Late Romano-British - early medieval socio-economic and cultural change: Analysis of the mammal and bird bone assemblages from the Roman city of *Viroconium Cornoviorum*, Shropshire: Volume 3: Tables and appendices

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Table and appendix notes

Tables 37-42, 65-70 and 84-89: The number of first phalanges has been adjusted due to their greater frequency in the skeleton (the original number has been divided by four)

Table 103: The number of first phalanges has been adjusted due to their greater frequency in the skeleton (the original number has been divided by two)

Table 105: The number of first phalanges has been adjusted due to their greater frequency in the skeleton (the original number has been divided by twenty)

Table and appendices codes

Where possible codes have been avoided, but due to constraints of pagination, etc codes have been used in the following instances: Tables 29, 31, 47-48, 56-63, 75-83 and 94-10, and all appendices.

Taxa codes

B = *Bos taurus* (Cattle)
cf. B = cf. *B. taurus* (cf. Cattle)
S = *Sus scrofa domesticus* (Pig)
cf. SUS = *S. scrofa* (cf. Wild boar)
OVA = *Ovis aries* (Sheep)
CAH = *Capra hircus* (Goat)
O = *O. aries/C. hircus* (Sheep/Goat)
EQC = *Equus caballus* (Horse)
EQ = *Equid* (Horse family)
CAF = *Canis familiaris* (Dog)
cf. CAF = cf. *C. familiaris* (cf. Dog)
cf. CAL = cf. *C. lupus* (cf. Wolf)
FEC = *Felis catus* (Cat)
GAG = *Gallus gallus* (Chicken)
GN = *G. gallus/Numida meleagris* (Chicken/Guinea fowl)
GP = *G. gallus/Phasianus colchicus* (Chicken/Pheasant)
GNP = *G. gallus/N. meleagris/P. colchicus* (Chicken/Guinea fowl/Pheasant)
CEE = *Cervus elaphus* (Red deer)
ORC = *Oryctolagus cuniculus* (Rabbit)
LAG = Lagomorph (Hare/Rabbit family)
SMI = Small microtinae (Small vole)
TAE = *Talpa europaea* (Common mole)
VUV = *Vulpes vulpes* (Red fox)

Element codes

HC = Horncore
ZY = Zgomaticus
dP4 = Mandibular fourth deciduous premolar
P3 = Mandibular third premolar
P4 = Mandibular fourth premolar
M1 = Mandibular first molar
M2 = Mandibular second molar
M3 = Mandibular third molar
MD = Mandible
SC = Scapula
HU = Humerus
RA = Radius
MC = Metacarpal
PE = Pelvis
FE = Femur
TI = Tibia
AS = Astragalus
CA = Calcaneum
MT = Metatarsal
PH = First phalange

Measurements

All measurements quoted in the tables and appendices are in millimetres (mm)

Site/Container	Plastic crates	Large box	'Museum' box	Small box
Baths basilica (Barker)	179	14	343	4
Baths and *macellum* (Webster)	65	4	446	98
Other			4	
Unlabelled	3	8	72	15

Table 1. Methods: Summary of *Viroconium* assemblages by excavation and storage container

Taxa/Site	Baths basilica (Barker)	Baths and *macellum* (Webster)
Cattle	17325	19193
Sheep/goat	3041	3368
Pig	1896	2100
Other mammals	513	568
Birds	1031	1142
Estimated total	*23806*	*26371*

Table 2. Methods: Countable specimen estimates for the baths basilica (Barker) and baths and *macellum* (Webster) assemblages

Taxa/Site	Baths basilica (Barker)	Baths and *macellum* (Webster)
Cattle	758	840
Sheep/goat	607	672
Pig	152	168
Estimated total	*1517*	*1680*

Table 3. Methods: Ageable mandible estimates for the baths basilica (Barker) and baths and *macellum* (Webster) assemblages

Taxa/Site	Baths basilica (Barker)	Baths and *macellum* (Webster)
Cattle	3374	3738
Sheep/goat	1418	1571
Pig	338	376
Other mammals	129	143
Birds	425	470
Estimated total	*5684*	*6298*

Table 4. Methods: Measurable specimen estimates for the baths basilica (Barker) and baths and *macellum* (Webster) assemblages

Feature/Phase	T	U	V	W	X	Y	Z	*Total*
Pit		2	3	4	2	27		*38*
Posthole		56	116	67	15	7	6	*267*
Cut		8	9	39	12	10	11	*89*
Hearth			1		10	11	5	*27*
Layer		1	7	125	43	73	14	*263*
Surface	3	20	21	206	28	65	55	*398*
Floor	12	13	32	247	3	3	10	*320*
Dump	2	18	34	408	56	55	79	*652*
Total	*17*	*118*	*223*	*1096*	*169*	*251*	*180*	*2054*

Table 5. Methods: Baths basilica (Barker): Bone containing context estimates by deposit type and phase

Feature/Phase	3.1	3.2	3.3	3.4	3.5	3.6	3.7	3.8	*Total*
Pit	86	79	12	5					*182*
Posthole	15	18	50	16					*99*
Cut	22	48	24	37			1		*132*
Hearth		1							*1*
Layer	321	268	425	45	20	4	20	31	*1134*
Floor	11	12							*23*
Dump		1							*1*
Total	*455*	*427*	*511*	*103*	*20*	*4*	*21*	*31*	*1572*

Table 6. Methods: Baths and *macellum* (Webster): Bone containing context estimates by deposit type and phase

Phase/Gnawing/Taxa		Cattle		Pig		Sheep/goat	
		n	%	n	%	n	%
All	Ungnawed	11126	*86.7*	3537	*79.1*	2723	*87.0*
	Gnawed	1709	*13.3*	935	*20.9*	407	*13.0*
T-V	Ungnawed	162	*90.0*	38	*66.7*	94	*86.2*
	Gnawed	18	*10.0*	19	*33.3*	15	*13.8*
W	Ungnawed	2400	*94.2*	511	*82.2*	735	*90.9*
	Gnawed	149	*5.8*	111	*17.8*	74	*9.1*
X	Ungnawed	52	*82.5*	24	*92.3*	32	*82.1*
	Gnawed	11	*17.5*	2	*7.7*	7	*17.9*
X-Y	Ungnawed	1315	*87.4*	303	*78.7*	220	*87.3*
	Gnawed	190	*12.6*	82	*21.3*	32	*12.7*
Y	Ungnawed	1918	*82.6*	814	*78.6*	489	*84.3*
	Gnawed	403	*17.4*	221	*21.4*	91	*15.7*
Y-Z	Ungnawed	1527	*87.5*	498	*76.9*	362	*86.6*
	Gnawed	219	*12.5*	150	*23.1*	56	*13.4*
Z	Ungnawed	3752	*83.9*	1349	*79.4*	791	*85.7*
	Gnawed	719	*16.1*	350	*20.6*	132	*14.3*

Table 7. Taphonomy: Scavenger gnawing: Cattle, pig and sheep/goat NISP (all phases)

Element	*%MNI by element*	Ungnawed	Gnawed	*% gnawed*
First phalange	*62.7*	1833	265	*12.6*
Femur distal	*28.9*	169	67	*28.4*
Calcaneum	*91.4*	482	272	*36.1*
Astragalus	*87.9*	659	75	*10.2*
Femur proximal	*75.1*	431	182	*29.7*
Metatarsal distal	*93.7*	571	52	*8.3*
Radius distal	*49.1*	301	82	*21.4*
Metacarpal distal	*50.5*	478	38	*7.4*
Metacarpal proximal	*87.0*	553	71	*11.4*
Pelvis	*52.5*	357	77	*17.7*
Scapula	*100.0*	748	88	*10.5*
Metatarsal proximal	*85.7*	531	72	*11.9*
Radius proximal	*78.4*	552	61	*10.0*
Tibia distal	*65.9*	480	66	*12.1*
Humerus distal	*69.6*	432	142	*24.7*
Mandible	*86.8*	724	7	*1.0*

Table 8. Taphonomy: Scavenger gnawing: Cattle: Proportion of ungnawed and gnawed elements (NISP) compared to anatomical representation (all phases)

Element	*%MNI by element*	Ungnawed	Gnawed	*% gnawed*
First phalange	*12.9*	471	23	*4.7*
Femur distal	*10.9*	75	9	*10.7*
Calcaneum	*30.8*	135	171	*55.9*
Astragalus	*22.4*	166	58	*25.9*
Femur proximal	*13.7*	91	23	*20.2*
Metatarsal distal	*9.4*	75	6	*7.5*
Radius distal	*7.8*	37	5	*11.9*
Metacarpal distal	*13.2*	77	5	*6.1*
Metacarpal proximal	*16.5*	89	69	*43.7*
Pelvis	*21.3*	120	87	*42.0*
Scapula	*33.7*	187	144	*43.5*
Metatarsal proximal	*12.3*	69	55	*44.4*
Radius proximal	*21.5*	123	53	*30.1*
Tibia distal	*31.2*	243	63	*20.6*
Humerus distal	*26.9*	201	69	*25.6*
Mandible	*100.0*	889	73	*7.6*

Table 9. Taphonomy: Scavenger gnawing: Pig: Proportion of ungnawed and gnawed elements (NISP) compared to anatomical representation (all phases)

Element	*%MNI by element*	Ungnawed	Gnawed	*% gnawed*
First phalange	*23.8*	312	7	*2.2*
Femur distal	*20.6*	58	3	*4.9*
Calcaneum	*47.6*	128	28	*17.9*
Astragalus	*49.4*	148	15	*9.2*
Femur proximal	*16.8*	47	2	*4.1*
Metatarsal distal	*39.1*	71	3	*4.1*
Radius distal	*27.4*	63	7	*10.0*
Metacarpal distal	*41.2*	44	6	*12.0*
Metacarpal proximal	*79.4*	115	69	*37.5*
Pelvis	*43.8*	102	39	*27.7*
Scapula	*50.0*	127	40	*24.0*
Metatarsal proximal	*66.8*	110	61	*35.7*
Radius proximal	*47.1*	111	26	*19.0*
Tibia distal	*93.5*	273	36	*11.7*
Humerus distal	*67.1*	191	35	*15.5*
Mandible	*100.0*	314	16	*4.8*

Table 10. Taphonomy: Scavenger gnawing: Sheep/goat: Proportion of ungnawed and gnawed elements (NISP) compared to anatomical representation (all phases)

Element/Phase	Brain	Payne	All		T-V		W		X		X-Y		Y		Y-Z		Z	
	%	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%
First phalange	*2.7*	*37.5*	534	*62.7*	9	*69.2*	118	*57.0*	3	*50.0*	62	*62.0*	96	*59.6*	76	*62.8*	163	*56.2*
Femur distal	*7.0*		246	*28.9*	1	*7.7*	31	*15.0*	4	*66.7*	28	*28.0*	47	*29.2*	34	*28.1*	92	*31.7*
Calcaneum	*10.9*	*62.5*	778	*91.4*	8	*61.5*	142	*68.6*	3	*50.0*	96	*96.0*	144	*89.4*	94	*77.7*	267	*92.1*
Astragalus	*12.5*	*62.5*	748	*87.9*	11	*84.6*	132	*63.8*	2	*33.3*	87	*87.0*	161	*100.0*	87	*71.9*	254	*87.6*
Femur proximal	*14.1*	*50.0*	639	*75.1*	11	*84.6*	107	*51.7*	4	*66.7*	64	*64.0*	120	*74.5*	77	*63.6*	231	*79.7*
Metatarsal distal	*15.6*	*69 0*	797	*93.7*	11	*84.6*	175	*84.5*	2	*33.3*	98	*98.0*	106	*65.8*	100	*82.6*	290	*100.0*
Radius distal	*17.2*	*75.0*	418	*49.1*	6	*46.2*	31	*15.0*	3	*50.0*	45	*45.0*	103	*64.0*	51	*42.1*	174	*60.0*
Metacarpal distal	*18.0*	*69.0*	430	*50.5*	7	*53.8*	139	*67.1*	4	*66.7*	73	*73.0*	100	*62.1*	87	*71.9*	248	*85.5*
Metacarpal proximal	*25.0*	*87.5*	740	*87.0*	12	*92.3*	175	*84.5*	5	*83.3*	88	*88.0*	118	*73.3*	102	*84.3*	231	*79.7*
Pelvis	*26.6*	*75.0*	447	*52.5*	7	*53.8*	65	*31.4*	1	*16.7*	41	*41.0*	85	*52.8*	53	*43.8*	182	*62.8*
Scapula	*27.4*		851	*100.0*	5	*38.5*	207	*100.0*	1	*16.7*	100	*100.0*	144	*89.4*	103	*85.1*	276	*95.2*
Metatarsal proximal	*30.4*	*87.5*	729	*85.7*	12	*92.3*	173	*83.6*	5	*83.3*	89	*89.0*	82	*50.9*	105	*86.8*	249	*85.9*
Radius proximal	*50.8*	*100.0*	667	*78.4*	10	*76.9*	90	*43.5*	5	*83.3*	76	*76.0*	128	*79.5*	75	*62.0*	259	*89.3*
Tibia distal	*56.3*	*100.0*	561	*65.9*	4	*30.8*	59	*28.5*	0	*0.0*	54	*54.0*	142	*88.2*	63	*52.1*	224	*77.2*
Humerus distal	*64.0*	*75.0*	592	*69.6*	2	*15.4*	68	*32.9*	3	*50.0*	61	*61.0*	125	*77.6*	98	*81.0*	217	*74.8*
Mandible	*91.4*	*100.0*	739	*86.8*	13	*100.0*	163	*78.7*	6	*100.0*	57	*57.0*	112	*69.6*	121	*100.0*	259	*89.3*

Table 11. Taphonomy: Cattle: NISP compared to Brain's (1981: 23, Figure 18a & 277, Table 5) and Payne & Munson's (1985: 41, Table 2) goat anatomical element attrition-survival patterns

Element/Phase	Brain	Payne	All		T-V		W		X		X-Y		Y		Y-Z		Z	
	%	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%
First phalange	*2.7*	*37.5*	131	*12.9*	2	*25.0*	21	*18.6*	1	*33.3*	9	*11.8*	33	*13.8*	15	*11.5*	44	*11.1*
Femur distal	*7.0*		110	*10.9*	3	*37.5*	18	*15.9*	1	*33.3*	9	*11.8*	25	*10.5*	14	*10.8*	37	*9.3*
Calcaneum	*10.9*	*62.5*	312	*30.8*	8	*100.0*	55	*48.7*	2	*66.7*	24	*31.6*	83	*34.7*	39	*30.0*	95	*23.9*
Astragalus	*12.5*	*62.5*	227	*22.4*	1	*12.5*	29	*25.7*			27	*35.5*	50	*20.9*	27	*20.8*	90	*22.7*
Femur proximal	*14.1*	*50.0*	139	*13.7*	6	*75.0*	17	*15.0*	1	*33.3*	12	*15.8*	35	*14.6*	19	*14.6*	47	*11.8*
Metatarsal distal	*15.6*	*69.0*	95	*9.4*	2	*25.0*	6	*5.3*	3	*100.0*	9	*11.8*	14	*5.9*	12	*9.2*	46	*11.6*
Radius distal	*17.2*	*75.0*	79	*7.8*			11	*9.7*			7	*9.2*	24	*10.0*	13	*10.0*	22	*5.5*
Metacarpal distal	*18.0*	*69.0*	134	*13.2*	2	*25.0*	24	*21.2*	1	*33.3*	15	*19.7*	26	*10.9*	28	*21.5*	38	*9.6*
Metacarpal proximal	*25.0*	*87.5*	167	*16.5*	2	*25.0*	31	*27.4*	2	*66.7*	12	*15.8*	35	*14.6*	35	*26.9*	46	*11.6*
Pelvis	*26.6*	*75.0*	216	*21.3*	4	*50.0*	31	*27.4*	1	*33.3*	15	*19.7*	42	*17.6*	37	*28.5*	77	*19.4*
Scapula	*27.4*		341	*33.7*	2	*25.0*	42	*37.2*	1	*33.3*	22	*28.9*	73	*30.5*	55	*42.3*	136	*34.3*
Metatarsal proximal	*30.4*	*87.5*	124	*12.3*	3	*37.5*	11	*9.7*	2	*66.7*	10	*13.2*	21	*8.8*	25	*19.2*	50	*12.6*
Radius proximal	*50.8*	*100.0*	218	*21.5*	5	*62.5*	26	*23.0*	1	*33.3*	17	*22.4*	51	*21.3*	24	*18.5*	87	*21.9*
Tibia distal	*56.3*	*100.0*	316	*31.2*	3	*37.5*	45	*39.8*	1	*33.3*	31	*40.8*	68	*28.5*	40	*30.8*	118	*29.7*
Humerus distal	*64.0*	*75.0*	272	*26.9*	1	*12.5*	28	*24.8*			25	*32.9*	71	*29.7*	24	*18.5*	121	*30.5*
Mandible	*91.4*	*100.0*	1012	*100.0*	5	*62.5*	113	*100.0*	2	*66.7*	76	*100.0*	239	*100.0*	130	*100.0*	397	*100.0*

Table 12. Taphonomy: Pig: NISP compared to Brain's (1981: 23, Figure 18a & 277, Table 5) and Payne & Munson's (1985: 41, Table 2) goat anatomical element attrition-survival patterns

Element/Phase	Brain	Payne	All		T-V		W		X		X-Y		Y		Y-Z		Z	
	%	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%
First phalange	*2.7*	*37.5*	81	*23.8*	3	*15.8*	24	*24.2*	1	*16.7*	6	*19.4*	18	*32.7*	8	*17.8*	23	*21.7*
Femur distal	*7.0*		70	*20.6*	3	*15.8*	21	*21.2*	2	*33.3*	5	*16.1*	18	*32.7*	5	*11.1*	15	*14.2*
Calcaneum	*10.9*	*62.5*	162	*47.6*	6	*31.6*	45	*45.5*	1	*16.7*	14	*45.2*	26	*47.3*	15	*33.3*	49	*46.2*
Astragalus	*12.5*	*62.5*	168	*49.4*	4	*21.1*	39	*39.4*	2	*33.3*	15	*48.4*	38	*69.1*	20	*44.4*	45	*42.5*
Femur proximal	*14.1*	*50.0*	57	*16.8*	1	*5.3*	14	*14.1*			2	*6.5*	12	*21.8*	5	*11.1*	23	*21.7*
Metatarsal distal	*15.6*	*69.0*	133	*39.1*	6	*31.6*	33	*33.3*			17	*54.8*	25	*45.5*	13	*28.9*	44	*41.5*
Radius distal	*17.2*	*75.0*	93	*27.4*	2	*10.5*	23	*23.2*			10	*32.3*	19	*34.5*	13	*28.9*	24	*22.6*
Metacarpal distal	*18.0*	*69.0*	140	*41.2*	5	*26.3*	46	*46.5*	1	*16.7*	8	*25.8*	25	*45.5*	15	*33.3*	39	*36.8*
Metacarpal proximal	*25.0*	*87.5*	270	*79.4*	8	*42.1*	74	*74.7*	5	*83.3*	29	*93.5*	41	*74.5*	38	*84.4*	69	*65.1*
Pelvis	*26.6*	*75.0*	149	*43.8*	7	*36.8*	29	*29.3*	3	*50.0*	7	*22.6*	28	*50.9*	19	*42.2*	48	*45.3*
Scapula	*27.4*		170	*50.0*	7	*36.8*	37	*37.4*			8	*25.8*	39	*70.9*	30	*66.7*	46	*43.4*
Metatarsal proximal	*30.4*	*87.5*	227	*66.8*	8	*42.1*	59	*59.6*	5	*83.3*	17	*54.8*	47	*85.5*	25	*55.6*	64	*60.4*
Radius proximal	*50.8*	*100.0*	160	*47.1*	6	*31.6*	40	*40.4*	1	*16.7*	10	*32.3*	28	*50.9*	22	*48.9*	51	*48.1*
Tibia distal	*56.3*	*100.0*	318	*93.5*	9	*47.4*	99	*100.0*	4	*66.7*	31	*100.0*	42	*76.4*	42	*93.3*	82	*77.4*
Humerus distal	*64.0*	*75.0*	228	*67.1*	5	*26.3*	46	*46.5*	3	*50.0*	20	*64.5*	46	*83.6*	36	*80.0*	70	*66.0*
Mandible	*91.4*	*100.0*	340	*100.0*	19	*100.0*	83	*83.8*	6	*100.0*	16	*51.6*	55	*100.0*	45	*100.0*	106	*100.0*

Table 13. Taphonomy: Sheep/goat: NISP compared to Brain's (1981: 23, Figure 18a & 277, Table 5) and Payne & Munson's (1985: 41, Table 2) goat anatomical element attrition-survival patterns

Element/Fusion/Fragmentation		100%	>50%	50%	<50%
	Fused		23	17	524
Humerus	Unfused		2		5
	Neonate		1	1	
	Fused	1	14	13	439
Tibia	Unfused	16	17	6	36
	Neonate		2		1
	Fused		35	61	731
Scapula	Unfused		1	2	4
	Neonate			1	
	Adult	292	330	58	49
Astragalus	Juvenile	1	3		1
	Neonate				
	Fused	54	333	151	138
Calcaneum	Unfused	27	41	6	1
	Neonate		2		
	Fused	1342	660	32	34
First phalange	Unfused	23	5		
	Neoante	1	1		

Table 14. Taphonomy: Age related attrition: Cattle NISP: An index of fragility (all phases)

Element/Fusion/Fragmentation		100%	>50%	50%	<50%
	Fused		2	6	146
Humerus	Unfused	12	23	12	30
	Neonate	18	18	2	1
	Fused	1	13	16	103
Tibia	Unfused	38	27	19	68
	Neonate	5	16		
	Fused		3	9	266
Scapula	Unfused		2	9	22
	Neonate		8	10	2
	Adult	74	121	15	7
Astragalus	Juvenile	2	5		
	Neonate				
	Fused	10	93	55	11
Calcaneum	Unfused	45	85	1	1
	Neonate	3	2		
	Fused	155	24	4	1
First phalange	Unfused	249	59	1	1
	Neoante				

Table 15. Taphonomy: Age related attrition: Pig NISP: An index of fragility (all phases)

Element/Fusion/Fragmentation		100%	>50%	50%	<50%
Humerus	Fused	1	24	22	153
	Unfused		3	5	8
	Neonate	3	4	2	1
Tibia	Fused		25	30	187
	Unfused	10	17	7	28
	Neonate	1	3		1
Scapula	Fused		3	7	127
	Unfused		1	8	14
	Neonate		6		1
Astragalus	Adult	89	70		1
	Juvenile	1	2		
	Neonate				
Calcaneum	Fused	22	52	5	8
	Unfused	17	47	2	2
	Neonate	1			
First phalange	Fused	211	65	2	2
	Unfused	26	10		1
	Neoante	2			

Table 16. Taphonomy: Age related attrition: Sheep/goat NISP: An index of fragility (all phases)

Phase/Preservation/Taxa		Cattle		Pig		Sheep/goat	
		n	%	n	%	n	%
All	Good	6257	*48.7*	2354	*52.6*	1633	*52.2*
	Moderate	6115	*47.6*	2038	*45.6*	1384	*44.2*
	Poor	463	*3.6*	80	*1.8*	113	*3.6*
T-V	Good	111	*61.7*	26	*45.6*	64	*58.7*
	Moderate	64	*35.6*	30	*52.6*	39	*35.8*
	Poor	5	*2.8*	1	*1.8*	6	*5.5*
W	Good	796	*31.2*	229	*36.8*	331	*40.9*
	Moderate	1460	*57.3*	353	*56.8*	412	*50.9*
	Poor	293	*11.5*	40	*6.4*	66	*8.2*
X	Good	35	*55.6*	18	*69.2*	25	*64.1*
	Moderate	27	*42.9*	7	*26.9*	13	*33.3*
	Poor	1	*1.6*	1	*3.8*	1	*2.6*
X-Y	Good	698	*46.4*	207	*53.8*	138	*54.8*
	Moderate	772	*51.3*	174	*45.2*	105	*41.7*
	Poor	35	*2.3*	4	*1.0*	9	*3.6*
Y	Good	1270	*54.7*	550	*53.1*	344	*59.3*
	Moderate	1025	*44.2*	475	*45.9*	230	*39.7*
	Poor	26	*1.1*	10	*1.0*	6	*1.0*
Y-Z	Good	1032	*59.1*	413	*64.0*	233	*55.7*
	Moderate	672	*38.5*	225	*35.0*	169	*40.4*
	Poor	42	*2.4*	10	*2.0*	16	*3.8*
Z	Good	2315	*51.8*	911	*53.6*	498	*54.0*
	Moderate	2095	*46.9*	774	*45.6*	416	*45.1*
	Poor	61	*1.4*	14	*0.8*	9	*1.0*

Table 17. Taphonomy: Surface preservation: Cattle, pig and sheep/goat (NISP)

Phase/Fragmentation/Taxa		Cattle		Pig		Sheep/goat	
		n	%	n	%	n	%
All	100%	2294	*17.9*	1011	*22.6*	617	*19.7*
	>50%	2933	*22.9*	990	*22.1*	970	*31.0*
	50%	966	*7.5*	391	*8.7*	322	*10.3*
	<50%	6642	*51.7*	2080	*46.5*	1221	*39.0*
T-V	100%	41	*22.8*	8	*14.0*	23	*21.1*
	>50%	38	*21.1*	23	*40.4*	40	*36.7*
	50%	17	*9.4*	6	*10.5*	8	*7.3*
	<50%	84	*46.7*	20	*35.1*	38	*34.9*
W	100%	375	*14.7*	149	*24.0*	152	*18.8*
	>50%	606	*23.8*	148	*23.8*	264	*32.6*
	50%	218	*8.6*	48	*7.7*	87	*10.8*
	<50%	1350	*53.0*	277	*44.5*	306	*37.8*
X	100%	6	*9.5*	11	*42.3*	3	*7.7*
	>50%	19	*30.2*	8	*30.8*	16	*41.0*
	50%	5	*7.9*	4	*15.4*	3	*7.7*
	<50%	33	*52.4*	3	*11.5*	17	*43.6*
X-Y	100%	229	*15.2*	78	*20.3*	44	*17.5*
	>50%	348	*23.1*	98	*25.5*	73	*29.0*
	50%	117	*7.8*	29	*7.5*	22	*8.7*
	<50%	811	*53.9*	180	*46.8*	113	*44.8*
Y	100%	501	*21.6*	247	*23.9*	140	*24.1*
	>50%	533	*23.0*	215	*20.8*	181	*31.2*
	50%	170	*7.3*	100	*9.7*	51	*8.8*
	<50%	1117	*48.1*	473	*45.7*	208	*35.9*
Y-Z	100%	322	*18.4*	163	*25.2*	55	*13.2*
	>50%	393	*22.5*	127	*19.6*	127	*30.4*
	50%	146	*8.4*	55	*8.5*	43	*10.3*
	<50%	885	*50.7*	303	*46.8*	193	*46.2*
Z	100%	820	*18.3*	355	*20.9*	200	*21.7*
	>50%	996	*22.3*	371	*21.8*	269	*29.1*
	50%	293	*6.6*	149	*8.8*	108	*11.7*
	<50%	2362	*52.8*	824	*48.5*	346	*37.5*

Table 18. Taphonomy: Fragmentation: Cattle, pig and sheep/goat (NISP)

