361	43.3	18.2	60.8	39.8	48.9
1206	-	-	-	42.7	50.4
1206	46.6	19.9	-	45.4	53.0
1429	-	18.5	59.2	-	48.4
1444	46.7	20.8	-	-	-
1446	45.0	-	-	-	-
1474	46.2	20.9	-	-	53.3
1663	59.1	-	-	-	-
1664	35.8	15.7	-	34.4	43.8

Cattle Scapula continued

	m2 SLC	m3	m4 GLP	m5 BG	m6 LG
416	43.2	-	-	-	-
517	45.4	17.7	-	-	-
545	54.5	27.2	-	-	-
565	45.6	19.9	66.7	43.7	53.3
570	52.0	-	-	-	-
592	45.0	17.1	-	-	-
592	44.7	18.9	-	-	-
608	46.0	17.7	61.3	40.7	49.1
667	47.2	-	-	-	-
674	46.7	20.0	-	-	51.3
674	37.9	16.9	55.1	39.8	46.9
674	47.3	20.3	62.3	44.0	48.4
713	51.6	21.8	71.8	-	-
731	44.3	18.0	-	-	-
732	47.7	20.5	69.3	-	57.5
732	44.6	17.9	60.2	40.6	49.6
773	49.1	-	-	-	-
773	57.1	-	75.4	-	-
782	44.4	19.5	63.4	-	50.8
786	-	-	71.8	-	58.4
786	48.4	23.0	-	-	-
786	41.6	17.4	-	-	-
787	-	-	79.7	-	67.3
809	47.8	21.2	63.7	45.8	54.0
809	58.9	-	-	-	-
892	46.2	20.8	63.6	44.6	53.3
892	49.6	-	-	-	-
892	45.2	19.8	-	43.7	51.4
936	48.2	21.2	-	-	-
936	43.2	19.9	60.6	41.7	48.8
943	41.9	-	-	-	-
976	66.3	-	-	-	-
976	-	-	63.6	44.7	53.8
978	-	22.3	-	-	-
978	52.4	21.3	-	-	59.7
979	45.0	18.4	-	-	-
979	-	-	58.8	-	-
1045	-	-	-	48.5	58.8
1115	44.9	18.4	59.3	39.8	-
1152	37.3	-	-	-	-
1186	41.5	-	-	-	-
1188	46.6	20.5	-	-	-
1206	44.4	18.8	-	-	-
1206	42.0	19.0	-	-	-
2733	47.2	-	-	-	-
3020	44.2	-	-	-	-
3024	41.8	18.9	57.1	-	47.7
3024	50.7	23.3	-	42.5	-
3024	56.6	25.0	77.1	-	64.0
3366	43.2	18.8	-	-	-
3651	46.1	18.9	61.4	42.4	50.3

Cattle Scapula continued

	m2 SLC	m3	m4 GLP	m5 BG	m6 LG
1664	46.1	21.3	-	47.5	51.1
1664	-	-	-	44.8	54.1
1709	45.0	21.6	-	-	-
1749	45.4	18.1	-	-	-
1784	42.1	20.9	-	-	-
1787	59.7	-	-	-	-
1790	47.0	20.1	-	-	50.5
1832	48.3	-	-	-	-
1906	40.9	17.7	59.6	-	50.5
1998	52.0	22.8	-	-	-
2037	47.7	-	-	-	-
2044	59.7	26.8	-	-	-
2061	48.3	21.0	61.1	-	50.8
2074	49.2	21.2	-	-	-
2155	46.1	19.8	-	-	50.2
2171	46.5	19.1	-	-	-
2171	62.0	30.2	79.3	-	67.4
2173	46.6	20.4	-	-	-
2178	45.2	18.9	61.8	-	51.1
2185	45.1	17.0	-	-	-
2257	44.2	18.5	-	-	-
2257	51.0	20.7	-	-	-
2258	45.0	21.2	59.8	-	50.0
2278	54.7	25.6	-	-	-
2283	46.0	21.7	62.8	45.2	52.9
2556	41.2	19.3	-	-	47.0
2560	44.7	-	-	-	-
2561	44.2	20.5	-	42.9	-
2565	41.1	18.0	-	-	-
2565	43.0	18.6	-	-	-
2565	46.3	21.7	65.8	-	51.2
2570	46.8	19.7	-	40.0	-
2570	-	-	67.2	47.7	55.4
2570	45.3	20.5	61.9	43.5	51.3
2570	49.0	27.6	-	51.9	-
2598	58.6	-	-	-	-
2598	-	-	-	43.0	49.8
2598	47.1	21.3	-	42.3	49.3
2606	53.4	-	-	-	-
2628	-	-	-	40.2	49.3
2634	48.6	20.0	66.2	42.6	54.0
2644	43.5	18.3	-	-	-
2660	-	-	59.7	42.4	49.5
2720	41.8	18.4	-	-	-
3669	43.6	18.4	-	-	47.8
4405	42.3	19.3	61.5	-	52.4
4416	54.8	22.2	-	-	
4428	46.9	18.4	-	-	57.3
4428	47.9	18.8	-	-	
4428	49.3	23.0	-	-	-
4487	48.8	-	65.2		61.5

Cattle Humerus

Context	Measurement						
	m2	m5	m6	m7	m8	m9	m10
	GLC	BT		Bd	SD	GL	LT
158	-	-	-	-	-	-	36.9
291	-	-	-	-	-	-	40.8
327	-	68.2	52.4	75.0	31.2	-	45.8
352	-	-	-	-	-	-	39.8
361	-	-	-	-	22.8	-	38.0
361	-	74.6	58.6	83.5	-	-	42.8
540	-	77.9	57.5	85.5	-	-	51.1
642	-	-	-	-	-	-	40.4
667	-	72.3	59.6	85.5	-	-	43.8
667	-	-	-	-	31.8	-	-
730	-	-	-	-	-	-	40.2
733	-	-	-	-	-	-	49.0
773	-	-	-	-	-	-	39.2
773	-	-	-	-	-	-	37.3
808	-	-	-	-	-	-	42.6
950	-	-	-	-	31.9	-	-
1041	-	-	-	-	26.2	-	36.6
1053	-	70.9	56.0	-	-	-	44.0
1206	-	66.0	-	-	29.5	-	39.5

Cattle Humerus continued

Context	Measurement						
	m2	m5	m6	m7	m8	m9	m10
	GLC	BT		Bd	SD	GL	LT
1428	-	62.5	-	-	-	-	37.2
1429	-	64.1	-	-	29.9	-	39.5
1709	-	-	-	-	-	-	41.4
1712	-	-	-	-	30.1	-	41.3
1831	-	67.3	-	-	-	-	38.2
2170	-	-	-	-	34.8	-	-
2170	-	-	-	-	32.7	-	42.9
2170	-	-	-	-	-	-	42.0
2195	-	-	-	-	-	-	42.3
2197	-	79.5	67.4	91.0	-	-	48.5
2257	-	-	-	-	-	-	48.2
2257	-	-	-	-	32.0	-	40.1
2258	-	66.7	-	74.2	-	-	39.5
2560	285.0	81.2	-	95.5	36.7	317.0	48.3
2561	-	-	-	-	33.3	-	-
2634	-	75.7	-	84.5	-	-	42.0
3351	-	-	-	-	-	-	48.2
3363	-	-	-	-	31.1	-	-
3399	-	-	-	-	-	-	42.4

Cattle Radius and Ulna fused

Context	Measurement									
	m1	m2	m3	m4	m5	m6	m8	m9	m11	m14
	GL	Bp				Bd	BFp	Dfd	SD	BPC
95	-	81.9	-	40.0	-	76.9	75.0	68.9	40.0	48.4
770	-	-	-	-	-	78.6	-	69.7	42.1	-
781	-	-	-	-	-	64.8	-	62.4	-	-
2061	264.0	72.5	36.7	36.7	19.9	62.3	67.8	59.1	33.8	-
2283	301.0	87.8	43.2	43.1	25.2	82.5	79.4	74.3	43.1	-
4437	-	-	-	-	-	76.0	-	75.4	-	-

Cattle Radius

Context	Measurement							
	m2	m3	m4	m5	m6	m8	m9	m11
	Bp				Bd	BFp	BFd	SD
128	69.5	36.9	-	-	-	-	-	-
361	-	38.4	-	-	-	66.6	-	-
361	71.4	37.2	-	19.6	-	-	-	-
394	-	-	-	-	59.9	-	54.5	-
667	75.0	38.9	-	-	-	69.3	-	-
986	78.4	40.8	-	-	-	71.6	-	-
1038	-	-	36.5	18.2	-	66.0	-	35.1
1358	89.7	-	-	-	-	79.4	-	-
1704	-	-	32.3	17.1	-	-	-	31.0
2044	-	-	-	-	59.6	-	50.6	-
2598	-	-	35.9	18.9	-	-	-	-
2620	-	-	32.9	18.6	-	-	-	-
3366	-	-	34.5	18.8	-	-	-	33.7

Cattle Ulna

Context	Measurement	
	m2	m4
	BPC	SDO
85	45.9	-
279	39.8	-
713	43.7	-
731	46.2	-
733	40.9	-
744	43.8	-
773	-	44.5
809	42.1	-
976	50.5	-
1152	46.8	-
1336	42.2	-
1415	-	50.0
1473	41.0	-
1816	53.1	-
2044	40.0	-
2570	39.9	-
3348	43.5	-
3399	44.6	-

Cattle Metacarpal

Context	Measurement														
	m1	m2	m3	m4	m5	m6	m7	m8	m9	m10	m11	m12	m13	m14	m15
	GL	Bp	Dp	SD		Bd							DD		
69	-	-	-	-	-	50.5	22.4	27.4	20.7	27.0	23.4	22.8	18.0	46.0	24.5
69	190.5	56.3	-	32.2	23.9	61.6	27.5	33.3	24.2	31.9	-	28.3	21.6	55.4	28.2
72	-	52.8	30.9	-	-	-	-	-	-	-	-	-	-	-	-
82	-	-	-	-	-	56.0	24.4	30.2	22.6	29.3	27.2	26.3	-	49.3	24.3
85	-	-	-	-	-	53.1	24.8	-	21.5	-	25.1	23.3	-	-	-
86	-	-	-	-	-	60.7	-	-	-	-	-	-	-	-	-
184	-	-	-	-	-	48.4	22.6	27.9	20.5	27.1	22.6	22.1	-	41.8	27.1
184	-	63.7	-	-	-	-	-	-	-	-	-	-	-	-	-
291	-	-	-	-	-	65.2	26.7	-	-	-	-	-	20.3	59.5	27.0
329	-	51.1	31.8	-	-	-	-	-	-	-	-	-	-	-	-
337	-	-	-	-	-	50.1	-	-	-	-	-	-	17.7	46.2	23.7
337	-	48.4	-	-	-	-	-	-	-	-	-	-	-	-	-
353	-	52.4	32.9	-	-	-	-	-	-	-	-	-	-	-	-
361	-	-	-	-	-	53.1	22.9	-	21.6	-	25.6	25.0	-	49.8	27.3
361	-	54.5	35.4	-	-	-	-	-	-	-	-	-	-	-	-
361	-	56.9	35.7	-	-	-	-	-	-	-	-	-	-	-	-
361	-	47.7	31.2	-	-	-	-	-	-	-	-	-	-	-	-
361	191.0	52.7	34.0	30.3	21.0	54.3	24.7	-	21.9	29.7	26.3	25.1	20.4	50.3	27.9
361	-	-	-	-	-	48.3	21.9	27.6	20.0	26.5	23.1	21.9	-	45.0	24.0
361	-	60.6	38.0	-	-	-	-	-	-	-	-	-	-	-	-
361	-	-	-	-	-	63.7	-	-	-	-	-	-	-	59.7	30.0
406	-	50.2	30.7	-	-	-	-	-	-	-	-	-	-	-	-
499	-	53.8	-	-	-	-	-	-	-	-	-	-	-	-	-
561	-	-	-	-	-	67.8	28.7	35.3	26.1	34.1	32.4	31.7	-	63.9	29.8
576	-	66.3	40.0	-	-	-	-	-	-	-	-	-	-	-	-
609	-	-	-	-	-	51.3	21.3	28.4	20.2	27.6	24.4	23.9	18.2	45.7	24.0
655	-	50.4	-	-	-	-	-	-	-	-	-	-	-	-	-
667	-	46.7	30.7	-	-	-	-	-	-	-	-	-	-	-	-
667	-	51.0	31.3	-	-	-	-	-	-	-	-	-	-	-	-
674	-	53.7	34.4	-	-	-	-	-	-	-	-	-	-	-	-
674	-	-	-	23.0	18.3	-	-	-	-	-	-	-	-	-	-
674	-	-	-	-	-	49.2	22.5	28.0	21.0	27.5	23.2	22.4	19.7	44.3	24.2
674	-	-	-	-	-	47.3	21.5	28.6	19.1	27.4	22.8	22.3	-	44.3	26.8
690	-	-	-	-	-	51.6	23.5	-	21.1	-	24.1	-	-	-	-
693	-	-	-	-	-	57.3	24.8	31.2	23.9	-	28.7	27.2	-	53.9	29.5
713	-	67.9	41.7	-	-	-	-	-	-	-	-	-	-	-	-
713	-	46.4	30.5	-	-	-	-	-	-	-	-	-	-	-	-
713	-	58.2	36.0	-	-	-	-	-	-	-	-	-	-	-	-
713	-	62.3	38.3	-	-	-	-	-	-	-	-	-	-	-	-
713	-	50.5	32.2	-	-	-	-	-	-	-	-	-	-	-	-
773	-	53.5	32.8	-	-	-	-	-	-	-	-	-	-	-	-
777	-	49.8	30.2	-	-	-	-	-	-	-	-	-	-	-	-
777	-	62.9	40.4	-	-	-	-	-	-	-	-	-	-	-	-
806	-	53.4	32.7	-	-	-	-	-	-	-	-	-	-	-	-
809	-	-	-	-	-	-	23.7	31.7	-	31.2	25.5	-	-	-	31.2
871	-	64.0	39.1	-	-	-	-	-	-	-	-	-	-	-	-
892	-	61.1	39.6	-	-	-	-	-	-	-	-	-	-	-	-
892	-	-	-	-	-	58.0	26.4	31.7	24.5	31.9	28.5	27.9	-	50.1	29.2
976	-	-	-	-	-	51.5	23.4	-	21.1	-	-	24.0	18.7	48.1	-
978	180.0	53.3	32.7	27.9	19.9	55.4	22.5	28.5	21.8	27.8	25.5	25.4	20.1	49.1	26.6
978	-	66.5	42.4	-	-	-	-	-	-	-	-	-	-	-	-
978	-	-	-	-	-	50.7	21.7	28.9	20.6	-	24.5	-	-	-	-
1225	-	58.4	36.4	-	-	-	-	-	-	-	-	-	-	-	-
1429	-	58.5	-	-	-	-	-	-	-	-	-	-	-	-	-
1468	-	63.0	37.7	-	-	-	-	-	-	-	-	-	-	-	-

Cattle Metacarpal continued

	m1	m2	m3	m4	m5	m6	m7	m8	m9	m10	m11	m12	m13	m14	m15
	GL	Bp	Dp	SD		Bd							DD		
1513	-	-	-	-	-	49.8	22.9	29.6	21.0	28.8	24.1	23.1	-	46.4	27.2
1526	-	50.8	31.2	-	-	-	-	-	-	-	-	-	-	-	-
1561	-	46.5	28.8	-	-	-	-	-	-	-	-	-	-	-	-
1616	-	48.6	30.9	28.6	21.8	-	-	-	-	-	-	-	-	-	-
1626	-	-	-	-	-	47.1	21.8	28.6	19.7	27.5	22.5	21.6	-	43.9	25.9
1664	-	-	-	-	-	52.9	22.5	28.4	20.1	27.9	24.4	23.6	-	48.8	25.0
1749	-	49.4	30.7	-	-	-	-	-	-	-	-	-	-	-	-
1796	-	-	-	-	-	54.2	23.7	-	-	-	25.1	24.9	-	50.5	28.0
1831	-	54.6	30.7	-	-	-	-	-	-	-	-	-	-	-	-
1831	-	-	-	-	-	50.1	-	-	19.9	28.8	24.5	22.3	-	-	-
2044	-	55.3	35.3	-	-	-	-	-	-	-	-	-	-	-	-
2044	-	60.9	35.7	-	-	-	-	-	-	-	-	-	-	-	-
2061	176.5	55.8	35.3	35.3	23.1	59.6	25.3	-	23.4	-	27.5	-	21.5	54.6	26.3
2061	-	49.4	30.5	25.2	19.2	-	-	-	-	-	-	-	-	-	-
2099	-	49.7	30.7	-	-	-	-	-	-	-	-	-	-	-	-
2170	-	60.4	37.3	-	-	-	-	-	-	-	-	-	-	-	-
2171	-	49.2	30.0	-	-	-	-	-	-	-	-	-	-	-	-
2172	-	48.4	-	26.9	18.8	-	-	-	-	-	-	-	-	-	-
2179	-	48.6	28.1	-	-	-	-	-	-	-	-	-	-	-	-
2257	-	58.7	37.5	-	-	-	-	-	-	-	-	-	-	-	-
2257	-	-	-	-	-	-	-	-	-	-	-	-	19.8	-	-
2275	-	-	-	-	-	49.0	20.7	26.2	19.8	26.4	23.8	23.0	15.5	44.9	22.2
2278	-	-	-	-	-	59.7	25.2	31.6	23.3	31.4	27.8	27.4	-	54.5	32.8
2565	-	49.2	29.4	-	-	-	-	-	-	-	-	-	-	-	-
2565	-	62.5	38.9	-	-	-	-	-	-	-	-	-	-	-	-
2570	-	-	-	-	-	52.7	23.6	29.9	22.0	28.8	24.1	23.5	20.4	47.8	26.0
2570	-	-	-	-	-	47.7	20.8	26.0	19.0	25.2	22.4	20.7	17.2	43.0	22.8
2588	-	61.8	39.4	-	-	-	-	-	-	-	-	-	-	-	-
2609	-	-	-	-	-	61.1	27.6	33.2	24.3	32.5	29.8	28.0	-	-	-
2609	-	51.0	33.6	-	-	-	-	-	-	-	-	-	-	-	-
2620	184.0	48.3	30.0	-	-	52.1	22.6	27.6	21.2	27.9	24.9	24.9	20.1	48.1	25.8
2620	181.0	-	29.3	27.7	19.4	51.4	23.3	27.9	20.6	27.4	24.3	24.2	19.5	47.3	26.2
2833	-	51.0	30.6	-	-	-	-	-	-	-	-	-	-	-	-
3365	-	50.8	32.5	-	-	-	-	-	-	-	-	-	-	-	-
3904	184.0	52.6	33.0	29.8	21.6	-	22.8	29.3	-	-	25.3	-	20.9	-	26.2
4404	172.6	48.5	31.0	24.9	19.3	49.1	23.1	27.8	20.2	26.9	23.5	22.7	18.4	43.3	23.9
4404	206.0	65.2	41.1	36.0	21.8	67.8	28.2	-	25.7	-	32.2	32.4	21.4	59.8	29.0
4405	-	51.1	32.5	-	-	-	-	-	-	-	-	-	-	-	-
4406	-	-	-	-	-	51.6	24.0	29.2	21.1	28.7	25.1	24.9	-	46.5	26.3
4406	-	-	-	-	-	50.2	22.8	29.6	20.1	28.1	25.8	22.7	-	45.5	28.2
4406	-	50.4	33.0	-	-	-	-	-	-	-	-	-	-	-	-
4416	-	60.0	-	-	-	-	-	-	-	-	-	-	-	-	-
4435	-	-	-	-	-	50.8	22.4	29.7	20.4	28.6	24.4	24.0	-	46.1	26.5
4437	-	49.0	31.6	-	-	-	-	-	-	-	-	-	-	-	-
4437	-	-	-	-	-	52.2	24.7	29.8	21.9	28.8	25.1	24.0	19.2	47.6	26.0
4492	188.0	52.4	32.8	29.5	19.5	54.0	22.6	29.3	20.9	27.9	25.7	24.2	18.5	49.6	25.0