Phase/Burning/Taxa		Cattle		Pig		Sheep/goat	
		n	%	n	%	n	%
All	Unburnt	12582	*98.0*	4398	*98.3*	3062	*97.8*
	Singed	191	*1.5*	57	*1.3*	43	*1.4*
	Burnt	62	*0.5*	16	*0.4*	24	*0.8*
	Calcined					1	*<0.1*
T-V	Unburnt	179	*99.4*	56	*98.2*	103	*94.5*
	Singed	1	*0.6*	1	*1.8*	3	*2.8*
	Burnt					3	*2.8*
	Calcined						
W	Unburnt	2518	*98.8*	608	*97.7*	790	*97.7*
	Singed	25	*1.0*	8	*1.3*	14	*1.7*
	Burnt	6	*0.2*	5	*0.8*	4	*0.5*
	Calcined				*0.2*	1	*0.1*
X	Unburnt	58	*92.1*	26	*100.0*	36	*92.3*
	Singed	2	*3.2*			1	*2.6*
	Burnt	3	*4.8*			2	*5.1*
	Calcined						
X-Y	Unburnt	1500	*99.7*	383	*99.4*	250	*99.2*
	Singed	5	*0.3*	1	*0.3*	1	*0.4*
	Burnt			1	*0.3*	1	*0.4*
	Calcined						
Y	Unburnt	2282	*98.3*	1020	*98.6*	570	*98.3*
	Singed	32	*1.4*	13	*1.3*	7	*1.2*
	Burnt	7	*0.3*	2	*0.2*	3	*0.5*
	Calcined						
Y-Z	Unburnt	1682	*96.3*	634	*97.8*	412	*98.6*
	Singed	42	*2.4*	12	*1.9*	3	*0.7*
	Burnt	22	*1.3*	2	*0.3*	3	*0.7*
	Calcined						
Z	Unburnt	4363	*97.6*	1671	*98.4*	901	*97.6*
	Singed	84	*1.9*	22	*1.2*	14	*1.5*
	Burnt	24	*0.4*	6	*0.4*	8	*0.9*
	Calcined						

Table 19. Taphonomy: Burning: Cattle, pig and sheep/goat (NISP)

Taxa/Category		Fragmentation			
		100%	<50%	50%	>50%
Cattle	A	847	996	301	2066
	B	651	949	315	2216
	C	796	988	350	2360
Pig	A	456	450	173	868
	B	218	260	98	581
	C	353	291	120	668
Sheep/goat	A	216	284	87	336
	B	186	303	117	415
	C	215	383	118	470

Table 20. Deposition: A-B-C category deposits: Taphonomic indicators: Cattle, pig and sheep/goat NISP fragmentation (all phases)

Taxa/Category		Surface preservation		
		Good	Moderate	Poor
Cattle	A	2295	1829	86
	B	1714	2165	252
	C	2248	2121	125
Pig	A	1069	863	15
	B	586	533	38
	C	742	663	27
Sheep/goat	A	509	387	27
	B	528	454	39
	C	596	543	47

Table 21. Deposition: A-B-C category deposits: Taphonomic indicators: Cattle, pig and sheep/goat NISP surface preservation (all phases)

Taxa/Category		Angularity of breakage	
		Spiky	Rounded
Cattle	A	3097	266
	B	2922	558
	C	3227	471
Pig	A	1407	84
	B	876	63
	C	1008	71
Sheep/goat	A	652	55
	B	769	66
	C	854	117

Table 22. Deposition: A-B-C category deposits: Taphonomic indicators: Cattle, pig and sheep/goat NISP angularity of breakage (all phases)

Taxa/Category		Scavenger gnawing	
		Ungnawed	Gnawed
Cattle	A	3498	712
	B	3657	474
	C	3961	533
Pig	A	1530	417
	B	906	251
	C	1146	286
Sheep/goat	A	777	146
	B	885	136
	C	1056	130

Table 23. Deposition: A-B-C category deposits: Taphonomic indicators: Cattle, pig and sheep/goat NISP scavenger gnawing (all phases)

Taxa/Dump	C527		D1569	
	n	%	n	%
Cattle (*Bos taurus*)	115	*54.8*	72	*64.9*
Sheep (*Ovis aries*)	14	*6.7*	4	*3.6*
Goat (*Capra hircus*)	1	*0.5*		
Sheep/Goat (*O.aries/C.hircus*)	40	*19.0*	1	*0.9*
Pig (*Sus scrofa domesticus*)	22	*10.5*	23	*20.7*
Dog (*Canis familiaris*)	5	*2.4*	1	*0.9*
Cat (*Felis cattus*)	1	*0.5*		
cf.Domestic fowl (cf.*Gallus gallus*)	4	*1.9*	4	*3.6*
Red deer *(Cervus elaphus*)	1	*0.5*		
Roe deer *(Capreolus capreolus*)			1	*0.9*
Badger (*Meles meles*)	1	*0.5*		
Dog/Fox (*C.familiaris/Vuples vulpes*)	1	*0.5*		
Rabbit (*Oryctolagus cuniculus*)	1	*0.5*		
Small microtinae			1	*0.9*
Small rodentia	1	*0.5*	2	*1.8*
Woodcock (*Scolopax rusticola*)	1	*0.5*	2	*1.8*
Crow (*Corvus corax*)	1	*0.5*		
Pigeon/Dove (*Columba* sp.)	1	*0.5*		
Total	*210*		*111*	

Table 24. Deposition: C527/D1569 dump comparison: Taxonomic composition (NISP)

Taxa/Dump	C527		D1569	
	n	%	n	%
Cattle	115	*59.9*	72	*72.0*
Pig	22	*11.5*	23	*23.0*
Sheep/goat	55	*28.6*	5	*5.0*
Total	*192*		*100*	

Table 25. Deposition: C527/D1569 dump comparison: Relative frequencies of cattle, pig and sheep goat (NISP)

Dump/Group/Taphonomic indicator					
Fragmentation					
		100%	<50%	50%	>50%
C527	Large mammal	10	29	14	63
D1569	Large mammal	26	18	5	23
C527	Medium mammal	12	21	8	36
D1569	Medium mammal	9	6	1	13
Surface preservation					
		Good	Moderate	Poor	
C527	Large mammal	46	53	17	
D1569	Large mammal	53	19		
C527	Medium mammal	24	38	15	
D1569	Medium mammal	13	16		
Angularity of break					
		Spiky	Rounded		
C527	Large mammal	78	20		
D1569	Large mammal	38	7		
C527	Medium mammal	52	9		
D1569	Medium mammal	19	1		
Scavenger gnawing					
		Ungnawed	Gnawed		
C527	Large mammal	110	6		
D1569	Large mammal	62	10		
C527	Medium mammal	73	4		
D1569	Medium mammal	25	4		

Table 26. Deposition: C527/D1569 dump comparison: Taphonomic indicators: Fragmentation, surface preservation, angularity of break and scavenger gnawing by taxonomic group

Butchery/Dump	C527		D1569	
	n	%	n	%
Unbutchered	192	*91.4*	96	*86.5*
Dismembered	1	*0.5*	4	*3.6*
Filleted	1	*0.5*		
Other	16	*7.6*	11	*9.9*

Table 27. Deposition: C527/D1569 dump comparison: Butchery evidence

Taxa/Dump/Fusion		Fused	Unfused
Cattle	C527	109	5
	D1569	90	7
Pig	C527	47	11
	D1569	3	2
Sheep/goat	C527	16	7
	D1569	12	10

Table 28. Deposition: C527/D1569 dump comparison: Cattle, pig and sheep/goat post-cranial epiphyseal fusion data

Phase	Context	Deposit type	A-B-C category	Bone ID	Taxa	Element	Side	Same as:
T-V	B602	Layer	A	6958	OVA	AS	R	possibly 6959
T-V	B602	Layer	A	6959	OVA	CA	R	possibly 6958
T-V	D1005	Layer	A	10198	FEC	HU	R	possibly 10198+10204-10205
T-V	D1005	Layer	A	10204	FEC	MD	L	possibly 10198+10204-10205
T-V	D1005	Layer	A	10205	FEC	SC	R	possibly 10198+10204-10205
W	*C0440*	*Pit fill*	*B*	*1016*	*S*	*MD*	*L*	*1017*
W	*C440*	*Pit fill*	*B*	*1017*	*S*	*MD*	*R*	*1016*
W	*D1265*	*Dump*	*C*	*6683*	*B*	*ZY*	*L*	*6684*
W	*D1265*	*Dump*	*C*	*6684*	*B*	*ZY*	*R*	*6683*
W	E278	Cut fill	B	7097	B	MD	R	possibly 7098
W	E278	Cut fill	B	7098	B	MD	L	possibly 7097
W	D2356	Layer	A	16408	S	MC	L	16409
W	D2356	Layer	A	16409	S	MC	L	16408
W	E96	Unassigned	B	17136	GNP	CO	R	possibly 17136-17143
W	E96	Unassigned	B	17137	GP	SC	R	possibly 17136-17143
W	E96	Unassigned	B	17138	GP	SC	L	possibly 17136-17143
W	E96	Unassigned	B	17139	GNP	HU	R	possibly 17136-17143
W	E96	Unassigned	B	17140	GNP	UL	R	possibly 17136-17143
W	E96	Unassigned	B	17141	GNP	UL	L	possibly 17136-17143
W	E96	Unassigned	B	17142	GP	CC	R	possibly 17136-17143
W	E96	Unassigned	B	17143	GNP	TI	L	possibly 17136-17143
W	D343	Cut fill	C	19206	LAG	MD	R	same individuals 19206-19231
W	D343	Cut fill	C	19207	LAG	SC	R	same individuals 19206-19231
W	D343	Cut fill	C	19208	LAG	SC	R	same individuals 19206-19231
W	D343	Cut fill	C	19209	LAG	SC	L	same individuals 19206-19231
W	D343	Cut fill	C	19210	LAG	HU	R	same individuals 19206-19231
W	D343	Cut fill	C	19211	LAG	HU	R	same individuals 19206-19231
W	D343	Cut fill	C	19212	LAG	HU	L	same individuals 19206-19231
W	D343	Cut fill	C	19213	LAG	RA	0	same individuals 19206-19231
W	D343	Cut fill	C	19214	LAG	RA	0	same individuals 19206-19231
W	D343	Cut fill	C	19215	LAG	RA	0	same individuals 19206-19231
W	D343	Cut fill	C	19216	LAG	RA	0	same individuals 19206-19231
W	D343	Cut fill	C	19217	LAG	RA	0	same individuals 19206-19231
W	D343	Cut fill	C	19218	LAG	PE	R	same individuals 19206-19231
W	D343	Cut fill	C	19219	LAG	PE	R	same individuals 19206-19231
W	D343	Cut fill	C	19220	LAG	PE	L	same individuals 19206-19231
W	D343	Cut fill	C	19221	LAG	FE	R	same individuals 19206-19231
W	D343	Cut fill	C	19222	LAG	FE	R	same individuals 19206-19231
W	D343	Cut fill	C	19223	LAG	FE	R	same individuals 19206-19231
W	D343	Cut fill	C	19224	LAG	FE	L	same individuals 19206-19231
W	D343	Cut fill	C	19225	LAG	FE	L	same individuals 19206-19231
W	D343	Cut fill	C	19226	LAG	TI	R	same individuals 19206-19231
W	D343	Cut fill	C	19227	LAG	TI	R	same individuals 19206-19231
W	D343	Cut fill	C	19228	LAG	TI	R	same individuals 19206-19231
W	D343	Cut fill	C	19229	LAG	TI	L	same individuals 19206-19231
W	D343	Cut fill	C	19230	LAG	TI	L	same individuals 19206-19231
W	D343	Cut fill	C	19231	LAG	TI	L	same individuals 19206-19231
W	C495	Dump	C	22250	O	MT	R	possibly 22251
W	C495	Dump	C	22251	O	RA	0	possibly 22250
X	C449	Cut fill	A	21035	B	MD	R	possibly 21036
X	C449	Cut fill	A	21036	B	MD	L	possibly 21035
X-Y	D81	Cut fill	B	19297	TAE	PE	R	19298
X-Y	D81	Cut fill	B	19298	TAE	PE	L	19297
X-Y	C306	Dump	C	19879	S	dP4	R	19879-19890
X-Y	C306	Dump	C	19880	S	SC	L	19879-19890
X-Y	C306	Dump	C	19881	S	SC	R	19879-19890
X-Y	C306	Dump	C	19882	S	HU	R	19879-19890

Table 29. Deposition: Anatomical elements from the same individuals (partial skeletons, articulated elements, etc) by chronological phase and context

NB. Italics = may not be a good indicator (see text)

Phase	Context	Deposit type	A-B-C category	Bone ID	Taxa	Element	Side	Same as:
X-Y	C306	Dump	C	19883	S	HU	L	19879-19890
X-Y	C306	Dump	C	19884	S	RA	L	19879-19890
X-Y	C306	Dump	C	19885	S	RA	R	19879-19890
X-Y	C306	Dump	C	19886	S	CA	L	19879-19890
X-Y	C306	Dump	C	19887	S	MP		19879-19890
X-Y	C306	Dump	C	19888	S	MP		19879-19890
X-Y	C306	Dump	C	19889	S	MP		19879-19890
X-Y	C306	Dump	C	19890	S	MP		19879-19890
X-Z	D251	Unassigned	A	16612	B	TI	R	possibly 16613
X-Z	D251	Unassigned	A	16613	B	AS	R	possibly 16612
X-Z	D251	Unassigned	A	16870	cf. CAF	PE	R	possibly 16871
X-Z	D251	Unassigned	A	16871	cf. CAF	FE	R	possibly 16870
X-Z	D251	Unassigned	A	19275	SMI	ZY	R	19276
X-Z	D251	Unassigned	A	19276	SMI	ZY	L	19275
X-Z	D251	Unassigned	A	19299	TAE	PE	R	19300
X-Z	D251	Unassigned	A	19300	TAE	PE	L	19299
Y	D318	Structure	A	2028	CAF	MD	R	2029
Y	D318	Structure	A	2029	CAF	MD	L	2028
Y	*D340*	*Surface*	*A*	*3954*	*S*	*MD*	*R*	*3955*
Y	*D340*	*Surface*	*A*	*3955*	*S*	*MD*	*L*	*3954*
Y	A230	Pit fill	B	6744	GAG	TT	L	possibly 6745
Y	A230	Pit fill	B	6745	GAG	TT	R	possibly 6744
Y	D1333	Dump	B	7181	OVA	MC	L	possibly 7182
Y	D1333	Dump	B	7182	OVA	MT	L	possibly 7181
Y	*D1158*	*Dump*	*B*	*7675*	*S*	*MD*	*L*	*7676*
Y	*D1158*	*Dump*	*B*	*7676*	*S*	*MD*	*R*	*7675*
Y	D1332	Layer	B	8018	O	SC	L	possibly 8018-8023
Y	D1332	Layer	B	8019	O	SC	R	possibly 8018-8023
Y	D1332	Layer	B	8020	O	HU	L	possibly 8018-8023
Y	D1332	Layer	B	8021	O	FE	L	possibly 8018-8023
Y	D1332	Layer	B	8022	O	TI	R	possibly 8018-8023
Y	D1332	Layer	B	8023	O	MT		possibly 8018-8023
Y	D312	Surface	A	8523	CAF	MD	R	8524
Y	D312	Surface	A	8524	CAF	MD	L	8523
Y	*D762*	*Dump*	*C*	*9954*	*CAF*	*PE*	*L*	*9955*
Y	*D762*	*Dump*	*C*	*9955*	*CAF*	*PE*	*R*	*9954*
Y	D329	Dump	C	10421	CAF	MD	R	10422
Y	D329	Dump	C	10422	CAF	MD	L	10421
Y	D318	Structure	A	10509	CAF	SC	L	possibly 10510
Y	D318	Structure	A	10510	CAF	HU	L	possibly 10509
Y	D762	Dump	C	10842	B	HC	L	10843
Y	D762	Dump	C	10843	B	HC	R	10842
Y	*D338*	*Cut fill*	*C*	*11505*	*CAF*	*PE*	*L*	*possibly 11506-11507*
Y	*D338*	*Cut fill*	*C*	*11506*	*CAF*	*PE*	*R*	*possibly 11506-11507*
Y	D338	Cut fill	C	11507	CAF	FE	R	possibly 11505-11506
Y	D338	Cut fill	C	11524	B	AS	L	possibly 11525
Y	D338	Cut fill	C	11525	B	CA	L	possibly 11524
Y	D312	Surface	A	13750	CEE	PH		possibly 13751
Y	D312	Surface	A	13751	CEE	PH		possibly 13750
Y	D329	Dump	C	13759	B	TI	L	13759-13761
Y	D329	Dump	C	13760	B	AS	L	13759-13761
Y	D329	Dump	C	13761	B	CA	L	13759-13761
Y	*D1282*	*Surface*	*B*	*14464*	*B*	*HC*	*L*	*14465*
Y	*D1282*	*Surface*	*B*	*14465*	*B*	*HC*	*R*	*14464*
Y	*D1282*	*Surface*	*B*	*14466*	*B*	*ZY*	*R*	*14467*
Y	*D1282*	*Surface*	*B*	*14467*	*B*	*HC*	*R*	*14466*
Y	D150	Surface	A	14746	B	TI	R	14746-14748

Table 29 cont. Deposition: Anatomical elements from the same individuals (partial skeletons, articulated elements, etc) by chronological phase and context

NB. Italics = may not be a good indicator (see text)

Phase	Context	Deposit type	A-B-C category	Bone ID	Taxa	Element	Side	Same as:
Y	D150	Surface	A	14747	B	AS	R	14746-14748
Y	D150	Surface	A	14748	B	CA	R	14746-14748
Y	*D1282*	*Surface*	*B*	*15842*	*B*	*HC*	*L*	*15843*
Y	*D1282*	*Surface*	*B*	*15843*	*B*	*HC*	*R*	*15842*
Y	*D1282*	*Surface*	*B*	*15844*	*B*	*HC*	*L*	*15845*
Y	*D1282*	*Surface*	*B*	*15845*	*B*	*HC*	*R*	*15844*
Y	D329	Dump	C	16819	CAF	MT	L	16820
Y	D329	Dump	C	16820	CAF	MT	L	16819
Y	D329	Dump	C	18409	CAF	HU	L	possibly 18409-18413
Y	D329	Dump	C	18410	CAF	RA	L	possibly 18409-18413
Y	D329	Dump	C	18411	CAF	PE	R	possibly 18409-18413
Y	D329	Dump	C	18412	CAF	FE	R	possibly 18409-18413
Y	D329	Dump	C	18413	CAF	TI	L	possibly 18409-18413
Y	D1335	Dump	B	20830	OVA	dP4	R	20830-20840
Y	D1335	Dump	B	20831	OVA	dP4	L	20830-20840
Y	D1335	Dump	B	20832	O	ZY	R	20830-20840
Y	D1335	Dump	B	20833	O	ZY	L	20830-20840
Y	D1335	Dump	B	20834	O	SC	L	20830-20840
Y	D1335	Dump	B	20835	O	SC	R	20830-20840
Y	D1335	Dump	B	20836	O	HU	L	20830-20840
Y	D1335	Dump	B	20837	O	CA	R	20830-20840
Y	D1335	Dump	B	20838	O	MT		20830-20840
Y-Z	D116	Cut fill	B	16472	ORC	MD	R	16472-16478
Y-Z	D116	Cut fill	B	16473	ORC	HU	L	16472-16478
Y-Z	D116	Cut fill	B	16474	ORC	PE	L	16472-16478
Y-Z	D116	Cut fill	B	16475	ORC	FE	L	16472-16478
Y-Z	D116	Cut fill	B	16476	ORC	FE	R	16472-16478
Y-Z	D116	Cut fill	B	16477	ORC	CA	R	16472-16478
Y-Z	D116	Cut fill	B	16478	ORC	CA	L	16472-16478
Y-Z	C267	Dump	C	17285	B	MD	L	possibly 17286
Y-Z	C267	Dump	C	17286	B	MD	R	possibly 17285
Y-Z	D116	Cut fill	B	19184	ORC	MD	R	possibly 19185
Y-Z	D116	Cut fill	B	19185	ORC	MD	L	possibly 19184
Y-Z	C240	Layer	C	20756	S	PE	L	possibly 20756-20758
Y-Z	C240	Layer	C	20757	S	PE	R	possibly 20756-20758
Y-Z	C240	Layer	C	20758	S	FE	R	possibly 20756-20758
Y-Z	*C268*	*Unassigned*	*B*	*21072*	*B*	*HC*	*L*	*possibly 21073*
Y-Z	*C268*	*Unassigned*	*B*	*21073*	*B*	*HC*	*R*	*possibly 21072*
Y-Z	*C268*	*Unassigned*	*B*	*21100*	*B*	*HC*	*L*	*21101*
Y-Z	*C268*	*Unassigned*	*B*	*21101*	*B*	*HC*	*R*	*21100*
Y-Z	*C231*	*Dump*	*C*	*22173*	*CAF*	*PE*	*R*	*possibly 22174*
Y-Z	*C231*	*Dump*	*C*	*22174*	*CAF*	*PE*	*L*	*possibly 22173*
Y-Z	C258	Layer	C	22180	CAH	MD	L	22181
Y-Z	C258	Layer	C	22181	CAH	MD	R	22180
Y-Z	D116	Cut fill	B	22542	B	TI	L	22543
Y-Z	D116	Cut fill	B	22543	B	AS	L	22542
Z	*D332*	*Dump*	*C*	*3938*	*S*	*MD*	*L*	*3939*
Z	*D332*	*Dump*	*C*	*3939*	*S*	*MD*	*R*	*3938*
Z	D100	Structure	A	6604	B	MD	L	6605
Z	D100	Structure	A	6605	B	MD	R	6604
Z	D100	Structure	A	6628	FEC	HU	R	possibly 6628-6630
Z	D100	Structure	A	6629	FEC	MC	R	possibly 6628-6630
Z	D100	Structure	A	6630	FEC	MC	R	possibly 6628-6630
Z	E85	Unassigned	C	7589	O	PE	L	possibly 7589-7595
Z	E85	Unassigned	C	7590	O	TI	L	possibly 7589-7595
Z	E85	Unassigned	C	7591	O	TI	R	possibly 7589-7595
Z	E85	Unassigned	C	7592	O	MT	R	possibly 7589-7595

Table 29 cont. Deposition: Anatomical elements from the same individuals (partial skeletons, articulated elements, etc) by chronological phase and context

NB. Italics = may not be a good indicator (see text)

Phase	Context	Deposit type	A-B-C category	Bone ID	Taxa	Element	Side	Same as:
Z	E85	Unassigned	C	7593	O	MT	R	possibly 7589-7595
Z	E85	Unassigned	C	7594	O	FE	R	possibly 7589-7595
Z	E85	Unassigned	C	7595	O	FE	L	possibly 7589-7595
Z	*B150*	*Other*	*B*	*7911*	*B*	*HC*	*R*	*possibly 7912*
Z	*B150*	*Other*	*B*	*7912*	*B*	*HC*	*L*	*possibly 7911*
Z	D108	Structure	A	10167	B	AS	R	possibly 10168
Z	D108	Structure	A	10168	B	CA	R	possibly 10167
Z	D305	Structure	A	12032	FEC	FE	R	possibly 12033
Z	D305	Structure	A	12033	FEC	TI	R	possibly 12032
Z	*D100*	*Structure*	*A*	*12346*	*VUV*	*PE*	*R*	*12347*
Z	*D100*	*Structure*	*A*	*12347*	*VUV*	*PE*	*L*	*12346*
Z	D100	Structure	A	13198	CEE	TI	R	13198-13200
Z	D100	Structure	A	13199	CEE	AS	R	13198-13200
Z	D100	Structure	A	13200	CEE	CA	R	13198-13200
Z	D283	Dump	A	14663	CEE	TI	R	14663-14665
Z	D283	Dump	A	14664	CEE	AS	R	14663-14665
Z	D283	Dump	A	14665	CEE	CA	R	14663-14665
Z	*E172*	*Surface*	*C*	*18356*	*B*	*HC*	*L*	*18357*
Z	*E172*	*Surface*	*C*	*18357*	*B*	*HC*	*R*	*18356*
Z	*E172*	*Surface*	*C*	*21084*	*B*	*HC*	*L*	*possibly 21085*
Z	*E172*	*Surface*	*C*	*21085*	*B*	*HC*	*R*	*possibly 21084*
Z	*E185*	*Unassigned*	*C*	*21106*	*B*	*HC*	*L*	*possibly 21107*
Z	*E185*	*Unassigned*	*C*	*21107*	*B*	*HC*	*R*	*possibly 21106*
Z	*D283*	*Dump*	*A*	*21992*	*S*	*MD*	*L*	*21993*
Z	*D283*	*Dump*	*A*	*21993*	*S*	*MD*	*R*	*21992*
Z	D100	Structure	A	23532	B	MD	L	possibly 23532
Z	D100	Structure	A	23533	B	MD	R	possibly 23533
Z	C78	Dump	C	23564	S	TI	L	23564-23566
Z	C78	Dump	C	23565	S	AS	L	23564-23566
Z	C78	Dump	C	23566	S	CA	L	23564-23566

Table 29 cont. Deposition: Anatomical elements from the same individuals (partial skeletons, articulated elements, etc) by chronological phase and context

NB. Italics = may not be a good indicator (see text)

Taxa - Taxonomic group	Phase T-V	Phase W	Phase X	Phase X-Y	Phase Y	Phase Y-Z	Phase Z	*Total*
Sorex araneus (Common shrew)		4			7			*11*
Soricidae (Shrew family)		4			10		1	*15*
Chiroptera (Bat family)				1		1		*2*
Talpa europaea (Common mole)	1		1	3	5	8	4	*22*
Macaca cf. *sylvanus* (cf. Barbary ape)						1		*1*
Canis familiaris (Dog)	3	59	1	20	85	41	105	*314*
cf. *C. familiaris* (cf. Dog)		3		1	4	1	2	*11*
Canis cf. *lupus* (cf. Wolf)					2	1	3	*6*
Vulpes vulpes (Red fox)		1			1	4	7	*13*
cf. *V. vulpes* (cf. Red fox)				1	4		1	*6*
C. familiaris/V. vulpes (Dog/Red fox)		7		4	24	4	12	*51*
Mustela ermina (Stoat)	1					1		*2*
M. cf. *ermina* (cf. Stoat)		3						*3*
Mustela nivalis (Weasel)		1			3		1	*5*
M. ermina/M. nivalis (Stoat/Weasel)					1			*1*
Martes sp. (Martin sp.)						2	1	*3*
Meles meles (Eurasian badger)		3		1	5	2		*11*
Lutra lutra (Otter)							1	*1*
Felis catus (Cat)	3	10		1	20	8	23	*65*
Felis cf. *sylvestris* (cf. Wild cat)					1			*1*
Equus caballus (Horse)				1	1		1	*3*
Equidae (Horse family)		7		8	9	7	73	*104*
Sus scrofa domesticus (Pig)	57	622	26	385	1035	648	1699	*4472*
Sus cf. *scrofa* (cf. Wild boar)	1	4	2	2	3	28	24	*64*
Cervus elaphus (Red deer)	1	14	1	19	77	47	158	*317*
C. elaphus/Dama dama (Red deer/Fallow deer)					1	2	4	*7*
Capreolus capreolus (Roe deer)		7	1	5	15	10	13	*51*
Bos taurus (Cattle)	168	2445	59	1449	2220	1678	4274	*12293*
cf. *B. taurus* (Cattle)	12	104	4	56	101	68	197	*542*
B. taurus/C. elaphus (Cattle/Red deer)		4	1	3	2	2	8	*20*
Ovis aries (Sheep)	34	257	13	91	206	124	336	*1061*
Capra hircus (Goat)	1	15		5	16	11	29	*77*
O. aries/C. hircus (Sheep/Goat)	74	537	26	156	358	283	558	*1992*

Table 30. Taxonomic composition: Number of identified skeletal parts (NISP): Identified specimens in taxonomic order by chronological phase

Taxa - Taxonomic group	Phase T-V	Phase W	Phase X	Phase X-Y	Phase Y	Phase Y-Z	Phase Z	*Total*
O. aries/C. hircus/C. capreolus (Sheep/Goat/Roe deer)	3	5	2	5	9	3	9	*36*
Clethrionomys glareolus (Bank vole)					1	2		*3*
Arvicola terrestris (Northern water vole)	1	7		3	8	12	29	*60*
A. terrestris/Rattus sp. (Northern water vole/Rat sp.)		11	3	5	28	39	46	*132*
Microtus agrestris (Field vole)						2	1	*3*
Small microtinae (Small vole)		1			14	3	5	*23*
Apodemus/Mus spp. (Mouse)					1	1	1	*3*
Murinae (Mouse)		1			5			*6*
Small rodentia (Small rodent)		46	7	5	92	44	36	*230*
Lepus sp. (Hare sp.)		19		4	17	15	13	*68*
Oryctolagus cuniculus (Rabbit)		14			8	50	2	*74*
Leporidae (Hare/Rabbit family)	1	37			3	2	4	*47*
Ardea cinerea (Grey heron)						1		*1*
Cygnus cf. *olar* (cf. Mute swan)							1	*1*
Cygnus cygnus (Whooper swan)						1		*1*
Anser anser (Domestic/Greylag goose)				1	2	1	2	*6*
cf. *Branta leucopsis* (cf. Barnacle goose)						1		*1*
Anas crecca (Teal)					1			*1*
A. crecca/A. Querquedula (Teal/Garganey)		3		1	1	1	4	*10*
Anas platyrhynchos (Domestic/Mallard duck)	3	9	1		8	4	10	*35*
Aythya sp. (Diving duck sp.)					1			*1*
Buteo buteo (Buzzard)							4	*4*
Tetrao tetrix (Black grouse)						1	1	*2*
Perdix perdix (Grey partridge)	1	1				1	1	*4*
Coturnix coturnix (Quail)						2	2	*4*
Rallus aquaticus (Water rail)					1			*1*
Crex crex (Corncrake)						1		*1*
Gallus gallus (Domestic chicken)	2	7		4	11	6	4	*34*
G. gallus/Numida meleagris (Chicken/Guinea fowl)	2	5	1	1	8	5	5	*27*
G. gallus/Phasianus colchicus (Chicken/Pheasant)		30		2	23	29	27	*111*
G. gallus/N. meleagris/P. colchicus (Chicken/Guinea fowl/Pheasant)	13	98	6	28	62	84	85	*376*
Gallinula chloropus (Moorhen)					1			*1*
Grus grus (Crane)	1	2						*3*

Table 30 cont. Taxonomic composition: Number of identified skeletal parts (NISP): Identified specimens in taxonomic order by chronological phase

Taxa - Taxonomic group	Phase T-V	Phase W	Phase X	Phase X-Y	Phase Y	Phase Y-Z	Phase Z	*Total*
Pluvialis apricia (Golden plover)						1		*1*
Charadriidae (Plover family)		1			2	2		*5*
cf. Charadriidae (cf. Plover family)						1		*1*
cf. *Lymnocryptes minimus* (cf. Jack snipe)							1	*1*
Scolopax rusticola (Woodcock)	2	23	4	9	20	23	21	*102*
Columba palumbus (Wood pigeon)		2		1	3	2	1	*9*
cf. *C. palumbus* (cf. Wood pigeon)							1	*1*
Columbidae (Pigeon/Dove family)		7		1	6	2	6	*22*
Tyto alba (Barn owl)		1				1	1	*3*
cf. *Asio otus* (cf. Long-eared owl)		1						*1*
Strigidae (Owl family)					1		1	*2*
cf. Strigidae (cf. Owl family)							1	*1*
Garrulus glandarius (Jay)							2	*2*
Pica pica (Magpie)		2		1	1		3	*7*
Corvus monedula (Jackdaw)		4		3	15	4	6	*32*
Corvus frugilegus/Corvus corone (Rook/Crow)		5		2	2		6	*15*
Corvus corax (Raven)	1	12		9	4	6	9	*41*
Corvidae (Crow family)		3			3		2	*8*
cf. *Turdus viscivorus* (cf. Mistle thrush)						1		*1*
Turdidae (Thrush family)		1		1	1	1	5	*9*
Turdidae/Sturnidae (Thrush family/Starling family)	1	5		1	5	12	5	*29*
Small passerine (Small song-bird family)	1	5		3	15	13	19	*56*
Total	*388*	*4479*	*159*	*2302*	*4599*	*3362*	*7917*	*23206*
Taxonomic grouping used to calculated MNE (see Table 31)								
Cattle (B & cf. B)	180	2549	63	1505	2321	1746	4471	*12835*
Sheep/Goat (OVA, CAH & O)	109	809	39	252	580	418	923	*3130*
Pig (S & cf. SUS)	58	626	28	387	1038	676	1723	*4536*
Equid (EQC & EQ)		7		9	10	7	74	*107*
Dog (CAF, cf. CAF & cf. CAL)	3	62	1	21	91	43	110	*331*
Domestic fowl (GAG, GN, GP & GNP)	17	140	7	35	104	124	121	*548*

Table 30 cont. Taxonomic composition: Number of identified skeletal parts (NISP): Identified specimens in taxonomic order by chronological phase

Taxa - Taxonomic group	Phase T-V	Phase W	Phase X	Phase X-Y	Phase Y	Phase Y-Z	Phase Z	*Total*
Sorex araneus (Common shrew)		4			7			*11*
Soricidae (Shrew family)		4			10		1	*15*
Chiroptera (Bat family)				1		1		*2*
Talpa europaea (Common mole)	1		1	3	5	8	4	*22*
Macaca cf. *sylvanus* (cf. Barbary ape)						1		*1*
Dog (CAF, cf. CAF & cf. CAL)	**3**	**60**	**1**	**20**	**88**	**42**	**101**	***315***
Vulpes vulpes (Red fox)		1			1	4	7	*13*
cf. *V. vulpes* (cf. Red fox)				1	4		1	*6*
C. familiaris/V. vulpes (Dog/Red fox)		7		4	24	3	12	*50*
Mustela ermina (Stoat)	1					1		*2*
M. cf. *ermina* (cf. Stoat)		3						*3*
Mustela nivalis (Weasel)		1			3		1	*5*
M. ermina/M. nivalis (Stoat/Weasel)					1			*1*
Martes sp. (Martin sp.)						2	1	*3*
Meles meles (Eurasian badger)		3		1	5	2		*11*
Lutra lutra (Otter)							1	*1*
Felis catus (Cat)	3	10		1	20	6	22	*62*
Felis cf. *sylvestris* (cf. Wild cat)					1			*1*
Equid (EQC & EQ)		7	7	1	10	7	66	*98*
Pig (S & cf. SUS)	**45**	**419**	**19**	**269**	**698**	**449**	**1191**	***3090***
Cervus elaphus (Red deer)	1	14	1	18	68	44	138	*284*
C. elaphus/Dama dama (Red deer/Fallow deer)					1	2	4	*7*
Capreolus capreolus (Roe deer)		7	1	5	13	9	13	*48*
Cattle (B & cf. B)	**102**	**1566**	**42**	**950**	**1474**	**1065**	**2825**	***8024***
B. taurus/C. elaphus (Cattle/Red deer)		4	1	3	2	2	8	*20*
Sheep/Goat (OVA, CAH & O)	**91**	**646**	**33**	**202**	**467**	**335**	**739**	***2513***
O. aries/C. hircus/C. capreolus (Sheep/Goat/Roe deer)	3	5	2	5	9	3	8	*35*
Clethrionomys glareolus (Bank vole)					1	2		*3*
Arvicola terrestris (Northern water vole)	1	7		3	8	12	29	*60*
A. terrestris/Rattus sp. (Northern water vole/Rat sp.)		11	3	5	27	39	44	*129*
Microtus agrestris (Field vole)						2	1	*3*
Small microtinae (Small vole)		1			14	3	5	*23*
Apodemus/Mus spp. (Mouse)					1	1	1	*3*

Table 31. Taxonomic composition: Minimum number of elements (MNE): Identified specimens in taxonomic order by chronological phase

Taxa - Taxonomic group	Phase T-V	Phase W	Phase X	Phase X-Y	Phase Y	Phase Y-Z	Phase Z	*Total*
Murinae (Mouse)		1			5			*6*
Small rodentia (Small rodent)		45	7	4	89	43	35	*223*
Lepus sp. (Hare sp.)		19		4	17	15	13	*68*
Oryctolagus cuniculus (Rabbit)		14			8	48	2	*72*
Leporidae (Hare/Rabbit family)	1	37			3	2	4	*47*
Ardea cinerea (Grey heron)						1		*1*
Cygnus cf. *olar* (cf. Mute swan)							1	*1*
Cygnus cygnus (Whooper swan)						1		*1*
Anser anser (Domestic/Greylag goose)				1	2	1	2	*6*
cf. *Branta leucopsis* (cf. Barnacle goose)						1		*1*
Anas crecca (Teal)					1			*1*
A. crecca/A. Querquedula (Teal/Garganey)		3		1	1	1	4	*10*
Anas platyrhynchos (Domestic/Mallard duck)	3	9	1		8	4	10	*35*
Aythya sp. (Diving duck sp.)					1			*1*
Buteo buteo (Buzzard)							4	*4*
Tetrao tetrix (Black grouse)						1	1	*2*
Perdix perdix (Grey partridge)	1	1				1	1	*4*
Coturnix coturnix (Quail)						2	2	*4*
Rallus aquaticus (Water rail)					1			*1*
Crex crex (Corncrake)						1		*1*
Domestic fowl (GAG, GN, GP & GNP)	**17**	**140**	**7**	**35**	**104**	**124**	**121**	***548***
Gallinula chloropus (Moorhen)					1			*1*
Grus grus (Crane)	1	2						*3*
Pluvialis apricia (Golden plover)						1		*1*
Charadriidae (Plover family)		1			2	2		*5*
cf. Charadriidae (cf. Plover family)						1		*1*
cf. *Lymnocryptes minimus* (cf. Jack snipe)							1	*1*
Scolopax rusticola (Woodcock)	2	23	4	9	20	23	21	*102*
Columba palumbus (Wood pigeon)		2		1	3	2	1	*9*
cf. *C. palumbus* (cf. Wood pigeon)							1	*1*
Columbidae (Pigeon/Dove family)		7		1	6	2	6	*22*
Tyto alba (Barn owl)		1				1	1	*3*
cf. *Asio otus* (cf. Long-eared owl)		1						*1*

Table 31 cont. Taxonomic composition: Minimum number of elements (MNE): Identified specimens in taxonomic order by chronological phase

Taxa - Taxonomic group	Phase T-V	Phase W	Phase X	Phase X-Y	Phase Y	Phase Y-Z	Phase Z	*Total*
Strigidae (Owl family)					1		1	*2*
cf. Strigidae (cf. Owl family)							1	*1*
Garrulus glandarius (Jay)							2	*2*
Pica pica (Magpie)		2		1	1		3	*7*
Corvus monedula (Jackdaw)		4		3	15	4	6	*32*
Corvus frugilegus/Corvus corone (Rook/Crow)		5		2	2		6	*15*
Corvus corax (Raven)	1	12		9	4	6	9	*41*
Corvidae (Crow family)		3			3		2	*8*
cf. *Turdus viscivorus* (cf. Mistle thrush)						1		*1*
Turdidae (Thrush family)		1		1	1	1	5	*9*
Turdidae/Sturnidae (Thrush family/Starling family)	1	5		1	5	12	5	*29*
Small passerine (Small song-bird family)	1	5		3	15	13	19	*56*
Total	*279*	*3123*	*130*	*1568*	*3281*	*2360*	*5513*	*16254*

Table 31 cont. Taxonomic composition: Minimum number of elements (MNE): Identified specimens in taxonomic order by chronological phase

Group/Phase	T-V		W		X		X-Y		Y		Y-Z		Z		*Total*
	n	*%*	n	*%*	n	*%*	n	*%*	n	*%*	n	*%*	n	*%*	
Domestic mammal	244	*87.5*	2708	*86.7*	102	*78.5*	1443	*92.0*	2757	*84.0*	1904	*80.7*	4944	*89.7*	*14102*
Domestic bird	17	*6.1*	140	*4.5*	7	*5.4*	35	*2.2*	104	*3.2*	124	*5.3*	121	*2.2*	*548*
Wild mammal	5	*1.8*	172	*5.5*	13	*10.0*	45	*2.9*	292	*8.9*	241	*10.2*	305	*5.5*	*1073*
Wild bird	7	*2.5*	78	*2.5*	4	*3.1*	32	*2.0*	83	*2.5*	78	*3.3*	103	*1.9*	*385*
Uncertain mammal	3	*1.1*	16	*0.5*	3	*2.3*	12	*0.8*	35	*1.1*	8	*0.3*	28	*0.5*	*105*
Uncertain bird	3	*1.1*	9	*0.3*	1	*0.8*	1	*0.1*	10	*0.3*	5	*0.2*	12	*0.2*	*41*
Total	*279*		*3123*		*130*		*1568*		*3281*		*2360*		*5513*		*16254*

Table 32. Taxonomic composition: Relative frequencies of domestic, wild and uncertain status mammals and birds by chronological phase, based on MNE

Phase/Taxa	Cattle		Pig		Sheep/goat	
a) Minimum number of elements						
	n	%	n	%	n	%
T-V	102	*42.9*	45	*18.9*	91	*38.2*
W	1566	*59.5*	419	*15.9*	646	*24.6*
X	42	*44.7*	19	*20.2*	33	*35.1*
X-Y	950	*66.9*	269	*18.9*	202	*14.2*
Y	1474	*55.9*	698	*26.4*	467	*17.7*
Y-Z	1065	*57.6*	449	*24.3*	335	*18.1*
Z	2825	*59.5*	1191	*25*	739	*15.5*
b) Estimated live weight						
	kg	%	kg	%	kg	%
T-V	28050	*79.5*	3825	*10.8*	3412.5	*9.7*
W	430650	*87.8*	35615	*7.3*	24225	*4.9*
X	11550	*80.2*	1615	*11.2*	1237.5	*8.6*
X-Y	261250	*89.6*	22865	*7.8*	7575	*2.6*
Y	405350	*84.1*	59330	*12.3*	17512.5	*3.6*
Y-Z	292875	*85.2*	38165	*11.1*	12562.5	*3.7*
Z	776875	*85.7*	101235	*11.2*	27712.5	*3.1*

Table 33a-b. Taxonomic composition: MNE and estimated live weight: Relative proportions of the major domesticates (cattle, pig and sheep/goat) to one another by chronological phase

Settlement type	Sites	Mean assemblage size	*Cattle%*	*Pig%*	*Sheep/goat%*
Town	50	1157	*54*	*19*	*27*
Vici	69	696	*56*	*12*	*32*
Villas	58	937	*56*	*14*	*30*
Rural settlements	90	1129	*47*	*12*	*41*
Late Iron Age	10	1663	*39*	*30*	*31*
Legionary sites	16	639	*63*	*22*	*15*
Auxiliary sites	63	1028	*65*	*13*	*22*

Table 34. Taxonomic composition: Relative proportions of the major domesticates (cattle, pig and sheep/goat) to one another by settlement type, based on King (1999a: 180, Table 3)

Phase	Sheep	Goat	Ratio
a) All anatomical elements			
T-V	34	1	34.0 : 1
W	257	15	17.1 : 1
X	13		13.0 : 0
X-Y	91	5	18.2 : 1
Y	206	16	12.9 : 1
Y-Z	124	11	11.3 : 1
Z	336	29	11.6 : 1
b) Horncores only			
W	7	2	3.5 : 1
X-Y	3	1	3.0 : 1
Y	7	4	1.8 : 1
Y-Z	5	2	2.5 : 1
Z	8	9	0.9 : 1

Table 35a-b. Taxonomic composition: Sheep to goat ratios, based on NISP

Phase	Cases	Fowl%	Pig%	Sheep/goat%
T-V	153	*11.1*	*29.4*	*59.5*
W	1205	*11.6*	*34.8*	*53.6*
X	59	*11.9*	*32.2*	*55.9*
X-Y	506	*6.9*	*53.2*	*39.9*
Y	1269	*8.2*	*55*	*36.8*
Y-Z	908	*13.7*	*49.4*	*36.9*
Z	2051	*5.9*	*58.1*	*36*

Table 36. Taxonomic composition: Relative proportions of domestic fowl, pig and sheep/goat to one another, based on MNE

Element/Phase	T-V		W		X		X-Y		Y		Y-Z		Z	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%
Zygomaticus	9	*50.0*	99	*42.7*	1	*14.3*	39	*31.2*	97	*60.2*	80	*57.1*	150	*47.3*
Horncore	6	*33.3*	38	*16.4*	0	*0.0*	15	*12.0*	65	*40.4*	37	*26.4*	102	*32.2*
Mandible	18	*100.0*	232	*100.0*	7	*100.0*	125	*100.0*	152	*94.4*	140	*100.0*	317	*100.0*
Scapula	5	*27.8*	207	*89.2*	1	*14.3*	100	*80.0*	144	*89.4*	102	*72.9*	276	*87.1*
Humerus	2	*11.1*	68	*29.3*	3	*42.9*	61	*48.8*	124	*77.0*	98	*70.0*	217	*68.5*
Radius	9	*50.0*	90	*38.8*	5	*71.4*	76	*60.8*	127	*78.9*	74	*52.9*	259	*81.7*
Metacarpal	14	*77.8*	212	*91.4*	7	*100.0*	107	*85.6*	141	*87.6*	121	*86.4*	271	*85.5*
Pelvis	7	*38.9*	64	*27.6*	1	*14.3*	40	*32.0*	85	*52.8*	53	*37.9*	182	*57.4*
Femur	1	*5.6*	30	*12.9*	4	*57.1*	28	*22.4*	47	*29.2*	34	*24.3*	92	*29.0*
Tibia	4	*22.2*	59	*25.4*	0	*0.0*	54	*43.2*	142	*88.2*	63	*45.0*	223	*70.3*
Astragalus	11	*61.1*	132	*56.9*	2	*28.6*	87	*69.6*	161	*100.0*	87	*62.1*	254	*80.1*
Calcaneum	8	*44.4*	142	*61.2*	3	*42.9*	96	*76.8*	144	*89.4*	94	*67.1*	266	*83.9*
Metatarsal	14	*77.8*	212	*91.4*	6	*85.7*	114	*91.2*	111	*68.9*	123	*87.9*	305	*96.2*
First phalange	9	*50.0*	118	*50.9*	3	*42.9*	62	*49.6*	96	*59.6*	76	*54.3*	163	*51.4*
Total	*102*		*1566*		*42*		*950*		*1474*		*1065*		*2825*	

Table 37. Cattle: Anatomical representation: MNE by chronological phase

Element/Phase	Cut fill		Layer		Surface		Dump	
	n	%	n	%	n	%	n	%
Zygomaticus	2	*10.0*	22	*78.6*	12	*30.8*	32	*51.6*
Horncore	1	*5.0*	3	*10.7*	4	*10.3*	12	*19.4*
Mandible	20	*100.0*	19	*67.9*	39	*100.0*	62	*100.0*
Scapula	14	*70.0*	21	*75.0*	26	*66.7*	47	*75.8*
Humerus	3	*15.0*	6	*21.4*	16	*41.0*	9	*14.5*
Radius	4	*20.0*	15	*53.6*	6	*15.4*	18	*29.0*
Metacarpal	9	*45.0*	28	*100.0*	19	*48.7*	49	*79.0*
Pelvis	2	*10.0*	4	*14.3*	11	*28.2*	21	*33.9*
Femur	4	*20.0*	18	*64.3*	18	*46.2*	37	*59.7*
Tibia	8	*40.0*	10	*35.7*	6	*15.4*	15	*24.2*
Astragalus	8	*40.0*	15	*53.6*	13	*33.3*	32	*51.6*
Calcaneum	7	*35.0*	19	*67.9*	15	*38.5*	36	*58.1*
Metatarsal	15	*75.0*	17	*60.7*	24	*61.5*	57	*91.9*
First phalange	8	*40.0*	18	*64.3*	15	*38.5*	40	*64.5*
Total	*105*		*215*		*224*		*467*	

Table 38. Cattle: Anatomical representation: Phase W: MNE by feature type (with 100 or more cases)

Element/Phase	Cut fill		Dump	
	n	%	n	%
Zygomaticus	33	*30.6*	6	*75.0*
Horncore	14	*13.0*	1	*12.5*
Mandible	97	*89.8*	4	*50.0*
Scapula	97	*89.8*	3	*37.5*
Humerus	56	*51.9*	5	*62.5*
Radius	70	*64.8*	6	*75.0*
Metacarpal	105	*97.2*	6	*75.0*
Pelvis	38	*35.2*	3	*37.5*
Femur	56	*51.9*	8	*100.0*
Tibia	46	*42.6*	8	*100.0*
Astragalus	82	*75.9*	5	*62.5*
Calcaneum	92	*85.2*	4	*50.0*
Metatarsal	108	*100.0*	8	*100.0*
First phalange	54	*50.0*	8	*100.0*
Total	*948*		*75*	

Table 39. Cattle: Anatomical representation: Phase X-Y: MNE by feature type (with 100 or more cases)

Element/Phase	Pit fill		Cut fill		Posthole fill		Layer		Surface		Structure		Dump	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%
Zygomaticus	3	*25.0*	6	*35.3*	3	*23.1*	8	*28.6*	23	*57.5*	7	*46.7*	46	*67.6*
Horncore	6	*50.0*	7	*41.2*	5	*38.5*	4	*14.3*	11	*27.5*	3	*20.0*	29	*42.6*
Mandible	8	*66.7*	10	*58.8*	10	*76.9*	16	*57.1*	30	*75.0*	11	*73.3*	68	*100.0*
Scapula	4	*33.3*	17	*100.0*	13	*100.0*	13	*46.4*	30	*75.0*	7	*46.7*	60	*88.2*
Humerus	4	*33.3*	11	*64.7*	6	*46.2*	15	*53.6*	26	*65.0*	6	*40.0*	56	*82.4*
Radius	4	*33.3*	11	*64.7*	6	*46.2*	17	*60.7*	29	*72.5*	5	*33.3*	65	*95.6*
Metacarpal	6	*50.0*	12	*70.6*	9	*69.2*	13	*46.4*	40	*100.0*	9	*60.0*	52	*76.5*
Pelvis	9	*75.0*	5	*29.4*	6	*46.2*	6	*21.4*	16	*40.0*	9	*60.0*	31	*45.6*
Femur	3	*25.0*	9	*52.9*	6	*46.2*	14	*50.0*	36	*90.0*	6	*40.0*	43	*63.2*
Tibia	1	*8.3*	10	*58.8*	4	*30.8*	28	*100.0*	35	*87.5*	9	*60.0*	55	*80.9*
Astragalus	12	*100.0*	8	*47.1*	6	*46.2*	26	*92.9*	29	*72.5*	15	*100.0*	64	*94.1*
Calcaneum	9	*75.0*	6	*35.3*	4	*30.8*	21	*75.0*	27	*67.5*	13	*86.7*	63	*92.6*
Metatarsal	8	*66.7*	9	*52.9*	10	*76.9*	15	*53.6*	19	*47.5*	5	*33.3*	51	*75.0*
First phalange	10	*83.3*	11	*64.7*	4	*30.8*	7	*25.0*	21	*52.5*	9	*60.0*	34	*50.0*
Total	*87*		*132*		*92*		*203*		*372*		*114*		*717*	

Table 40. Cattle: Anatomical representation: Phase Y: MNE by feature type (with 100 or more cases)

Element/Phase	Cut fill		Layer		Surface		Dump	
	n	%	n	%	n	%	n	%
Zygomaticus	33	*75.0*	1	*7.7*	21	*53.8*	21	*51.2*
Horncore	20	*45.5*	3	*23.1*	5	*12.8*	2	*4.9*
Mandible	39	*88.6*	13	*100.0*	39	*100.0*	34	*82.9*
Scapula	33	*75.0*	7	*53.8*	34	*87.2*	20	*48.8*
Humerus	34	*77.3*	9	*69.2*	17	*43.6*	32	*78.0*
Radius	24	*54.5*	6	*46.2*	20	*51.3*	22	*53.7*
Metacarpal	31	*70.5*	8	*61.5*	39	*100.0*	41	*100.0*
Pelvis	21	*47.7*	6	*46.2*	12	*30.8*	9	*22.0*
Femur	23	*52.3*	6	*46.2*	17	*43.6*	31	*75.6*
Tibia	18	*40.9*	7	*53.8*	18	*46.2*	16	*39.0*
Astragalus	21	*47.7*	7	*53.8*	23	*59.0*	31	*75.6*
Calcaneum	30	*68.2*	9	*69.2*	25	*64.1*	25	*61.0*
Metatarsal	44	*100.0*	7	*53.8*	36	*92.3*	33	*80.5*
First phalange	19	*43.2*	4	*30.8*	20	*51.3*	28	*68.3*
Total	390		93		326		345	

Table 41. Cattle: Anatomical representation: Phase Y-Z: MNE by feature type (with 100 or more cases)

Element/Phase	Pit fill		Cut fill		Surface		Structure		Dump	
	n	%	n	%	n	%	n	%	n	%
Zygomaticus	1	*7.1*	3	*18.8*	18	*31.6*	52	*51.0*	61	*54.0*
Horncore	2	*14.3*	6	*37.5*	15	*26.3*	34	*33.3*	38	*33.6*
Mandible	12	*85.7*	16	*100.0*	46	*80.7*	102	*100.0*	113	*100.0*
Scapula	5	*35.7*	8	*50.0*	57	*100.0*	81	*79.4*	74	*65.5*
Humerus	2	*14.3*	5	*31.3*	33	*57.9*	69	*67.6*	80	*70.8*
Radius	6	*42.9*	5	*31.3*	33	*57.9*	81	*79.4*	106	*93.8*
Metacarpal	7	*50.0*	8	*50.0*	40	*70.2*	93	*91.2*	104	*92.0*
Pelvis	6	*42.9*	4	*25.0*	19	*33.3*	54	*52.9*	81	*71.7*
Femur	1	*7.1*	3	*18.8*	35	*61.4*	67	*65.7*	102	*90.3*
Tibia	1	*7.1*	4	*25.0*	26	*45.6*	79	*77.5*	83	*73.5*
Astragalus	7	*50.0*	5	*31.3*	30	*52.6*	91	*89.2*	93	*82.3*
Calcaneum	14	*100.0*	6	*37.5*	32	*56.1*	94	*92.2*	96	*85.0*
Metatarsal	8	*57.1*	9	*56.3*	55	*96.5*	96	*94.1*	110	*97.3*
First phalange	6	*42.9*	4	*25.0*	17	*29.8*	56	*54.9*	63	*55.8*
Total	*78*		*86*		*456*		*1049*		*1204*	

Table 42. Cattle: Anatomical representation: Phase Z: MNE by feature type (with 100 or more cases)

Phase/State		Neonates		Early (6-24 mth)		Middle (24-42 mth)		Late (42-48 mth)	
		n	%	n	%	n	%	n	%
	Neonate	1	*1.0*						
	Post-neo	97	*99.0*						
T-V	Unfused			2	*3.6*	1	*4.3*	5	*27.8*
	Fusing							2	*11.1*
	Fused			54	*96.4*	22	*95.7*	11	*61.1*
	Neonate	1	*0.1*						
	Post-neo	1398	*99.9*						
W	Unfused			7	*0.9*	44	*9.9*	47	*27.8*
	Fusing					5	*1.1*	6	*3.6*
	Fused			779	*99.1*	394	*88.9*	116	*68.6*
	Neonate								
	Post-neo	37	*100.0*						
X	Unfused			20	*100.0*	3	*50.0*	3	*27.3*
	Fusing							1	*9.1*
	Fused					3	*50.0*	7	*63.6*
	Neonate	1	*0.1*						
	Post-neo	888	*99.9*						
X-Y	Unfused			3	*0.6*	42	*15.1*	47	*34.3*
	Fusing					5	*1.8*	7	*5.1*
	Fused			469	*99.4*	232	*83.2*	83	*60.6*
	Neonate	6	*0.4*						
	Post-neo	1473	*99.6*						
Y	Unfused			16	*2.0*	81	*19.6*	119	*44.2*
	Fusing			8	*1.0*	4	*1.0*	18	*6.7*
	Fused			766	*97.0*	329	*79.5*	132	*49.1*
	Neonate	3	*0.3*						
	Post-neo	1039	*99.7*						
Y-Z	Unfused			8	*1.4*	54	*17.8*	55	*34.0*
	Fusing			2	*0.3*	1	*0.3*	6	*3.7*
	Fused			563	*98.3*	249	*81.9*	101	*62.3*
	Neonate	5	*0.2*						
	Post-neo	2831	*99.8*						
Z	Unfused			21	*1.5*	175	*19.2*	180	*36.2*
	Fusing			8	*0.6*	11	*1.2*	32	*6.4*
	Fused			1392	*98.0*	727	*79.6*	285	*57.3*