Cattle Pelvis

Context	Measurement			
	m9	m16	m19	m20
	SB	SH	LA	LAR
85	21.6	37.6	-	-
329	21.9	38.0	62.9	46.7
361	-	-	-	-
368	19.4	33.4	59.1	49.0
583	22.7	36.8	-	-

Cattle Femur

Context	Measurement					
	m3	m4	m5	m7	m8	m9
	Bd			SD		DC
	-	-	-	-	-	-
361	-	28.2	-	-	-	-
713	-	29.6	-	-	-	-
777	-	-	-	-	-	41.3
891	-	-	-	36.4	37.1	-

Cattle Pelvis continued

	m9	m16	m19	m20
	SD	SH	LA	LAR
645	-	-	60.0	50.0
670	19.6	34.6	-	-
713	-	-	62.7	49.0
744	-	-	70.0	60.9
782	-	39.3	-	-
813	16.8	33.8	54.1	41.3
1186	22.6	35.9	-	-
2061	19.3	33.8	-	-
2061	25.0	42.2	-	-
2257	19.8	39.9	-	-
2620	-	-	56.9	47.5

Cattle Femur continued

	m3	m4	m5	m7	m8	m9
	Bd			SD		DC
892	-	-	30.0	-	-	-
1742	-	-	-	28.7	33.2	41.9
2061	83.0	-	-	-	-	-
2061	97.5	40.1	44.9	34.0	41.0	-
2170	-	29.4	-	-	-	-
2404	-	-	-	28.9	29.7	-
2561	-	-	-	31.4	35.2	-
2834	-	-	-	28.4	34.3	-
4428	-	-	-	-	-	41.9

Cattle Patella

Context	Measurement	
	m1	m2
	GL	GB
361	58.1	-
744	59.2	48.0
2280	56.4	46.6
4404	-	62.5

Cattle Tibia

Context	Measurement			
	m3	m5	m6	m7
	Bp	SD		Bd
63	-	-	-	66.4
72	-	38.4	26.1	66.1
72	-	32.0	23.7	-
361	-	37.6	26.6	-
361	-	-	-	56.7
394	-	-	-	53.0
667	-	-	-	52.3
732	-	31.8	23.4	51.9
777	-	-	-	53.6
891	-	-	-	60.7
891	-	-	-	60.0
1206	-	32.3	22.7	55.7
1223	-	34.5	22.5	-
1624	-	30.5	19.9	49.6

Cattle Tibia continued

	m3	m5	m6	m7
	Bp	SD		Bd
1704	-	-	-	57.0
1958	-	-	-	53.7
2044	-	-	-	56.6
2044	-	-	-	54.3
2044	-	41.3	27.9	-
2171	57.7	-	-	-
2173	-	38.7	27.2	-
2283	-	-	-	57.2
2583	-	-	-	51.5
2589	-	-	-	59.6
3351	-	34.3	23.5	55.0
3369	-	-	-	58.8
4404	-	34.1	24.0	54.6

Cattle Astragalus

Context	Measurement					
	m1	m2	m3	m4	m5	m6
	GLl		GLm		Bd	Dl
63	66.3	51.9	60.9	45.2	44.4	37.0
63	59.9	45.4	55.3	39.6	37.0	32.6
72	-	54.6	65.4	-	-	38.5
279	-	50.6	59.0	-	44.1	-
361	-	44.9	52.9	-	37.2	33.4
361	57.5	44.2	52.5	39.0	38.0	32.9
361	55.4	42.3	51.4	35.1	-	31.5
361	65.4	49.7	57.8	42.8	42.8	37.4
361	63.8	48.0	57.4	40.0	38.8	33.0
361	60.0	46.5	55.3	42.2	41.5	34.4
361	59.7	45.2	53.2	37.1	37.3	33.3

Cattle Astragalus continued

	m1	m2	m3	m4	m5	m6
	GLl		GLm		Bd	Dl
773	66.2	47.4	56.5	40.1	43.5	36.5
781	-	-	-	-	-	34.5
891	63.1	47.0	58.1	40.8	37.5	35.2
937	-	49.6	58.6	-	43.3	-
937	64.0	47.6	57.0	41.2	43.3	
976	60.5	44.6	54.3	-	-	36.2
986	-	43.2	49.3	-		-
1199	-	-	55.7	-	-	-
1202	63.3	48.1	58.7	41.0	41.4	-
1450	58.3	45.5	53.3	38.2	36.6	32.4
1473	-	-	-	-	-	42.1

Cattle Astragalus continued

	m1	m2	m3	m4	m5	m6
	GLl		GLM		Bd	Dl
361	-	48.3	57.4	41.6	43.9	36.1
394	-	48.0	56.3	-	40.8	34.9
406	60.7	46.7	-	-	40.5	34.2
564	69.5	52.8	-	-	46.0	37.1
609	-	-	-	-	42.3	-
609	-	45.3	55.3	-	37.0	33.3
667	61.8	47.5	-	38.9	-	34.9
667	58.4	44.8	52.9	37.0	35.8	31.6
674	64.0	48.4	56.5	41.7	41.9	35.9
674	58.0	45.2	53.8	40.8	37.0	32.5
674	-	50.4	-	-	43.4	38.4
693	-	-	-	-	-	34.2
713	-	-	-	-	38.1	-
713	64.7	49.0	-	44.3	-	36.0
713	60.2	46.1	55.7	37.2	36.6	33.0
713	58.5	-	-	-	-	-
713	-	45.7	55.0	-	-	-
744	-	-	-	-	40.1	34.8
773	-	-	-	37.4	-	-
773	61.8	47.5	56.4	35.8	37.2	32.9
2258	61.1	44.8	53.3	41.9	40.2	33.1
2561	58.8	45.5	54.0	36.2	36.5	32.4
2565	60.2	45.6	-	36.6	-	32.7
2570	-	-	-	-	40.8	-
2723	-	-	-	-	40.4	-
2834	67.6	52.0	61.8	46.4	42.6	37.1
2834	60.6	46.1	56.4	38.0	38.7	32.6

Cattle Astragalus continued

	m1	m2	m3	m4	m5	m6
	GLl		GLM		Bd	Dl
1474	60.8	-	-	-	-	33.6
1474	62.2	48.9	57.5	37.7	38.1	35.2
1474	59.8	45.9	55.0	38.8	37.1	32.5
1474	-	44.6	53.6	-	-	-
1517	-	-	-	-	-	-
1664	59.9	45.8	53.2	39.4	38.0	32.1
1704	55.7	-	50.6	-	-	30.3
1749	70.3	52.7	62.8	44.5	44.1	39.0
1749	59.1	-	-	-	36.5	31.6
1788	-	-	-	-	36.9	-
1831	56.5	44.3	52.1	38.2	35.6	32.0
1958	57.4	43.4	51.0	36.7	35.5	31.1
2044	-	47.8	59.1	-	46.5	36.9
2044	67.6	52.0	62.2	41.8	42.0	37.9
2061	-	52.0	60.5	43.0	45.7	-
2171	61.3	47.5	56.7	41.4	40.4	35.2
2171	59.8	45.7	54.6	39.2	-	34.9
2179	57.7	44.2	52.4	38.9	-	33.2
2195	-	46.5	54.3	-	37.4	-
2257	78.4	59.8	72.0	-	50.6	43.9
3346	60.0	44.7	54.4	-	36.5	-
3351	61.4	46.1	55.5	39.8	36.8	33.4
3684	69.8	54.3	63.8	46.3	45.5	38.7
4404	60.3	46.4	-	-	-	32.3
4416	58.2	44.6	52.4	37.3	37.6	32.2
4428	-	47.1	55.2	-	-	-

Cattle Calcaneum

Context Measurement

	m3	m4	m5	m6	m7	m8	m9	m12
	GL			GB				
72	-	-	-	-	14.5	-	-	45.7
72	-	-	-	-	12.3	-	-	45.7
72	116.1	29.7	33.9	37.5	13.6	-	-	44.0
82	-	-	-	-	15.1	-	51.2	45.9
270	-	29.1	34.0	-	-	-	-	-
323	-	-	-	-	13.9	45.0	49.6	46.6
361	-	30.0	37.8	-	-	-	-	-
361	117.9	27.9	33.8	37.5	12.9	-	47.5	44.2
361	-	-	-	-	-	46.7	-	-
361	-	-	-	-	15.6	-	-	53.5
361	-	-	-	-	12.5	39.8	45.2	-
363	-	-	-	-	12.2	-	46.1	43.7
379	-	-	-	-	15.7	46.1	-	-
392	-	-	-	-	13.3	-	50.0	45.9
540	141.0	-	-	47.0	18.6	49.8	57.9	54.1
560	-	-	-	-	13.0	-	-	-
667	-	-	-	-	14.3	41.9	-	43.5
667	-	-	-	-	14.1	-	53.7	50.0
667	-	-	-	-	-	39.4	-	-
667	-	-	-	-	14.0	42.3	48.0	43.9
690	-	-	-	-	13.0	-	49.4	44.8
713	113.2	27.4	35.2	38.0	12.3	-	-	42.9

Cattle Calcaneum continued

	m3	m4	m5	m6	m7	m8	m9	m12
	GL			GB				
732	119.1	28.9	36.0	38.5	14.6	43.6	49.7	46.5
773	128.4	32.1	40.1	43.0	14.7	-	49.8	46.2
773	-	-	-	-	13.0	-	-	-
777	-	-	-	-	13.2	42.5	47.8	44.8
780	-	-	-	-	11.5	-	-	-
808	-	-	-	-	13.6	-	-	46.7
950	-	-	-	-	15.8	-	-	50.2
986	-	-	-	-	14.4	-	-	-
1410	117.7	28.8	35.0	37.0	13.3	39.8	45.8	-
1472	-	-	-	-	13.2	-	49.5	46.6
1749	-	-	-	-	13.3	41.2	46.9	44.5
1784	-	-	-	-	16.0	47.4	50.9	48.4
2044	-	-	-	-	12.3	-	-	42.3
2170	-	-	-	-	15.6	41.9	48.8	43.4
2197	-	-	-	-	15.8	-	52.8	49.3
2570	-	-	-	-	13.9	43.4	47.3	44.9
2598	-	-	-	-	14.0	45.0	50.8	46.1
2601	-	-	-	-	13.2	-	-	44.5
2615	-	-	-	-	11.5	-	42.5	41.4
2645	-	-	-	-	12.8	38.2	44.6	42.8
3369	122.4	28.4	-	40.5	13.3	40.5	48.5	43.4
3370	118.3	28.9	35.0	39.0	13.4	42.0	48.4	44.0

Cattle Metatarsal

Context	Measurement														
	m1	m2	m3	m4	m5	m6	m7	m8	m9	m10	m11	m12	m13	m14	m15
	GL	Dp	Dp	SD		Bd							DD		
68	-	44.6	-	-	-	-	-	-	-	-	-	-	-	-	-
72	-	41.2	40.2	21.5	26.6	-	-	-	-	-	-	-	-	-	-
352	-	41.7	41.2	-	-	-	-	-	-	-	-	-	-	-	-
353	-	-	-	-	-	50.2	23.1	28.6	20.6	28.2	23.9	22.8	23.5	48.0	28.9
359	193.5	44.1	40.2	25.0	26.5	53.0	23.6	29.7	20.6	28.5	-	23.7	23.5	48.2	27.6
359	-	44.5	42.0	23.4	26.3	53.4	23.1	30.0	20.3	28.8	26.0	23.5	23.6	47.7	29.4
361	-	50.1	47.0	-	-	-	-	-	-	-	-	-	-	-	-
361	-	-	-	-	-	49.3	-	-	-	-	-	-	-	46.9	26.2
361	-	40.6	39.4	22.0	23.5	-	20.5	-	-	-	22.9	-	20.7	-	25.6
361	-	-	-	-	-	48.0	22.0	29.1	20.3	28.2	22.5	22.0	-	45.0	28.5
369	-	42.8	40.6	-	-	-	-	-	-	-	-	-	-	-	-
608	-	-	-	-	-	48.2	23.0	-	20.7	-	-	-	-	43.9	25.9
608	-	43.9	42.4	-	-	-	-	-	-	-	-	-	-	-	-
609	197.5	37.4	37.6	19.8	25.2	44.5	20.2	22.0	18.5	26.1	21.5	20.3	20.9	40.4	24.5
642	-	43.1	41.0	-	-	-	-	-	-	-	-	-	-	-	-
655	-	41.4	39.9	-	-	-	-	-	-	-	-	-	-	-	-
655	-	42.8	37.2	-	-	-	-	-	-	-	-	-	-	-	-
667	-	43.2	-	-	-	-	-	-	-	-	-	-	-	-	-
674	-	-	-	-	-	58.7	21.9	29.6	23.1	30.1	28.3	27.5	24.5	52.5	30.4
693	-	44.5	42.5	25.4	28.6	-	-	-	-	-	-	-	-	-	-
713	-	43.0	38.8	-	-	-	-	-	-	-	-	-	-	-	-
713	-	43.8	41.5	-	-	-	-	-	-	-	-	-	-	-	-
713	-	53.3	49.5	-	-	-	-	-	-	-	-	-	-	-	-
713	-	40.4	41.0	-	-	-	-	-	-	-	-	-	-	-	-
732	-	40.2	40.0	-	-	-	-	-	-	-	-	-	-	-	-
776	-	49.9	-	-	-	-	-	-	-	-	-	-	-	-	-
777	-	42.1	38.0	-	-	-	-	-	-	-	-	-	-	-	-
781	-	-	-	22.3	24.8	-	22.1	-	-	-	21.7	-	21.6	42.5	26.6
793	-	42.3	-	-	-	-	-	-	-	-	-	-	-	-	-
950	-	-	-	-	-	49.1	23.9	-	21.0	-	23.5	22.0	-	46.4	-
976	-	-	-	-	-	48.9	23.3	29.5	21.3	29.3	-	21.8	23.0	46.6	27.3
978	-	48.1	-	-	-	-	-	-	-	-	-	-	-	-	-
978	-	47.6	43.4	-	-	-	-	-	-	-	-	-	-	-	-
979	-	42.1	41.0	-	-	-	-	-	-	-	-	-	-	-	-
1006	-	48.0	46.2	29.0	29.3	-	-	-	-	-	-	-	24.4	-	-
1152	-	44.0	40.7	25.4	25.3	-	-	-	-	-	-	-	22.5	-	-
1186	-	40.6	41.9	-	-	-	-	-	-	-	-	-	-	-	-
1186	-	-	-	-	-	59.1	25.9	32.8	23.8	32.1	26.9	25.8	24.6	52.3	29.9
1186	-	-	-	-	-	53.3	24.6	30.5	21.6	30.4	24.7	24.4	-	50.8	28.5
1429	-	42.1	40.8	-	-	-	-	-	-	-	-	-	-	-	-
1472	-	-	-	-	-	44.2	21.1	27.2	19.2	26.7	21.4	20.4	-	41.0	23.1
1561	-	42.8	38.7	-	-	-	-	-	-	-	-	-	-	-	-
1570	-	44.7	41.5	-	-	-	-	-	-	-	-	-	-	-	-
1664	-	-	-	-	-	58.4	24.7	33.0	23.5	32.6	27.0	26.3	-	54.1	30.9
1748	-	42.8	40.6	-	-	-	-	-	-	-	-	-	-	-	-
1788	-	44.4	44.3	-	-	-	-	-	-	-	-	-	-	-	-
1851	-	-	-	-	-	-	24.9	31.7	21.8	31.0	28.4	25.0	-	-	-
2044	-	46.9	45.4	-	-	-	-	-	-	-	-	-	-	-	-
2044	-	-	-	-	-	57.5	26.0	-	26.3	-	26.5	25.8	24.8	54.1	29.3
2061	-	47.4	-	24.3	27.3	53.2	22.3	-	20.0	28.3	24.9	-	22.5	47.9	26.5
2066	-	42.2	40.1	-	-	-	-	-	-	-	-	-	-	-	-
2074	-	-	-	-	-	49.8	22.4	29.3	19.7	-	24.1	22.8	22.3	46.1	26.7
2074	-	42.3	40.5	-	-	-	-	-	-	-	-	-	-	-	-
2170	-	-	-	-	-	49.3	23.2	29.7	20.6	28.3	23.0	22.2	22.8	46.5	27.8
2170	-	-	-	-	-	-	-	-	-	-	-	-	21.0	-	-