Table 43. Cattle: Mortality profiles: Post-cranial epiphyseal fusion by chronological phase, based on Schmid (1972: 75, Table 9) and Silver (1969: 252-253, Table A)

Age/Phase	T-V			W			X			X-Y			Y			Y-Z			Z		
	n	%n	curve	n	%n	curve	n	%n	curve	n	%n	curve	n	%n	curve	n	%n	curve	n	%n	curve
Neonate	1.0	*4.5*	95.5	6.0	*2.1*	97.9			100.0			100.0	5.0	*2.9*	97.1	2.0	*1.2*	98.8	2.0	*0.5*	99.5
Juvenile			95.5	2.0	*0.7*	97.2			100.0			100.0	4.0	*2.3*	94.8			98.8	4.0	*1.0*	98.5
Immature			95.5			97.2			100.0	2.0	*1.4*	98.6	5.0	*2.9*	91.9			98.8	4.0	*1.0*	97.5
Subadult 1			95.5	5.0	*1.8*	95.4			100.0			98.6	8.8	*5.1*	86.8	1.4	*0.8*	98.0	9.1	*2.3*	95.2
Subadult 2			95.5	5.0	*1.8*	93.6			100.0	3.6	*2.4*	96.2	6.2	*3.6*	83.2	8.6	*5.0*	93.0	18.1	*4.5*	90.7
Adult 1	1.1	*5.0*	90.0	13.8	*4.9*	88.7	2.3	*25.6*	74.4	9.9	*6.7*	89.5	20.1	*11.7*	71.5	14.9	*8.7*	84.3	34.1	*8.5*	82.2
Adult 2	2.4	*10.9*	79.1	16.1	*5.7*	83.0			74.4	12.1	*8.2*	81.3	14.2	*8.3*	63.2	11.2	*6.5*	77.8	38.1	*9.5*	72.7
Adult 3	11.4	*51.8*	27.3	169.1	*59.8*	23.2	5.7	*63.3*	11.1	86.0	*58.1*	23.2	80.8	*47.0*	16.2	95.5	*55.8*	22.0	201.1	*49.9*	22.8
Elderly	6.1	*27.7*		65.9	*23.3*		1.0	*11.1*		34.5	*23.3*		27.9	*16.2*		37.5	*21.9*		92.4	*22.9*	

Table 44. Cattle: Mortality profiles: Mandibular tooth eruption and wear by chronological phase, based on Grant (1982), O'Connor (1991: 250, Table 67 & 2003: 160) and Silver (1969: 262, Table D)

Phase/Sex	Female	Male	Ratio
T-V	2	2	1.0 : 1
W	24	4	6.0 : 1
X		1	0.0 : 1
X-Y	11	2	5.5 : 1
Y	19	5	3.8 : 1
Y-Z	6	5	1.2 : 1
Z	41	14	2.9 : 1

Table 45. Cattle: Sexing: Female to male ratios based on the morphology of the pelvis, using the ilio-pubic ridge and median acetabular border, by chronological phase

Element/Phase	T-V			W			X			X-Y			Y			Y-Z			Z		
	n	butch	*%butch*	n	butch	*%butch*	n	butch	*%butch*	n	butch	*%butch*	n	butch	*%butch*	n	butch	*%butch*	n	butch	*%butch*
Horncore	6			38	1	*2.6*				15			65	1	*1.5*	37			102	5	*4.9*
Zygomaticus	9	2	*22.2*	99	15	*15.2*	1			39	5	*12.8*	97	11	*11.3*	80	8	*10.0*	150	16	*10.7*
Mandible	13	2	*15.4*	163	12	*7.4*	6	1	*16.7*	57	6	*10.5*	112	5	*4.5*	121	11	*9.1*	259	25	*9.7*
Scapula	5	4	*80.0*	207	81	*39.1*	1			100	47	*47.0*	144	65	*45.1*	103	40	*38.8*	276	130	*47.1*
Humerus	2	1	*50.0*	68	20	*29.4*	3			61	18	*29.5*	125	48	*38.4*	98	43	*43.9*	217	99	*45.6*
Radius	15	3	*20.0*	121	25	*20.7*	8	2	*25.0*	118	27	*22.9*	222	52	*23.4*	123	34	*27.6*	419	113	*27.0*
Metacarpal	17	4	*23.5*	289	15	*5.2*	8			149	15	*10.1*	193	10	*5.2*	174	16	*9.2*	417	40	*9.6*
Pelvis	7	1	*14.3*	65	23	*35.4*	1	1	*100.0*	41	15	*36.6*	85	39	*45.9*	53	16	*30.2*	182	75	*41.2*
Femur	12			138	26	*18.8*	8	2	*25.0*	92	28	*30.4*	167	30	*18.0*	111	21	*18.9*	322	78	*24.2*
Tibia	4			59	8	*13.6*				54	8	*14.8*	142	20	*14.1*	63	9	*14.3*	224	28	*12.5*
Astragalus	11	2	*18.2*	132	23	*17.4*	2			87	12	*13.8*	161	19	*11.8*	87	14	*16.1*	254	42	*16.5*
Calcaneum	8	2	*25.0*	142	48	*33.8*	3			96	32	*33.3*	144	43	*29.9*	94	30	*31.9*	267	80	*30.0*
Metatatarsal	21	4	*19.0*	323	48	*14.9*	6	2	*33.3*	169	24	*14.2*	160	25	*15.6*	186	38	*20.4*	473	78	*16.5*
First phalange	35	4	*11.4*	470	54	*11.5*	10	2	*20.0*	246	32	*13.0*	384	51	*13.3*	302	43	*14.2*	651	88	*13.5*
Total	*165*	*29*	*17.6*	*2314*	*399*	*17.2*	*57*	*10*	*17.5*	*1324*	*269*	*20.3*	*2201*	*419*	*19.0*	*1632*	*323*	*19.8*	*4213*	*897*	*21.3*

Table 46. Cattle: Butchery: Frequencies of butchery marks by anatomical element and chronological phase (NISP)

Phase	Type	HC	ZY	MD	SC	HU	RA	MC	PE	FE	TI	AS	CA	MT	PH
	Chopped		2	2	3	1	3	4	1			2	2	4	1
	Cut														
T-V	Chopped & cut				1										3
	Sawn														
	Total		*2*	*2*	*4*	*1*	*3*	*4*	*1*			*2*	*2*	*4*	*4*
	Chopped	1	13	9	75	19	24	15	21	22	7	20	46	42	7
	Cut		2	3						3	1	3	2	4	45
W	Chopped & cut				6	1	1		2	1				2	1
	Sawn														1
	Total	*1*	*15*	*12*	*81*	*20*	*25*	*15*	*23*	*26*	*8*	*23*	*48*	*48*	*54*
	Chopped			1			2		1	2				2	
	Cut														2
X	Chopped & cut														
	Sawn														
	Total			*1*			*2*		*1*	*2*				*2*	*2*
	Chopped		4	6	37	17	24	13	14	25	4	5	25	20	3
	Cut		1		6		1	1	1	3	3	6	7	4	29
X-Y	Chopped & cut				4	1	2	1			1	1			
	Sawn														
	Total		*5*	*6*	*47*	*18*	*27*	*15*	*15*	*28*	*8*	*12*	*32*	*24*	*32*
	Chopped	1	7	3	57	37	44	5	34	26	11	10	37	14	2
	Cut		4	2	5	7	4	5	2	1	8	9	6	9	48
Y	Chopped & cut				3	4	4		3	3	1			2	1
	Sawn														
	Total	*1*	*11*	*5*	*65*	*48*	*52*	*10*	*39*	*30*	*20*	*19*	*43*	*25*	*51*
	Chopped		*5*	5	34	33	28	11	14	16	5	11	19	30	1
	Cut		3	3	2	4	3	4	1	5	3	2	9	5	40
Y-Z	Chopped & cut			3	4	6	3	1	1		1	1	2	3	2
	Sawn														
	Total		*8*	*11*	*40*	*43*	*34*	*16*	*16*	*21*	*9*	*14*	*30*	*38*	*43*
	Chopped	4	12	22	98	69	86	18	65	57	21	20	59	59	8
	Cut	1	3	3	14	15	20	22	5	13	7	20	18	16	79
Z	Chopped & cut		1		18	15	7		5	8		2	3	1	1
	Sawn													2	
	Total	*5*	*16*	*25*	*130*	*99*	*113*	*40*	*75*	*78*	*28*	*42*	*80*	*78*	*88*

Table 47. Cattle: Butchery: Butchery mark type (chop, cut and saw) by anatomical element and chronological phase (NISP)

Phase/Stage/Element		HC		ZY		MD		SC		HU		RA		MC		PE		FE		TI		AS		CA		MT		PH	
		n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%
	Skinned			2	*13.3*																							44	*81.5*
	Dismembered	1	*100.0*			6	*42.9*			5	*62.0*	9	*33.3*	3	*21.4*	12	*42.9*	9	*60.0*	7	*77.8*	12	*46.2*	30	*61.2*	28	*58.3*		
W	Filleted							1	*1.1*	1	*12.5*	4	*14.8*					1	*6.7*	2	*22.2*					3	*7.0*		
	Other			13	*86.7*	8	*57.1*	92	*98.9*	2	*25.0*	14	*51.9*	11	*78.6*	16	*57.1*	5	*33.3*			14	*53.8*	19	*38.8*	17	*35.4*	10	*18.5*
	Total	*1*		*15*		*14*		*93*		*8*		*27*		*14*		*28*		*15*		*9*		*26*		*49*		*48*		*54*	
	Skinned			1	*20.0*																							30	*90.9*
	Dismembered					5	*83.3*			5	*50.0*	15	*46.9*	4	*28.6*	1	*6.7*	7	*53.8*	5	*55.6*	7	*53.8*	20	*57.1*	19	*79.2*		
X-Y	Filleted							1	*2.1*	4	*40.0*	2	*6.3*					2	*15.4*	3	*33.3*					1	*4.2*		
	Other			4	*80.0*	1	*16.7*	47	*97.9*	1	*10.0*	15	*46.9*	10	*71.4*	14	*93.3*	4	*30.8*	1	*11.1*	6	*46.2*	15	*42.9*	4	*16.7*	3	*9.1*
	Total			*5*		*6*		*48*		*10*		*32*		*14*		*15*		*13*		*9*		*13*		*35*		*24*		*33*	
	Skinned			4	*36.4*																							41	*80.4*
	Dismembered	1	*100.0*			2	*33.3*	2	*2.8*	9	*32.1*	15	*25.9*	3	*50.0*	11	*27.5*	14	*82.4*	10	*58.8*	10	*43.5*	25	*53.2*	20	*90.9*		
Y	Filleted							1	*1.4*	8	*28.6*	8	*13.8*	1	*16.7*			3	*17.6*	2	*11.8*								
	Other			7	*63 6*	4	*66.7*	68	*95.8*	11	*39.3*	35	*60.3*	2	*33.3*	29	*72.0*			5	*29.4*	13	*56.5*	22	*46.8*	2	*9.1*	10	*19.6*
	Total	*1*		*11*		*6*		*71*		*28*		*58*		*6*		*40*		*17*		*17*		*23*		*47*		*22*		*51*	
	Skinned			3	*37.5*																							37	*86.0*
	Dismembered					7	*50.0*	1	*3.0*	6	*26.1*	11	*29.7*	6	*42.9*	4	*22.2*	8	*72.7*	8	*100.0*	6	*42.9*	22	*66.7*	27	*73.0*		
Y-Z	Filleted							2	*4.0*	11	*47.8*	7	*18.9*					1	*9.1*							1	*2.7*		
	Other			5	*62.0*	7	*50.0*	43	*93.0*	6	*26.1*	19	*51.4*	8	*57.1*	14	*77.8*	2	*18.2*			8	*57.1*	11	*33.3*	9	*24.3*	6	*14.0*
	Total			*8*		*14*		*46*		*23*		*37*		*14*		*18*		*11*		*8*		*14*		*33*		*37*		*43*	
	Skinned			4	*23.5*			1	*0.7*																			71	*78.9*
	Dismembered	4	*80.0*			18	*60.0*			16	*34.8*	33	*27.0*	19	*59.4*	17	*21.3*	32	*71.1*	19	*70.4*	24	*53.3*	49	*52.1*	57	*78.1*		
Z	Filleted							2	*1.5*	19	*41.3*	20	*16.4*					4	*8.9*	6	*23.0*								
	Other	1	*20.0*	13	*76.5*	12	*40.0*	133	*97.8*	11	*23.9*	69	*56.6*	13	*40.6*	63	*78.8*	9	*20.0*	2	*7.4*	21	*46.7*	45	*47.9*	16	*21.9*	19	*21.1*
	Total	*5*		*17*		*30*		*136*		*46*		*122*		*32*		*80*		*45*		*27*		*45*		*94*		*73*		*90*	

Table 48. Cattle: Butchery: Carcase reduction stages (based on Binford 1981: 98-133, Figures 4.06-4.38, Table 4.04) by anatomical element and chronological phase

Butchery/Phase	W		X-Y		Y		Y-Z		Z	
	n	%	n	%	n	%	n	%	n	%
S1/2	48	*59.3*	28	*59.6*	37	*56.9*	25	*62.5*	71	*54.6*
S3	1	*1.2*	4	*8.5*	3	*4.6*	4	*10.0*	9	*6.9*
S4	58	*71.6*	27	*57.4*	35	*53.8*	17	*42.5*	64	*49.2*
S5					1	*1.5*			1	*0.8*
S6	26	*32.1*	8	*17.0*	20	*30.8*	10	*25.0*	31	*23.8*
S7	13	*16.0*	11	*23.4*	14	*21.5*	11	*27.5*	43	*33.1*
S8	1	*1.2*							1	*0.8*
S9					3	*4.6*			2	*1.5*
S10	4	*4.9*	2	*4.3*	1	*1.5*	4	*10.0*	7	*5.4*
S11			2	*4.3*	3	*4.6*	2	*5.0*	14	*10.8*
S12	2	*2.5*	6	*12.8*	1	*1.5*			9	*6.9*
Total	*81*		*47*		*65*		*40*		*130*	

Table 49. Cattle: Butchery: Scapula: Inter-site comparison using Maltby's (1989: 93, Table 3) categories expressed as a percentage of element NISP by chronological phase

Phase	NISP	Hook damage	Probable hook damage	*Total*	*%total*
TV	5	1	1	*2*	*40.0*
W	81	5	14	*19*	*23.5*
X	1		1	*1*	*100.0*
XY	100		5	*5*	*5.0*
Y	144	2	7	*9*	*6.3*
YZ	103	2	5	*7*	*6.8*
Z	276	3	12	*15*	*5.4*

Table 50. Cattle: Butchery: Scapula: Hook damage by chronological phase

Butchery/Phase	W		X-Y		Y		Z	
	n	%	n	%	n	%	n	%
F1	11	*52.4*	14	*63.6*	13	*38.2*	27	*49.1*
F2	15	*71.4*	19	*86.4*	24	*70.6*	41	*74.5*
F3	2	*9.5*			3	*8.8*	1	*1.8*
F4					2	*5.9*	6	*10.9*
F9	3	*14.3*	4	*18.2*	6	*17.6*	5	*9.1*
F10	3	*14.3*	2	*9.1*			3	*5.5*
F11	1	*4.8*			7	*20.6*	12	*21.8*
F12							5	*9.1*
Total	*21*		*22*		*34*		*55*	

Table 51. Cattle: Butchery: Proximal femur: Inter-site comparison using Maltby's (1989: 97, Table 7) categories expressed as a percentage of element NISP by chronological phase

Butchery/Phase	W		X-Y		Y		Y-Z		Z	
	n	%	n	%	n	%	n	%	n	%
A1	9	*39.1*	4	*33.3*	3	*15.8*	4	*28.6*	6	*14.3*
A2	6	*26.1*	1	*8.3*	6	*31.6*	4	*28.6*	6	*14.3*
A3	1	*4.3*	1	*8.3*	2	*10.5*	2	*14.3*	2	*4.8*
A4	11	*47.8*	6	*50.0*	6	*31.6*	5	*35.7*	14	*33.3*
A5	2	*8.7*	1	*8.3*			1	*7.1*	2	*4.8*
A6			1	*8.3*					1	*2.4*
A7/8	4	*17.4*					1	*7.1*		
A9	2	*8.7*	3	*25.0*	4	*21.1*	2	*14.3*	14	*33.3*
A10	3	*13.0*	4	*33.3*	6	*31.6*	1	*7.1*	14	*33.3*
A11	2	*8.7*	1	*8.3*	3	*15.8*	4	*28.6*	4	*9.5*
Total	*23*		*12*		*19*		*14*		*42*	

Table 52. Cattle: Butchery: Astragalus: Inter-site comparison using Maltby's (1989: 99, Table 9) categories expressed as a percentage of element NISP by chronological phase

Butchery/Phase	W		X-Y		Y		Y-Z		Z	
	n	%	n	%	n	%	n	%	n	%
C1	18	*37.5*	13	*40.6*	22	*51.2*	10	*33.3*	28	*35*
C2	3	*6.3*	2	*6.3*	9	*20.9*	4	*13.3*	10	*12.5*
C3	22	*45.8*	11	*34.4*	11	*25.6*	7	*23.3*	28	*35*
C4	6	*12.5*	1	*3.1*	2	*4.7*	1	*3.3*	3	*3.8*
C5	25	*52.1*	16	*50.0*	14	*32.6*	14	*46.7*	33	*41.3*
C6	20	*41.7*	16	*50.0*	18	*41.9*	7	*23.3*	41	*51.3*
C7	1	*2.1*	3	*9.4*	2	*4.7*	4	*13.3*	11	*13.8*
C8	1	*2.1*	2	*6.3*	2	*4.7*	7	*23.3*	9	*11.3*
Total	*48*		*32*		*43*		*30*		*80*	

Table 53. Cattle: Butchery: Calcaneum: Inter-site comparison using Maltby's (1989: 100, Table 10) categories expressed as a percentage of element NISP by chronological phase

Butchery/Phase	W		X-Y		Y		Y-Z		Z	
	n	%	n	%	n	%	n	%	n	%
M1/2/4	10	*29.4*	4	*18.2*	2	*13.3*	2	*7.1*	8	*18.2*
M5	27	*79.4*	15	*68.2*	9	*60.0*	21	*75.0*	34	*77.3*
M6	1	*2.9*			1	*6.7*	1	*3.6*	3	*6.8*
M7	5	*14.7*	4	*18.2*	2	*13.3*	5	*17.9*	2	*4.5*
M8	23	*67.6*	17	*77.3*	13	*86.7*	24	*85.7*	34	*77.3*
M10	2	*5.9*	3	*13.6*	4	*26.7*			4	*9.1*
M11	2	*5.9*			3	*20.0*	2	*7.1*	1	*2.3*
M12			1	*4.5*			3	*10.7*		
Total	34		22		15		28		44	

Table 54. Cattle: Butchery: Proximal metatarsal: Inter-site comparison using Maltby's (1989: 101, Table 11) categories expressed as a percentage of element NISP by chronological phase

Element/Phase		T-V			W			X			X-Y			Y			Y-Z			Z	
	n	split	*%split*	n	split	*%split*	n	split	*%split*	n	split	*%split*	n	split	*%split*	n	split	*%split*	n	split	*%split*
Humerus	2			68	1	*1.5*	3			61			125	5	*4.0*	98			217		
Radius	15	2	*13.3*	121	37	*30.6*	8	1	*12.5*	118	23	*19.5*	222	20	*9.0*	123	27	*22.0*	419	55	*13.1*
Metacarpal	17	6	*35.3*	289	57	*19.7*	8	2	*25.0*	149	31	*20.8*	193	23	*11.9*	174	26	*14.9*	417	36	*8.6*
Femur	12			138	1	*0.7*	8			92			167			111			322	1	*0.3*
Tibia	4	2	*50.0*	59	10	*16.9*				54	4	*7.4*	142	1	*0.7*	63	5	*7.9*	224	9	*4.0*
Metatarsal	21	2	*9.5*	323	49	*15.2*	6	1	*16.7*	169	19	*11.2*	160	7	*4.4*	186	21	*11.3*	473	34	*7.2*
Total		*12*			*155*			*4*			*77*			*56*			*79*			*135*	

Table 55. Cattle: Butchery: Instances of axially split long bones by chronological period

Element	Measurement	Number	Minimum	Maximum	Mean	Standard deviation	Coefficient of variation
M3	B	11	14.0	16.9	15.3	0.9	5.9

Table 56. Cattle: Biometry: Phase T-V: Summary statistics (minimum, maximum, mean, standard deviation and coefficient of variation) of measurements with 10 or more cases

Element	Measurement	Number	Minimum	Maximum	Mean	Standard deviation	Coefficient of variation
M3	L	118	29.2	40.7	35.1	2.0	5.7
M3	B	158	13.3	17.4	15.0	0.8	5.3
HC	45	25	37.2	77.5	47.9	10.2	21.3
HC	46	23	21.7	56.0	33.8	8.7	25.7
HU	HTC	27	25.9	31.5	28.5	1.5	5.3
MC	GL	13	161.0	192.0	177.8	8.4	4.7
MC	SD	13	24.8	36.9	28.1	3.5	12.5
MC	Bp	64	44.7	65.4	52.0	4.4	8.5
MC	Bd	88	42.7	72.6	52.3	5.1	9.8
MC	BatF	90	41.6	64.9	47.8	4.2	8.8
MC	1	72	18.2	26.4	21.5	1.6	7.4
MC	2	33	25.2	32.7	28.3	1.8	6.4
MC	3	62	22.7	30.9	25.7	1.7	6.6
MC	4	73	17.6	28.2	21.2	1.9	9.0
MC	5	38	25.7	33.5	28.2	1.6	5.7
MC	6	57	23.0	30.3	25.9	1.7	6.6
TI	Bd	14	50.5	62.3	54.0	2.9	5.4
TI	Dd	12	37.0	46.0	40.5	2.6	6.4
AS	GLl	43	52.2	68.4	60.2	3.6	6.0
AS	Bd	46	33.3	45.4	37.9	2.9	7.7
AS	Dl	36	29.7	38.8	33.1	2.0	6.0
CA	GL	12	108.7	132.7	118.2	6.9	5.8
CA	DS	35	33.9	43.9	40.2	2.6	6.5
CA	C	40	20.2	28.5	24.9	1.8	7.2
CA	C+D	42	38.1	48.3	43.8	2.6	5.9
MT	Bp	60	37.5	52.0	41.8	2.7	6.5
MT	Bd	97	43.7	57.3	48.0	2.7	5.6
MT	BatF	98	40.6	52.3	44.8	2.4	5.4
MT	1	88	18.0	24.5	20.7	1.2	5.8
MT	2	39	25.6	32.2	28.2	1.4	5.0
MT	3	70	22.4	28.8	25.0	1.2	4.8
MT	4	83	17.4	23.0	19.6	1.0	5.1
MT	5	36	24.9	31.4	27.5	1.3	4.7
MT	6	71	23.0	29.3	25.2	1.1	4.4
MT	a	90	20.0	28.7	23.2	1.5	6.5
MT	b	88	20.0	26.0	22.2	1.3	5.9

Table 57. Cattle: Biometry: Phase W: Summary statistics (minimum, maximum, mean, standard deviation and coefficient of variation) of measurements with 10 or more cases

Element	Measurement	Number	Minimum	Maximum	Mean	Standard deviation	Coefficient of variation
M3	L	71	29.9	41.8	35.0	2.1	6.0
M3	B	96	12.8	17.0	15.1	0.8	5.3
HU	HTC	30	25.3	37.2	29.3	2.5	8.5
MC	Bp	36	45.3	62.4	51.2	4.1	8.0
MC	Bd	36	46.3	63.2	52.6	4.2	8.0
MC	BatF	38	41.4	56.7	47.8	3.6	7.5
MC	1	32	19.5	26.1	21.9	1.7	7.8
MC	2	14	26.9	32.6	29.0	1.9	6.6
MC	3	27	23.2	32.1	26.3	2.0	7.6
MC	4	30	18.6	24.4	21.3	1.6	7.5
MC	5	16	26.1	31.9	28.7	2.1	7.3
MC	6	26	23.8	29.9	26.4	1.7	6.4
TI	Bd	22	51.7	66.2	56.0	3.6	6.4
TI	Dd	22	37.5	49.1	41.7	2.7	6.5
AS	GLl	37	54.5	68.9	60.8	3.2	5.3
AS	Bd	42	34.3	42.7	37.7	2.1	5.6
AS	Dl	38	29.6	37.1	33.1	1.7	5.1
CA	DS	25	35.1	44.2	40.0	2.1	5.3
CA	C	38	20.7	29.5	24.8	1.8	7.3
CA	C+D	39	39.6	49.4	44.0	2.6	5.9
MT	Bp	34	36.5	51.7	42.2	3.1	7.3
MT	Bd	53	43.7	59.5	48.8	3.7	7.6
MT	BatF	55	40.1	53.3	45.1	3.2	7.1
MT	l	49	19.0	30.4	21.1	1.9	9.0
MT	2	24	25.5	33.5	28.4	2.0	7.0
MT	3	41	21.8	30.2	25.0	1.8	7.2
MT	4	46	17.6	24.0	19.8	1.3	6.6
MT	5	25	24.6	32.2	27.5	1.8	6.5
MT	6	41	22.0	29.8	25.3	1.6	6.3
MT	a	49	20.8	28.4	23.4	1.8	7.7
MT	b	50	20.0	27.7	22.4	1.7	7.6

Table 58. Cattle: Biometry: Phase X-Y: Summary statistics (minimum, maximum, mean, standard deviation and coefficient of variation) of measurements with 10 or more cases

Element	Measurement	Number	Minimum	Maximum	Mean	Standard deviation	Coefficient of variation
M3	L	89	30.8	41.4	35.4	1.9	5.4
M3	B	102	13.5	17.6	15.3	0.7	4.6
HC	47	12	112.3	171.6	139.1	16.6	11.9
HC	45	43	39.7	71.7	49.3	8.3	16.8
HC	46	41	27.4	52.8	35.3	5.8	16.4
HU	BT	25	27.1	81.9	65.9	9.9	15.0
HU	HTC	73	25.7	36.5	29.8	2.2	7.4
RA	Bp	21	67.3	81.0	72.2	3.1	4.3
RA	BFp	33	61.9	75.0	66.5	3.1	4.7
MC	Bp	60	44.1	62.0	51.4	3.7	7.2
MC	Bd	60	47.0	66.1	52.8	4.5	8.5
MC	BatF	63	41.6	60.4	48.2	4.2	8.7
MC	l	58	18.5	27.1	21.9	1.7	7.8
MC	2	44	23.0	34.6	28.7	2.2	7.7
MC	3	56	23.3	31.3	26.0	1.9	7.3
MC	4	58	18.7	25.3	21.2	1.5	7.1
MC	5	39	26.0	33.6	28.5	1.8	6.3
MC	6	57	23.3	31.1	26.1	1.8	6.9
TI	Bd	87	46.7	69.3	56.5	3.9	6.9
TI	Dd	83	34.8	50.2	42.3	3.1	7.3
AS	GLl	117	52.7	71.5	61.0	3.9	6.4
AS	Bd	119	32.9	47.4	38.3	2.9	7.6
AS	Dl	118	29.0	39.9	33.9	2.2	6.5
CA	GL	25	106.2	140.4	121.0	9.3	7.7
CA	DS	74	35.1	47.4	41.8	2.7	6.5
CA	C	81	21.5	29.7	25.9	1.9	7.3
CA	C+D	82	40.5	52.2	45.7	2.7	5.9
MT	Bp	46	39.0	51.7	43.7	3.1	7.1
MT	Bd	63	43.1	60.5	48.7	3.2	6.6
MT	BatF	69	40.7	58.9	45.8	3.7	8.1
MT	1	66	19.0	24.2	21.0	1.1	5.2
MT	2	44	26.6	33.3	28.6	1.3	4.5
MT	3	62	23.6	29.6	25.4	1.4	5.5
MT	4	65	17.4	23.5	19.7	1.1	5.6
MT	5	46	23.9	31.8	27.4	1.4	5.1
MT	6	62	22.7	29.2	25.4	1.2	4.7
MT	a	66	20.8	29.0	23.6	1.6	6.8
MT	b	64	20.1	28.4	22.5	1.6	7.1

Table 59. Cattle: Biometry: Phase Y: Summary statistics (minimum, maximum, mean, standard deviation and coefficient of variation) of measurements with 10 or more cases

Element	Measurement	Number	Minimum	Maximum	Mean	Standard deviation	Coefficient of variation
M3	L	93	30.7	38.2	34.8	1.7	4.9
M3	B	120	13.3	17.2	15.1	0.8	5.3
HC	45	24	41.4	66.2	48.7	6.2	12.7
HC	46	25	26.2	44.0	33.5	4.4	13.1
HU	BT	20	31.4	87.9	67.3	10.1	15.0
HU	HTC	56	26.0	34.1	29.6	1.7	5.7
RA	Bp	10	68.4	92.6	75.8	9.2	12.1
RA	BFp	11	62.3	83.6	70.4	8.2	11.6
MC	GL	10	167.0	224.5	192.1	17.8	9.3
MC	SD	10	24.4	39.3	30.6	5.1	16.7
MC	Bp	49	44.5	63.7	51.5	4.5	8.7
MC	Bd	54	45.1	71.5	52.8	4.8	9.1
MC	BatF	56	42.1	67.9	48.3	4.6	9.5
MC	1	50	19.3	30.0	22.3	1.8	8.1
MC	2	33	22.7	33.3	28.8	1.8	6.3
MC	3	46	22.7	33.4	26.3	2.1	8.0
MC	4	51	18.0	28.3	21.2	1.9	9.0
MC	5	39	24.6	37.2	28.8	2.3	8.0
MC	6	50	22.4	33.6	26.3	1.9	7.2
TI	Bd	24	50.7	62.1	55.1	2.7	4.9
TI	Dd	21	38.5	46.7	41.8	2.4	5.7
AS	GLl	52	55.7	68.9	61.8	3.5	5.7
AS	Bd	51	26.9	45.3	39.0	3.5	9.0
AS	Dl	53	30.2	38.2	33.9	2.1	6.2
CA	GL	13	110.2	130.3	119.8	6.2	5.2
CA	DS	43	35.0	48.0	41.7	2.4	5.8
CA	C	45	21.2	29.1	25.4	2.1	8.3
CA	C+D	42	40.6	49.8	44.7	2.6	5.8
MT	Bp	66	25.6	52.5	43.3	3.8	8.8
MT	Bd	59	43.3	61.9	49.5	4.2	8.5
MT	BatF	64	38.7	57.4	46.2	4.0	8.7
MT	1	60	18.9	25.3	21.4	1.4	6.5
MT	2	39	25.5	33.3	28.8	1.9	6.6
MT	3	58	22.5	30.3	25.7	1.7	6.6
MT	4	58	17.7	23.9	20.1	1.4	7.0
MT	5	33	24.5	32.9	28.2	2.2	7.8
MT	6	57	22.7	30.1	26.0	1.8	6.9
MT	a	60	20.9	30.3	23.8	2.1	8.8
MT	b	60	19.9	28.5	22.9	2.0	8.7

Table 60. Cattle: Biometry: Phase Y-Z: Summary statistics (minimum, maximum, mean, standard deviation and coefficient of variation) of measurements with 10 or more cases

Element	Measurement	Number	Minimum	Maximum	Mean	Standard deviation	Coefficient of variation
M3	L	203	21.2	39.8	35.2	2.1	6.0
M3	B	235	8.1	17.1	15.2	0.9	5.9
HC	47	13	96.0	172.7	127.2	22.8	17.9
HC	45	53	35.2	74.9	50.1	8.7	17.4
HC	46	52	24.7	54.1	36.0	7.2	20.0
HU	BT	37	62.8	84.2	69.5	4.7	6.8
HU	HTC	121	20.0	35.7	29.8	2.3	7.7
RA	Bp	49	32.7	86.0	73.0	7.6	10.4
RA	BFp	61	31.0	78.6	67.0	6.4	9.6
MC	GL	45	168.0	209.5	187.5	9.3	5.0
MC	SD	44	24.4	64.8	31.4	6.4	20.4
MC	Bp	141	35.0	69.4	52.6	5.1	9.7
MC	Bd	169	39.3	70.7	53.6	5.0	9.3
MC	BatF	178	40.9	62.9	49.2	4.4	8.9
MC	1	164	18.7	27.3	22.2	1.8	8.1
MC	2	117	24.8	52.4	29.7	3.1	10.4
MC	3	155	23.0	31.4	26.3	1.9	7.2
MC	4	162	18.2	27.0	21.5	1.7	7.9
MC	5	113	25.5	35.0	29.2	2.0	6.8
MC	6	154	22.6	32.1	26.5	2.0	7.5
TI	Bd	126	50.5	70.7	56.8	3.9	6.9
TI	Dd	119	36.3	52.5	42.6	3.0	7.0
AS	GLl	164	52.9	71.8	61.3	3.6	5.9
AS	Bd	169	33.1	64.6	39.0	3.5	9.0
AS	Dl	166	29.1	54.4	34.1	2.6	7.6
CA	GL	35	107.8	156.2	122.5	11.0	9.0
CA	DS	108	35.3	48.4	41.8	2.8	6.7
CA	C	140	21.0	32.5	25.6	2.0	7.8
CA	C+D	137	39.4	55.9	45.3	2.9	6.4
MT	GL	32	192.0	230.0	210.6	10.8	5.1
MT	SD	31	20.6	44.7	25.9	4.3	16.6
MT	Bp	163	23.4	55.2	43.6	4.0	9.2
MT	Bd	164	41.6	61.8	50.1	4.1	8.2
MT	BatF	173	20.4	58.2	46.3	4.4	9.5
MT	1	167	17.9	25.3	21.2	1.4	6.6
MT	2	113	24.5	34.0	28.8	2.0	6.9
MT	3	164	19.2	31.4	25.6	1.8	7.0
MT	4	165	16.8	25.1	20.2	1.5	7.4
MT	5	117	23.9	33.9	28.2	2.0	7.1
MT	6	158	22.0	29.9	25.9	1.6	6.2
MT	a	165	21.1	33.0	24.1	2.1	8.7
MT	b	158	19.8	29.1	23.1	2.0	8.7

Table 61. Cattle: Biometry: Phase Z: Summary statistics (minimum, maximum, mean, standard deviation and coefficient of variation) of measurements with 10 or more cases

Element/Measurement	Phase	Number	Mean	Skewness	Standard error	Sk/Std.Er
M3 W	T-V	11	15.3	0.31	0.66	0.5
M3 W	W	158	15.0	0.34	0.19	1.8
M3 W	X	96	15.1	-0.16	0.25	-0.7
M3 W	Y	102	15.3	0.22	0.24	0.9
M3 W	Y-Z	120	15.1	-0.06	0.22	-0.2
M3 W	Z	234	15.2	-0.13	0.16	-0.8
HU HTC	W	27	28.5	0.09	0.45	0.2
HU HTC	X-Y	30	29.3	1.05	0.43	2.5
HU HTC	Y	73	29.8	0.88	0.28	3.1
HU HTC	Y-Z	56	29.6	0.50	0.32	1.6
HU HTC	Z	120	29.9	0.50	0.22	2.3
MC BatF	W	90	47.8	1.55	0.25	6.1
MC BatF	X-Y	38	47.8	0.79	0.38	2.1
MC BatF	Y	63	48.2	1.21	0.30	4.0
MC BatF	Y-Z	56	48.3	1.95	0.32	6.1
MC BatF	Z	178	49.2	0.96	0.18	5.3
TI Bd	W	14	54.0	1.81	0.60	3.0
TI Bd	X-Y	22	56.0	1.22	0.49	2.5
TI Bd	Y	87	56.5	0.88	0.26	3.4
TI Bd	Y-Z	24	55.1	0.79	0.47	1.7
TI Bd	Z	125	56.7	1.07	0.22	4.9
AS Bd	W	46	37.9	0.71	0.35	2.0
AS Bd	X-Y	42	37.7	0.53	0.37	1.5
AS Bd	Y	119	38.3	0.77	0.22	3.5
AS Bd	Y-Z	50	39.2	0.45	0.34	1.3
AS Bd	Z	169	39.0	2.58	0.19	13.8
MT 3	W	70	25.0	0.80	0.29	2.8
MT 3	X-Y	41	25.0	0.60	0.37	1.6
MT 3	Y	62	25.4	1.17	0.30	3.9
MT 3	Y-Z	58	25.7	0.56	0.31	1.8
MT 3	Z	163	25.6	0.60	0.19	3.1
Width	T-V	18	0.01	0.42	0.54	0.8
Width	W	264	0.00	0.82	0.15	5.5
Width	X-Y	174	0.00	0.99	0.18	5.4
Width	Y	396	0.01	-2.17	0.12	-17.7
Width	Y-Z	224	0.01	0.92	0.16	5.6
Width	Z	742	0.01	0.59	0.09	6.6
Length	W	99	0.00	0.04	0.24	0.2
Length	X-Y	80	0.00	0.91	0.27	3.4
Length	Y	230	0.01	0.59	0.16	3.7
Length	Y-Z	139	0.01	0.48	0.21	2.4
Length	Z	396	0.01	0.44	0.12	3.6
Depth	T-V	13	0.01	-0.11	0.62	-0.2
Depth	W	180	0.00	0.63	0.18	3.5
Depth	X-Y	128	0.00	0.60	0.21	2.8
Depth	Y	319	0.01	0.53	0.14	3.9
Depth	Y-Z	178	0.01	0.55	0.18	3.0
Depth	Z	603	0.01	0.47	0.10	4.8

Table 62. Cattle: Biometry: Skewness values for selected measurements and log ratios to highlight unusual distributions

Element/Measurement	Phase	Bone ID	Value	Log ratio
AS Bd	Y-Z	22543	26.9	n/a
M3 W	Z	1343	8.1	n/a
HU HTC	Z	17344	20.0	n/a
MT 3	Z	2789	19.2	n/a
HU width log	X-Y	365	28.9	-0.35
HU width log	Y-Z	1721	31.4	-0.31
RA width log	Z	4733	31.0	-0.32
AS width log	Y-Z	22543	26.9	-0.15
MT width log	Z	2789	20.4	-0.34
HU length log	Z	17344	20.0	-0.15
MT depth log	Z	2789	19.2	-0.11

Table 63. Cattle: Biometry: Outliers excluded from skewness value calculations

Trait/Phase		T-V		W		X		X-Y		Y		Y-Z		Z	
		n	%	n	%	n	%	n	%	n	%	n	%	n	%
Foramen	Present	3	*100.0*	18	*90.0*			6	*54.5*	22	*81.5*	14	*87.5*	35	*81.4*
	Absent			2	*10.0*			5	*45.5*	5	*18.5*	2	*12.5*	8	*18.6*
	Total	*3*		*20*				*11*		*27*		*16*		*43*	
Second premolar	Present	6	*100.0*	71	*83.5*	3	*100.0*	23	*92.0*	56	*94.9*	48	*82.8*	104	*83.2*
	Absent			14	*16.5*			2	*8.0*	3	*5.1*	10	*17.2*	21	*16.8*
	Total	*6*		*85*		*3*		*25*		*59*		*58*		*125*	
Third molar	Present	6	*100.0*	74	*91.4*	4	*100.0*	24	*88.9*	66	*91.7*	69	*89.6*	131	*86.2*
	Absent			7	*8.6*			3	*11.1*	6	*8.3*	8	*10.4*	21	*13.8*
	Total	*6*		*81*		*4*		*27*		*72*		*77*		*152*	

Table 64. Cattle: Non-metric traits: Mandibular extra/unusual mental nutrient foramina, absent 2nd premolars and reduced/absent 3rd molar hypoconulids by chronological phase

Element/Phase	T-V		W		X		X-Y		Y		Y-Z		Z	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%
Zygomaticus														
Mandible	5	*62.5*	66	*100.0*	4	*100.0*	42	*100.0*	124	*100.0*	75	*100.0*	230	*100.0*
Scapula	2	*25.0*	42	*63.6*	1	*25.0*	22	*52.4*	73	*58.9*	58	*77.3*	138	*60.0*
Humerus	1	*12.5*	28	*42.4*			25	*59.5*	71	*57.3*	24	*32.0*	125	*54.3*
Radius	5	*62.5*	26	*39.4*	1	*25.0*	26	*61.9*	51	*41.1*	25	*33.3*	87	*37.8*
Metacarpal	3	*37.5*	42	*63.6*	2	*50.0*	20	*47.6*	42	*33.9*	48	*64.0*	60	*26.1*
Pelvis	4	*50.0*	31	*47.0*	1	*25.0*	15	*35.7*	42	*33.9*	38	*50.7*	80	*34.8*
Femur	7	*87.5*	20	*30.3*	1	*25.0*	13	*31.0*	36	*29.0*	21	*28.0*	51	*22.2*
Tibia	3	*37.5*	46	*69.7*	1	*25.0*	31	*73.8*	68	*54.8*	42	*56.0*	120	*52.2*
Astragalus	1	*12.5*	29	*43.9*			27	*64.3*	50	*40.3*	29	*38.7*	92	*40.0*
Calcaneum	8	*100.0*	55	*83.3*	3	*75.0*	24	*57.1*	83	*66.9*	41	*54.7*	97	*42.2*
Metatarsal	4	*50.0*	13	*19.7*	4	*100.0*	15	*35.7*	25	*20.2*	32	*42.7*	67	*29.1*
First phalange	2	*25.0*	21	*31.8*	1	*25.0*	9	*21.4*	33	*26.6*	16	*21.3*	44	*19.1*
Total	*45*		*419*		*19*		*269*		*698*		*449*		*1191*	

Table 65. Pig: Anatomical representation: MNE by chronological phase

Element/Phase	Layer		Dump	
	n	%	n	%
Zygomaticus				
Mandible	13	*100.0*	21	*95.5*
Scapula	9	*69.2*	12	*54.5*
Humerus	10	*76.9*	5	*22.7*
Radius	4	*30.8*	10	*45.5*
Metacarpal	8	*61.5*	15	*68.2*
Pelvis	8	*61.5*	13	*59.1*
Femur	6	*46.2*	10	*45.5*
Tibia	8	*61.5*	17	*77.3*
Astragalus	6	*46.2*	9	*40.9*
Calcaneum	3	*23.1*	22	*100.0*
Metatarsal	2	*15.4*	5	*22.7*
First phalange	5	*38.5*	10	*45.5*
Total	*82*		*149*	

Table 66. Pig: Anatomical representation: Phase W: MNE by feature type (with 100 or more cases)

Element/Phase	Cut fill	
	n	%
Zygomaticus		
Mandible	34	*100.0*
Scapula	16	*47.1*
Humerus	21	*61.8*
Radius	12	*35.3*
Metacarpal	14	*41.2*
Pelvis	12	*35.3*
Femur	9	*26.5*
Tibia	23	*67.6*
Astragalus	23	*67.6*
Calcaneum	18	*52.9*
Metatarsal	13	*38.2*
First phalange	6	*17.6*
Total	*201*	

Table 67. Pig: Anatomical representation: Phase X-Y: MNE by feature type (with 100 or more cases)

Element/Phase	Cut fill		Surface		Dump	
	n	%	n	%	n	%
Zygomaticus						
Mandible	24	*100.0*	16	*100.0*	23	*100.0*
Scapula	20	*83.3*	13	*81.3*	17	*73.9*
Humerus	9	*37.5*	4	*25.0*	10	*43.5*
Radius	4	*16.7*	7	*43.8*	12	*52.2*
Metacarpal	14	*58.3*	7	*43.8*	20	*87.0*
Pelvis	18	*75.0*	3	*18.8*	12	*52.2*
Femur	5	*20.8*	3	*18.8*	10	*43.5*
Tibia	17	*70.8*	4	*25.0*	17	*73.9*
Astragalus	9	*37.5*	5	*31.3*	12	*52.2*
Calcaneum	9	*37.5*	12	*75.0*	16	*69.6*
Metatarsal	10	*41.7*	7	*43.8*	14	*60.9*
First phalange	2	*8.3*	3	*18.8*	9	*39.1*
Total	*141*		*84*		*172*	

Table 68. Pig: Anatomical representation: Phase Y: NME by feature type (with 100 or more cases)

Element/Phase	Cut fill		Surface		Dump	
	n	%	n	%	n	%
Zygomaticus						
Mandible	24	*100.0*	16	*100.0*	23	*100.0*
Scapula	20	*83.3*	13	*81.3*	17	*73.9*
Humerus	9	*37.5*	4	*25.0*	10	*43.5*
Radius	4	*16.7*	7	*43.8*	12	*52.2*
Metacarpal	14	*58.3*	7	*43.8*	20	*87.0*
Pelvis	18	*75.0*	3	*18.8*	12	*52.2*
Femur	5	*20.8*	3	*18.8*	10	*43.5*
Tibia	17	*70.8*	4	*25.0*	17	*73.9*
Astragalus	9	*37.5*	5	*31.3*	12	*52.2*
Calcaneum	9	*37.5*	12	*75.0*	16	*69.6*
Metatarsal	10	*41.7*	7	*43.8*	14	*60.9*
First phalange	2	*8.3*	3	*18.8*	9	*39.1*
Total	*141*		*84*		*172*	

Table 69. Pig: Anatomical representation: Phase Y-Z: NME by feature type (with 100 or more cases)

Element/Phase	Surface		Structure		Dump	
	n	%	n	%	n	%
Zygomaticus						
Mandible	11	*91.7*	102	*100.0*	97	*100.0*
Scapula	9	*75.0*	58	*56.9*	58	*59.8*
Humerus	7	*58.3*	41	*40.2*	60	*61.9*
Radius	8	*66.7*	35	*34.3*	32	*33.0*
Metacarpal	1	*8.3*	24	*23.5*	25	*25.8*
Pelvis	10	*83.3*	29	*28.4*	34	*35.1*
Femur	4	*33.3*	17	*16.7*	23	*23.7*
Tibia	12	*100.0*	49	*48.0*	43	*44.3*
Astragalus	2	*16.7*	36	*35.3*	42	*43.3*
Calcaneum	5	*41.7*	39	*38.2*	31	*32.0*
Metatarsal	5	*41.7*	20	*19.6*	35	*36.1*
First phalange	2	*16.7*	17	*16.7*	21	*21.6*
Total	*76*		*467*		*501*	

Table 70. Pig: Anatomical representation: Phase Z: NME by feature type (with 100 or more cases)

Phase/State		Neonates		Early (6-24 mth)		Middle (24-42 mth)		Late (42-48 mth)	
		n	%	n	%	n	%	n	%
T-V	Neonate								
	Post-neo	1	*1.8*						
	Unfused	54	*98.2*						
	Fusing			8	*29.6*	11	*64.7*	9	*90.0*
	Fused					2	*11.8*		
				19	*70.4*	4	*23.5*	1	*10.0*
W	Neonate	24	*4.8*						
	Post-neo	455	*90.5*						
	Unfused			80	*28.8*	84	*59.2*	33	*94.3*
	Fusing			10	*3.6*	4	*2.8*		
	Fused			188	*67.6*	54	*38.0*	2	*5.7*
X	Neonate	5	*17.9*						
	Post-neo	23	*82.1*						
	Unfused			5	*38.5*	7	*70.0*		
	Fusing								
	Fused			8	*61.5*	3	*30.0*		
X-Y	Neonate	11	*3.7*						
	Post-neo	285	*96.3*						
	Unfused			49	*30.6*	65	*65.0*	22	*88.0*
	Fusing			3	*1.9*	5	*5.0*		
	Fused			108	*67.5*	30	*30.0*	3	*12.0*
Y	Neonate	50	*6.3*						
	Post-neo	743	*93.5*						
	Unfused			134	*29.3*	131	*59.8*	64	*95.5*
	Fusing			13	*2.8*	17	*7.8*	1	*1.5*
	Fused			310	*67.8*	71	*32.4*	2	*3.0*
Y-Z	Neonate	12	*2.2*						
	Post-neo	529	*96.0*						
	Unfused			73	*22.3*	98	*62.4*	41	*91.1*
	Fusing			5	*1.5*	3	*1.9*		
	Fused			249	*76.1*	56	*35.7*	4	*8.9*
Z	Neonate	56	*4.3*						
	Post-neo	1221	*93.9*						
	Unfused			176	*23.2*	220	*59.6*	90	*95.7*
	Fusing			18	*2.4*	15	*4.1*	3	*3.2*
	Fused			564	*74.4*	134	*36.3*	1	*1.1*

Table 71. Pig: Mortality profiles: Post-cranial epiphyseal fusion by chronological phase, based on Schmid (1972: 75, Table 9) and Silver (1969: 264-265, Table G)

Age/Phase	T-V			W			X			X-Y			Y			Y-Z			Z		
	n	*%n*	curve	n	*%n*	curve	n	*%n*	curve	n	*%n*	curve	n	*%n*	curve	n	*%n*	curve	n	*%n*	curve
Neonate	1.0	*20.0*	80.0	2.0	*1.9*	98.1			100.0	2.6	*3.6*	96.4	7.4	*3.8*	96.2	3.2	*2.9*	97.1	15.6	*4.2*	95.8
Juvenile			80.0	7.5	*7.1*	91.0			100.0	7.4	*10.2*	86.2	21.1	*10.9*	85.3	9.7	*2.6*	94.5	30.0	*8.1*	87.7
Immature			80.0	2.2	*2.1*	88.9			100.0			86.2	2.9	*1.5*	83.8	13.5	*7.9*	86.6	11.0	*3.0*	84.7
Subadult 1	2.0	*40.0*	40.0	17.1	*16.3*	72.6	2.0	*50.0*	50.0	5.6	*7.8*	78.4	28.5	*14.7*	69.1	9.4	*11.1*	75.5	42.2	*11.3*	73.4
Subadult 2			40.0	7.0	*6.7*	65.9			50.0	1.9	*2.6*	75.8	16.0	*8.3*	60.8	36.9	*7.7*	67.8	11.2	*3.0*	70.4
Adult 1			40.0	17.6	*16.7*	49.2			50.0	27.5	*38.1*	37.7	29.3	*15.1*	45.7	8.9	*30.2*	37.6	88.2	*23.7*	46.7
Adult 2	1.0	*20.0*	20.0	11.5	*10.9*	38.3			50.0	4.8	*6.6*	31.1	21.2	*10.9*	34.8	34.5	*7.3*	30.3	46.5	*12.5*	34.2
Adult 3	1.0	*20.0*		39.2	*37.3*	1.0	1.0	*25.0*	25.0	19.2	*26.6*	4.5	64.2	*33.1*	1.7	2.4	*28.3*	2.0	121.7	*32.7*	1.5
Elderly						1.0			25.0	1.2	*1.7*	2.8	1.2	*0.6*	1.1		*2.0*		3.6	*1.0*	0.5
Neonate				1.0	*1.0*		1.0	*25.0*		2.0	*2.8*		2.0	*1.0*					2.0	*0.5*	

Table 72. Pig: Mortality profiles: Mandibular tooth eruption and wear by chronological phase, based on Grant (1982), O'Connor (1991: 250, Table 67 & 2003: 160) and Silver (1969: 264-265, Table G)

Phase/Sex	Female	Male	Ratio
W	17	8	2.1 : 1
X-Y	8	9*	0.9 : 1
Y	30	38*	0.8 : 1
Y-Z	16	11	1.5 : 1
Z	39	52	0.8 : 1

Table 73. Pig: Sexing: Female to male ratios based on the morphology of the mandibular canine teeth by chronological phase

* Includes one probable male specimen

Element/Phase	T-V			W			X			X-Y			Y			Y-Z			Z		
	n	butch	*%butch*	n	butch	*%butch*	n	butch	*%butch*	n	butch	*%butch*	n	butch	*%butch*	n	butch	*%butch*	n	butch	*%butch*
Zygomaticus																					
Mandible	5			113	13	*11.5*	2	1	*50.0*	76	6	*7.9*	241	37	*15.4*	130	13	*10.0*	397	32	*8.1*
Scapula	2			42	7	*16.7*	1			22	4	*18.2*	74	24	*32.4*	55	17	*30.9*	136	45	*33.1*
Humerus	1			28	5	*17.9*				25	3	*12.0*	74	10	*13.5*	24	4	*16.7*	121	27	*22.3*
Radius	5			29	2	*6.9*	1			18	3	*16.7*	57	9	*15.8*	29	3	*10.3*	79	7	*8.9*
Metacarpal	4			62			3			24			70			70			92		
Pelvis	4			32	3	*9.4*	1			15	3	*20.0*	42	8	*19.0*	37	6	*16.2*	77	20	*26.0*
Femur	9			36	2	*5.6*	2			22	5	*22.7*	66	4	*6.1*	33	2	*6.1*	92	10	*10.9*
Tibia	3			47			1			31	1	*3.2*	69	8	*11.6*	40	2	*5.0*	119	13	*10.9*
Astragalus	1			29	2	*6.9*				27	1	*3.7*	50	7	*14.0*	27	2	*7.4*	90	8	*8.9*
Calcaneum	8	1	*12.5*	55	3	*5.5*	2	1	*50.0*	24			83	7	*8.4*	39	3	*7.7*	95	6	*6.3*
Metatatarsal	6			21			4			19			43	2	*4.7*	49			99	1	*1.0*
First phalange	6			84			4			35			129			60	1	*1.7*	176	4	*2.3*
Total	*54*	*1*	*1.9*	*578*	*37*	*6.4*	*21*	*2*	*9.5*	*338*	*26*	*7.7*	*998*	*116*	*11.6*	*593*	*53*	*8.9*	*1573*	*173*	*11.0*

Table 74. Pig: Butchery: Frequencies of butchery marks by anatomical element and chronological phase (NISP)

Phase	Type	ZY	MD	SC	HU	RA	MC	PE	FE	TI	AS	CA	MT	PH
	Chopped											1		
	Cut													
T-V	Chopped & cut													
	Sawn													
	Total											*1*		
	Chopped		12	7	4	2		3	2		1	3		
	Cut		1		1						1			
W	Chopped & cut													
	Sawn													
	Total		*13*	*7*	*5*	*2*		*3*	*2*		*2*	*3*		
	Chopped		1									1		
	Cut													
X	Chopped & cut													
	Sawn													
	Total		*1*									*1*		
	Chopped		5	2	2	3		2	4	1				
	Cut		1	1				1	1		1			
X-Y	Chopped & cut			1	1									
	Sawn													
	Total		*6*	*4*	*3*	*3*		*3*	*5*	*1*	*1*			
	Chopped		29	18	3	8		6	1	8	1	4	1	
	Cut		4	5	7	1		2	3		6	3	1	
Y	Chopped & cut		4	1										
	Sawn													
	Total		*37*	*24*	*10*	*9*		*8*	*4*	*8*	*7*	*7*	*2*	
	Chopped		12	12	2	2		2	1	1				
	Cut			4	2	1		2	1	1	2	3		1
Y-Z	Chopped & cut													
	Sawn													
	Total		*13*	*17*	*4*	*3*		*6*	*2*	*2*	*2*	*3*		*1*
	Chopped		26	32	12	6		11	5	8	1	1		
	Cut		5	13	14			5	4	5	7	5	1	4
Z	Chopped & cut		1		1	1		3	1					
	Sawn							1						
	Total		*32*	*45*	*27*	*7*		*20*	*10*	*13*	*8*	*6*	*1*	*4*