Cattle Metatarsal continued

	m1	m2	m3	m4	m5	m6	m7	m8	m9	m10	m11	m12	m13	m14	m15
	GL	Bp	Dp	SD		Bd							DD		
2170	-	46.6	45.6	-	-	-	-	-	-	-	-	-	-	-	-
2222	-	-	-	-	-	50.3	24.3	31.1	22.1	29.9	24.0	23.5	-	45.8	27.9
2426	-	44.4	44.6	-	-	-	-	-	-	-	-	-	-	-	-
2430	-	-	-	-	-	47.4	22.2	28.3	20.1	27.1	22.8	22.0	21.9	44.1	27.5
2583	-	42.2	-	-	-	-	-	-	-	-	-	-	-	-	-
2615	188.3	42.3	42.0	25.7	27.9	53.3	22.5	28.4	19.3	27.4	24.5	23.6	22.2	47.2	26.6
2620	-	-	-	-	-	51.6	23.6	30.2	20.7	-	24.3	23.7	22.9	48.4	28.3
2628	-	46.3	43.4	-	-	-	-	-	-	-	-	-	-	-	-
2660	-	-	-	-	-	46.8	22.0	29.2	19.9	28.1	22.9	21.0	-	44.4	25.6
3053	-	-	-	-	-	51.2	23.0	29.8	21.3	29.2	24.3	23.0	-	46.5	25.5
3684	-	-	-	-	-	50.7	23.1	30.6	20.7	-	24.9	23.8	23.0	48.4	28.8
4404	240.0	53.1	51.1	28.9	32.4	61.4	25.3	32.6	-	-	29.2	28.2	26.5	57.8	30.2
4437	-	-	-	-	-	48.3	22.2	28.7	19.4	27.2	23.4	22.2	22.1	43.9	26.4
4437	-	-	-	-	-	47.9	21.4	-	20.6	28.3	23.6	22.3	21.4	45.8	27.3
4437	-	42.3	39.4	-	-	-	-	-	-	-	-	-	-	-	-
4437	-	-	-	-	-	47.5	22.8	29.4	20.5	28.3	22.6	21.5	22.3	44.5	27.5

SHEEP AND GOAT

Sheep Horncore

Context	Measurement		
	m1	m2	m3
	45	46	47
361	33.6	20.9	-
667	30.4	22.8	-
674	30.2	20.3	-
744	19.8	17.1	46.5
1491	35.6	26.4	-
2275	37.3	26.7	-
2277	28.3	20.6	-
2427	32.8	20.5	-
3024	15.9	14.4	-

Sheep/Goat Horncore

Context	Measurement		
	m1	m2	m3
	45	46	47
361	-	22.2	-
361	37.2	23.1	-
562	32.4	19.8	-
693	40.8	27.9	-
900	33.8	21.7	-
1410	30.3	18.4	-
1607	33.4	19.3	-
1831	34.2	22.3	-
2644	31.0	23.4	-

Goat Horncore

Context	Measurement		
	m1	m2	m3
	45	46	47
690	32.5	19.1	-
773	37.0	24.5	-

Sheep/Goat Maxilla

Context	Measurement		
	m4	m5	m6
	20	21	22
329	-	-	27.4
368	-	43.4	-
1664	73.6	47.2	26.1
2620	65.1	41.9	22.7
2724	-	43.9	-
2733	67.8	43.3	25.9
4437	59.0	39.7	20.4

Sheep/Goat Mandible

Context	Measurement																
	m1	m2	m3	m4	m5	m6	m10	m11	m12	m13	m14	m15	m16	m17	m18	m19	m20
		12	13	14	1	5	9	8	11	15c			15b			10L	7
69	-	-	-	-	-	-	-	47.5	-	-	17.4	17.9	19.7	24.6	28.2	23.1	-
73	21.7	66.9	60.3	-	-	109.1	22.1	46.8	-	15.0	17.5	17.3	19.5	22.6	26.8	19.3	69.1
82	-	-	-	-	-	-	20.2	39.1	-	17.4	17.3	19.6	21.0	23.1	27.1	15.6	60.3
89	19.8	-	-	-	-	107.9	20.5	43.6	-	16.0	17.2	17.6	19.0	22.2	26.4	18.7	62.3
171	-	-	-	-	-	-	-	-	-	-	-	-	19.0	23.3	-	17.1	-
186	-	-	-	-	-	-	-	-	-	-	-	-	-	-	28.6	19.6	-

Sheep/Goat Mandible continued

	m1	m2	m3	m4	m5	m6	m10	m11	m12	m13	m14	m15	m16	m17	m18	m19	m20
		12	13	14	1	5	9	8	11	15c			15b			10L	7
337	-	-	-	-	-	-	18.9	-	-	18.1	19.1	19.1	19.2	20.9	-	-	-
359	20.0	63.2	55.7	82.0	-	108.5	21.6	46.4	-	15.5	17.7	18.2	19.1	22.3	24.8	19.2	67.3
360	-	-	-	-	-	-	22.0	-	-	16.7	17.9	19.0	20.5	24.5	28.4	-	-
360	-	-	-	-	-	-	-	-	38.2	18.3	-	-	-	-	-	-	-
361	21.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
361	17.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	20.8	-
361	-	-	-	-	-	-	-	45.1	-	-	-	-	-	-	26.7	21.0	-
361	22.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
394	18.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
642	17.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
642	20.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
667	17.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
667	16.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
732	20.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
732	-	-	-	-	-	-	20.3	44.1	-	-	-	-	-	-	-	19.8	64.3
732	-	-	-	-	-	-	20.1	42.6	-	-	-	-	-	-	-	16.8	63.3
732	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	21.5	-
732	20.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
737	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	17.2	-
773	-	-	-	-	-	-	22.5	-	-	-	-	17.7	19.3	24.5	-	17.3	-
773	-	-	-	-	-	-	-	44.5	-	-	-	-	-	-	-	19.8	-
776	-	-	-	-	-	-	20.5	-	-	17.8	18.9	19.8	-	-	-	-	-
777	-	-	-	-	-	-	22.2	-	-	15.9	16.6	17.7	19.4	24.1	-	-	-
777	-	-	-	-	-	-	-	-	-	14.6	16.0	18.4	-	-	-	-	-
777	-	-	-	-	-	-	22.5	46.5	-	18.9	20.7	21.8	21.4	25.4	26.5	21.5	69.8
777	-	-	-	-	-	-	23.9	51.3	-	18.5	19.8	20.6	21.9	24.9	29.4	21.3	75.4
977	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	19.8	-
1152	19.2	-	-	-	-	-	-	44.4	-	-	-	-	-	23.0	26.0	18.8	-
1198	-	-	-	-	-	-	20.2	-	-	18.0	20.1	20.3	20.8	23.7	26.4	17.6	-
1216	-	-	-	-	-	-	22.0	-	-	17.2	18.4	19.4	20.1	24.2	26.4	19.0	-
1428	-	-	-	-	-	-	18.3	44.7	-	14.7	15.6	17.3	17.9	20.7	25.0	21.3	62.1
1446	18.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1509	21.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1664	20.4	60.0	53.9	-	158.9	110.8	19.8	45.0	39.6	16.3	17.3	18.9	20.4	23.3	26.4	19.4	65.4
1779	21.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1779	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1990	-	-	-	-	-	-	21.6	45.7	-	-	18.0	18.6	20.6	24.0	28.0	18.2	70.9
2061	19.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2074	20.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	18.4	-
2222	-	-	-	-	-	-	21.9	45.5	-	17.3	18.8	19.3	20.0	24.1	-	17.7	69.1
2272	20.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2278	-	-	-	-	-	-	18.9	42.7	-	-	-	18.4	20.0	23.7	27.2	16.0	63.8
2387	-	-	-	-	-	-	22.9	-	-	16.7	19.2	20.6	20.3	-	-	-	-
2564	18.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2565	19.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2565	-	-	-	-	-	-	22.0	46.1	-	14.6	16.3	18.3	18.4	23.2	28.3	-	66.6
2589	-	-	-	-	-	-	22.5	48.3	-	18.7	21.2	21.7	22.6	25.4	30.1	19.1	71.6
2830 L41	20.6	-	-	-	-	-	-	-	-	14.6	16.8	18.2	19.2	-	-	21.3	-
2830 L43	20.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	20.7	-
3016 L141	19.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3016 L143	20.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3372	17.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4404	17.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Sheep/Goat Scapula

Context	Measurement				
	m2	m3	m4	m5	m6
	SLC		GLP	BG	LG
90	16.2	8.7	-	-	-
270	18.0	-	30.6	-	24.2
323	21.1	11.4	-	-	-
323	16.8	-	-	-	-
359	15.3	9.4	-	-	-
361	18.0	9.9	29.5	17.4	23.6
361	16.1	8.1	25.8	15.8	21.2
361	17.9	9.2	-	-	-
361	15.1	8.8	28.1	17.0	23.3
667	18.4	8.7	29.4	18.6	23.0
674	16.7	8.3	27.8	17.5	22.6
712	17.6	8.5	27.3	16.9	21.4
732	15.6	8.2	29.6	16.8	23.6
732	-	-	29.8	-	-
732	15.6	-	27.8	-	21.3
732	19.0	-	-	19.7	-
733	17.3	11.4	-	-	-
744	17.2	9.3	30.9	17.4	24.3
767	17.2	9.6	27.5	18.7	22.4
773	17.1	8.9	-	-	-
773	-	9.7	-	19.7	-
773	18.7	10.0	31.5	19.8	24.1
777	17.9	10.0	-	-	-
780	18.7	9.0	-	-	-

Sheep/Goat scapula continued

	m2	m3	m4	m5	m6
	SLC		GLP	BG	LG
939	15.3	9.3	29.5	18.3	23.6
1429	16.2	8.7	-	-	-
1831	18.7	9.4	27.8	17.6	22.4
1831	18.5	-	-	-	-
1831	16.8	8.8	-	-	-
1987	14.2	7.9	25.2	16.2	19.0
1988	17.9	11.5	-	22.0	-
2061	18.5	9.7	28.8	18.2	23.3
2076	16.1	8.9	-	-	-
2206	15.2	8.0	27.3	16.7	22.0
2564	16.1	9.4	28.9	18.5	23.7
2565	17.9	10.4	-	-	-
2565	16.9	9.3	-	-	-
2606	17.4	9.2	32.1	19.9	25.9
2615	15.6	7.8	25.2	17.0	20.5
2620	18.4	-	-	-	-
2626	17.5	9.2	-	-	-
2628	19.3	9.5	-	-	-
2630	-	-	-	16.7	21.4
2707	17.5	8.9	-	18.6	-
2830 [4]	16.1	7.8	26.4	6.5	21.3
3351	19.3	9.0	-	-	-
4415	16.5	9.8	-	-	-

Sheep/Goat Humerus

Context	Measurement						
	m2	m3	m5	m6	m7	m8	m10
	GLC	Bp	BT		Bd	SD	LT
63	-	-	26.8	-	28.0	-	17.0
69	-	-	28.0	21.2	29.3	-	18.2
93	-	-	25.2	20.2	28.8	-	15.8
397	-	-	-	-	-	9.6	-
352	-	-	25.8	19.8	27.5	-	16.7
361	-	-	26.4	20.4	27.5	-	16.5
361	-	-	26.7	20.2	28.2	-	17.4
361	-	-	25.9	-	26.3	-	16.8
361	-	-	-	-	-	12.9	17.2
361	-	-	-	-	-	-	16.0
361	-	-	25.7	-	27.6	-	16.5
361	-	-	28.3	-	30.0	-	17.4
361	-	-	-	-	-	13.4	-
392	-	-	-	-	-	13.7	-
667	-	-	23.8	19.2	25.7	11.7	14.5
667	-	-	24.7	19.8	28.5	-	17.2
667	-	-	25.6	-	26.8	-	16.9
667	-	-	26.8	-	-	-	17.5
670	-	-	25.4	20.3	27.9	-	16.5
674	-	37.1	-	-	-	-	-
713	-	-	27.5	-	29.4	-	13.2
713	-	-	25.5	19.7	27.4	-	16.3
1481	-	-	23.9	19.0	27.5	-	19.2
1557	-	-	25.0	19.7	28.6	-	16.7
1557	-	-	26.0	19.7	28.8	-	16.8
1664	-	-	25.1	18.9	26.9	13.3	15.7

Sheep/Goat Humerus continued

	m2	m3	m5	m6	m7	m8	m10
	GLC	Bp	BT		Bd	SD	LT
713	-	-	25.7	-	27.9	-	16.6
713	-	-	-	-	-	-	15.9
713	-	-	27.7	-	29.1	14.0	16.8
713	-	-	28.4	-	30.2	-	17.6
730	-	-	27.8	-	-	-	17.8
732	-	-	-	18.9	-	-	16.1
744	-	-	27.3	20.7	28.9	-	17.3
773	-	-	25.5	20.5	26.8	-	15.8
773	-	-	-	-	-	15.8	-
773	-	-	-	-	-	13.3	-
777	-	-	-	-	-	13.1	-
780	-	-	25.7	18.9	27.3	-	16.6
786	-	-	27.5	-	30.4	15.6	18.0
968	-	-	-	-	-	12.5	16.1
978	-	-	26.0	-	-	-	16.1
1041	-	-	25.6	19.7	27.9	-	16.1
1222	-	-	29.4	23.7	31.5	-	18.3
1402	-	-	24.6	-	26.4	11.9	15.3
1428	-	-	23.6	20.2	25.5	10.7	15.2
1428	-	-	27.8	22.0	28.5	-	17.5
1472	-	-	28.3	22.6	31.5	13.9	19.2
1474	-	-	24.9	-	27.3	12.9	16.5
2561	-	-	25.1	19.3	26.0	13.3	16.5
2615	-	-	25.9	-	28.4	-	17.0
2615	-	-	25.9	20.2	27.7	-	16.9
2620	-	-	24.4	17.2	26.2	12.7	16.1

Sheep/Goat Humerus continued

	m2 GLC	m3 Bp	m5 BT	m6	m7 Bd	m8 SD	m10 LT
1664	-	-	28.2	-	30.3	-	18.8
1787	-	-	-	-	-	14.0	-
1788	-	-	-	-	-	15.8	-
1834	-	-	25.5	20.5	27.2	-	-
2044	-	-	-	-	-	-	15.8
2061	-	-	24.6	20.8	28.3	-	16.8
2074	-	-	26.0	21.1	27.0	-	15.5
2074	-	-	24.2	18.9	25.5	12.5	15.6
2158	-	-	22.8	18.1	26.0	-	14.8
2179	-	-	-	-	-	12.7	-
2257	-	-	24.8	21.4	26.8	-	17.1
2267	-	-	28.1	21.7	30.6	-	18.0

Sheep/Goat Humerus continued

	m2 GLC	m3 Bp	m5 BT	m6	m7 Bd	m8 SD	m10 LT
2647	-	-	27.6	-	-	-	17.0
2723	-	-	21.9	18.0	23.8	11.7	15.6
2830 [4]	-	-	24.1	-	26.2	12.4	15.3
2830 [4]	-	-	24.3	18.2	25.4	-	15.1
3015 [14]	112.8	-	24.2	-	26.3	13.0	16.0
3336	-	-	30.1	-	32.0	-	18.7
3505	-	-	25.7	20.2	26.9	-	16.7
4404	-	-	24.2	-	25.0	11.6	14.9
4405	-	-	27.2	20.8	28.4	14.8	17.1
4428	-	-	26.9	-	28.6	-	17.9
4449	-	-	-	-	-	14.2	17.6
4492	-	-	25.1	18.7	26.7	-	16.7

Sheep/Goat Radius

Context Measurement

	m1 GL	m2 Bp	m3	m4	m5	m6 Bd	m7	m8 BFp	m9 BFd	m11 SD
72	-	-	-	16.4	8.3	-	-	-	-	-
87	-	-	-	-	-	30.4	19.4	-	27.3	-
89	-	-	-	-	-	24.9	17.6	-	21.4	-
90	-	26.1	13.1	14.8	7.4	-	-	23.8	-	14.5
337	-	-	-	15.6	-	25.7	16.6	-	21.1	15.2
361	-	28.8	15.0	-	-	-	-	27.7	-	-
361	-	28.1	13.8	-	-	-	-	26.3	-	-
361	-	28.6	14.0	-	-	-	-	25.9	-	-
361	-	-	-	16.8	8.4	-	-	-	-	15.5
361	-	29.3	14.4	-	-	-	-	-	-	-
361	-	-	-	-	-	25.3	15.6	-	21.3	-
361	-	-	-	-	-	24.9	17.3	-	20.6	14.6
361	-	-	-	-	-	25.4	17.5	-	20.0	-
368	-	-	-	16.3	7.5	-	-	-	-	14.3
394	-	-	-	-	-	25.3	16.9	-	21.6	-
526	-	-	-	15.5	7.7	-	-	-	-	-
642	-	-	-	16.0	8.0	-	-	-	-	15.3
667	-	27.4	13.6	16.6	8.3	-	-	24.5	-	-
667	-	28.5	14.8	-	-	-	-	27.2	-	-
667	-	23.2	12.7	13.0	6.9	-	-	22.5	-	12.4
667	-	29.6	15.5	18.5	8.7	-	-	28.2	-	-
671	-	30.1	15.3	-	-	-	-	-	-	-
674	-	-	-	-	-	28.7	18.2	-	23.6	-
731	-	27.1	13.6	15.6	7.5	-	-	-	-	-
731	-	25.2	-	14.8	7.7	-	-	23.2	-	-
744	-	-	-	15.9	8.0	-	-	-	-	14.8
761	-	31.8	16.3	18.1	9.6	-	-	30.7	-	-
773	-	28.6	15.0	-	-	-	-	-	-	-
773	-	28.2	14.3	16.8	8.6	-	-	27.0	-	-
777	-	26.7	13.9	15.9	6.9	-	-	25.3	-	-
777	-	-	-	16.3	7.9	-	-	-	-	-
777	-	27.4	14.3	16.8	8.3	-	-	26.5	-	-
777	-	24.9	-	-	-	-	-	-	-	-
793	-	27.8	14.7	16.5	7.5	-	-	-	-	15.3
891	-	-	-	14.7	7.5	-	-	-	-	-
893	-	25.3	13.3	16.0	7.5	-	-	24.3	-	-
1152	-	-	-	15.1	7.1	-	-	-	-	14.6
1206	-	29.2	14.7	16.5	8.1	-	-	-	-	14.8
1336	-	26.2	-	15.1	8.0	-	-	-	-	-