Table 75. Pig: Butchery: Butchery mark type (chop, cut and saw) by anatomical element and chronological phase (NISP)

Phase/Stage/Element		ZY		MD		SC		HU		RA		MC		PE		FE		TI		AS		CA		MT		PH	
		n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%
	Skinned																										
	Dismembered			1	*7.7*			4	*80.0*					1	*33.3*	2	*66.7*	1	*100.0*	2	*100.0*	2	*66.7*				
W	Filleted																										
	Other			12		7		1		2				2	*66.7*	1	*33.3*					1	*33.3*				
	Total			*13*		*7*		*5*		*2*				*3*		*3*		*1*		*2*		*3*					
	Skinned																										
	Dismembered			1	*16.7*			2	*66.7*	2	*50.0*					4	*80.0*	1	*100.0*	1	*100.0*			1	*100.0*		
X-Y	Filleted																										
	Other			5	*83.3*	4	*100.0*	1	*33.3*	2	*50.0*			3	*100.0*	1	*20.0*										
	Total			*6*		*4*		*3*		*4*				*3*		*5*		*1*		*1*				*1*			
	Skinned																										
	Dismembered			5	*13.5*			7	*63.6*	6	*66.7*			1	*12.5*	1	*16.7*	4	*44.4*	5	*62.5*	4	*57.1*	2	*100.0*		
Y	Filleted															3	*50.0*										
	Other	32	*86.5*	24	*100.0*	4	*36.4*	3	*33.3*			7	*87.5*	2	*33.3*	5	*55.6*	3	*37.5*	3	*42.9*						
	Total	*37*		*24*		*11*		*9*				*8*		*6*		*9*		*8*		*7*		*2*					
	Skinned																									1	*100.0*
	Dismembered	3	*23.1*	1	*5.6*	3	*60.0*	2	*50.0*			1	*16.7*	1	*100.0*	1	*50.0*	2	*100.0*	3	*100.0*	1	*100.0*				
Y-Z	Filleted					2	*40.0*	1	*25.0*							1	*50.0*										
	Other	10	*76.9*	17	*94.4*			1	*25.0*			5	*83.3*														
	Total	*13*		*18*		*5*		*4*				*6*		*1*		*2*		*2*		*3*		*1*		*1*			
	Skinned																									3	*100.0*
	Dismembered	6	*18.8*	1	*2.1*	21	*63.6*	5	*71.4*					5	*41.7*	8	*61.5*	7	*87.5*	6	*60.0*	2	*100.0*				
Z	Filleted					4	*12.1*							1	*8.3*	1	*7.7*										
	Other	26	*81.3*	47	*97.9*	8	*24.2*	2	*28.6*					6	*50.0*	4	*30.8*	1	*12.5*	4	*40.0*					1	*25.0*
	Total	*32*		*48*		*33*		*7*						*12*		*13*		*8*		*10*		*2*				*4*	

Table 76. Pig: Butchery: Carcase reduction stages (based on Binford 1981: 98-133, Figures 4.06-4.38, Table 4.04) by anatomical element and chronological phase

Element	Measurement	Number	Minimum	Maximum	Mean	Standard deviation	Coefficient of variation
dP4	W	18	7.5	9.0	8.2	0.4	4.9
M1	WA	30	8.8	13.2	9.8	0.8	8.2
M1	WP	29	9.5	13.2	10.6	0.8	7.5
M2	WA	37	9.6	15.4	12.9	1.0	7.8
M2	WP	38	10.3	15.0	13.4	0.9	6.7
M3	L	13	29.3	37.0	33.3	1.8	5.4
M3	WA	20	14.2	16.3	15.0	0.5	3.3
M3	7	21	13.2	16.6	14.4	0.8	5.6
HU	HTC	10	16.8	21.6	19.1	1.3	6.8

Table 77. Pig: Biometry: Phase W: Summary statistics (minimum, maximum, mean, standard deviation and coefficient of variation) of measurements with 10 or more cases

Element	Measurement	Number	Minimum	Maximum	Mean	Standard deviation	Coefficient of variation
M1	WA	21	9.2	12.9	10.1	0.8	7.9
M1	WP	20	9.8	13.5	10.8	0.8	7.4
M2	WA	19	11.0	15.4	12.9	1.0	7.8
M2	WP	19	11.1	14.7	13.4	0.9	6.7
M3	L	10	27.8	35.4	32.4	2.4	7.4
M3	WA	17	12.7	16.3	14.6	0.8	5.5
M3	7	17	12.7	15.9	14.0	0.9	6.4
AS	GLl	10	37.3	49.0	41.5	3.8	9.2
AS	GLm	10	35.5	45.8	39.5	3.8	9.6

Table 78. Pig: Biometry: Phase X-Y: Summary statistics (minimum, maximum, mean, standard deviation and coefficient of variation) of measurements with 10 or more cases

Element	Measurement	Number	Minimum	Maximum	Mean	Standard deviation	Coefficient of variation
dP4	L	32	16.5	21.4	19.2	1.1	5.7
dP4	W	44	7.2	9.2	8.4	0.4	4.8
M1	WA	65	8.8	11.0	9.9	0.5	5.1
M1	WP	61	9.3	11.7	10.6	0.5	4.7
M2	WA	61	11.3	14.2	12.7	0.7	5.5
M2	WP	59	11.7	14.9	13.4	0.8	6.0
M3	L	22	30.0	38.2	33.6	2.1	6.3
M3	WA	47	13.7	17.5	14.9	0.8	5.4
M3	7	45	12.7	16.0	14.3	0.8	5.6
HU	BT	24	30.1	42.6	33.2	2.7	8.1
HU	HTC	24	16.6	25.4	19.2	1.8	9.4
TI	Bd	22	26.4	36.8	30.0	2.4	8.0
TI	Dd	19	25.2	34.2	27.3	2.5	9.2
AS	GLl	27	37.2	48.9	41.1	2.8	6.8
AS	GLm	27	34.1	44.7	37.9	2.5	6.6

Table 79. Pig: Biometry: Phase Y: Summary statistics (minimum, maximum, mean, standard deviation and coefficient of variation) of measurements with 10 or more cases

Element	Measurement	Number	Minimum	Maximum	Mean	Standard deviation	Coefficient of variation
dP4	W	21	7.6	9.0	8.4	0.4	4.8
M1	WA	45	9.0	13.4	10.0	0.8	8.0
M1	WP	45	9.9	13.7	10.8	0.7	6.5
M2	WA	44	11.3	14.6	12.7	0.7	5.5
M2	WP	43	12.4	14.6	13.3	0.6	4.5
M3	L	15	32.9	43.8	36.1	3.1	8.6
M3	WA	28	12.8	19.9	15.3	1.4	9.2
M3	7	28	12.8	19.3	14.8	1.2	8.1
TI	Bd	16	26.8	40.2	31.0	3.8	12.3
TI	Dd	14	25.2	34.8	27.9	2.8	10.0
AS	GLl	14	38.1	51.7	43.6	4.7	10.8
AS	GLm	14	35.5	47.7	40.3	3.8	9.4

Table 80. Pig: Biometry: Phase Y-Z: Summary statistics (minimum, maximum, mean, standard deviation and coefficient of variation) of measurements with 10 or more cases

Element	Measurement	Number	Minimum	Maximum	Mean	Standard deviation	Coefficient of variation
dP4	L	48	17.2	21.4	19.4	0.9	4.6
dP4	W	71	7.5	9.6	8.5	0.4	4.7
M1	WA	114	8.2	11.2	9.9	0.6	6.1
M1	WP	114	9.3	12.2	10.6	0.5	4.7
M2	WA	113	10.2	15.2	12.8	0.7	5.5
M2	WP	111	11.0	15.9	13.4	0.8	6.0
M3	L	58	26.2	42.2	33.2	3.1	9.3
M3	WA	89	12.8	12.8	15.0	1.0	6.7
M3	7	91	12.0	17.8	14.3	0.9	6.3
HU	BT	43	29.8	44.1	33.5	3.6	10.7
HU	HTC	53	16.6	25.6	19.6	2.2	11.2
TI	Bd	55	24.8	36.9	29.6	2.6	8.8
TI	Dd	54	18.6	32.7	26.3	2.4	9.1
AS	GLl	49	35.4	53.1	41.6	3.8	9.1
AS	GLm	49	31.9	47.6	38.1	3.3	8.7

Table 81. Pig: Biometry: Phase Z: Summary statistics (minimum, maximum, mean, standard deviation and coefficient of variation) of measurements with 10 or more cases

Element/Measurement	Phase	Number	Mean	Skewness	Standard error	Sk/Std.Er
dP4 W	W	18	8.2	0.20	0.54	0.4
dP4 W	Y	44	8.4	-0.19	0.36	-0.5
dP4 W	Y-Z	21	8.4	-0.44	0.50	-0.9
dP4 W	Z	71	8.5	0.62	0.28	2.2
M1 WA	W	29	9.7	0.10	0.43	0.2
M1 WA	X-Y	20	9.9	0.35	0.51	0.7
M1 WA	Y	65	9.9	-0.08	0.30	-0.3
M1 WA	Y-Z	43	9.9	0.13	0.36	0.4
M1 WA	Z	114	9.9	0.08	0.23	0.4
M2 WA	W	36	12.9	-1.28	0.39	-3.3
M2 WA	X-Y	18	12.7	-0.37	0.54	-0.7
M2 WA	Y	61	12.7	0.28	0.31	0.9
M2 WA	Y-Z	44	12.7	0.34	0.36	1.0
M2 WA	Z	112	12.8	-0.36	0.23	-1.6
M3 WC	W	21	14.4	1.15	0.50	2.3
M3 WC	X-Y	17	14.0	0.33	0.55	0.6
M3 WC	Y	45	14.3	0.21	0.35	0.6
M3 WC	Y-Z	27	14.7	0.05	0.45	0.1
M3 WC	Z	91	14.3	0.85	0.25	3.4
HU HTC	W	10	19.1	0.14	0.69	0.2
HU HTC	Y	23	19.0	0.01	0.48	0.0
HU HTC	Z	47	19.0	0.89	0.35	2.6
TI Bd	Y	21	29.7	1.23	0.50	2.5
TI Bd	Y-Z	13	29.4	0.35	0.62	0.6
TI Bd	Z	53	29.4	0.60	0.33	1.8
AS GLI	X-Y	10	41.5	1.05	0.69	1.5
AS GLI	Y	27	41.1	0.71	0.45	1.6
AS GLI	Y-Z	11	41.4	0.20	0.66	0.3
AS GLI	Z	45	40.7	0.05	0.35	0.1
Teeth width	W	103	0.00	-0.14	0.24	-0.6
Teeth width	X-Y	64	0.00	-0.04	0.30	-0.1
Teeth width	Y	217	0.00	0.04	0.17	0.3
Teeth width	Y-Z	135	0.00	-0.23	0.21	-1.1
Teeth width	Z	387	0.00	-0.13	0.12	-1.1
Post-cranial width	W	15	0.00	0.82	0.58	1.4
Post-cranial width	X-Y	11	0.01	0.81	0.66	1.2
Post-cranial width	Y	43	0.01	0.10	0.36	0.3
Post-cranial width	Y-Z	18	0.01	0.23	0.54	0.4
Post-cranial width	Z	90	0.00	0.41	0.25	1.6
Teeth length	W	21	0.00	-0.34	0.50	-0.7
Teeth length	X-Y	16	-0.01	-0.84	0.56	-1.5
Teeth length	Y	54	0.00	-0.26	0.32	-0.8
Teeth length	Y-Z	21	0.01	0.33	0.50	0.7
Teeth length	Z	104	0.00	-0.43	0.24	-1.8
Post-cranial length	W	18	0.00	-0.09	0.54	-0.2
Post-cranial length	X-Y	17	0.00	0.62	0.55	1.1
Post-cranial length	Y	50	0.00	0.19	0.34	0.6
Post-cranial length	Y-Z	17	0.02	0.51	0.55	0.9
Post-cranial length	Z	93	0.00	0.45	0.25	1.8

Table 82. Pig: Biometry: Skewness values for selected measurements and log ratios to highlight unusual distributions

Element/Measurement	Phase	Bone ID	Value	Log ratio
M1 WA	W	13554	13.2	n/a
M1 WA	X-Y	3304	12.9	n/a
M1 WA	Y-Z	80	13.4	n/a
M1 WA	Y-Z	18213	12.7	n/a
M2 WA	W	13554	15.4	n/a
M2 WA	X-Y	3304	15.4	n/a
M2 WA	Z	524	15.2	n/a
M3 WA	Y-Z	21056	19.3	n/a
HU HTC	X-Y	17609	24.4	n/a
HU HTC	Y	7808	25.4	n/a
HU HTC	Z	2320	25.4	n/a
HU HTC	Z	12019	25.6	n/a
HU HTC	Z	15028	24.4	n/a
HU HTC	Z	20220	24.7	n/a
HU HTC	Z	20221	23.9	n/a
HU HTC	Z	20222	24.8	n/a
AS GLI	Y-Z	4850	51.7	n/a
AS GLI	Y-Z	12795	51.1	n/a
AS GLI	Y-Z	23657	51.0	n/a
AS GLI	Z	3029	50.5	n/a
AS GLI	Z	5366	50.9	n/a
AS GLI	Z	12841	53.1	n/a
AS GLI	Z	23565	49.5	n/a
TI Bd	Y	11597	36.8	n/a
TI Bd	Y-Z	5345	36.4	n/a
TI Bd	Y-Z	12816	40.2	n/a
TI Bd	Y-Z	17078	37.2	n/a
TI Bd	Z	12806	36.9	n/a
TI Bd	Z	12824	36.5	n/a
M1 width log	W	13554	13.2	0.13
M1 width log	X-Y	3304	12.9	0.12
M1 width log	Y-Z	80	13.4	0.14
M1 width log	Y-Z	18213	12.7	0.11
M2 width log	W	9915	9.6	-0.13
M3 width log	Y-Z	21056	19.3	0.12
HU width log	X-Y	17609	39.6	0.09
HU width log	Y	7808	42.6	0.12
HU width log	Z	2320	43.5	0.13
HU width log	Z	12019	41.7	0.11
HU width log	Z	15028	41.3	0.11
HU width log	Z	20220	41.8	0.11
HU width log	Z	20221	44.1	0.14
TI width log	Y	11597	36.8	0.11
TI width log	Y	13259	35.5	0.09
TI width log	Y-Z	5345	36.4	0.10
TI width log	Y-Z	12816	40.2	0.14
TI width log	Y-Z	17078	37.2	0.11
TI width log	Z	12806	36.9	0.11
TI width log	Z	12824	36.5	0.10
TI width log	Z	23564	35.2	0.09
M3 length log	Y-Z	7265	43.8	0.12
M3 length log	Y-Z	12836	41.6	0.10
M3 length log	Z	9600	41.9	0.10
M3 length log	Z	12847	42.2	0.10
HU length log	X-Y	17609	24.4	0.11
HU length log	Y	7808	25.4	0.12
HU length log	Z	2320	25.4	0.12
HU length log	Z	12019	25.6	0.13
HU length log	Z	15028	24.4	0.11

Table 83. Pig: Biometry: Outliers excluded from skewness value calculations

Element/Measurement	Phase	Bone ID	Value	Log ratio
HU length log	Z	20220	24.7	0.11
HU length log	Z	20221	23.9	0.10
HU length log	Z	20222	24.8	0.11
AS length log	Y-Z	4850	51.7	0.11
AS length log	Y-Z	12795	51.1	0.10
AS length log	Y-Z	23657	51.0	0.10
AS length log	Z	3029	50.5	0.10
AS length log	Z	5366	50.9	0.10
AS length log	Z	12841	53.1	0.12
TI depth log	W	10871	36.8	0.14
TI depth log	Y-Z	12816	34.8	0.12
TI depth log	Z	18311	18.6	-0.16

Table 83 cont. Pig: Biometry: Outliers excluded from skewness value calculations

Element/Phase	T-V		W		X		X-Y		Y		Y-Z		Z	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%
Zygomaticus	3	*17.6*	16	*16.2*			2	*6.5*	15	*23.8*	8	*16.3*	14	*11.0*
Horncore	1	*5.9*	10	*10.1*			4	*12.9*	12	*19.0*	8	*16.3*	17	*13.4*
Mandible	17	*100.0*	90	*90.9*	6	*100.0*	26	*83.9*	63	*100.0*	49	*100.0*	127	*100.0*
Scapula	7	*41.2*	37	*37.4*			8	*25.8*	39	*61.9*	30	*61.2*	46	*36.2*
Humerus	5	*29.4*	46	*46.5*	3	*50.0*	20	*64.5*	46	*73.0*	36	*73.5*	70	*55.1*
Radius	6	*35.3*	40	*40.4*	1	*16.7*	11	*35.5*	29	*46.0*	22	*44.9*	51	*40.2*
Metacarpal	9	*52.9*	81	*81.8*	5	*83.3*	30	*96.8*	46	*73.0*	43	*87.8*	74	*58.3*
Pelvis	7	*41.2*	29	*29.3*	3	*50.0*	7	*22.6*	28	*44.4*	19	*38.8*	48	*37.8*
Femur	3	*17.6*	21	*21.2*	2	*33.3*	5	*16.1*	18	*28.6*	8	*16.3*	23	*18.1*
Tibia	9	*52.9*	99	*100.0*	4	*66.7*	31	*100.0*	42	*66.7*	42	*85.7*	82	*64.6*
Astragalus	4	*23.5*	39	*39.4*	2	*33.3*	15	*48.4*	38	*60.3*	20	*40.8*	45	*35.4*
Calcaneum	6	*35.3*	45	*45.5*	1	*16.7*	14	*45.2*	26	*41.3*	15	*30.6*	49	*38.6*
Metatarsal	11	*64.7*	70	*70.7*	5	*83.3*	23	*74.2*	48	*76.2*	28	*57.1*	70	*55.1*
First phalange	3	*17.6*	23	*23.2*	1	*16.7*	6	*19.4*	17	*27.0*	7	*14.3*	23	*18.1*
Total	*91*		*646*		*33*		*202*		*467*		*335*		*739*	

Table 84. Sheep/goat: Anatomical representation: MNE by chronological phase

Element/Phase	Dump	
	n	%
Zygomaticus	12	*27.3*
Horncore	6	*13.6*
Mandible	20	*45.5*
Scapula	16	*36.4*
Humerus	20	*45.5*
Radius	17	*38.6*
Metacarpal	37	*84.1*
Pelvis	10	*22.7*
Femur	13	*29.5*
Tibia	44	*100.0*
Astragalus	17	*38.6*
Calcaneum	19	*43.2*
Metatarsal	26	*59.1*
First phalange	12	*27.3*
Total	*269*	

Table 85. Sheep/goat: Anatomical representation: Phase W: MNE by feature type (with 100 or more cases)

Element/Phase	Cut fill	
	n	%
Zygomaticus	2	*6.5*
Horncore	2	*6.5*
Mandible	8	*25.8*
Scapula	6	*19.4*
Humerus	17	*54.8*
Radius	10	*32.3*
Metacarpal	29	*93.5*
Pelvis	7	*22.6*
Femur	5	*16.1*
Tibia	31	*100.0*
Astragalus	13	*41.9*
Calcaneum	12	*38.7*
Metatarsal	22	*71.0*
First phalange	5	*16.1*
Total	*169*	

Table 86. Sheep/goat: Anatomical representation: Phase X-Y: MNE by feature type (with 100 or more cases)

Element/Phase	Dump	
	n	%
Zygomaticus	7	*35.0*
Horncore	3	*15.0*
Mandible	14	*70.0*
Scapula	12	*60.0*
Humerus	16	*80.0*
Radius	13	*65.0*
Metacarpal	20	*100.0*
Pelvis	10	*50.0*
Femur	8	*40.0*
Tibia	17	*85.0*
Astragalus	14	*70.0*
Calcaneum	9	*45.0*
Metatarsal	14	*70.0*
First phalange	6	*30.0*
Total	*163*	

Table 87. Sheep/goat: Anatomical representation: Phase Y: MNE by feature type (with 100 or more cases)

Element/Phase	Surface	
	n	%
Zygomaticus		
Horncore	2	*8.7*
Mandible	7	*30.4*
Scapula	6	*26.1*
Humerus	16	*69.6*
Radius	9	*39.1*
Metacarpal	23	*100.0*
Pelvis	8	*34.8*
Femur		
Tibia	13	*56.5*
Astragalus	5	*21.7*
Calcaneum	9	*39.1*
Metatarsal	13	*56.5*
First phalange	3	*13.0*
Total	*114*	

Table 88. Sheep/goat: Anatomical representation: Phase Y-Z: MNE by feature type (with 100 or more cases)

Element/Phase	Dump	
	n	%
Zygomaticus	4	*14.3*
Horncore	8	*28.6*
Mandible	16	*57.1*
Scapula	10	*35.7*
Humerus	22	*78.6*
Radius	17	*60.7*
Metacarpal	23	*82.1*
Pelvis	10	*35.7*
Femur	10	*35.7*
Tibia	28	*100.0*
Astragalus	18	*64.3*
Calcaneum	15	*53.6*
Metatarsal	25	*89.3*
First phalange	10	*35.7*
Total	*216*	

Table 89. Sheep/goat: Anatomical representation: Phase Z: MNE by feature type (with 100 or more cases)

Phase/State		Neonates		Early (3-16 mth)		Middle (15-36 mth)		Late (36-42 mth)	
		n	%	n	%	n	%	n	%
	Neonate	1	*1.2*						
	Post-neo	82	*98.8*						
T-V	Unfused			7	*14.0*	14	*53.8*	2	*33.3*
	Fusing			1	*2.0*	1	*3.8*	1	*16.7*
	Fused			42	*84.0*	11	*42.3*	3	*50.0*
	Neonate	15	*2.3*						
	Post-neo	649	*97.7*						
W	Unfused			27	*7.3*	85	*37.9*	37	*66.1*
	Fusing			2	*0.5*	3	*1.3*	1	*1.8*
	Fused			340	*92.1*	136	*60.7*	18	*32.1*
	Neonate								
	Post-neo	29	*100.0*						
X	Unfused			1	*4.8*			1	*50.0*
	Fusing								
	Fused			20	*95.2*	6	*100.0*	1	*50.0*
	Neonate	3	*1.5*						
	Post-neo	200	*98.5*						
X-Y	Unfused			3	*2.7*	23	*31.9*	11	*64.7*
	Fusing			1	*0.9*	2	*2.8*		
	Fused			107	*96.4*	47	*65.3*	6	*35.3*
	Neonate	28	*6.3*						
	Post-neo	441	*98.9*						
Y	Unfused			26	*9.4*	46	*39.0*	28	*60.9*
	Fusing			6	*2.2*			1	*2.2*
	Fused			245	*88.4*	72	*61.0*	17	*37.0*
	Neonate	8	*2.6*						
	Post-neo	305	*97.4*						
Y-Z	Unfused			12	*6.2*	31	*34.4*	12	*54.5*
	Fusing			4	*2.1*	2	*2.2*		
	Fused			177	*91.7*	57	*63.3*	10	*45.5*
	Neonate	22	*3.0*						
	Post-neo	704	*97.0*						
Z	Unfused			39	*9.0*	79	*36.7*	35	*61.4*
	Fusing			7	*1.6*	6	*2.8*		
	Fused			386	*89.4*	130	*60.5*	22	*38.6*

Table 90. Sheep/goat: Mortality profiles: Post-cranial epiphyseal fusion by chronological phase, based on Reitz & Wing's (1999: 76) combined summary of Schmid (1972: 75, Table 9) and Silver (1969: 264-265, Table A)

Age/Phase		T-V			W			X			X-Y			Y			Y-Z			Z	
	n	%n	curve	n	%n	curve	n	%n	curve	n	%n	curve	n	%n	curve	n	%n	curve	n	%n	curve
A	1.0	5.0	95.0	4.0	3.6	96.4			100.0			100.0	4.0	5.2	94.8			100.0	1.0	0.6	99.4
B	3.0	14.9	80.1	16.1	14.4	82.0	1.0	14.3	85.7			100.0	16.4	21.2	73.7	13.7	22.0	78.0	23.6	15.1	84.3
C	1.3	6.5	73.6	6.4	5.7	76.3			85.7	2.3	6.9	93.1	10.9	14.1	59.6	3.4	5.4	72.6	18.1	11.6	72.7
D	5.7	28.4	45.2	24.9	22.2	54.1	2.4	34.3	51.4			93.1	18.4	23.8	35.8	11.3	18.1	54.5	37.1	23.7	49.0
E	3.8	18.9	26.3	17.2	15.4	38.7			51.4	24.6	74.3	18.8	10.2	13.2	22.6	17.6	28.2	26.3	38.6	24.7	24.3
F			26.3	22.3	19.9	18.8			51.4	2.1	6.3	12.5	10.2	13.2	9.4	9.9	15.9	10.4	15.4	9.9	14.8
G	2.8	13.9	12.4	19.0	17.0	1.8	3.6	51.4		4.1	12.4		7.2	9.3		6.5	10.4		12.6	8.1	6.7
H	2.5	12.4		2.1	1.9														9.9	6.3	
I																					

Table 91. Sheep/goat: Mortality profiles: Mandibular tooth eruption and wear by chronological phase, based on (Payne 1973: 299)

Phase/Sex	Female	Male	Ratio
T-V	1	1	1.0 : 1
W	11	3	3.7 : 1
X		1	0.0 : 1
Y	3	6	0.5 : 1
Y-Z	2	1	2.0 : 1
Z	3	4	0.8 : 1

Table 92. Sheep/goat: Sexing: Female to male ratios based on the morphology of the pelvis, using the ilio-pubic ridge and median acetabular border, by chronological phase

Element/Phase	T-V			W			X			X-Y			Y			Y-Z			Z		
	n	butch	*%butch*	n	butch	*%butch*	n	butch	*%butch*	n	butch	*%butch*	n	butch	*%butch*	n	butch	*%butch*	n	butch	*%butch*
Horncore	1			10	2	20.0				4			12	2	16.7	8	1	12.5	17	1	5.9
Zygomaticus	3			16						2			15			8			14	1	7.1
Mandible	19	1	5.3	83	3	3.6	6			16			55			45			106	1	0.9
Scapula	7			37	3	8.1				8			39	7	17.9	30	6	20.0	46	7	15.2
Humerus	5	1	20.0	46	13	28.3	3	1	33.3	20	7	35.0	46	9	19.6	36	5	13.9	70	17	24.3
Radius	8			59	5	8.5	1	1	100.0	18			40	3	7.5	32	2	6.3	70	10	14.3
Metacarpal	9			92			5	1	20.0	32	1	3.1	48	2	4.2	47	1	2.1	81	2	2.5
Pelvis	7			29	2	6.9	3			7	1	14.3	28	5	17.9	19	4	21.1	48	11	22.9
Femur	4	1	25.0	32	3	9.4	2			7			27	2	7.4	9	1	11.1	37	13	35.1
Tibia	9	2	22.2	99	9	9.1	4			31			42	2	4.8	42	2	4.8	82	10	12.2
Astragalus	4	1	25.0	39	4	10.3	2			15	2	13.3	38	1	2.6	20	2	10.0	45	11	24.4
Calcaneum	6			45	2	4.4	1			14	1	7.1	26	2	7.7	15	4	26.7	49	4	8.2
Metatatarsal	12			76	2	2.6	5			29	3	10.3	55	2	3.6	34			88	7	8.0
First phalange	10			93			4			23	1	4.3	69			29			91		
Total	104	6	5.8	756	48	6.3	36	3	8.3	226	16	7.1	540	37	6.9	374	28	7.5	844	95	11.3