Sheep/Goat Ulna

Context Measurement

	m1 LO	m2 BPC	m4 SDO
361	-	15.0	-
361	36.9	-	19.6
361	-	15.7	21.1
361	-	15.3	-
361	-	16.0	-
667	-	18.4	20.8
732	-	16.2	-
773	-	17.2	19.7
773	-	19.3	-
793	-	17.7	-
1591	38.2	15.8	20.6
1684	-	15.2	19.3
2062	-	15.9	19.7
2074	-	16.4	-
2074	-	15.4	19.4
2171	-	14.1	19.0
2257	34.2	14.5	18.3
2258	-	17.3	-
2540	-	14.4	-
2552	-	14.1	-
2565	34.8	14.5	19.4
2570	-	16.4	-
3684	-	16.7	19.1
4405	-	17.3	22.3

Sheep/Goat Radius continued

		m1 GL	m2 Bp	m3	m4	m5	m6 Bd	m7	m8 BFp	m9 BFd	m11 SD
1428		-	27.5	13.4	16.6	7.6	-	-	25.2	-	-
1660		-	25.8	14.4	15.5	7.6	-	-	-	-	-
1664		-	28.0	13.0	-	-	-	-	24.7	-	-
1768		-	28.0	15.3	15.9	8.6	-	-	26.7	-	15.0
1770		-	29.2	14.9	-	-	-	-	-	-	-
1831		-	-	-	15.3	8.0	-	-	-	-	-
1906		-	-	-	15.2	7.9	-	-	-	-	14.7
1955		-	28.4	14.5	16.5	8.2	-	-	-	-	-
2044		-	-	-	-	-	25.7	16.6	-	22.4	-
2064		-	-	-	14.0	6.9	-	-	-	-	13.0
2074		-	-	-	-	-	26.9	17.3	-	-	-
2074		-	28.7	13.9	16.5	8.2	-	-	-	-	16.4
2257		-	27.9	13.3	-	-	-	-	25.6	-	-
2257		-	-	-	17.4	7.9	-	-	-	-	16.3
2258		-	-	-	-	-	26.0	17.5	-	21.9	-
2401		-	-	-	17.0	7.5	-	-	-	-	15.9
2468		-	-	-	16.1	7.2	-	-	-	-	15.1
2540		-	28.1	14.9	15.9	8.1	-	-	25.6	-	-
2564		-	-	-	14.5	6.8	-	-	-	-	-
2570		-	-	-	15.7	8.5	-	-	-	-	-
2587		-	-	-	16.5	8.3	-	-	-	-	-
2620		-	27.9	13.8	16.3	7.8	-	-	-	-	15.3
2628		-	-	-	15.4	8.0	-	-	-	-	-
2630		-	-	-	18.4	9.5	-	-	-	-	-
2630		-	29.6	15.4	17.2	8.3	-	-	27.0	-	-
2630		-	-	-	-	-	24.3	16.5	-	20.7	-
2723		-	-	-	15.6	8.0	-	-	-	-	14.9
2819		-	26.9	-	-	-	-	-	25.0	-	-
2830	[4]	147.3	26.9	12.2	14.8	7.3	24.3	16.2	26.1	20.3	13.1
2830	[4]	149.0	-	12.7	15.2	6.8	24.3	15.9	-	19.9	14.0
3016	[14]	-	-	-	-	-	25.2	16.6	-	24.1	-
3544		-	28.5	13.8	15.7	7.7	-	-	25.4	-	14.4
3552		-	25.3	12.6	14.8	7.0	-	-	-	-	-
3684		-	28.5	14.3	-	-	-	-	26.5	-	-
4405		-	28.9	14.7	17.2	7.8	-	-	26.9	-	16.7

Goat Metacarpal

Context Measurement

	m1 GL	m2 Bp	m3 Dp	m4 SD	m5	m6 Bd	m7	m8	m9	m10	m11	m12	m13 DD	m14 DFB	m15 DFD
674	110.5	23.7	17.8	16.4	11.0	27.3	10.3	16.5	9.7	16.4	12.8	12.6	9.6	28.2	13.9

Sheep/Goat Metacarpal

Context Measurement

	m1 GL	m2 Bp	m3 Dp	m4 SD	m5	m6 Bd	m7	m8	m9	m10	m11	m12	m13 DD	m14 DFB	m15 DFD
73	-	20.3	15.6	12.9	10.3	-	-	-	-	-	-	-	-	-	-
291	-	-	-	11.5	10.4	-	-	-	-	-	-	-	-	-	-
361	-	-	-	-	-	23.2	10.3	-	9.8	-	10.8	10.6	7.6	23.3	11.3
361	-	-	-	13.7	-	-	-	-	-	-	-	-	-	-	-
361	-	21.4	15.5	-	-	-	-	-	-	-	-	-	-	-	-
361	-	21.4	15.4	-	-	-	-	-	-	-	-	-	-	-	-
361	-	-	-	13.6	10.1	-	-	-	-	-	-	-	-	-	-
361	-	21.9	16.5	-	-	-	-	-	-	-	-	-	-	-	-
361	-	-	-	12.2	9.9	-	-	-	-	-	-	-	-	-	-
361	125.7	21.3	15.4	-	-	23.5	10.9	15.1	10.3	-	11.0	10.9	9.3	23.2	12.5

Sheep/Goat Metacarpal continued

	m1 GL	m2 Dp	m3 Dp	m4 SD	m5	m6 Bd	m7	m8	m9	m10	m11	m12	m13 BD	m14 DFD	m15 DFD
369	-	21.0	15.5	13.1	11.3	-	-	-	-	-	-	-	-	-	-
392	-	20.8	15.6	13.1	10.9	-	-	-	-	-	-	-	-	-	-
399	-	21.0	15.6	12.8	-	-	-	-	-	-	-	-	9.1	-	-
460	-	20.3	14.8	13.5	-	-	-	-	-	-	-	-	-	-	-
532	-	-	-	12.8	11.4	-	-	-	-	-	-	-	9.1	-	-
562	-	21.7	15.7	12.8	10.3	-	-	-	-	-	-	-	-	-	-
608	-	-	-	13.9	11.3	-	-	-	-	-	-	-	-	-	-
631	-	20.8	15.7	12.7	11.4	-	-	-	-	-	-	-	-	-	-
645	121.5	-	-	12.6	9.9	22.4	10.8	-	10.1	14.4	10.5	10.5	8.4	23.3	12.5
645	-	-	-	11.6	9.5	-	-	-	-	-	-	-	-	-	-
667	-	-	-	12.8	9.9	-	-	-	-	-	-	-	-	-	-
674	-	22.8	16.7	14.1	11.5	-	-	-	-	-	-	-	-	-	-
674	-	-	-	13.8	10.5	-	-	-	-	-	-	-	-	-	-
674	-	22.4	15.5	12.3	9.7	-	-	-	-	-	-	-	-	-	-
684	-	-	-	-	-	22.6	10.5	13.9	9.3	13.3	10.1	9.5	8.0	22.3	12.2
713	-	-	-	12.1	11.4	23.3	9.8	14.4	9.1	13.7	10.2	10.0	8.2	23.1	12.3
713	-	19.3	14.7	14.4	10.9	-	-	-	-	-	-	-	-	-	-
713	127.5	21.5	15.4	13.6	10.9	-	10.5	14.8	-	-	-	-	-	-	-
713	-	-	-	12.7	10.3	-	-	-	-	-	-	-	-	-	-
713	-	-	-	11.4	10.0	-	-	-	-	-	-	-	8.1	-	-
744	-	19.7	14.8	11.5	10.4	-	-	-	-	-	-	-	-	-	-
761	-	20.6	15.2	-	-	-	-	-	-	-	-	-	-	-	-
766	-	20.8	15.1	13.3	10.6	-	-	-	-	-	-	-	-	-	-
766	113.7	20.3	14.4	11.2	10.1	21.3	9.7	-	8.9	13.1	10.0	9.2	8.9	21.4	11.6
773	-	20.8	14.5	-	-	-	-	-	-	-	-	-	-	-	-
773	-	20.2	14.7	12.2	10.7	-	-	-	-	-	-	-	-	-	-
773	-	-	-	11.5	10.5	-	-	-	-	-	-	-	9.3	-	-
773	-	19.7	13.9	-	-	-	-	-	-	-	-	-	-	-	-
773	-	-	-	11.2	9.4	-	-	-	-	-	-	-	8.0	-	-
777	-	18.9	13.2	-	-	-	-	-	-	-	-	-	-	-	-
777	-	21.6	15.9	-	-	-	-	-	-	-	-	-	-	-	-
781	-	22.4	16.3	14.4	11.5	-	-	-	-	-	-	-	-	-	-
782	-	-	-	12.8	10.1	-	-	-	-	-	-	-	-	-	-
787	-	-	-	11.1	9.7	-	-	-	-	-	-	-	8.1	-	-
793	-	21.1	15.7	-	-	-	-	-	-	-	-	-	-	-	-
795	-	-	-	13.4	11.0	-	-	-	-	-	-	-	-	-	-
815	-	-	-	12.6	10.6	22.5	9.8	13.2	8.9	12.7	10.0	9.4	8.6	22.0	11.7
950	-	19.1	13.2	-	-	-	-	-	-	-	-	-	-	-	-
976	-	20.0	15.1	-	-	-	-	-	-	-	-	-	-	-	-
986	-	-	-	14.5	11.1	-	-	-	-	-	-	-	-	-	-
986	-	18.7	13.9	-	-	-	-	-	-	-	-	-	-	-	-
1006	-	22.4	16.8	15.2	11.8	-	-	-	-	-	-	-	10.0	-	-
1152	-	21.7	15.9	11.7	9.7	-	-	-	-	-	-	-	-	-	-
1186	-	22.0	15.8	-	11.6	-	-	-	-	-	-	-	9.1	-	-
1206	-	22.2	15.5	-	-	-	-	-	-	-	-	-	-	-	-
1221	-	21.4	14.9	-	-	-	-	-	-	-	-	-	-	-	-
1225	-	19.2	14.1	12.4	10.4	-	-	-	-	-	-	-	-	-	-
1428	-	22.3	15.6	14.1	10.8	-	-	-	-	-	-	-	-	-	-
1428	-	21.1	15.0	12.9	11.1	-	-	-	-	-	-	-	-	-	-
1429	-	21.0	15.0	12.6	10.2	-	-	-	-	-	-	-	9.1	-	-
1429	-	22.0	15.9	13.8	11.5	-	-	-	-	-	-	-	-	-	-
1463	-	19.6	14.0	-	-	-	-	-	-	-	-	-	-	-	-
1473	-	18.8	-	11.5	9.8	-	-	-	-	-	-	-	-	-	-
1473	-	20.6	15.5	12.9	10.9	-	-	-	-	-	-	-	-	-	-
1474	-	-	-	-	-	22.7	10.1	14.3	9.4	13.7	11.0	10.4	9.0	21.9	12.1
1508	-	20.8	-	13.0	11.1	-	-	-	-	-	-	-	-	-	-

Sheep/Goat Metacarpal continued

	m1 GL	m2 Bp	m3 Dp	m4 SD	m5	m6 Bd	m7	m8	m9	m10	m11	m12	m13 DD	m14 DFD	m15 DPD
1570	-	20.1	13.9	11.6	9.9	-	-	-	-	-	-	-	-	-	-
1624	-	20.2	13.6	-	-	-	-	-	-	-	-	-	-	-	-
1663	-	-	-	12.4	9.7	-	-	-	-	-	-	-	-	-	-
1664	119.3	20.3	14.7	12.5	9.9	22.7	10.0	14.4	9.4	14.1	10.2	9.6	7.9	22.9	11.7
1664	-	21.1	14.2	11.8	9.7	-	-	-	-	-	-	-	-	-	-
1749	-	19.5	14.6	-	-	-	-	-	-	-	-	-	-	-	-
1770	-	21.1	15.5	12.7	9.7	-	-	-	-	-	-	-	-	-	-
1787	-	-	-	14.4	11.6	24.3	10.6	15.9	10.0	15.2	11.8	10.8	9.9	25.3	14.5
1787	-	20.4	-	-	-	-	-	-	-	-	-	-	-	-	-
1788	-	-	-	-	-	20.9	9.9	-	9.3	-	9.9	9.6	-	22.0	11.2
1811	-	-	-	13.0	11.3	-	-	-	-	-	-	-	-	-	-
1831	-	22.7	16.0	12.9	11.6	-	-	-	-	-	-	-	10.2	-	-
1831	-	21.7	15.4	13.7	11.5	-	-	-	-	-	-	-	-	-	-
1831	130.1	22.4	16.8	13.5	12.0	24.8	10.5	15.2	10.2	15.1	10.7	10.5	9.8	24.6	12.9
1831	-	19.6	14.9	12.6	10.8	-	-	-	-	-	-	-	-	-	-
1904	-	21.1	15.5	-	-	-	-	-	-	-	-	-	-	-	-
1906	-	20.0	14.5	12.6	10.1	-	-	-	-	-	-	-	-	-	-
1914	-	20.2	14.7	13.2	11.5	-	-	-	-	-	-	-	-	-	-
1933	107.3	18.6	13.6	10.7	10.1	21.4	9.4	-	8.5	12.7	9.8	9.4	7.9	20.7	10.0
1987	-	21.2	15.4	14.1	10.8	-	-	-	-	-	-	-	-	-	-
2044	-	19.8	13.8	12.1	-	-	-	-	-	-	-	-	-	-	-
2061	-	-	-	-	-	22.5	10.7	15.0	9.7	14.4	10.2	9.6	8.5	22.4	11.3
2062	-	19.8	14.9	12.7	11.1	-	-	-	-	-	-	-	-	-	-
2172	-	19.8	14.0	13.1	11.0	-	-	-	-	-	-	-	-	-	-
2258	-	-	-	13.9	10.9	-	-	-	-	-	-	-	-	-	-
2260	-	18.5	13.4	10.9	9.2	-	-	-	-	-	-	-	-	-	-
2280	118.6	20.8	14.8	13.2	10.3	23.1	10.2	15.0	9.0	-	10.9	10.7	8.3	23.1	12.0
2311	-	-	-	12.4	10.3	-	-	-	-	-	-	-	-	-	-
2320	115.1	20.6	15.2	12.0	10.6	23.2	10.4	14.3	9.5	14.0	10.0	9.9	8.7	22.5	11.8
2386	-	17.6	12.6	11.0	8.7	-	-	-	-	-	-	-	7.7	-	-
2428	-	-	-	11.5	9.3	-	-	-	-	-	-	-	-	-	-
2430	-	-	-	-	-	20.4	9.8	13.8	8.9	13.4	9.9	9.3	-	22.8	12.7
2565	-	21.2	14.6	13.3	10.8	-	-	-	-	-	-	-	-	-	-
2565	-	20.2	15.3	13.3	10.5	-	-	-	-	-	-	-	-	-	-
2565	-	-	14.0	13.1	10.5	-	-	-	-	-	-	-	8.8	-	-
2565	-	20.9	16.3	13.6	10.3	-	-	-	-	-	-	-	-	-	-
2601	-	19.7	13.6	14.4	10.9	-	-	-	-	-	-	-	-	-	-
2627	-	22.0	15.1	12.5	10.5	-	-	-	-	-	-	-	8.9	-	-
2630	-	20.5	14.6	13.5	10.6	-	-	-	-	-	-	-	9.1	-	-
2657	-	-	-	12.3	10.8	-	-	-	-	-	-	-	-	-	-
2660	-	-	-	13.3	11.3	-	-	-	-	-	-	-	9.7	-	-
2712	-	20.8	15.0	13.5	10.4	-	-	-	-	-	-	-	-	-	-
2720	-	18.7	13.1	12.3	-	-	-	-	-	-	-	-	-	-	-
2720	-	21.2	15.7	-	-	-	-	-	-	-	-	-	-	-	-
2723	-	20.6	14.7	-	-	-	-	-	-	-	-	-	-	-	-
2830 [4]	119.4	-	13.2	11.5	9.2	20.9	9.5	13.5	8.9	-	9.5	9.0	7.7	20.5	11.0
2833	-	22.0	15.0	13.0	10.9	-	-	-	-	-	-	-	-	-	-
2834	-	23.7	17.3	-	-	-	-	-	-	-	-	-	-	-	-
3351	-	-	-	12.5	11.0	-	-	-	-	-	-	-	-	-	-
3363	-	-	-	12.4	9.6	-	-	-	-	-	-	-	-	-	-
3365	-	23.6	16.2	14.0	11.1	-	-	-	-	-	-	-	-	-	-
3366	-	-	-	14.2	11.8	-	-	-	-	-	-	-	-	-	-
3366	-	21.3	15.6	12.8	10.7	-	-	-	-	-	-	-	9.1	-	-
3544	-	21.0	15.1	12.5	9.7	-	-	-	-	-	-	-	-	-	-
3545	-	20.0	14.9	11.7	10.3	-	-	-	-	-	-	-	-	-	-
3669	-	-	-	12.9	11.2	-	-	-	-	-	-	-	9.1	-	-

Sheep/Goat Metacarpal continued

	m1	m2	m3	m4	m5	m6	m7	m8	m9	m10	m11	m12	m13	m14	m15
	GL	Bp	Dp	SD		Bd							DD	DFD	DFD
4404	-	-	-	-	-	22.8	10.3	14.8	9.3	14.1	10.5	10.4	-	23.6	11.5
4404	-	20.1	15.2	12.3	11.0	-	-	-	-	-	-	-	-	-	-
4416	-	20.1	15.5	-	-	-	-	-	-	-	-	-	-	-	-

Sheep/Goat Pelvis

Context	Measurement				
	m9	m16	m17	m19	m20
	SB	SH	LFo	LA	LAR
63	-	-	-	26.8	23.3
69	10.9	-	-	-	-
100	-	-	-	25.6	21.4
361	-	-	-	26.1	22.1
361	9.6	14.0	-	-	-
361	10.0	13.7	-	26.8	22.5
361	-	-	-	24.0	22.6
361	-	-	-	25.1	21.9
361	9.5	13.3	-	24.3	21.7
361	8.8	13.0	-	-	-
369	8.6	13.5	-	26.7	-
565	10.2	14.3	-	25.4	22.2
655	9.3	-	-	27.8	23.8
713	8.7	-	-	24.1	20.5
761	-	-	-	24.7	22.3
773	-	-	-	27.1	22.2
777	10.3	14.1	-	26.0	23.0
892	11.1	14.6	26.6	-	-
897	-	-	-	24.8	21.6
900	11.2	14.0	-	26.5	22.9
976	8.4	14.0	-	-	-
978	-	-	-	26.4	21.5

Sheep/Goat Pelvis continued

	m9	m16	m17	m19	m20
	SB	SH	LFo	LA	LAR
979	11.0	14.9	-	-	-
1222	10.0	14.4	-	26.2	21.0
1459	-	-	-	25.9	-
1491	9.1	13.8	-	24.6	20.7
1787	9.1	13.8	-	-	-
1991	8.6	12.0	-	-	-
2074	9.8	13.0	-	24.6	21.5
2257	10.5	14.3	-	26.2	22.4
2468	-	-	-	23.4	20.8
2589	10.7	15.2	-	-	-
2606	7.7	13.6	-	26.0	22.5
2620	8.5	-	-	23.8	21.2
2725	-	-	-	25.9	22.5
2830 (4)	7.6	13.2	-	-	-
3346	-	-	-	27.2	22.9
3351	-	-	-	26.2	22.6
3364	10.4	13.9	-	25.4	22.0
3366	11.0	16.2	33.2	26.4	22.1
3366	8.0	12.7	-	23.8	20.0
3505	9.1	14.0	-	23.7	19.7
3682	10.5	14.6	-	26.7	23.1
4512	10.6	15.8	-	26.7	22.0

Sheep/Goat Femur

Context	Measurement							
	m3	m4	m5	m6	m7	m8	m9	m10
	Bd				SD		DC	Bp
90	-	-	-	-	14.1	13.9	17.6	37.9
642	-	-	-	-	-	-	20.8	-
773	-	-	-	-	14.5	-	-	-
871	-	-	-	-	13.9	16.4	-	-
1491	31.9	10.6	10.8	38.8	-	-	-	-

Sheep/Goat Femur continued

	m3	m4	m5	m6	m7	m8	m9	m10
	Bd				SD		DC	Bp
1830	-	-	-	-	-	-	18.8	-
2222	-	-	-	-	14.5	16.2	-	-
2678	31.1	10.8	10.7	38.2	-	-	-	-
2830 (4)	31.9	13.8	10.7	-	-	-	17.0	39.7
2830 (4)	-	-	11.0	-	-	-	17.4	-

Sheep/Goat Tibia

Context	Measurement						
	m1	m3	m4	m5	m6	m7	m8
	GL	Bp		SD		Bd	Dd
63	-	-	-	-	-	24.7	-
69	-	-	-	-	-	25.4	-
72	-	-	-	-	-	24.5	-
92	-	-	-	12.9	10.4	21.1	-
93	-	-	-	-	-	25.8	-
115	-	-	-	-	-	25.2	-
258	-	-	-	-	-	22.4	-
307	-	-	-	-	-	22.0	-
359	-	-	-	-	-	22.7	-
361	-	-	-	13.1	9.7	-	-
361	-	-	-	-	-	23.8	-

Sheep/Goat Tibia continued

	m1	m3	m4	m5	m6	m7	m8
	GL	Bp		SD		Bd	Dd
733	-	-	-	-	-	23.7	-
744	-	-	-	-	-	24.1	-
744	-	36.2	37.0	-	-	-	-
744	-	-	-	12.6	9.5	22.7	-
773	-	-	-	12.0	9.9	21.8	-
773	-	-	-	12.4	9.6	-	-
773	-	-	-	12.0	10.8	22.5	-
773	-	-	-	-	-	25.0	-
773	-	-	-	13.8	11.3	24.7	-
773	-	-	-	12.2	10.4	23.2	-
773	-	-	-	12.7	9.8	24.0	-

Sheep/Goat Tibia continued

	m1	m3	m4	m5	m6	m7	m8
	GL	Bp		SD		Bd	Dd
361	-	-	-	13.3	10.4	-	-
361	-	-	-	12.0	9.7	22.0	-
361	-	-	-	12.6	9.8	-	-
361	-	-	-	-	-	25.0	-
361	-	35.7	37.1	-	-	-	-
361	-	-	-	13.4	10.3	24.3	-
361	-	-	-	13.9	10.9	24.3	-
368	-	-	-	11.8	9.5	-	-
369	-	-	-	12.2	10.0	-	-
516	-	-	-	12.8	10.3	23.4	-
540	-	-	-	12.0	10.2	22.5	-
583	-	-	-	12.2	9.3	22.8	-
601	-	-	-	-	-	24.8	-
610	-	-	-	-	-	22.9	-
655	-	-	-	-	-	23.3	-
667	-	-	-	-	-	22.1	-
667	-	-	-	12.0	10.1	22.5	-
667	-	-	-	13.3	10.8	23.6	-
674	-	-	-	14.4	11.7	25.4	-
693	-	-	-	12.1	10.0	22.9	-
713	188.0	37.0	35.0	12.7	10.3	23.6	-
713	-	-	-	-	-	22.7	-
713	-	-	-	-	-	23.9	-
713	-	-	-	13.0	10.5	21.3	16.5
732	-	-	-	-	-	22.0	-
732	-	-	-	12.3	10.0	22.7	-
732	-	-	-	-	-	20.4	-
733	-	-	-	-	-	28.2	-
733	-	-	-	-	-	21.5	-
1152	-	-	-	13.6	11.4	25.4	-
1186	-	-	-	12.7	9.8	21.7	-
1186	-	-	-	13.4	10.8	23.4	-
1221	-	-	-	13.8	10.9	24.4	-
1407	-	-	-	13.0	10.5	-	-
1415	-	-	-	12.9	9.9	-	-
1415	-	-	-	13.6	10.7	24.4	-
1415	-	-	-	13.4	10.2	-	-
1428	-	-	-	-	-	21.9	-
1459	-	-	-	-	-	22.2	-
1481	-	-	-	-	-	27.9	-
1491	-	-	-	13.2	10.9	-	-
1624	-	-	-	12.7	10.4	23.0	-
1624	-	-	-	13.9	10.8	23.9	-
1709	-	-	-	14.9	11.1	24.4	-
1779	-	-	-	13.9	11.3	23.4	-
1779	-	-	-	12.4	10.1	-	-
1787	-	-	-	12.3	10.1	-	-
1790	-	-	-	12.7	10.6	25.7	-
1831	-	-	-	13.2	10.2	-	-
1831	-	-	-	13.0	9.9	-	-
1858	-	-	-	-	-	25.5	-
1906	-	-	-	-	-	23.9	-
1955	-	-	-	12.5	10.0	-	-
1958	-	-	-	12.8	10.7	-	-
1985	-	-	-	12.5	9.4	21.8	-
1987	-	-	-	12.8	10.2	-	-

Sheep/Goat Tibia continued

	m1	m3	m4	m5	m6	m7	m8
	GL	Bp		SD		Bd	Dd
773	-	-	-	12.5	10.6	-	-
773	-	-	-	13.4	10.8	23.3	-
773	-	-	-	-	-	24.4	-
773	-	-	-	12.5	10.6	-	-
773	-	-	-	13.9	11.5	-	-
773	-	-	-	-	-	25.3	-
773	-	-	-	-	-	22.3	-
773	-	-	-	-	-	23.0	-
776	-	-	-	12.8	10.5	22.0	-
776	-	-	-	14.7	11.3	24.6	-
776	-	-	-	-	-	23.7	-
777	-	-	-	-	-	24.0	-
777	-	-	-	14.3	11.8	25.9	-
777	-	-	-	12.7	10.2	23.9	-
780	-	-	-	14.5	11.4	-	-
780	-	-	-	-	-	22.7	-
780	-	-	-	-	-	22.3	-
780	-	-	-	-	-	21.0	-
781	-	-	-	13.4	11.0	-	-
786	-	-	-	-	-	25.5	-
807	-	-	-	13.9	11.0	-	-
891	-	-	-	12.8	9.9	23.7	-
892	-	-	-	-	-	23.7	-
893	-	-	-	13.5	10.6	24.5	-
979	-	-	-	-	-	23.9	-
1006	-	-	-	13.4	12.1	25.8	-
1045	-	-	-	-	-	21.5	-
1104	-	-	-	14.1	11.2	-	-
1115	-	-	-	12.6	10.6	-	-
2257	-	-	-	13.7	10.9	-	-
2258	-	-	-	12.8	10.6	24.6	-
2283	-	-	-	13.4	10.8	24.2	-
2556	-	-	-	-	-	23.9	-
2560	-	-	-	13.3	10.0	21.9	-
2561	-	-	-	-	-	24.2	-
2564	-	-	-	-	-	20.5	-
2565	-	-	-	13.3	10.8	22.8	-
2565	-	-	-	11.7	9.6	22.0	-
2565	-	-	-	12.8	10.4	22.6	-
2565	-	-	-	12.2	9.8	-	-
2565	-	-	-	-	-	24.5	-
2565	-	-	-	12.0	9.2	22.5	-
2565	-	-	-	13.5	10.2	22.7	-
2578	-	-	-	-	-	23.6	-
2589	-	-	-	13.7	11.0	-	-
2595	-	-	-	13.4	10.7	24.9	-
2615	-	-	-	14.2	11.2	-	-
2615	-	-	-	13.4	10.5	21.4	-
2616	-	-	-	13.5	10.5	22.7	-
2616	-	-	-	13.3	10.5	-	-
2628	-	-	-	-	-	22.3	-
2660	-	-	-	12.8	10.3	22.2	-
2660	-	-	-	12.4	10.0	21.9	-
2707	-	-	-	13.1	11.6	-	-
2730	-	-	-	-	-	24.5	-
2819	-	-	-	-	-	24.1	-

Sheep/Goat Tibia continued

	m1 GL	m3 Bp	m4	m5 SD	m6	m7 Bd	m8 Dd
1987	-	-	-	11.7	10.0	20.8	-
1988	-	-	-	12.9	10.6	23.0	-
1988	-	-	-	-	-	24.3	-
1990	-	-	-	14.9	11.0	25.5	-
1992	-	-	-	12.1	10.0	23.3	-
1997	-	-	-	13.3	11.1	24.9	-
2061	-	-	-	13.2	10.8	23.0	-
2061	-	-	-	13.9	11.1	24.2	-
2061	-	-	-	14.5	11.7	25.7	-
2061	-	-	-	14.5	11.0	25.5	-
2061	-	-	-	15.0	13.2	26.3	-
2064	-	-	-	12.4	9.8	-	-
2074	-	-	-	11.9	9.6	21.7	-
2173	-	-	-	-	-	24.9	-
2256	-	-	-	12.4	10.4	-	-
2257	-	-	-	-	-	25.9	-

Sheep/Goat Tibia continued

	m1 GL	m3 Bp	m4	m5 SD	m6	m7 Bd	m8 Dd
2830 [4]	200.0	35.3	34.3	11.8	9.7	21.5	-
2830 [4]	-	35.3	34.0	-	-	-	-
3336	-	-	-	-	-	23.3	-
3363	-	-	-	12.7	9.7	22.1	-
3366	-	-	-	14.3	11.8	25.5	-
3552	-	-	-	12.4	9.9	22.2	-
3552	-	-	-	-	-	23.0	-
4404	-	-	-	12.0	9.7	22.0	-
4428	-	-	-	-	-	23.4	-
4428	-	-	-	-	-	23.5	-
4437	-	-	-	-	-	21.3	-
4446	-	-	-	13.1	10.4	-	-
4449	-	-	-	13.5	11.5	23.1	-
4450	-	-	-	13.5	12.2	25.6	-
4485	-	-	-	12.0	9.5	-	-
4485	-	-	-	11.5	9.3	-	-

Sheep/Goat Astragalus

Context Measurement

	m1 GL1	m2	m3 GLm	m4	m5 Bd	m6 Dl
72	27.7	21.9	26.5	18.7	19.2	15.7
72	29.0	23.0	27.5	18.6	18.4	16.2
279	26.9	21.9	26.1	18.1	17.3	15.4
359	25.4	20.9	24.6	17.9	17.5	14.5
361	24.9	20.0	23.8	15.5	15.9	13.7
379	25.0	19.5	23.3	15.4	16.3	14.1
526	25.0	20.1	24.2	15.9	16.1	13.7
667	-	-	25.4	-	17.3	-
713	24.1	19.0	22.9	15.9	15.7	13.1
713	25.8	20.4	24.4	-	17.1	15.0
730	27.1	20.8	25.3	-	17.5	15.4
732	-	19.3	23.7	-	16.5	-
780	26.8	20.7	25.7	-	18.4	14.8
939	27.8	22.1	26.2	18.3	18.5	15.5
1704	-	18.8	23.1	-	15.9	14.6
2583	26.6	21.8	26.6	-	16.9	14.8
2589	24.5	20.1	-	-	15.6	13.8
4428	26.8	20.9	24.9	17.6	18.6	15.5

Sheep/Goat Calcaneum

Context Measurement

	m3 GL	m4	m5	m6 GB	m7	m8	m9	m12
361	49.3	12.0	14.5	17.0	5.7	-	-	17.3
361	50.6	12.7	15.5	17.5	5.6	17.2	19.9	18.7
361	50.0	12.1	13.0	16.7	4.8	-	-	19.3
667	51.3	12.6	14.8	-	5.4	18.3	21.1	19.7
667	51.7	12.1	13.9	16.3	5.4	15.5	20.6	18.4
674	60.0	13.7	15.5	20.0	6.2	16.5	23.0	20.5
674	39.4	12.0	13.7	17.0	5.4	-	20.5	18.7
713	53.1	12.6	14.8	17.5	4.9	-	21.4	19.6
733	48.8	11.7	14.2	16.9	5.8	16.1	20.7	19.0
777	47.0	10.8	13.5	15.6	4.6	15.9	18.6	17.4
777	52.5	13.3	15.0	17.8	6.2	17.4	20.9	18.9
2044	46.8	11.1	12.7	16.0	4.9	15.6	18.8	17.8
2257	51.2	12.3	14.5	17.5	5.3	17.0	20.6	18.6
2565	53.9	12.4	15.0	16.8	5.2	16.6	20.9	19.2
2628	51.0	10.9	13.5	16.2	4.5	16.0	19.3	18.1
2724	47.0	11.6	12.7	15.4	4.9	15.3	18.6	17.5
2830 [4]	49.8	11.6	13.7	16.5	4.8	15.5	19.5	17.8
3366	51.7	12.1	15.0	-	5.5	18.1	20.7	19.8

Sheep/Goat Metatarsal

Context Measurement

	m1 GL	m2 Bp	m3 Dp	m4 SD	m5	m6 Bd	m7	m8	m9	m10	m11	m12	m13 DD	m14 DFB	m15 DFD
72	-	17.8	17.9	11.2	10.5	-	-	-	-	-	-	-	-	-	-
86	-	18.1	18.3	10.3	-	-	-	-	-	-	-	-	8.8	-	-
90	-	17.9	16.8	10.9	11.3	-	-	-	-	-	-	-	9.3	-	-
93	-	17.8	18.3	11.3	11.5	-	-	-	-	-	-		-	-	-
128	-	19.3	-	-	-	-	-	-	-	-	-	-	-	-	-
251	-	19.9	19.7	-	-	-	-	-	-	-	-	-	-	-	-
251	-	-	-	12.8	14.1	-	-	-	-	-	-	-	-	-	-
291	-	-	-	-	-	-	-	-	-	-	-	-	10.0	-	-
307	-	18.2	17.4	11.2	11.9	-	-	-	-	-	-	-	-	-	-
329	-	17.6	17.3	10.1	11.3	-	-	-	-	-	-	-	9.7	-	-
337	-	18.7	19.0	11.4	11.6	-	-	-	-	-	-	-	-	-	-
337	-	17.9	18.0	11.4	11.6	-	-	-	-	-	-	-	-	-	-