Table 93. Sheep/goat: Butchery: Frequencies of butchery marks by anatomical element and chronological phase (NISP)

Phase	Type	HC	ZY	MD	SC	HU	RA	MC	PE	FE	TI	AS	CA	MT	PH
	Chopped					1					2				
	Cut			1						1		1			
T-V	Chopped & cut														
	Sawn														
	Total			*1*		*1*				*1*	*2*	*1*			
	Chopped	2		3	2	9	5		2	3	7			1	
	Cut				1	2					1	4	2	1	
W	Chopped & cut					2									
	Sawn										1				
	Total	*2*		*3*	*3*	*13*	*5*		*2*	*3*	*9*	*4*	*2*	*2*	
	Chopped						1	1							
	Cut					1									
X	Chopped & cut														
	Sawn														
	Total					*1*	*1*	*1*							
	Chopped					2							1		1
	Cut					5		1				2		3	
X-Y	Chopped & cut								1						
	Sawn														
	Total					*7*		*1*	*1*			*2*	*1*	*3*	*1*
	Chopped	2			7	4	3		4	1	1			2	
	Cut					5		1	1	1	1	1	2		
Y	Chopped & cut							1							
	Sawn														
	Total	*2*				*7*	*9*	*3*	*2*	*5*	*2*	*2*	*1*	*2*	*2*
	Chopped	1				4	3	2	1	4	1	1			
	Cut					1	1					1	2	4	
Y-Z	Chopped & cut					1	1								
	Sawn														
	Total	*1*				*6*	*5*	*2*	*1*	*4*	*1*	*2*	*2*	*4*	
	Chopped	1	1			4	7	7		9	8	7		1	3
	Cut				1	3	9	3	2	2	5	3	11	3	2
Z	Chopped & cut						1								2
	Sawn														
	Total	*1*	*1*	*1*		*7*	*17*	*10*	*2*	*11*	*13*	*10*	*11*	*4*	*7*

Table 94. Sheep/goat: Butchery: Butchery mark type (chop, cut and saw) by anatomical element and chronological phase (NISP)

Phase/Stage/Element		HC		ZY		MD		SC		HU		RA		MC		PE		FE		TI		AS		CA		MT		PH	
		n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%
W	Skinned																												
	Dismembered					1	*33.3*			9	*60.0*							1	*33.3*	3	*30.0*	4	*100.0*	1	*50.0*	1	*50.0*		
	Filleted									1	*6.7*									1	*10.0*								
	Other	2	*100.0*			2	*66.7*	3	*100.0*	5	*33.3*	5	*100.0*			2	*100.0*	2	*66.7*	6	*60.0*			1	*50.0*	1	*50.0*		
	Total	*2*				*3*		*3*		*15*		*5*				*2*		*3*		*10*		*4*		*2*		*2*			
X-Y	Skinned																											1	*100.0*
	Dismembered									7	*87.5*			1	*100.0*							2	*100.0*			2	*66.7*		
	Filleted																												
	Other									1	*12.5*					1	*100.0*							1	*100.0*	1	*33.3*		
	Total									*8*				*1*		*1*						*2*		*1*		*3*		*1*	
Y	Skinned																												
	Dismembered									8	*88.9*	1	*33.3*	2	*66.7*	1	*20.0*			1	*50.0*	1	*100.0*	2	*100.0*				
	Filleted									1	*11.1*							1	*50.0*										
	Other	2	*100.0*			7	*100.0*					2	*66.7*	1	*33.3*	4	*80.0*	1	*50.0*	1	*50.0*					2	*100.0*		
	Total	*2*				*7*		*9*				*3*		*3*		*5*		*2*		*2*		*1*		*2*		*2*			
Y-Z	Skinned																												
	Dismembered							4	*66.7*	1	*66.7*			1	*25.0*	1	*100.0*	1	*50.0*	2	*100.0*	4	*100.0*						
	Filleted																												
	Other	1	*100.0*			6	*100.0*	2	*33.3*	2	*33.3*	1	*100.0*	3	*75.0*			1	*50.0*										
	Total	*1*				*6*		*6*		*3*		*1*		*4*		*1*		*2*		*2*		*4*							
Z	Skinned																												
	Dismembered			1	*100.0*			14	*82.4*	6	*50.0*	2	*66.7*	1	*9.1*	6	*46.2*	3	*27.3*	7	*63.6*	3	*75.0*	4	*50.0*				
	Filleted							1	*5.9*	1	*8.3*					4	*30.8*	3	*27.3*										
	Other	1	*100.0*			7	*100.0*	2	*11.8*	5	*41.7*	1	*33.3*	10	*90.9*	3	*23.1*	5	*45.5*	4	*36.4*	1	*25.0*	4	*50.0*				
	Total	*1*		*1*		*7*		*17*		*12*		*3*		*11*		*13*		*11*		*11*		*4*		*8*					

Table 95. Sheep/goat: Butchery: Carcase reduction stages (based on Binford 1981: 98-133, Figures 4.06-4.38, Table 4.04) by anatomical element and chronological phase

Element	Measurement	Number	Minimum	Maximum	Mean	Standard deviation	Coefficient of variation
dP4	B	26	5.4	6.6	6.0	0.3	4.9
M3	L	28	18.5	23.3	20.9	1.2	5.7
HU	HTC	32	10.4	13.7	12.5	0.8	6.1
RA	BFp	14	23.4	29.5	25.9	1.9	7.3
MC	b	17	9.3	11.3	10.2	0.5	5.3
TI	Dd	40	16.4	21.1	18.4	1.1	5.8
AS	Dl	27	12.9	18	14.7	1.2	7.8
CA	C+D	23	18.4	22.5	20.3	1.0	4.8
MT	b	10	8.7	10.3	9.4	0.5	5.6

Table 96. Sheep/goat: Biometry: Phase W: Summary statistics (minimum, maximum, mean, standard deviation and coefficient of variation) of measurements with 10 or more cases

Element	Measurement	Number	Minimum	Maximum	Mean	Standard deviation	Coefficient of variation
M3	L	18	18.7	22.8	20.6	1.2	5.8
HU	HTC	13	10.6	15.6	13.0	1.4	10.5
TI	Dd	16	17	21.4	18.6	1.3	7.0

Table 97. Sheep/goat: Biometry: Phase X-Y: Summary statistics (minimum, maximum, mean, standard deviation and coefficient of variation) of measurements with 10 or more cases

Element	Measurement	Number	Minimum	Maximum	Mean	Standard deviation	Coefficient of variation
dP4	B	26	5.1	6.6	6.0	0.3	5.8
M3	L	14	19	22.9	21.6	1.2	5.7
HU	HTC	30	11.3	14.7	13.0	0.9	7.1
RA	BFp	12	24.3	28.3	26.4	1.1	4.0
TI	Dd	22	17.5	21.4	19.0	1.2	6.1
AS	Dl	28	13.5	16	14.8	0.7	4.6
CA	C+D	12	18.9	24.2	21.5	1.5	6.9
MT	b	11	8.5	10.8	9.5	0.7	7.9

Table 98. Sheep/goat: Biometry: Phase Y: Summary statistics (minimum, maximum, mean, standard deviation and coefficient of variation) of measurements with 10 or more cases

Element	Measurement	Number	Minimum	Maximum	Mean	Standard deviation	Coefficient of variation
dP4	B	14	5.6	6.8	6.3	0.3	5.4
M3	L	17	18.9	24	21.2	1.5	6.9
HU	HTC	17	11.3	15.1	13.1	1.1	8.1
RA	BFp	15	22.1	28.6	25.8	1.9	7.3
TI	Dd	20	16.4	25.2	19.5	1.9	9.6
AS	Dl	15	13.1	15.9	14.3	0.9	6.2

Table 99. Sheep/goat: Biometry: Phase Y-Z: Summary statistics (minimum, maximum, mean, standard deviation and coefficient of variation) of measurements with 10 or more cases

Element	Measurement	Number	Minimum	Maximum	Mean	Standard deviation	Coefficient of variation
dP4	B	39	5.7	7.1	6.1	0.3	5.2
M3	L	43	19.1	23.5	21.1	0.9	4.2
HU	HTC	51	10.8	16.9	13.1	1.1	8.7
RA	BFp	36	22.9	33.9	26.3	2.1	7.9
MC	b	17	9.8	11.8	10.8	0.7	6.3
TI	Dd	46	15.8	26.6	19.1	1.8	9.6
AS	Dl	34	12.7	16.8	14.9	1.0	7.0
CA	C+D	23	18.6	22.8	20.5	1.1	5.3
MT	b	17	8.5	11.4	9.7	0.7	7.4

Table 100. Sheep/goat: Biometry: Phase Z: Summary statistics (minimum, maximum, mean, standard deviation and coefficient of variation) of measurements with 10 or more cases

Element/Measurement	Phase	Number	Mean	Skewness	Standard error	Sk/Std.Er
dP4 W	W	31	6.1	0.70	0.42	1.7
dP4 W	Y	33	6.1	0.34	0.41	0.8
dP4 W	Y-Z	18	6.3	-0.21	0.54	-0.4
dP4 W	Z	45	6.2	0.53	0.35	1.5
HU HTC	W	32	12.5	-0.38	0.41	-0.9
HU HTC	X-Y	13	13.0	-0.24	0.62	-0.4
HU HTC	Y	30	13.0	-0.26	0.43	-0.6
HU HTC	Y-Z	17	13.1	0.46	0.55	0.8
HU HTC	Z	52	13.1	0.49	0.33	1.5
TI Bd	W	46	23.9	0.40	0.35	1.2
TI Bd	X-Y	16	24.4	0.68	0.56	1.2
TI Bd	Y	28	24.4	-0.11	0.44	-0.3
TI Bd	Y-Z	24	24.6	0.00	0.47	0.0
TI Bd	Z	48	24.4	0.41	0.34	1.2
AS GLl	W	28	26.0	0.22	0.44	0.5
AS GLl	Y	31	26.8	0.69	0.42	1.6
AS GLl	Y-Z	16	26.4	1.73	0.56	3.1
AS GLl	Z	34	26.8	0.23	0.40	0.6
MT Bp	W	31	18.2	-0.02	0.42	-0.1
MT Bp	X-Y	10	18.7	-0.16	0.69	-0.2
MT Bp	Y	27	18.8	0.53	0.45	1.2
MT Bp	Y-Z	12	18.7	0.87	0.64	1.4
MT Bp	Z	44	19.3	-0.01	0.36	0.0
Width	T-V	16	0.00	-0.51	0.56	-0.9
Width	W	144	0.00	0.17	0.20	0.8
Width	X-Y	52	0.00	0.30	0.33	0.9
Width	Y	117	0.01	0.04	0.22	0.2
Width	Y-Z	77	0.01	0.08	0.27	0.3
Width	Z	203	0.01	0.34	0.17	2.0
Length	T-V	10	0.01	0.68	0.69	1.0
Length	W	88	0.00	0.06	0.26	0.2
Length	X-Y	31	0.01	-0.06	0.42	-0.1
Length	Y	84	0.02	0.19	0.26	0.7
Length	Y-Z	39	0.01	0.62	0.38	1.6
Length	Z	118	0.02	0.46	0.22	2.1
Depth	W	95	0.00	0.36	0.25	1.5
Depth	X-Y	37	0.00	0.20	0.39	0.5
Depth	Y	70	0.01	0.49	0.29	1.7
Depth	Y-Z	43	0.01	0.89	0.36	2.5
Depth	Z	115	0.01	0.35	0.23	1.6

Table 101. Sheep/goat: Biometry: Skewness values for selected measurements and log ratios to highlight unusual distributions

Element/Measurement	Phase	Bone ID	Value	Log ratio
HU HTC	Z	16305	16.9	n/a
AS GLI	W	3897	32.3	n/a
TI depth log	Z	11544	26.6	0.16

Table 102. Sheep/goat: Biometry: Outliers excluded from skewness value calculations

Element/Phase	W		X		X-Y		Y		Y-Z		Z	
	n	%	n	%	n	%	n	%	n	%	n	%
Zygomaticus												
Mandible					1	*100.0*	1	*10.0*			1	*1.6*
Scapula											6	*9.5*
Humerus	3	*42.9*	1	*14.3*			2	*20.0*			6	*9.5*
Radius	1	*14.3*					1	*10.0*	1	*14.3*	15	*23.8*
Metacarpal											6	*9.5*
Pelvis			1	*14.3*			1	*10.0*			8	*12.7*
Femur							1	*10.0*	2	*28.6*	2	*3.2*
Tibia	2	*28 6*	3	*42.9*			1	*10.0*			5	*7.9*
Astragalus									2	*28.6*	2	*3.2*
Calcaneum											2	*3.2*
Metatarsal			1	*14.3*			2	*20.0*	2	*28.6*	6	*9.5*
First phalange	1	*14.3*	1	*14.3*			1	*10.0*			2	*6.3*
Total	*7*		*7*		*1*		*10*		*7*		*63*	

Table 103. Equid: Anatomical representation: MNE by chronological phase

Element/Phase	W		X-Y		Y		Y-Z		Z	
	fused	unfused	fused	unfused	fused	unfused	fused	unfused	fused	unfused
Scapula									6	
Humerus	3		1		2				6	
Radius proximal									13	
Radius distal	1				1		1		7	
Metacarpal					1				4	
Pelvis			1						8	
Femur proximal						1	1		1	1
Femur distal								1	1	1
Tibia	1	1	1	2	1				4	1
Astragalus							2		2	
Calcaneum									2	
Metatarsal					1		1		4	
First phalange	1		1		1				6	1

Table 104. Equid: Post-cranial epiphyseal fusion by anatomical element and chronological age

Element/Phase	T-V		W		X		X-Y		Y		Y-Z		Z	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%
Zygomaticus														
Mandible	2	*66.7*	12	*20.3*			7	*36.8*	16	*19.3*	7	*16.7*	28	*28.6*
Scapula			6	*10.2*			2	*10.5*	12	*14.5*	3	*7.1*	10	*10.2*
Humerus			5	*8.5*			1	*5.3*	4	*4.8*	4	*9.5*	8	*8.2*
Radius			4	*6.8*			1	*5.3*	6	*7.2*	3	*7.1*	8	*8.2*
Metacarpal			14	*23.7*			1	*5.3*	5	*6.0*	8	*19.0*	8	*8.2*
Pelvis	1	*33.3*	4	*6.8*			2	*10.5*	13	*15.7*	6	*14.3*	14	*14.3*
Femur			5	*8.5*					8	*9.6*	2	*4.8*	3	*3.1*
Tibia			2	*3.4*			1	*5.3*	4	*4.8*	1	*2.4*	3	*3.1*
Astragalus			1	*1.7*			1	*5.3*	2	*2.4*	2	*4.8*	3	*3.1*
Calcaneum			3	*5.1*			1	*5.3*	3	*3.6*			2	*2.0*
Metatarsal			2	*3.4*	1	*100.0*	1	*5.3*	9	*10.8*	5	*11.9*	10	*10.2*
First phalange			1	*1.7*			1	*5.3*	1	*1.2*	1	*2.4*	1	*1.0*
Total	*3*		*59*		*1*		*19*		*83*		*42*		*98*	

Table 105. Dog: Anatomical representation: MNE by chronological phase

Element/Phase	T-V		W		X		X-Y		Y		Y-Z		Z	
	fused	unfused	fused	unfused	fused	unfused	fused	unfused	fused	unfused	fused	unfused	fused	unfused
Scapula			6				2		12		3		10	
Humerus			5				1			4		4		8
Radius proximal			4						6		3		8	
Radius distal			1				1			2		1		4
Metacarpal			10	1						4		3		7
Pelvis	1		4				2		13		5		14	
Femur proximal			4						6	2	2		3	
Femur distal			4	1						1	1			3
Tibia			2				1			4		1		3
Astragalus			1				1		2		2		2	1
Calcaneum			3				1		3				2	
Metatarsal			1							3	1	3	1	3
First phalange			2				2		6		1		4	

Table 106. Dog: Post-cranial epiphyseal fusion by anatomical element and chronological age

Phase	Bone ID	Context	Trait
W	18856	E96	absent first premolar
X-Y	12586	D81	absent second premolar
X-Y	14399	D81	reduced first premolar and absent third molar
Y	1821	D340	absent second premolar
Y	10357	A318	absent third molar
Y-Z	5348	C132	absent second-third premolar
Z	641	D372	absent second premolar and third molar
Z	17152	D108	absent third molar

Table 107. Dog: Mandibular non-metric traits by chronological phase

Phase	Context	ID	Element
W	E96	16112	mandible
W	D1834	13558	humerus
W	D335	18279	metacarpal
W	D1132	11089	tibia
X-Y	D0210	16767	tibia
Y	D1231	1970	mandible
Y	A318	10357	mandible
Y	D216	14936	mandible
Y	D224	21384	radius
Y	D312	19039	metacarpal
Y	A78	23683	metacarpal
Y	D329	17035	femur
Y	C409	18904	tibia
Y-Z	E74	19457	mandible
Y-Z	D116	15095	tibia
Z	D100	9347	mandible
Z	D463	9429	metacarpal
Z	D283	14666	metacarpal
Z	D283	17857	metacarpal
Z	D466	23809	femur
Z	D283	23810	femur
Z	D283	23812	femur
Z	D100	15035	metatarsal

Table 108. Dog: Summary of specimens considered to represent 'lap' dogs by chronological phase

Element/Phase	T-V		W		X		X-Y		Y		Y-Z		Z	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%
Coracoid	3	*17.6*	25	*17.9*	1	*14.3*	6	*17.1*	12	*11.5*	23	*18.5*	20	*16.5*
Scapula	1	*5.9*	20	*14.3*			1	*2.9*	13	*12.5*	13	*10.5*	14	*11.6*
Humerus			10	*7.1*	1	*14.3*	2	*5.7*	10	*9.6*	16	*12.9*	12	*9.9*
Ulna	2	*11.8*	12	*8.6*	2	*28.6*	5	*14.3*	10	*9.6*	11	*8.9*	8	*6.6*
Carpometacarpus	1	*5.9*	19	*13.6*			2	*5.7*	13	*12.5*	19	*15.3*	19	*15.7*
Femur	5	*29.4*	15	*10.7*			4	*11.4*	8	*7.7*	5	*4.0*	14	*11.6*
Tibiotarsus	2	*11.8*	17	*12.1*	1	*14.3*	6	*17.1*	16	*15.4*	18	*14.5*	15	*12.4*
Tarsometatarsus	3	*17.6*	22	*15.7*	2	*28.6*	9	*25.7*	22	*21.2*	19	*15.3*	19	*15.7*
Total	*17*		*140*		*7*		*35*		*104*		*124*		*121*	

Table 109. Domestic fowl: Anatomical representation: MNE by chronological phase

Element/Phase	T-V		W		X		X-Y		Y		Y-Z		Z	
	adult	juvenile	adult	juvenile	adult	juvenile	adult	juvenile	adult	juvenile	adult	juvenile	adult	juvenile
Coracoid	3		25		1		5	1	12		21	2	20	
Scapula	1		20					1	13		13		14	
Humerus			4						3	1	5		7	
Ulna	2		11	1	2		5		9	1	11		8	
Carpometacarpus	1		19				2		13		19		19	
Femur	5		15				2		6	1	5		11	2
Tibiotarsus	2		17		1		6		16		18		14	1
Tarsometatarsus	3		21	1	2		8		20	2	18	1	17	2

Table 110. Domestic fowl: Post-cranial epiphyseal ossification by anatomical element and chronological phase

Element/Measurement	Phase	Number	Mean	Skewness	Standard error	Sk/Std.Er
Width	W	54	0.0	0.4	0.3	1.2
Width	X-Y	14	0.0	-1.5	0.6	-2.5
Width	Y	52	0.0	-0.1	0.3	-0.2
Width	Y-Z	60	0.0	0.5	0.3	1.7
Width	Z	59	0.0	-0.1	0.3	-0.4
Length	W	22	0.0	-1.0	0.5	-2.1
Length	Y	24	0.0	-1.5	0.5	-3.2
Length	Y-Z	31	0.0	-0.9	0.4	-2.0
Length	Z	32	0.0	-0.7	0.4	-1.7
Depth	W	36	0.0	0.9	0.4	2.4
Depth	Y	28	0.0	-0.5	0.4	-1.1
Depth	Y-Z	33	0.0	-1.1	0.4	-2.6
Depth	Z	33	0.0	0.4	0.4	0.9

Table 111. Domestic fowl: Biometry: Skewness values for selected log ratios to highlight unusual distributions

Phase	Context	Grid location	Deposit type	A-B-C category
T	D1999	8-12	Surface	A
T	D791	Unassigned	Unassigned	B
U	B621	5	Hearth fill	B
U	B632	5-6	Layer	A
U	B637	6	Pit fill	B
U	B639	6	Pit fill	B
U	B645	6	Cut fill	B
U	B665	5-6	Surface	A
U	D1075	22	Dump	C
U	D1077	22-23	Dump	C
U	D1324	23-24	Layer	A
U	D2284	Unassigned	Unassigned	B
U	D2364	8	Dump	C
U	D2381	27	Posthole fill	A
U	D2410	8	Layer	A
U	D655	22	Layer	A
U	D661	21	Surface	A
U	D673	21	Surface	A
U	D879	22	Surface	A
U	D941	22	Dump	C
V	B602	5	Layer	A
V	B603	5-6	Layer	A
V	B618	6	Surface	A
V	B631	6	Surface	A
V	B643	5	Pit fill	B
V	C433	48-48α	Layer	C
V	C439	48	Hearth fill	B
V	D1005	13	Layer	A
V	D1013	12-13	Layer	A
V	D1164	24-25	Dump	A
V	D1196	24	Layer	A
V	D1215	23-24	Layer	A
V	D1234	24	Layer	A
V	D1274	23-24	Layer	A
V	D1885	12	Surface	A
V	D1929	7	Cut fill	B
V	D2120	9	Layer	A
V	D2127	25-26	Layer	A
V	D2135	25	Surface	A
V	D2153	25	Surface	A
V	D2175	7-8	Layer	A
V	D2188	24-25	Layer	A
V	D2192	8	Cut fill	B
V	D2194	8	Cut fill	B
V	D2201	8	Cut fill	B
V	D2221	7-8	Cut fill	B
V	D2222	6	Layer	A
V	D2267	7-8	Layer	A
V	D2271	7-8	Dump	C
V	D2290	8	Layer	A
V	D2298	7	Layer	A
V	D2332	8	Cut fill	B
V	D2354	13	Surface	A
V	D2369	8	Surface	A
V	D2371	7-8	Surface	C
V	D710	12	Dump	C
V	D824	10	Pit fill	B
V	D918	10	Pit fill	B
W	A403	2	Cut fill	B
W	B302	5	Layer	A

Appendix 1. Context details of A-B-C category deposits considered in the baths basilica analysis

Phase	Context	Grid location	Deposit type	A-B-C category
W	B306	5	Layer	A
W	B336	5-6	Structure	C
W	B434	20	Layer	A
W	B444	20	Hearth fill	B
W	B455	19	Hearth fill	B
W	B458	19	Layer	B
W	B470	20	Hearth fill	B
W	B500	20	Hearth fill	B
W	B507	19	Hearth fill	B
W	B520	19 & 20	Dump	C
W	B521	19 & 20	Dump	C
W	B605	5	Hearth fill	B
W	B608	5	Other	B
W	B648	5	Pit fill	B
W	C278	48	Pit fill	B
W	C380	47-48	Dump	C
W	C384	32	Layer	A
W	C404	48-48α	Pit fill	C
W	C407	48α	Pit fill	B
W	C417	48-48α	Dump	C
W	C421	48	Pit fill	B
W	C423	48-48α	Dump	C
W	C426	48	Dump	C
W	C440	48	Pit fill	B
W	C444	48	Cut fill	B
W	C445	47-48	Layer	C
W	C463	33-34	Layer	A
W	C468	32-34	Layer	A
W	C469	33	Dump	C
W	C471	32-33	Dump	C
W	C472	32	Dump	C
W	C473	33	Dump	C
W	C474	32-33	Dump	C
W	C476	32-33	Dump	C
W	C477	33	Dump	C
W	C479	33	Dump	C
W	C481	33	Dump	C
W	C485	33	Dump	C
W	C486	32-33	Dump	C
W	C488	33	Dump	C
W	C489	33-34	Dump	C
W	C493	33	Dump	C
W	C495	33-34	Dump	C
W	C501	33-34	Dump	C
W	C515	32	Layer	A
W	C525	33	Dump	C
W	C526	32-33	Dump	C
W	C527	32-34	Dump	C
W	C528	32-33	Dump	C
W	C529	32-33	Dump	C
W	C532	34	Dump	C
W	C533	34	Dump	C
W	C535	34	Dump	C
W	C536	34	Dump	C
W	C537	34	Dump	C
W	C539	34	Dump	C
W	C540	34	Dump	C
W	C541	34	Dump	C
W	C543	Unassigned	Unassigned	A
W	C546	34	Dump	C

Appendix 1 cont. Context details of A-B-C category deposits considered in the baths basilica analysis

Phase	Context	Grid location	Deposit type	A-B-C category
W	C549	34	Layer	A
W	C553	33-34	Floor	A
W	D1011	27-28 & 41-42	Surface	A
W	D102	6-9 & 20-23	Layer	A
W	D1124	14	Layer	A
W	D1126	Unassigned	Unassigned	A
W	D1127	23-24	Dump	C
W	D1129	Unassigned	Unassigned	A
W	D1131	42	Surface	A
W	D1132	25	Surface	C
W	D1133	Unassigned	Unassigned	A
W	D1136	28	Surface	A
W	D1137	27-28	Surface	A
W	D1139	13-14 & 27-28	Layer	A
W	D1147	23	Dump	C
W	D1151	14 & 28	Dump	A
W	D1165	Unassigned	Unassigned	A
W	D1172	28	Surface	A
W	D1203	24	Layer	A
W	D1225	9	Surface	A
W	D1232	24	Surface	C
W	D1265	41	Dump	C
W	D1328	7-8	Layer	A
W	D1329	8	Layer	A
W	D1348	34	Layer	A
W	D1369	12-13	Dump	A
W	D1377	24	Layer	A
W	D1380	24-25	Surface	A
W	D1389	9-10 & 23-24	Dump	A
W	D1394	7-8	Layer	A
W	D1395	7 & 21	Dump	C
W	D1418	8 & 22	Dump	C
W	D1545	7-8 & 21-22	Dump	C
W	D1549	9	Layer	A
W	D1555	12 & 25-26	Surface	A
W	D1557	11 & 25	Layer	A
W	D1569	8-9 & 22-23	Dump	C
W	D1578	8	Layer	A
W	D1591	26	Surface	A
W	D1593	12 & 26	Dump	A
W	D1601	20-21	Dump	C
W	D1606	11-12 & 25-26	Surface	A
W	D1612	24	Dump	A
W	D1628	7 & 21	Layer	A
W	D163	34-37	Surface	A
W	D1635	13	Surface	A
W	D1649	25-26	Layer	A
W	D1663	12-13 & 26-27	Surface	A
W	D1670	25	Surface	A
W	D1682	23-24	Surface	A
W	D1714	24	Layer	A
W	D1715	24	Layer	A
W	D1722	8-9	Surface	C
W	D1723	7	Layer	A
W	D1728	7	Layer	A
W	D1730	12-13 & 26-27	Surface	A
W	D1731	Unassigned	Unassigned	A
W	D1732	13 & 27	Surface	A
W	D1744	24-25	Layer	A
W	D1746	25	Layer	A

Appendix 1 cont. Context details of A-B-C category deposits considered in the baths basilica analysis