Sheep/Goat Metatarsal continued

	m1 GL	m2 Bp	m3 Dp	m4 SD	m5	m6 Bd	m7	m8	m9	m10	m11	m12	m13 DD	m14 Dd-B	m15 DFD
359	-	17.3	-	-	-	-	-	-	-	-	-	-	-	-	-
359	-	19.8	19.0	12.0	11.5	-	-	-	-	-	-	-	-	-	-
361	-	-	-	-	-	21.9	9.5	14.6	8.4	13.7	10.2	9.7	9.7	21.6	11.9
361	-	17.6	17.6	10.2	10.8	-	-	-	-	-	-	-	-	-	-
361	-	18.1	16.7	10.4	11.3	-	-	-	-	-	-	-	-	-	-
361	-	21.6	21.5	12.5	13.9	-	-	-	-	-	-	-	-	-	-
361	-	17.9	17.8	-	-	-	-	-	-	-	-	-	-	-	-
361	-	18.7	18.4	11.8	-	-	-	-	-	-	-	-	-	-	-
361	-	20.3	19.3	12.0	13.2	-	-	-	-	-	-	-	-	-	-
361	-	19.2	18.3	11.2	-	-	-	-	-	-	-	-	-	-	-
361	-	18.3	17.8	-	-	-	-	-	-	-	-	-	-	-	-
361	-	17.9	18.9	10.0	-	-	-	-	-	-	-	-	-	-	-
361	-	-	-	11.7	-	-	-	-	-	-	-	-	-	-	-
361	-	17.1	16.7	10.5	-	-	-	-	-	-	-	-	8.4	-	-
361	-	-	-	-	-	22.3	9.8	14.8	9.3	14.2	10.5	9.6	9.6	21.9	13.7
393	-	18.9	18.5	11.9	11.9	-	-	-	-	-	-	-	9.9	-	-
469	-	19.0	18.8	11.4	12.5	-	-	-	-	-	-	-	-	-	-
516	-	18.4	18.6	-	-	-	-	-	-	-	-	-	-	-	-
526	-	17.2	18.2	10.7	-	-	-	-	-	-	-	-	-	-	-
526	-	20.0	20.4	-	-	-	-	-	-	-	-	-	-	-	-
609	-	18.0	17.7	10.5	10.5	-	-	-	-	-	-	-	9.0	-	-
642	-	-	-	10.1	10.6	-	-	-	-	-	-	-	-	-	-
645	-	19.1	19.1	10.9	11.5	-	-	-	-	-	-	-	-	-	-
655	-	-	-	10.7	-	-	-	-	-	-	-	-	9.2	-	-
667	-	-	-	10.4	-	-	-	-	-	-	-	-	9.5	-	-
667	-	-	-	10.3	-	-	-	-	-	-	-	-	8.9	-	-
713	-	19.5	18.9	-	-	-	-	-	-	-	-	-	-	-	-
713	-	-	-	-	-	21.6	10.2	-	9.3	14.2	10.1	9.3	9.7	21.4	12.6
713	-	19.1	-	11.1	11.6	-	-	-	-	-	-	-	-	-	-
713	-	17.6	17.3	10.4	11.3	20.7	9.2	13.4	8.4	12.7	9.6	8.5	9.0	20.6	11.8
731	-	-	16.7	9.6	10.2	-	-	-	-	-	-	-	9.2	-	-
744	-	18.6	-	10.7	11.2	-	-	-	-	-	-	-	8.8	-	-
744	-	17.9	18.4	10.6	11.7	-	-	-	-	-	-	-	8.9	-	-
762	-	20.2	18.5	-	-	-	-	-	-	-	-	-	-	-	-
762	-	17.3	17.9	10.9	-	-	-	-	-	-	-	-	9.7	-	-
773	-	-	-	11.0	11.8	-	-	-	-	-	-	-	-	-	-
773	-	19.0	19.7	11.6	12.4	-	-	-	-	-	-	-	10.0	-	-
773	-	-	-	10.3	-	-	-	-	-	-	-	-	-	-	-
773	-	17.2	17.7	9.7	10.8	-	-	-	-	-	-	-	-	-	-
773	-	23.2	-	14.7	13.6	-	-	-	-	-	-	-	-	-	-
773	-	-	-	10.1	11.0	-	-	-	-	-	-	-	9.2	-	-
780	-	20.7	21.6	-	-	-	-	-	-	-	-	-	-	-	-
780	-	17.2	17.5	-	-	-	-	-	-	-	-	-	-	-	-
793	-	19.4	19.2	11.0	-	-	-	-	-	-	-	-	-	-	-
808	-	19.3	19.7	11.5	12.5	-	-	-	-	-	-	-	-	-	-
892	-	18.7	-	11.6	-	-	-	-	-	-	-	-	-	-	-
898	-	17.6	17.4	-	-	-	-	-	-	-	-	-	-	-	-
976	-	17.8	17.4	10.0	-	-	-	-	-	-	-	-	-	-	-
1180	-	-	-	10.4	11.2	-	-	-	-	-	-	-	-	-	-
1216	-	20.3	-	-	-	-	-	-	-	-	-	-	-	-	-
1216	132.0	18.5	18.3	11.2	11.8	21.8	9.0	15.0	8.9	14.3	10.8	9.4	8.9	21.5	12.2
1222	-	17.2	-	-	-	-	-	-	-	-	-	-	-	-	-
1410	-	18.4	19.6	10.8	12.2	-	-	-	-	-	-	-	-	-	-
1429	-	16.5	17.3	9.4	10.2	-	-	-	-	-	-	-	-	-	-
1429	-	19.0	20.1	11.8	11.6	-	-	-	-	-	-	-	-	-	-
1520	-	19.2	19.2	11.0	11.4	-	-	-	-	-	-	-	-	-	-

Sheep/Goat Metatarsal continued

	m1 GL	m2 Bp	m3 Dp	m4 SD	m5	m6 Bd	m7	m8	m9	m10	m11	m12	m13 DD	m14 DFB	m15 DFD
1520	-	17.2	18.5	-	-	-	-	-	-	-	-	-	-	-	-
1551	-	19.3	19.1	-	-	-	-	-	-	-	-	-	-	-	-
1626	-	21.4	21.4	-	-	-	-	-	-	-	-	-	-	-	-
1626	-	14.6	15.5	10.3	8.8	-	-	-	-	-	-	-	8.2	-	-
1663	-	-	-	10.6	-	-	-	-	-	-	-	-	8.5	-	-
1664	-	18.5	18.4	11.0	11.3	-	-	-	-	-	-	-	-	-	-
1664	130.7	17.4	18.8	10.6	11.3	21.8	9.2	14.9	8.7	14.2	10.5	9.7	8.9	21.4	12.1
1664	-	18.7	-	11.5	11.3	22.4	10.4	15.8	9.4	15.3	10.6	9.6	9.7	21.5	13.3
1704	-	20.9	20.0	12.8	12.9	-	-	-	-	-	-	-	-	-	-
1787	-	-	-	10.7	11.8	-	-	-	-	-	-	-	-	-	-
1790	-	-	-	10.7	10.7	-	-	-	-	-	-	-	-	-	-
1911	-	19.3	-	11.3	-	-	-	-	-	-	-	-	-	-	-
1830	-	18.8	18.2	10.3	-	-	-	-	-	-	-	-	7.8	-	-
1831	132.5	17.8	18.3	11.1	12.0	20.5	9.8	-	9.1	14.0	9.5	8.9	9.8	20.0	11.5
1906	-	19.7	19.6	11.5	12.5	-	-	-	-	-	-	-	10.1	-	-
1987	-	18.3	17.6	10.9	10.9	-	-	-	-	-	-	-	9.3	-	-
1987	-	-	-	10.7	10.7	-	-	-	-	-	-	-	-	-	-
1989	-	19.6	18.2	11.4	12.2	-	-	-	-	-	-	-	-	-	-
1997	-	16.6	17.8	9.5	12.1	-	-	-	-	-	-	-	8.8	-	-
1997	133.4	18.0	16.9	10.0	-	21.8	9.4	14.7	9.0	14.0	10.4	9.6	8.7	21.7	12.6
1998	-	17.8	17.3	10.1	11.8	-	-	-	-	-	-	-	-	-	-
2061	-	20.7	20.3	12.3	13.4	-	-	-	-	-	-	-	-	-	-
2061	-	17.3	17.9	10.9	11.5	-	-	-	-	-	-	-	-	-	-
2061	-	-	-	11.6	12.2	-	-	-	-	-	-	-	-	-	-
2061	-	18.5	18.5	11.7	12.4	-	-	-	-	-	-	-	-	-	-
2062	-	18.4	18.7	10.2	-	-	-	-	-	-	-	-	8.2	-	-
2064	-	19.5	19.6	13.3	12.6	-	-	-	-	-	-	-	10.9	-	-
2074	-	-	-	11.3	12.8	-	-	-	-	-	-	-	-	-	-
2076	-	17.9	18.4	-	-	-	-	-	-	-	-	-	-	-	-
2170	136.5	19.2	18.3	11.6	12.5	22.6	10.8	16.1	9.7	-	10.9	9.8	9.8	22.5	13.0
2257	-	18.8	-	10.9	11.1	-	-	-	-	-	-	-	9.4	-	-
2260	-	-	-	11.3	11.8	-	-	-	-	-	-	-	-	-	-
2272	-	18.2	-	11.0	12.9	-	-	-	-	-	-	-	9.8	-	-
2428	-	18.9	19.8	11.4	12.5	-	-	-	-	-	-	-	-	-	-
2564	-	18.6	19.0	10.7	10.4	-	-	-	-	-	-	-	-	-	-
2565	-	17.1	17.5	9.9	10.4	-	-	-	-	-	-	-	8.2	-	-
2565	-	-	-	9.5	10.9	-	-	-	-	-	-	-	8.8	-	-
2565	-	-	-	9.3	10.6	19.8	9.0	13.3	8.6	12.9	9.3	8.5	8.3	19.4	11.2
2578	-	17.7	18.4	-	-	-	-	-	-	-	-	-	-	-	-
2589	-	19.5	20.2	-	-	-	-	-	-	-	-	-	-	-	-
2615	-	18.0	18.0	-	-	-	-	-	-	-	-	-	9.2	-	-
2630	-	19.6	18.2	10.7	11.7	-	-	-	-	-	-	-	-	-	-
2830 [4]	131.4	17.2	17.6	10.2	-	19.8	8.8	13.6	8.4	13.1	9.3	8.7	8.3	19.0	10.9
3346	-	19.1	18.9	10.6	12.0	-	-	-	-	-	-	-	-	-	-
3351	-	18.2	18.0	10.6	10.4	-	-	-	-	-	-	-	-	-	-
3352	-	19.9	20.4	12.3	12.6	-	-	-	-	-	-	-	-	-	-
3369	-	19.8	19.5	11.5	11.0	-	-	-	-	-	-	-	-	-	-

PIG

Pig Skull

Context	Measurement m1 30	m2 31	m4 28
73	30.8	18.2	-
569	29.7	18.3	-
605	27.5	15.7	-

Pig Skull continued

	m1 30	m2 31	m4 28
713	33.2	19.0	-
754	29.3	16.3	-
978	26.6	16.4	59.6

Pig Skull continued

	m1 30	m2 31	m4 28
2074	32.2	18.0	-
2724	27.6	16.4	63.4

Pig Mandible

Context	Measurement							
	m10	m11	m15	m16	m17	m18	m19	m20
	9a	8		16b			10L	10B
71	-	-	-	-	-	-	30.9	14.9
72	-	-	-	-	-	-	30.8	14.8
361	-	-	-	-	-	-	31.3	13.7
667	-	-	-	-	-	-	31.8	14.3
674	-	-	-	-	-	-	32.2	14.3
674	-	-	-	-	-	-	34.2	14.7
713	-	59.5	36.4	37.5	38.4	39.3	-	-
776	35.6	61.7	-	-	-	-	28.6	14.9

Pig Mandible continued

	m10	m11	m15	m16	m17	m18	m19	m20
	9a	8		16b			10L	10B
777	-	-	-	-	-	-	30.6	14.4
892	35.6	-	-	-	-	-	-	-
892	-	66.3	-	-	-	-	34.7	15.0
976	-	-	-	-	-	-	33.9	15.2
977	-	-	-	-	-	-	36.5	15.0
2185	-	-	-	-	-	-	29.5	14.0
2733	-	-	-	-	-	-	33.9	14.9
3367	-	59.6	-	30.3	31.2	32.5	29.6	14.5

Pig Scapula

Context	Measurement				
	m2	m3	m4	m5	m6
	SLC		GLP	BG	LG
69	17.0	8.0	-	-	-
361	19.9	10.4	32.4	22.8	27.4
361	17.4	8.3	-	-	-
394	23.6	11.2	-	-	-
537	23.9	0.1	-	-	-
581	22.0	10.7	34.3	25.8	29.5
618	24.2	12.8	-	-	-
645	21.4	11.0	-	-	-
655	20.3	-	-	-	-
712	19.4	10.3	33.3	21.0	-
713	23.1	-	-	-	-
733	22.6	-	-	-	-
766	21.2	10.1	-	-	-

Pig Scapula continued

	m2	m3	m4	m5	m6
	SLC		GLP	BG	LG
773	22.2	11.5	-	-	-
773	19.8	9.7	-	-	-
978	20.6	10.0	-	-	-
1186	22.1	10.4	-	-	-
1222	20.7	10.6	31.1	-	-
1223	18.0	9.7	-	-	-
1787	20.7	10.0	30.5	22.0	25.6
2258	22.2	-	-	-	-
2589	22.9	11.3	-	-	-
2620	21.0	10.2	-	-	-
2620	19.7	-	-	-	-
4428	19.5	9.7	-	-	-

Pig Humerus

Context	Measurement				
	m5	m6	m7	m8	m10
	BT		Bd	SD	LT
90	-	-	-	16.5	-
90	-	-	-	15.2	-
322	-	-	-	15.3	-
361	-	-	-	12.3	-
361	26.8	27.9	36.8	-	27.0
368	-	-	-	12.8	-
713	28.2	28.0	38.5	14.9	26.2
766	-	-	-	14.2	-
766	-	-	-	15.5	-
773	-	-	-	14.4	-
773	25.4	-	-	-	24.6
1152	-	-	-	13.7	-
1198	-	-	-	14.3	-
1551	-	-	-	11.3	-
1663	-	-	33.8	-	-
2061	30.3	-	35.9	13.2	26.0
2260	21.7	-	-	-	-
2620	-	-	-	13.9	-
3651	29.5	-	39.6	-	27.8

Pig Radius

Context	Measurement		
	m2	m3	m11
	Bp		SD
262	25.3	-	-
361	25.4	-	13.2
655	23.5	-	-
667	25.3	-	-
773	27.0	17.7	14.9
786	25.2	-	-
978	23.1	16.8	-
1085	24.5	16.5	-
1186	-	-	16.6
2620	25.4	-	-
2630	26.2	-	-
4404	28.0	-	-

Pig Ulna

Context	Measurement		Pig Ulna continued			Pig Ulna continued		
	m2	m4		m2	m4		m2	m4
	BFC	SDO		BFC	SDO		BFC	SDO
85	20.5	-	777	18.9	-	2061	22.1	-
93	20.7	-	780	19.0	-	2061	20.2	-
337	19.2	-	908	-	22.9	2589	20.2	25.8
361	19.8	-	936	17.7	-	2615	20.4	24.0
394	19.8	-	1410	22.7	-	2615	18.7	-
394	19.4	-	1607	16.6	-	2620	20.5	-
744	17.6	-	1664	19.3	-	2620	19.8	-
773	18.9	-	1684	20.1	-			
777	20.9	-	1811	26.0	-			

Pig Third Metacarpal

Context	Measurement
	m2
	Bd
361	15.5
713	17.8
781	17.2
2565	15.4

Pig Fourth Metacarpal

Context	Measurement			
	m1	m2	m3	m4
	GL	Bp	Bd	B
897	-	13.0	-	-
269	-	13.6	-	-
776	-	15.1	-	-
897	-	14.3	-	-
2278	71.0	14.3	15.0	11.1

Pig Pelvis

Context	measruement				
	m9	m16	m17	m19	m20
	SB	SH	LFo	LA	LAR
361	10.2	18.5	-	31.2	29.1
361	-	-	-	-	-
361	8.6	16.3	-	-	-
465	10.7	19.3	-	-	-
645	9.4	15.0	-	-	-
693	11.4	19.0	-	-	-
744	-	-	-	-	-
950	-	13.2	-	-	-
1006	-	22.0	-	-	-
1006	13.3	-	-	-	-
2099	11.9	21.8	-	30.3	28.4
2257	11.3	21.0	-	-	-

Pig Pelvis continued

	m9	m16	m17	m19	m20
	SB	SH	LFo	LA	LAR
2258	11.2	20.8	-	-	-
2258	9.5	19.4	-	29.0	25.1
2278	-	-	-	-	-
2311	-	-	-	31.5	28.5
2620	-	-	-	29.0	28.0
2620	14.4	24.1	-	-	-
2628	12.5	21.9	-	-	-
3370	12.5	23.0	-	32.3	29.8
3552	13.2	22.4	-	-	-
4405	-	-	-	-	-
4416	11.6	22.6	-	32.6	30.3

Pig Femur

Context	Measurement
	m7
	SD
762	14.3
773	11.5

Pig Tibia

Context	Measurement		
	m5	m6	m7
	SD		Bd
251	16.2	-	-
361	15.8	13.1	-
457	-	-	32.4
674	16.4	-	26.9
750	17.5	15.5	26.5
976	18.0	14.9	-
2064	15.9	-	-

Pig Astragalus

Context	Measurement		
	m1	m2	m3
	GLl		GLM
82	40.2	32.5	37.1
363	43.6	36.1	-
713	37.5	30.0	34.0
773	39.6	31.7	36.4
892	39.8	32.0	36.7
2074	42.1	33.7	37.4
4353	39.1	30.4	35.2

Pig Calcaneum

Context	Measurement						
	m3	m4	m5	m6	m7	m9	m12
	GL			GB			
773	82.4	16.9	19.4	23.5	10.5	31.0	30.1
773	-	-	-	-	9.3	33.0	31.2
977	-	-	-	-	8.6	-	-
2565	-	-	-	-	10.3	31.5	30.

Pig Third Metatarsal

Context	Measurement		
	m2	m3	m4
	Bp	Bd	B
361	14.2	-	-
526	13.7	-	-
667	14.5	-	-
773	13.4	-	-
808	-	14.3	11.4
2061	12.5	-	-

Pig Third Metatarsal

Context	Measurement
	m3
	Bd
766	14.7
2061	13.3

HORSE

Horse Skull

Context	Measurement			
	m3	m5	m6	m7
	24	36	37	34
871	-	29.0	31.2	80.5
978	-	38.1	33.8	82.2
1206	106.1	-	-	-
1837	-	33.2	36.2	94.6
3351	-	36.9	38.9	92.6
3351	-	32.3	35.5	73.4

Horse Mandible

Context	Measurement					
	m10	m13	m14	m15	m16	m19
	8	22c			22b	14L
445	-	48.9	59.5	-	-	31.6
1206	87.5	51.7	62.7	68.6	74.9	-
1206	86.4	52.0	64.0	69.1	-	-

Horse Scapula

Context	Measurement				
	m2	m3	m4	m5	m6
	SLC		GLP	BG	LG
200	-	-	-	38.7	53.5
359	-	-	89.1	-	-
667	49.0	14.3	-	-	-
895	52.6	17.7	76.9	37.4	46.5
1206	52.7	17.5	72.8	38.4	-
2615	-	-	81.7	41.5	52.0

Horse Humerus

Context	Measurement					
	m2	m5	m6	m7	m8	m10
	GLC	BT		Bd	SD	LT
68	-	78.8	59.8	86.0	37.8	-
230	285.0	73.4	56.7	79.5	33.1	46.2
251	-	70.7	-	73.5	31.2	48.5
304	-	-	-	-	-	43.3
415	-	66.8	-	-	-	44.5
500	-	75.5	57.1	83.0	34.0	46.9
666	-	68.8	-	-	31.6	44.9
780	-	67.3	49.8	74.5	31.5	44.4
787	-	65.0	50.0	72.5	29.5	49.1
807	-	-	-	-	31.5	-
812	-	72.5	-	79.0	-	45.3
1474	-	-	-	-	29.2	42.7
2172	-	71.3	-	-	35.6	48.9
2178	-	67.7	50.8	76.0	-	46.4
2185	-	-	51.8	69.0	30.9	46.1
2570	-	67.0	-	74.5	-	36.9

Horse Ulna

Context	Measurement	
	m14	m16
	BPC	SDO
674	41.0	-
770	37.8	-
808	33.6	-
2044	41.3	-
2172	-	43.1
2564	44.2	-

Horse Radius and Ulna Fused

Context	Measurement											
	m1	m2	m3	m4	m5	m6	m7	m8	m9	m10	m11	m14
	GL	Bp				Bd		BFp	BFd	LI	SD	BPC
329	315.0	77.8	45.7	42.1	-	71.7	43.2	69.7	56.3	307.5	36.2	40.8
780	319.5	75.1	41.2	41.2	-	68.3	39.0	68.8	56.1	300.0	33.9	39.3
809	-	-	-	47.8	-	65.8	45.5	-	55.3	-	37.4	-

Horse Radius only

233	-	-	-	36.2	-	-	-	-	-	-	31.6
674	-	82.3	-	-	-	-	-	75.2	-	-	-
808	-	66.5	33.5	37.0	23.0	-	-	-	-	-	-
812	-	-	-	-	-	66.8	41.5	-	54.6	-	-
1198	296.4	-	41.5	39.4	-	67.0	41.3	67.0	57.8	283.0	34.1

Horse Radius only continued

	m1	m2	m3	m4	m5	m6	m7	m8	m9	m10	m11
	GL	Bp				Bd		BFp	BFd	LI	SD
1788	-	-	-	-	-	-	-	-	58.3	-	-
2044	-	76.2	40.8	43.3	-	-	-	66.9	-	-	-
2074	297.9	72.8	44.2	-	-	65.6	43.6	67.2	58.8	290.0	33.5
2172	347.9	-	48.6	-	46.2	75.4	42.6	76.7	65.5	335.0	36.3
2179	-	-	-	-	-	-	-	-	59.0	-	-
2185	347.9	87.4	44.5	-	-	-	46.6	77.4	-	335.0	40.1

Horse Metacarpal

Context Measurement

	m1	m2	m3	m4	m5	m6	m13	m14	m15	m16
	GL	Bp	Dp	SD		Bd	DD			LI
73	206.0	48.2	32.3	30.5	22.7	47.5	17.8	44.9	-	198.5
122	-	43.0	27.9	31.6	22.7	-	-	-	-	-
361	-	52.2	34.5	-	-	-	-	-	-	-
361	-	42.0	29.6	28.3	20.1	-	16.0	-	-	-
361	-	-	-	-	-	40.8	-	38.7	-	-
500	218.5	53.2	31.7	33.0	24.9	50.4	21.8	49.9	-	211.0
761	208.5	45.8	32.0	31.4	23.4	45.5	18.1	43.8	-	-
773	191.5	44.7	30.7	29.1	21.2	49.2	18.3	-	-	183.0
1209	-	-	-	-	-	-	24.8	48.0	-	-
1749	-	-	-	-	-	52.8	-	-	-	-
1749	-	49.1	31.5	-	-	-	-	-	-	-
2172	204.0	46.8	-	29.8	22.5	48.7	18.5	44.6	26.2	196.0
2660	211.5	41.9	30.0	27.0	20.9	43.9	18.4	-	-	206.0
2660	-	41.9	27.5	-	-	-	-	-	-	-
2731	-	-	-	-	-	42.2	-	-	-	-
4404	-	47.4	-	33.5	23.6	-	-	-	-	-

Horse First Phalanx

Context Measurement

	m1	m2	m3	m4	m5	m6	m7	m10
	GL	Bp	Dp	SD		Bd	BFp	Bfd
72	80.0	53.2	35.5	32.9	23.4	46.4	-	42.0
82	62.8	46.8	31.8	27.0	19.6	31.6	42.6	34.8
100	93.6	57.9	43.3	30.7	25.7	45.5	52.7	43.9
323	72.2	48.9	33.0	31.0	20.5	42.3	44.2	37.7
516	74.8	49.3	32.7	32.8	22.9	44.2	46.1	41.3
674	76.2	50.9	32.6	31.1	-	42.6	48.3	41.1
713	85.9	52.4	39.3	30.5	24.4	44.7	-	42.5
733	79.6	51.3	35.9	31.5	24.2	45.2	49.0	40.0
776	88.5	55.8	36.8	37.7	24.9	48.5	51.6	46.5
1221	-	45.3	29.4	-	-	-	-	-

Horse First Phalanx continued

	m1	m2	m3	m4	m5	m6	m7	m10
	GL	Bp	Dp	SD		Bd	BFp	Bfd
1223	84.5	54.4	35.0	-	-	-	49.8	49.1
1704	-	-	-	33.4	21.5	46.3	-	43.2
2061	85.5	55.8	39.0	37.4	-	49.9	51.1	43.5
2171	-	55.7	37.1	-	-	-	52.2	-
2257	70.2	51.1	33.6	31.6	23.2	41.8	46.1	39.8
2561	80.0	-	-	36.2	22.7	-	-	43.7
2589	75.8	50.3	30.2	30.8	22.4	43.0	45.6	41.0
3053	87.3	59.3	35.8	37.0	26.8	49.5	52.1	44.5

Horse Second Phalanx

Context Measurement

	m1	m2	m3	m4	m5	m6	m7	m10
	GL	Bp	Dp	SD		Bd	BFp	
86	44.5	54.3	31.5	46.0	-	50.4	46.6	-
270	-	52.3	-	44.0	-	-	48.8	-
323	40.5	46.2	28.3	38.8	19.1	42.6	40.3	41.5
674	44.2	48.6	-	41.5	-	45.8	44.1	45.2

Horse Third Phalanx

Context Measurement

	m1	m2	m3	m4
	GL	La	DD	DP
674	-	-	66.8	33.0
2430	56.5	41.6	70.9	32.0

Horse Pelvis

Context	Measurement					
	m9	m16	m17	m18	m19	m20
	SB	SH	LPo		LA	LAR
69	22.8	31.8	55.4	34.7	55.2	51.6
72	20.6	35.5	55.8	-	56.7	55.0
72	20.8	32.1	-	-	54.8	52.8
674	20.8	37.0	-	-	-	-
674	-	-	-	-	58.1	56.1
1206	25.9	44.0	73.6	52.9	71.4	66.1

Horse Pelvis continued

	m9	m16	m17	m18	m19	m20
	SB	SH	LPo		LA	LAR
1206	25.0	43.1	70.4	-	70.3	65.2
1206	-	-	-	-	59.5	54.5
1709	27.6	41.1	67.6	46.6	62.1	57.5
2170	-	-	-	-	-	-
2172	22.6	36.5	-	-	-	-
2197	23.8	39.6	-	-	-	56.7

Horse Femur

Context	Measurement								
	m2	m3	m4	m5	m6	m7	m8	m9	m10
	GLC	Bd				SD		DC	Bp
72	-	80.9	34.3	30.5	99.0	35.7	46.6	45.3	-
279	-	-	-	32.3	-	35.6	51.3	-	-
361	-	-	-	-	-	41.9	51.2	57.0	110.3
674	372.0	95.0	40.0	36.2	-	39.6	52.4	58.5	-
938	369.0	96.5	37.0	-	-	45.0	51.6	59.4	-
1053	-	-	-	-	-	-	-	47.0	96.2
2173	326.0	80.9	29.6	31.0	-	32.9	43.8	48.2	-

Horse Patella

Context	Measurement
	m1
	GL
69	67.6

Horse Tibia

Context	Measurement								
	m1	m2	m3	m4	m5	m6	m7	m8	m9
	GL		Bp		SD		Bd	Dd	LI
69	307.9	292.5	83.9	-	36.2	25.1	63.7	37.2	279.5
518	-	-	-	-	31.9	25.9	61.3	39.0	264.0
566	327.4	310.0	91.6	86.7	39.3	31.0	69.8	43.5	301.0
713	-	-	-	-	-	-	70.5	45.0	-
770	344.9	327.0	101.6	87.0	41.4	33.2	75.1	47.0	310.0
773	-	-	-	-	36.2	30.1	-	-	-
808	-	-	-	-	-	-	58.5	35.5	-
842	-	-	-	-	36.2	27.6	63.6	38.5	-
891	-	-	-	75.5	-	-	-	-	-
1358	-	-	94.8	-	42.3	32.8	-	-	-
2155	-	-	90.3	-	-	-	-	-	-
2173	-	-	-	-	35.4	28.0	66.0	40.5	-
2561	-	-	-	-	-	-	70.2	47.5	-
2570	317.9	303.5	-	-	35.3	28.1	65.7	39.5	290.0
2583	-	-	-	-	-	-	-	-	302.5
3363	364.4	345.5	-	-	43.0	30.9	-	45.0	-

Horse Astragalus

Context	Measurement							
	m1	m2	m3	m4	m5	m6	m7	m8
	Lmf					GB	GH	BFd
85	60.7	32.7	37.7	49.2	53.4	-	61.0	49.9
87	56.0	34.4	50.9	46.6	50.5	60.0	54.0	47.5
290	-	-	-	-	-	-	-	47.8
361	50.5	-	-	44.8	48.5	55.0	51.0	46.6
415	55.9	30.7	52.0	47.4	52.9	63.0	56.5	48.9
713	54.1	34.9	54.6	47.3	52.3	57.0	55.5	49.9
2598	49.4	28.6	46.2	-	43.9	51.0	48.5	42.0

Horse Calcaneum

Context	Measurement							
	m3	m4	m5	m6	m7	m8	m9	m12
	GL			GB				
69	-	-	-	-	20.1	-	-	-
415	113.1	32.8	52.0	55.0	18.5	-	-	-
936	94.5	-	-	-	16.2	48.9	41.1	-
1704	110.4	-	46.5	53.0	17.1	59.9	48.2	-
2044	-	-	-	-	15.7	50.3	42.0	24.8
3041	-	-	-	-	17.6	53.7	44.3	-

Horse Metatarsal

Context	Measurement									
	m1	m2	m3	m4	m5	m6	m13	m14	m15	m16
	GL	Dp	Dp	SD		Bd	DD			Ll
69	-	45.8	37.7	28.9	27.2	-	-	-	-	-
233	-	-	-	28.1	25.8	-	21.8	-	-	-
1041	-	51.7	-	-	-	-	-	-	-	-
2044	252.0	46.0	36.9	28.5	29.4	48.3	22.9	44.4	32.0	248.0
2074	-	53.5	50.0	-	-	-	-	-	-	-
2222	-	55.2	44.6	-	-	-	-	-	-	-
2598	223.5	40.6	-	24.6	22.4	40.3	18.8	-	-	217.5
2660	-	-	-	-	-	50.9	28.0	-	-	-
2833	243.0	43.7	-	27.4	27.8	45.0	21.0	-	-	239.0

RED DEER

Red Deer Pelvis

Context	Measurement	
	m9	m16
	SB	SH
3346	12.5	29.1

DOG

Dog Skull

Context	Measurement																	
	m1	m2	m3	m4	m5	m6	m7	m8	m9	m10	m12	m13	m15	m16	m17	m18	m19	m20
	1	7	8	9	16	17	23	25	28	29	32	34	37	38	40	18L	18B	18a
72	-	-	-	-	-	44.3	-	-	-	-	-	-	-	-	-	18.2	7.6	11.0
91 [3]	122.8	61.4	56.7	67.0	12.8	30.1	48.4	27.4	15.2	46.9	32.3	45.6	23.7	40.7	30.7	13.6	4.8	9.6
713	-	-	-	-	19.6	-	-	-	-	-	-	-	-	-	-	21.5	8.9	11.6
1152 [9]	-	-	-	-	-	-	-	-	-	-	55.4	-	-	-	-	-	-	-
1152 [9]	-	-	-	-	16.5	42.6	-	-	-	-	-	-	-	-	-	16.5	6.5	8.5
2598	-	-	-	-	15.6	34.5	-	-	-	-	-	-	-	-	-	15.6	6.3	8.3
2598	-	-	-	-	-	35.4	-	-	-	-	-	-	-	-	-	15.9	6.1	7.7

Dog Mandible

Context	Measurement																
	m1	m2	m3	m4	m5	m6	m7	m10	m11	m13	m14	m15	m16	m17	m18	m19	m20
				18	2		7	12	10		20			19		13L	13B
91 [3]	16.3	18.0	17.3	-	93.6	79.8	-	26.0	23.9	14.0	13.3	12.7	13.7	15.3	15.9	16.0	6.1
91 [3]	-	18.4	17.7	-	93.1	79.0	-	26.2	-	-	13.5	12.5	14.1	-	-	16.3	6.0
361	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	17.0	6.9
667	-	-	-	-	-	-	-	-	32.6	16.5	16.0	17.9	19.8	20.5	20.4	20.4	8.0
667	23.1	-	-	-	-	-	-	-	31.6	-	16.1	17.5	20.9	20.9	25.3	19.5	8.0
713	-	-	-	-	-	-	-	-	30.3	-	19.8	20.0	20.4	25.4	25.7	23.8	9.9
986	-	-	14.4	25.8	-	-	-	-	24.6	-	-	12.0	12.8	12.6	14.3	15.5	6.2
1051 [13]	16.2	17.2	16.7	29.9	94.0	78.5	55.6	27.6	27.2	14.3	13.9	14.1	13.3	14.8	16.2	18.3	6.5
1051 [13]	16.5	18.7	16.7	-	92.1	77.3	55.1	26.7	26.7	14.7	14.2	13.7	13.5	13.8	15.8	18.3	6.5
1152	21.7	-	20.1	36.3	-	95.4	-	32.4	31.2	-	-	16.9	18.5	19.3	20.0	19.5	7.6
1152 [9]	-	-	-	-	-	-	-	34.5	34.7	19.3	17.8	18.4	21.0	21.3	23.6	21.2	8.5
1152 [9]	-	-	-	-	-	-	-	35.3	-	-	18.1	18.8	21.1	20.8	-	21.2	8.7
2432	-	-	-	-	-	-	-	28.6	-	13.6	12.7	12.9	13.5	15.7	-	16.4	6.3
2620	-	-	-	-	-	-	-	30.0	31.0	16.7	15.8	15.7	16.9	17.8	20.1	19.1	7.5

Dog Scapula

Context	Measurement					
	m2	m3	m4	m5	m6	m7
	SLC		GLP	BG	LG	HS
89	-	8.2	20.4	11.5	16.9	87.0
172	19.6	8.9	22.7	13.0	20.5	-
1188 [11]	-	13.5	37.3	21.1	30.3	-
1223	25.0	11.6	-	18.0	27.2	-
2170	30.0	14.4	37.1	19.4	28.3	-
2561	-	11.0	29.7	-	25.5	-

Dog Humerus

Context	Measurement								
	m2	m3	m4	m5	m6	m7	m8	m9	m10
	GLC	Bp		Bi		Bd	SD	GL	LI
91 [3]	98.5	17.8	25.9	14.8	12.3	21.8	7.7	101.0	12.5
91 [3]	98.7	18.3	25.7	14.8	13.9	21.7	7.7	101.0	12.3
667	-	-	-	-	-	-	10.7	-	-
713	-	-	-	-	-	-	10.5	-	-
986	-	-	-	14.1	-	19.6	7.0	-	10.1
1188 [11]	-	-	-	26.8	23.9	-	14.6	-	23.6
1188 [10]	109.7	-	27.3	15.9	13.5	24.0	8.5	113.5	13.2
2061	-	-	-	17.6	14.3	22.8	-	-	13.6
2597	-	-	-	-	-	-	12.9	-	-
3372	-	-	-	26.6	21.9	33.7	-	-	19.1

Dog Radius

Context	Measurement							
	m1	m2	m3	m6	m7	m8	m9	m11
	GL	Bp		Bd		BFp	BFd	SD
91 [3]	96.5	11.4	7.3	14.5	8.7	11.4	12.8	7.2
93	-	-	-	14.8	9.0	-	11.5	7.1
279	102.6	-	-	15.2	9.9	-	-	9.3
690	90.0	12.6	8.0	16.2	8.7	12.6	13.8	8.2
693	110.2	11.4	7.7	15.0	8.9	11.4	12.9	7.8
998	-	-	-	-	-	-	-	8.7
1188 [11]	-	21.5	14.2	-	-	-	-	14.6
1206 [12]	-	12.5	8.4	-	-	-	-	-
2037	-	16.0	10.4	-	-	-	-	-
2278	-	15.4	9.7	-	-	-	-	-
2282	-	-	-	22.3	11.4	-	17.8	10.9

Dog Ulna

Context	Measurement			
	m1	m2	m3	m4
	LO	BPC	GL	SDO
91 [3]	18.9	11.6	-	13.6
93	18.9	11.6	113.3	13.9
516	-	16.3	-	-
693	20.6	11.2	129.5	13.3
713	-	12.3	-	-
780	-	16.5	-	-
986	17.6	9.0	-	11.5
1206 [12]	21.8	12.2	-	14.6
1206 [12]	21.7	12.6	-	15.0
2278	-	-	-	17.1

Dog Pelvis

Context	Measurement						
	m1	m9	m13	m16	m17	m18	m20
	GL	SB			SB	LFo	LAR
91 [3]	-	6.1	14.1	11.3	-	-	14.1
91 [3]	95.8	6.1	14.4	11.4	17.4	14.5	14.4
1051 [13]	-	4.3	15.6	9.5	18.7	14.9	13.5
1152 [9]	-	7.9	18.0	16.3	-	-	18.8
1206 [12]	-	5.9	-	12.7	-	-	14.0

Dog Pelvis continued

	m1	m9	m13	m16	m17	m18	m20
	GL	SB			SB	LFo	LAR
1206 [12]	107.9	6.0	14.2	12.5	19.2	-	14.1
1469	-	8.3	-	19.7	-	-	-
2173	-	-	20.8	-	-	-	-
2468	-	-	18.5	-	-	-	19.5
2564	-	-	16.6	-	-	-	16.5

Dog Femur

Context	Measurement									
	m1	m2	m3	m4	m5	m6	m7	m8	m9	m10
	GL	GLC	Bd				SD		DC	Dp
91 [3]	107.5	107.5	20.2	7.1	6.4	20.7	8.9	7.8	12.3	24.6
91 [3]	107.5	107.5	19.9	7.0	6.6	20.2	8.8	7.8	12.4	24.9
566	-	-	37.6	13.5	12.9	38.7	-	-	-	-
891	-	-	-	-	-	-	11.2	10.5	-	-
1152 [9]	-	-	-	-	-	-	11.4	-	-	-
1186	-	-	25.8	8.4	8.9	27.9	11.1	10.3	-	-
1206 [12]	122.3	122.4	22.0	7.5	8.0	22.2	8.9	8.1	12.8	26.6
1206 [12]	-	-	21.9	7.5	7.4	-	8.9	8.2	-	-
2171	-	-	-	-	-	-	12.3	12.4	-	-
2614	-	-	-	-	-	-	-	-	16.4	31.8

Dog Tibia

Context	Measurement						
	m1	m3	m4	m5	m6	m7	m8
	GL	Bp		SD		Bd	Dd
91 [3]	106.5	21.4	21.9	7.6	8.3	14.6	9.9
91 [3]	106.7	21.3	22.4	7.6	8.0	14.8	9.7
569	-	-	-	-	-	25.4	18.1
786	-	36.0	35.3	-	-	-	-
1188 [10]	123.5	23.2	-	8.3	8.8	15.6	10.6
1206 [12]	124.1	23.0	23.1	8.5	7.6	15.5	10.7
2432	125.0	23.4	23.5	8.3	7.6	14.6	10.8
3020	-	-	29.0	10.3	9.5	-	13.1

Dog Calcaneus

Context	Measurement	
	m3	m6
	GL	GB
1830	53.7	22.3

CAT

Cat Skull

Context	Measurement	CHECK WHAT THESE MEASUREMENTS ARE		
	m1	m2	m3	m5
	12	13	14	
744	22.1	20.8	10.8	5.2

HARE

Hare Humerus

Context	Measurement		
	m5	m6	m7
	BT		Bd
3372	10.6	9.8	13.4

Hare Tibia

Context	Measurement			
	m5	m6	m7	m8
	SD		Bd	Dd
3367	7.9	7.2	16.6	10.1

FOWL

Fowl Coracoid

Context	Measurement			
	m1	m2	m3	m4
	GL	LM	Bb	BF
361	-	-	-	12.0
667	60.1	58.0	15.8	12.6
732	-	-	-	-
781	47.1	44.9	12.0	9.2

Fowl Coracoid continued

	m1	m2	m3	m4
	GL	LM	Bb	BF
897	-	47.7	-	11.1
1788	56.9	54.1	15.4	12.8
1788	56.8	53.9	15.0	12.0
2278	-	46.3	-	10.4

Fowl Scapula

Context	Measurement
	m2
	Dic
667	13.6
744	11.9
1788	12.8
2278	11.3
2609	12.9

Fowl Radius

Context	Measurement		
	m1	m2	m3
	GL	Bd	SC
2061	55.9	6.8	2.9

Fowl Furcula

Context	Measurement
	m1
1788	63.1

Fowl Humerus

Context	Measurement			
	m1	m2	m3	m4
	GL	Bp	Bd	SC
352	74.6	20.8	16.5	7.2
732	72.7	21.0	16.3	7.5
733	-	-	15.9	7.4
744	-	-	17.0	8.0
897	65.2	-	14.1	6.2
1402	-	18.4	-	-
1684	69.6	18.8	15.2	-
2278	71.2	19.4	16.4	6.9

Fowl Ulna

Context	Measurement			
	m1	m2	m3	m4
	GL		Bp	SC
361	76.8	6.5	8.9	4.8
684	72.5	6.0	8.8	4.5
976	-	4.9	-	3.5
2044	74.8	6.2	9.1	4.7
2570	-	-	9.2	-
3544	-	6.1	8.4	4.3
4449	78.5	5.5	-	4.5

Fowl Carpometacarpus

Context	Measurement				
	m1	m2	m3	m4	m5
	GL	L	Bp	Did	(DS)
2257	38.5	36.4	12.6	8.1	-
2278	-	-	10.9	-	8.8

Measurement 5 = DS Dibersdobler

Fowl Femur

Context	Measurement						
	m1	m2	m3	m4	m5	m6	m7
	GL	Bp	Bd	SC	LR	Dp	Dd
361	-	16.5	-	7.2	-	10.9	-
959	-	-	16.1	-	-	-	-
1824	79.3	15.7	15.2	6.8	74.1	10.1	13.0
1995	79.9	16.2	-	7.4	-	11.1	-
3301	74.4	-	14.1	6.4	-	-	11.2

Fowl Tarsometatarsus

Context	Measurement				
	m1	m2	m3	m4	m5
	GL	Bp	Bd		SC
361	-	11.5	-	-	5.5
361	-	-	-	-	7.4
361	-	-	-	-	6.8
369	81.6	13.6	-	-	7.0
399	-	11.4	-	-	-
693	79.7	13.9	13.0	-	7.2
732	70.9	11.8	11.3	-	6.0
766	-	-	-	20.5	-
891	-	-	-	-	6.1
1420	-	15.2	-	-	7.3
1481	-	-	12.8	-	-
1788	75.8	14.2	13.6	-	6.1
2565	-	11.7	-	-	5.9
2578	-	-	-	21.0	-
3346	-	-	-	-	7.2

Fowl Tibiotarsus

Context	Measurement						
	m1	m2	m3	m4	m5	m6	m7
	GL	Dip	Bd	SC	La	Dd	(Bp)
251	-	-	-	-	-	-	12.7
251	-	17.8	-	6.6	-	-	12.7
357	95.6	18.3	10.0	5.4	92.2	9.8	12.1
399	-	21.0	-	-	-	-	13.9
399	-	15.6	9.7	3.3	89.5	9.6	-
731	-	-	9.8	10.3	-	-	-
1575	-	-	10.0	-	-	10.4	-
2054	114.2	20.0	12.4	6.2	110.6	11.5	13.3
2386	-	-	9.5	4.9	-	10.3	-
2615	-	-	10.7	5.9	98.0	10.7	-

Measurement 7 = Bp Bacher

GOOSE

Goose Ulna

Context	Measurement		
	m2	m3	m4
		Bp	SC
361	-	8.4	-
1221	6.1	-	7.2

Goose Femur

Context	Measurement		
	m2	m4	m5
	Bp	SC	LH
4455	20.6	8.8	79.4

Goose Tibiotarsus

Context	Measurement	
	m3	m6
	Bd	Dd
361	18.4	18.8

DOMESTIC DUCK/MALLARD

Domestic Duck/Mallard Coracoid

Context	Measurement	
	m2	m4
	LM	BF
465	51.1	16.3

Domestic Duck/Mallard Carpometacarpus

Context	Measurement		
	m1	m3	m4
	GL	Bp	Did
563	57.6	12.8	7.1

Domestic Duck/Mallard Tibiotarsus

Context	Measurement			
	m3	m4	m6	m7
	Bd	SC	Dd	(Bp)
361	-	4.5	-	9.6
361	8.7	4.3	8.9	-
560	8.7	-	8.7	-

Measurement 7 = Bp Bacher

PIGEON

Pigeon Scapula

Context	Measurement	
	m2	
	Dic	
2565 (6)	9.6	

Pigeon Humerus

Context	Measurement			
	m1	m2	m3	m4
	GL	Dip	Bd	SC
667	46.0	-	10.5	5.7
2565 (6)	47.5	-	11.1	4.9
2565 (6)	47.5	18.6	11.3	5.0

Pigeon Carpometacarpus

Context	Measurement		
	m1	m3	m4
	GL	Bp	Did
2565 (6)	-	9.6	-
2565 (6)	35.3	9.6	5.7

Pigeon Femur

Context	Measurement		
	m1	m4	m5
	GL	SC	LM
2565 (6)	42.8	3.3	41.3

BARN OWL

Barn Owl Ulna

Context	Measurement			
	m1	m2	m3	m4
	GL		Bp	SC
399	92.0	3.5	7.7	3.3

Barn Owl Carpometacarpus

Context	Measurement			
	m1	m3	m4	m5
	GL	Bp	Did	(BS)
399	42.4	9.3	6.4	6.3

Measurement 5 = BS Erbersdobler

CARRION CROW

Carrion Crow Coracoid

Context	Measurement			
	m1	m2	m3	m4
	GL	LM	Bb	BF
639 (8)	48.0	44.5	-	13.5
639 (8)	48.2	44.3	14.6	13.9
732	44.5	41.3	-	12.2

Carrion Crow Scapula

Context	Measurement	
	m1	m2
	GL	Dic
639 (8)	54.8	12.0

Carrion Crow Humerus

Context	Measurement			
	m1	m2	m3	m4
	GL	Bp	Bd	SC
639	70.5	20.7	17.2	6.8
1684	70.9	19.7	16.1	6.8

Carrion Crow Radius

Context	Measurement	
	m1	m2
	GL	Bd
639 (8)	77.1	6.7

Carrion Crow Ulna

Context	Measurement			
	m1	m2	m3	m4
	GL		Bp	SC
639 (8)	85.4	5.2	11.0	5.2

Carrion Crow Femur

Context	Measurement						
	m1	m2	m3	m4	m5	m6	m7
	GL	Dp	Bd	SC	LM	Dp	Dd
639 (8)	56.6	11.1	11.5	5.0	52.7	6.2	9.7
639 (8)	55.5	11.4	11.3	4.9	52.3	6.2	9.5

Carrion Crow Tibiotarsus

Context	Measurement				
	m2	m3	m4	m6	m7
	Dip	Bd	SC	Dd	(Dp)
639 (8)	-	9.3	5.0	8.4	-
936	11.9	-	-	-	8.1

Measurement 7 = Dp Bacher

Carrion Crow Tarsometatarsus

Context	Measurement			
	m1	m2	m3	m5
	GL	Bp	Bd	SC
639 (8)	-	10.3	-	-
4445	55.9	9.8	7.4	3.7

RAVEN

Raven Humerus

Context	Measurement
	m3
	Bd
251	20.5

Raven Radius

Context	Measurement
	m3
	SC
770	3.7

Raven Ulna

Context	Measurement
	m3
	Bp
732	12.2

Raven Carpometacarpus

Context	Measurement				
	m1	m2	m3	m4	m5
	GL	L	Bp	Did	(BS)
732	66.6	60.7	16.9	12.4	-

Measurement 5 = BS Erbersdobler

Raven Femur

Context	Measurement		
	m2	m4	m6
	Dp	SC	Dp
770	14.3	5.9	8.4

Raven Tibiotarsus

Context	Measurement
	m4
	SC
2257	6.1

Appendix 3.

Contexts containing bone from each Phase from Bainesse Farm CEU 46.

All recovered bone was recorded

Unphased Contexts
307,331,432,434,821,837,1444,1798,2155,2506,2521,2527,2568,2598,2634,2664,4427,4444,4498,4547,4558.

Unstratified contexts
2,36,76,129,301,308,328,338,339,348,379,423,601,682,694,695,701,763,844,936,962,964,970,980,986,989,990,996,997,998,1366,1715,1819,1820,1839,1952,1971,2074,2162,2301,2502,2504,2558,2619,2635,2679,2682,2736,2737,3639,3668,4403.

Phase 1 Trajanic
660.

Phase 2 Flavian (80-117 A.D.)
2206,3541.

Phase 2-5 Flavian (80-117 A.D.) - 150-165/170 A.D.
4513,4516.

Phase 3 Hadrianic (117-138 A.D.)
133,174,193,249,500,511,530,547,590,592,609,619,1443,1774,1990,1991,1995,1996,2286,2303,2387,2388,2404,2427,3505.

Phase 3+ Hadrianic (117-138 A.D.) +
322,516,817,1038,1367.

Phase 3-4 Hadrianic (117-138 A.D.) - 130-150 A.D.
2610,2612,2652,2654,2655,2712.

Phase 3-5 Hadrianic (117-138 A.D.) - 150-165/170 A.D.
262,876,884,1794,2105,2108,2428,2432,2433,2707,2720,2725.

Phase 3-6 Hadrianic (117-138 A.D.) - 170-200 A.D.
514,517,557.

Phase 4 130-150 A.D.
162,198,200,251,506,544,761,762,897,1784,1997,2256,2262,2265,2267,2268,2269,2272,2275,2318,2320,2402,2426,2434,2460,2473,3352,3360,3361,3366,3370,3544,3545,3552.

Phase 4+ 130-150 A.D.+
540.

Phase 4-5 130-150 A.D. - 150-165/170 A.D.
2270,2291,2571.

Phase 4-8 130-150 A.D. - 275-340 A.D.
463,465,469,481.

Phase 5 150-165/170 A.D.
77,503,576,655,657,681,754,809,812,813,814,815,1216,1225,1415,1428,1429,1441,1498,1523,1526,1585,1591,1599,1787,1788,1789,1790,1832,1955,1958,1985,1987,1988,1989,1992,1998,2033,2047,2062,2064,2066,2067,2076,2079,2099,2258,2259,2260,2282,2283,2311,2317,2346,2386,2401,2616,2657,2715,2730,2731,2735,2738,2740,2742,2743,2819,2830,2833,2835,2836,3363,3364,3365.

Phase 5+ 150-165/170 A.D.+
1770,2280,2660,2831.

Phase 5-6 150-165/170 A.D. - 170-200 A.D.
1453,1855.

Phase 6 170-200 A.D.
4,68,72,280,336,337,359,360,366,367,368,369,370,372,374,378,499,560,561,562,563,564,565,566,568,569,581,582,583,605,608,610,614,666,671,684,732,733,737,775,780,793,795,871,883,891,892,893,895,898,900,1104,1222,1225,1446,1450,1468,1472,1474,1475,1483,1490,1491,1510,1528,1559,1622,1650,1663,1664,1708,1709,1723,1768,1778,1779,1781,1811,1816,1821,1831,1834,1835,1837,1914,1933,1954,2054,2061,2198,2222,2227,2278,2279,2406,2430,2431,2560,2564,2565,2570,2578,2589,2595,2596,2597,2598,2601,2603,2606,2614,2615,2627,2630,2631,2644,2645,2647,2648,2658,2678,2709,2723,2724,2727,2733,2744,3351,3355,3356,3367,3369,3372,3904,4437,4505,4506,4512.

Phase 6+ 170-200 A.D.+
542,1221,1390,3354.

Phase 6-7 170-200 A.D. - 200-275 A.D.
37,69,70,71,73,85,86,87,89,90,91,92,93,95,96,99,100,113,114,122,128,158,164,165,180,184,186,209,233,269,270,271,279,290,291,295,315,329,352,353,415,416,417,418,460,526,808,937,938,939,943,968,1002,1004,1041,1045,1085,1086,1115,1152,1155,1184,1188,1199,1200,1201,1202,1206,1207,1336,1358,1359,1704,1719,1748,1796,2044,2154,2170,2171,2172,2173,2197,2805,3015,3016,3020,3021,3024,3025,3026,3041,3053,3346,3348,3397,3399,3645,3647,3669,3670,3672,3674,3675,3677,3682,3684,4407,4418,4443,4449,4450.

Phase 6-9 170-200 A.D. - 340-400 A.D.
674,941,947,953,1714,1741,1742.

Phase 7 200-275 A.D.
3,51,54,58,59,63,82,83,115,120,155,157,171,172,195,230,231,237,258,274,275,293,304,323,401,405,406,445,457,518,532,537,646,690,777,787,791,983,1006,1043,1051,1053,1084,1087,1186,1198,1209,1407,1415,1425,1433,1469,1473,1493,1511,1513,1551,1557,1575,1606,1616,1624,1660,1682,1685,1810,1829,1906,1931,2508,2510,2552,2556,2563,2609,2626,2628,2817,2834.

Phase 7+ 200-275 A.D.
305,411,421,430,508.

Phase 7-8 200-275 A.D. - 275-340 A.D.
806,807,950,958,972,975,976,977,978,979,1712,1749,2152,2158,2177,2178,2179,2185,2195,3050,4440,4441,4485,4486.

Phase 7-9 200-275 A.D. - 340-400 A.D.
62,361,363,393,618,712,713,730,731,744,766,767,768,770,776,781,782.

Phase 7a 200-275 A.D.
4489,4492,4494,4501,4509,4557,4559.

Phase 7b 200-275 A.D.
4435,4456,4459,4462,4464,4466,4474,4549,4553.

Phase 7c 200-275 A.D.
3336,3651,4409,4413,4415,4445,4446,4447,4454,4455.

Phase 8 275-340 A.D.
639,641,642,645,667,670,693,786,840,842,1402,1410,1419,1421,1481,1517,1520,1561,1570,1607,1618,1626,2037,2257,2532,2540,2561,2569,2583,2620,2621,2622,2624,2649,4404,4405,4406,4416,4420,4425,4428,4438,4555.

Phase 8+ 275-340 A.D.+
1684.

Phase 8-9 275-340 A.D. - 340-400 A.D.
1904.

Phase 9 340-400 A.D.
391,392,394,396,399,704,705,771,1830.

Phase 9-10 340-400 A.D. -
783.

Phase 10
631,698,1608,1309,1604,1662.

Pre Phase 6 Pre 170-200 A.D.
1459.

Pre Phase 6-7 Pre 170-200 A.D. - 200-275 A.D.
273.

Pre Phase 7 Pre 200-275 A.D.
75,967,2512.

Pre Phase 8 Pre 275-340 A.D.
839.

Modern
458,599,1361,2303.