Phase	Context	Grid location	Deposit type	A-B-C category
W	D1754	23-24	Layer	A
W	D1769	Unassigned	Unassigned	B
W	D1770	12 & 26	Layer	A
W	D1774	26	Surface	A
W	D1777	11 & 25	Surface	C
W	D1784	20-21	Surface	A
W	D1785	21	Dump	C
W	D1802	9 & 23	Surface	A
W	D1813	8	Cut fill	B
W	D1814	8	Cut fill	B
W	D1834	13 & 27	Layer	A
W	D1849	9	Layer	A
W	D1851	27	Layer	A
W	D1854	27	Cut fill	A
W	D1858	Unassigned	Unassigned	A
W	D1864	8	Layer	A
W	D1868	8	Cut fill	B
W	D1871	12-13 & 26-27	Surface	A
W	D1872	24	Surface	A
W	D1874	8	Cut fill	B
W	D188	37-38	Structure	A
W	D1896	8	Cut fill	B
W	D1903	21	Surface	A
W	D1911	12	Surface	A
W	D1912	26	Surface	A
W	D1916	9	Layer	A
W	D1925	7	Cut fill	B
W	D1946	12	Surface	A
W	D1951	11 & 25	Dump	C
W	D1955	Unassigned	Unassigned	A
W	D1958	23-24	Surface	A
W	D1965	7-8	Layer	A
W	D1980	7	Layer	A
W	D1996	13	Surface	A
W	D2001	8	Surface	A
W	D2009	12	Layer	A
W	D2013	6-7 & 20-21	Layer	A
W	D2081	20	Dump	A
W	D2095	13	Surface	A
W	D2144	6	Layer	A
W	D2161	13	Layer	A
W	D2173	13	Layer	A
W	D2177	21	Dump	C
W	D2187	7-8 & 21	Surface	A
W	D2191	6	Layer	A
W	D2227	Unassigned	Unassigned	A
W	D227	9	Surface	A
W	D2288	13	Surface	A
W	D2300	21	Layer	A
W	D2301	21	Surface	A
W	D2314	21	Surface	A
W	D2331	20	Floor	A
W	D2340	20	Layer	A
W	D2356	21-22	Layer	A
W	D2357	21	Layer	A
W	D2358	20-21	Surface	A
W	D2363	8	Layer	A
W	D2378	7-8 & 22	Surface	A
W	D2391	20-21	Layer	A
W	D244	35-38	Dump	C

Appendix 1 cont. Context details of A-B-C category deposits considered in the baths basilica analysis

Phase	Context	Grid location	Deposit type	A-B-C category
W	D252	35-36	Surface	A
W	D254	37-38	Dump	C
W	D334	25-26	Layer	A
W	D335	13 & 27	Layer	A
W	D342	13 & 25-27	Surface	A
W	D343	40-41	Cut fill	C
W	D406	6-7	Layer	C
W	D440	7 & 21	Layer	A
W	D454	6-7	Layer	A
W	D459	6-7	Surface	A
W	D482	20-21	Layer	C
W	D484	Unassigned	Unassigned	A
W	D485	Unassigned	Unassigned	A
W	D543	33-34	Layer	A
W	D560	22	Layer	A
W	D579	20	Floor	A
W	D612	Unassigned	Unassigned	A
W	D631	21	Layer	A
W	D664	21	Dump	A
W	D700	22	Layer	A
W	D743	12-13	Dump	C
W	D755	11-12	Dump	C
W	D756	9-10	Dump	C
W	D757	10	Layer	C
W	D758	10-11	Dump	C
W	D767	10-11	Dump	C
W	D773	10-11	Dump	C
W	D774	10	Layer	C
W	D778	25	Surface	A
W	D783	7	Surface	A
W	D787	24	Layer	A
W	D789	24	Layer	A
W	D790	24	Layer	A
W	D798	27	Layer	A
W	D800	9	Dump	A
W	D802	23	Layer	A
W	D803	23	Layer	A
W	D804	10	Layer	C
W	D808	27	Dump	C
W	D810	10-11	Layer	C
W	D822	Unassigned	Unassigned	C
W	D839	9	Surface	A
W	D840	12-13	Dump	C
W	D841	11-12	Dump	C
W	D859	9-10	Layer	C
W	D880	11-12	Dump	C
W	D881	9-10	Layer	C
W	D906	9	Surface	A
W	D907	7-8	Dump	C
W	D913	24	Layer	A
W	D914	24	Surface	C
W	D916	Unassigned	Unassigned	C
W	D925	13	Dump	C
W	D931	7-8	Layer	A
W	D933	26-27	Surface	C
W	D936	13	Pit fill	B
W	D940	13	Dump	C
W	D947	13	Cut fill	C
W	D950	9	Dump	C
W	D957	12-13	Surface	C

Appendix 1 cont. Context details of A-B-C category deposits considered in the baths basilica analysis

Phase	Context	Grid location	Deposit type	A-B-C category
W	D983	25-26	Dump	C
W	E188	35-38	Cut fill	B
W	E270	39-40	Cut fill	B
W	E271	38	Cut fill	B
W	E272	39	Cut fill	B
W	E273	39	Cut fill	B
W	E277	40	Cut fill	B
W	E278	40	Cut fill	B
W	E292	39	Cut fill	B
W	E96	Unassigned	Unassigned	B
X	A444	1	Pit fill	B
X	B204	5	Surface	A
X	B292	20	Hearth fill	B
X	B304	19 & 20	Dump	C
X	B344	19 & 20	Dump	C
X	B86	3-4	Cut fill	B
X	C412	48α	Pit fill	B
X	C419	48	Pit fill	A
X	C448	32-34	Cut fill	B
X	C449	33-34	Cut fill	A
X	D1171	28	Dump	A
X	D1288	41	Dump	C
X	D1346	34	Cut fill	C
X	D1372	6	Hearth fill	C
X	D1642	6	Floor	A
X	D1748	6-7	Floor	A
X	D182	6-7	Pit fill	B
X	D402	21	Layer	A
X	D446	20	Surface	A
X	D502	Unassigned	Unassigned	B
X	D542	21	Surface	A
X	D552	21	Hearth fill	B
X	D553	21	Hearth fill	B
X	D554	21	Dump	C
X-Y	C306	33-34	Dump	C
X-Y	C308	34	Dump	C
X-Y	C309	33	Dump	C
X-Y	D210	23-25	Dump	A
X-Y	D728	42	Cut fill	B
X-Y	D735	41-42	Cut fill	B
X-Y	D81	32-42	Cut fill	B
Y	A129	1a	Surface	A
Y	A131	2	Pit fill	B
Y	A151	1-2	Hearth fill	A
Y	A183	2	Pit fill	B
Y	A186	2	Pit fill	B
Y	A187	2	Pit fill	B
Y	A196	16	Pit fill	B
Y	A201	16	Pit fill	B
Y	A230	16	Pit fill	B
Y	A238	16	Pit fill	B
Y	A240	16	Pit fill	B
Y	A241	16	Pit fill	B
Y	A247	1-2	Hearth fill	B
Y	A253	2	Cut fill	B
Y	A318	2	Pit fill	B
Y	A322	1	Hearth fill	B
Y	A332	2	Cut fill	B
Y	A336	16	Cut fill	B
Y	A345	2	Pit fill	B

Appendix 1 cont. Context details of A-B-C category deposits considered in the baths basilica analysis

Phase	Context	Grid location	Deposit type	A-B-C category
Y	A347	2	Pit fill	B
Y	A443	16	Pit fill	B
Y	A78	1a	Pit fill	B
Y	B120	17 & 19	Dump	C
Y	B299	19	Surface	A
Y	B317	19	Surface	A
Y	B321	19 & 20	Layer	C
Y	C184	34	Surface	A
Y	C203	47	Surface	A
Y	C207	47	Structure	C
Y	C270	47-48	Structure	A
Y	C307	33-34	Dump	C
Y	C406	48	Pit fill	A
Y	C409	48	Pit fill	B
Y	C418	48	Pit fill	B
Y	D1143	6-7	Dump	B
Y	D1145	27	Hearth fill	B
Y	D1158	6-7	Dump	B
Y	D1193	7	Dump	B
Y	D1231	7	Dump	B
Y	D125	20	Surface	A
Y	D1282	6-7	Surface	B
Y	D1326	6-7	Dump	B
Y	D1332	6	Layer	B
Y	D1333	6	Dump	B
Y	D1335	6	Dump	B
Y	D150	35	Surface	A
Y	D151	35-37	Dump	C
Y	D168	7-8, 21 & 23-24	Layer	A
Y	D178	34-35	Layer	A
Y	D191	6	Layer	C
Y	D2016	9 & 23	Layer	A
Y	D2018	9 & 23	Layer	A
Y	D214	9-10	Surface	A
Y	D216	23	Dump	C
Y	D219	10	Surface	A
Y	D224	10-11	Surface	A
Y	D238	24	Surface	A
Y	D303	25	Layer	A
Y	D312	26-27	Surface	A
Y	D313	25	Surface	A
Y	D318	13 & 27	Structure	A
Y	D320	40	Posthole fill	C
Y	D329	13 & 27	Dump	C
Y	D338	40	Cut fill	C
Y	D340	11-13	Surface	A
Y	D346	13	Dump	B
Y	D349	13	Layer	B
Y	D352	13	Cut fill	B
Y	D419	13	Structure	A
Y	D455	41	Dump	C
Y	D464	Unassigned	Unassigned	B
Y	D702	Unassigned	Unassigned	B
Y	D703	12-13	Dump	B
Y	D704	11-12	Dump	B
Y	D705	10-11	Dump	B
Y	D706	10	Dump	B
Y	D712	25-26	Surface	A
Y	D713	26-27	Surface	A
Y	D714	27	Surface	A

Appendix 1 cont. Context details of A-B-C category deposits considered in the baths basilica analysis

Phase	Context	Grid location	Deposit type	A-B-C category
Y	D716	23-24	Surface	A
Y	D727	Unassigned	Unassigned	B
Y	D746	25-26	Dump	A
Y	D762	13-14 & 27-28	Dump	C
Y	D763	14 & 27-28	Surface	A
Y	D78	6-7 & 20-21	Dump	A
Y	D837	41-42	Dump	C
Y	D885	28 & 42	Dump	C
Y	D898	28 & 41-42	Dump	C
Y	D908	13-14	Dump	C
Y	D928	13-14 & 27-28	Dump	C
Y-Z	B277	19 & 20	Dump	A
Y-Z	C124	Unassigned	Unassigned	A
Y-Z	C131	32	Dump	C
Y-Z	C132	32-33	Dump	C
Y-Z	C144	Unassigned	Unassigned	A
Y-Z	C150	Unassigned	Unassigned	B
Y-Z	C160	32-33	Dump	C
Y-Z	C181	33	Surface	A
Y-Z	C187	33-34	Surface	A
Y-Z	C190	Unassigned	Unassigned	C
Y-Z	C195	Unassigned	Unassigned	C
Y-Z	C231	32-33	Dump	C
Y-Z	C233	33	Layer	C
Y-Z	C240	33-34	Layer	C
Y-Z	C258	32	Layer	C
Y-Z	C267	33-34	Dump	C
Y-Z	C268	Unassigned	Unassigned	B
Y-Z	C75	31-32	Surface	C
Y-Z	D116	20-27, 34 & 41	Cut fill	B
Y-Z	D233	24 & 38	Pit fill	B
Y-Z	E133	34	Surface	C
Y-Z	E249	53	Dump	C
Y-Z	E250	51-52	Dump	C
Y-Z	E74	34-40 & 48-54	Surface	C
Y-Z	E81	Unassigned	Unassigned	B
Z	A1	1	Pit fill	B
Z	B132	17	Layer	A
Z	B136	3-4 & 17	Dump	C
Z	B137	3-17	Dump	C
Z	B147	4-5	Pit fill	B
Z	B149	4	Surface	A
Z	B150	5	Other	B
Z	B152	4	Pit fill	B
Z	B153	5	Cut fill	B
Z	B154	5	Pit fill	B
Z	B155	4	Pit fill	B
Z	B159	5	Pit fill	B
Z	B168	5	Pit fill	B
Z	B170	2	Pit fill	B
Z	B172	3-17	Other	B
Z	B175	Unassigned	Unassigned	B
Z	B176	3-17	Cut fill	B
Z	B179	18	Hearth fill	B
Z	B184	18	Surface	A
Z	B186	Unassigned	Unassigned	B
Z	B188	Unassigned	Unassigned	B
Z	B196	4	Pit fill	B
Z	B197	4	Pit fill	B
Z	B198	4 & 18	Pit fill	B

Appendix 1 cont. Context details of A-B-C category deposits considered in the baths basilica analysis

Phase	Context	Grid location	Deposit type	A-B-C category
Z	B207	5	Pit fill	B
Z	B80	4	Pit fill	B
Z	B97	4	Surface	A
Z	B98	4	Pit fill	B
Z	B99	4-5	Surface	A
Z	C100	47	Structure	A
Z	C101	47	Structure	C
Z	C104	47	Pit fill	B
Z	C106	47	Structure	A
Z	C112	34	Dump	C
Z	C113	34	Dump	C
Z	C188	32-34	Cut fill	B
Z	C191	33-34	Dump	C
Z	C192	32-33	Pit fill	B
Z	C210	47	Pit fill	B
Z	C212	33-34	Dump	C
Z	C225	33 & 47	Pit fill	B
Z	C74	31	Dump	C
Z	C76	31-32	Dump	C
Z	C78	32-34	Dump	C
Z	C80	32-33	Dump	C
Z	C86	31-32 & 47	Dump	C
Z	C88	33-34 & 47-48	Dump	C
Z	C89	33-34	Dump	C
Z	C90	47-49	Layer	A
Z	C94	33-34	Surface	A
Z	D100	7, 9, 21-25 & 35-39	Structure	A
Z	D103	Unassigned	Unassigned	A
Z	D104	8-9	Dump	A
Z	D106	10-11	Structure	A
Z	D107	11-12	Structure	A
Z	D108	12	Structure	A
Z	D148	34	Dump	C
Z	D208	23	Surface	A
Z	D229	10-11	Dump	C
Z	D283	13 & 25-27	Dump	A
Z	D305	12	Structure	A
Z	D306	13	Structure	A
Z	D307	13	Layer	A
Z	D308	34	Dump	A
Z	D310	39-40	Dump	C
Z	D317	40-41	Surface	A
Z	D323	Unassigned	Unassigned	A
Z	D330	14 & 18	Dump	C
Z	D331	14 & 18	Dump	C
Z	D332	28 & 42	Dump	C
Z	D344	Unassigned	Unassigned	A
Z	D372	27-28	Dump	C
Z	D393	14	Layer	C
Z	D463	27-28	Surface	C
Z	D466	14	Surface	C
Z	D467	Unassigned	Unassigned	C
Z	D473	Unassigned	Unassigned	A
Z	D474	28	Hearth fill	C
Z	D742	42	Surface	A
Z	D85	6	Surface	A
Z	E100	Unassigned	Unassigned	C
Z	E137	48-49	Dump	C
Z	E170	40 & 54	Dump	C
Z	E172	40-41	Surface	C

Appendix 1 cont. Context details of A-B-C category deposits considered in the baths basilica analysis

Phase	Context	Grid location	Deposit type	A-B-C category
Z	E177	54-55	Surface	C
Z	E179	40-41	Dump	C
Z	E184	42	Cut fill	B
Z	E185	Unassigned	Unassigned	C
Z	E221	52-53	Layer	A
Z	E260	41-42	Dump	C
Z	E85	Unassigned	Unassigned	C

Appendix 1 cont. Context details of A-B-C category deposits considered in the baths basilica analysis

Element/Measurement	1	2	3	4	5	6	7	8	9	10	11	12	13
Cattle HC	47	44	45	46									
Ovicaprid HC	43	40	41	42									
Ovicaprid dP4	L	B											
M3	L	B											
HU	GLC	SD	BT	HTC									
RA	GL	SD	Bp	BFp									
MC	GL	SD	Bp	Bd	BatF	1 (Dem)	2 (Dvm)	3 (Dim)	4 (Del)	5 (Dvl)	6 (Dil)	a (Wtm)	b (Wtl)
TI	GL	SD	Bd	Dd									
AS	GLl	Bd	Dl										
CA	GL	DS	C	C+D									
MT	GL	SD	Bp	Bd	BatF	1 (Dem)	2 (Dvm)	3 (Dim)	4 (Del)	5 (Dvl)	6 (Dil)	a (Wtm)	b (Wtl)

Appendix 2a. Measurements taken by anatomical element for the baths basilica assemblage: Cattle and sheep/goat

Element/Measurement	1	2	3	4
dP4	L	WP (1)		
M1	WA (2)	WP (3)		
M2	WA (4)	WP (5)		
M3	L	WA (6)	WC (7)	
HU	GLC	SD	BT	HTC
RA	GLC	SD		
TI	GL	SD	Bd	Dd
AS	GLl	GLm		
CA	GL			

Appendix 2b. Measurements taken by anatomical element for the baths basilica assemblage: Pig

Element/Phase	1	2	3	4	5	6
P2 - P4	L1	Wa				
M1 - M3	L1	Wa	Wd			
HU	GLC	SD	BT	HTC		
RA	GL	SD	Bp	BFp	Bd	BFd
MC	GL	SD	Bp	Dp	BFd	Dd
TI	GL	SD	Bd	Dd		
AS	GH	LmT	GB	BFd		
CA	GL					
PH	GL	SD	Bp	Dp	Bd	
MT	GL	SD	Bp	BFp	Bd	Dd

Appendix 2c. Measurements taken by anatomical element for the baths basilica assemblage: Equid

Element/Phase	1	2	3	4	5
Cranium	1 (I)	30 (IV)			
MD	8 (XV)	9	10	11	12
M1	L	B			
HU	GL	SD	GLl	Bd	
RA	GL	SD			
TI	GL	SD	Bd		
CA	GL				

Appendix 2d. Measurements taken by anatomical element for the baths basilica assemblage: Equid

Element/Phase	1	2	3	4	5
HU	GL	SC	Bd		
FE	GL	SC	Bp	Bd	Dd
CC	GL	L	Bp	Did	
TI	GL	SC	La	Bd	Dd
TT	GL	SC	Bp	Bd	

Appendix 2e. Measurements taken by anatomical element for the baths basilica assemblage: Domestic fowl

Stage/Reference	Higham (1967: 104-106, Appendices A-C)	Silver (1969: 262, Table D)
Neonatal	0-1 month	0-1 month
Juvenile	1-8 months	1-5 months
Immature	8-18 months	5-14 months
Subadult 1	18-24 months	15-18 months
Subadult 2	24-30 months	24-30 months
Adult 1	30-36 months	>30 months
Adult 2	>36 months	-
Adult 3	Grigson (1982: 13) quoted Degerbøl (1970) that the hypoconulid comes into wear at approximately 60 months	
Elderly	-	-

Appendix 3. Cattle: O'Connor's (2003: 160, Table 31) mandible stages with suggested absolute ages from Higham (1967: 104-106, Appendices A-C) & Silver (1969: 262, Table D)

Stage/Reference	Bull & Payne (1982: 56, Table 1)	Silver (1969: 264-265, Table G)
Neonatal	0-4 months	0-1.5 months
Juvenile	4-6 months	1.5-6 months
Immature 1	6-7 months	6 months
Immature 2	7-13 months	6-12 months
Subadult 1	13-17 months	12 months
Subadult 2	17-22 months	12-24 months
Adult 1	>22 months	>24 months
Adult 2	-	-
Adult 3	-	-
Elderly	-	-

Appendix 4. Pig: O'Connor's (2003: 160, Table 31) mandible stages with suggested absolute ages from Bull & Payne (1982: 56, Table 1) & Silver (1969: 264-265, Table G)

Stage/Reference	Payne (1973: 299)	Silver (1969: 263-264, Tables E-F)
A	0-2 months	0-3 months
B	2-6 months	3-5 months
C	6-12 months	8-12 months
D	12-24 months	18-30 months
E	24-36 months	>30 months
F	36-48 months	-
G	48-72 months	-
H	72-96 months	-
I	96-120 months	-

Appendix 5. Sheep/goat: Payne's (1973: 299) mandible stages and ages with additional absolute ages from Silver (1969: 263-264, Table E-F)

Stage/Taxa	Cattle	Pig	Sheep/Goat
Early fusing	6-24 months	12-24 months	3-16 months
Middle fusing	24-42 months	24-30 months	15-36 months
Late fusing	42-48 months	42 months	36-42 months

Appendix 6. Suggested absolute ages for cattle, pig and sheep/goat post-cranial epiphyseal fusion stages from Reitz & Wing's (1999: 76, Table 3.5) combined summary of Schmid (1972: 75, Table 9) and Silver (1969)

Length	Width	Depth
humerus HTC	humerus BT	metacarpal 3/Dim
metacarpal GL	radius BFp	tibia Dd
astragalus GLI	metacarpal BatF	astragalus Dl
calcaneum GL	tibia Bd	metatarsal 3/Dim
metatarsal GL	astragalus Bd	
	metatarsal BatF	

Appendix 7. Cattle and sheep/goat: Measurement used to construct width, length and depth log ratios

Length	Width	Depth
fourth deciduous premolar L	fourth deciduous premolar W	tibia Dd
third molar L	first molar WA	
humerus HTC	second molar WA	
astragalus GLl	third molar WA	
	humerus BT	

Appendix 8. Pig: Measurement used to construct width, length and depth log ratios

Length	Width	Depth
humerus GL	humerus Bd	carpometacarpus Did
carpometacarpus GL	carpometacarpus Bd	femur Dd
femur GL	femur Bd	tibiotarsus Dd
tibiotarsus GL	tibiotarsus Bd	
tarsometatarsus GL	tarsometatarsus Bd	

Appendix 9. Domestic fowl: Measurement used to construct width, length and depth log ratios

Preservation	Colour	Angularity	Bone index	Number of contexts
fair	not variable	variable	mixed	16
fair	variable	variable	mixed	30
good	not variable	variable	mixed	2
good	variable	variable	mixed	2
poor	variable	battered	mixed	13
poor	variable	rounded	mixed	3
poor	not variable	variable	mixed	2
varable	variable	battered	mixed	5
variable	not variable	spikey	mixed	3
variable	variable	spikey	mixed	7
variable	not variable	variable	mixed	5
variable	variable	variable	mixed	37
fair	not variable	battered	uncertain	59
fair	variable	battered	uncertain	39
fair	variable	spikey	uncertain	35
poor	not variable	battered	uncertain	20
poor	not variable	battered	uncertain	4
fair	not variable	spikey	useful	76
good	not variable	spikey	useful	69
good	variable	spikey	useful	37

Appendix 10. Lincoln: 'Bone index' criteria (Dobney *et al.* 1996: 130, Table 4)

Residuality score	Matching		Conflicting		*Total*
	number	*%*	number	*%*	
a) Roman contexts					
Mixed	14	*58*	10	*42*	*24*
Uncertain	6	*17*	30	*83*	*36*
Useful	8	*16*	42	*84*	*50*
Total	*28*		*82*		*110*
b) Saxon contexts					
Mixed	10	*56*	8	*44*	*18*
Uncertain	4	*31*	9	*69*	*13*
Useful	2	*13*	14	*88*	*16*
Total	*16*		*31*		*47*
c) Medieval contexts					
Mixed	17	*68*	8	*32*	*25*
Uncertain	4	*9*	39	*91*	*43*
Useful	3	*7*	42	*93*	*45*
Total	*24*		*89*		*113*
d) Post-medieval contexts					
Mixed	9	*50*	9	*50*	*18*
Uncertain	7	*47*	8	*53*	*15*
Useful	1	*6*	17	*94*	*18*
Total	*17*		*34*		*51*

Apenndix 11. Lincoln: Concordance of the 'bone index' and 'pottery residuality index' (Dobney *et al.* 1996: 131, Table 6)

Deposit	C527		D1569	
a) Pottery	% assemblage	% pottery	% assemblage	% pottery
Coarse wares	60.9	65.8	44.9	79.7
Fine wares	14.7	15.8	8.1	14.4
Storage (cooking)	11.4	12.3	1.9	3.3
Samian	5.6	6	1.4	2.5
Total	*92.6*	*99.9*	*56.3*	*99.9*
b) Other finds	% 'other finds'		% 'other finds'	
Vessel glass	21.8		18	
Window glass	19.5		6.7	
Personal jewellery & toilet implements	12.8		48.5*	
Tools and weapons	0.8		0.3	
Business & coins	9		8.5	
Industrial	6		0.3	
Building & furniture	5.3		2.9	
Leisure	9		0.3	
Other	15.7		14.5	
	99.9		100	
Total	(133 finds)		(373 finds *including 142 beads)	

Appendix 12. C527/D1569 dump comparison: Summary of artefacts grouped by perceived function (Barker *et al.* 1997: 195, Table 9)

C527	D1569
a) Personal equipment	
3 bronze brooches (Fig.298 no.'s 1-3 p.196)	1 bronze brooch spring
1 iron brooch	
1 shale bracelet	8 shale bracelets
2 jet beads	142 jet & glass beads
1 glass bead (Fig.298 no. 7 p.196)	
2 *intaglios* (Fig.298 no.'s 8-9 p.196)	2 finger rings
6 bone pins (Fig 298 no.'s 4-6 p.196)	11 bone hair pins (Fig.302 no. 1-9 p.200)
	6 jet hair pins (Fig.302 no.1-9 p.200)
	1 1st century button loop (Fig.301 no. 9 p.199)
	1 necklace terminal (Fig.301 no. 1 p.199)
	4 boot lace tags (Fig.301 no. 8 p.199)
	part of a mirror
	1 pair of tweezers (Fig.301 no. 7 p.199)
b) Business equipment	
fewer coins compared to later dumps	32 coins
1 seal box (Fig.299 no. 2 p.197)	
2 iron *styli*	
c) Domestic equipment (NOT including pottery)	
18 glass vessel body shards	64 glass vessel body shards
1 lamp	
d) Industrial material	
bone pin fragments	≥23 bone pin shaft fragments
1 joiner's dog	
1 T-clamp	
	assorted pieces of bronze (sheets, rods, shafts & disks)
	assorted pieces of iron (strips & bars)
e)Furniture and building materials	
wall plaster	wall plaster
(8.16 x 8.34m^2 in large freshly broken pieces)	(11.07 x 10.085m^2 smaller pieces, more varied colours)
lead waste	lead waste (4 x more by weight than C527)
1 iron key	
1 nail	
1 cleat	
part of ceramic chimney	
window glass fragments	
f) Leisure and religious materials	
5 bone gaming counters (Fig.300 p.198)	
2 ceramic gaming counters	
6 human bone fragments	
(4 teeth, 1 tibia & 1 metapodial)	

Appendix 13. C527/D1569 dump comparison: Non-ceramic artefacts grouped by perceived function (summary of Barker *et al.* 1997: 198-201)

Phase	Context	Bone ID	dP4	P4	M1	M2	M3	Phase	Context	Bone ID	dP4	P4	M1	M2	M3
T-V	D941	11108		g	l	k	g	T-V	D1196	7658					b
T-V	D941	11109		g	m	l	g	T-V	D1005	10194					e
T-V	D2284	12315					g	T-V	D1005	10199					j
T-V	D2284	12316					l	T-V	D1005	10835		E	h	f	c
T-V	D2284	12326		f	l	l	g	T-V	D824	10918					l
T-V	D2284	15995		f	k			T-V	D1234	11599			l	l	
V	B603	7026	E					T-V	D2188	12268					f

Appendix 14. Cattle: Ageing data: Mandibular tooth eruption and wear

Phase	Context	Bone ID	dP4	P4	M1	M2	M3
T-V	D2188	12269					l
T-V	D2332	14486		E	h	g	d
T-V	D2188	17568		c	k	g	
T-V	D2135	18680					k
T-V	D2135	18681					g
T-V	D1885	18996					g
T-V	D1885	18997					g
T-V	D2290	19009		b	j	g	
W	C533	185			n	l	k
W	C527	186		f	l	k	g
W	C527	187		d	j	j	g
W	C527	188					j
W	C536	213		E	j	g	e
W	C541	228					f
W	C546	237	f				
W	C553	245			k	k	
W	C553	249		b	k		
W	C553	250					k
W	D1139	317					g
W	D163	800					b
W	C440	974				k	g
W	D755	1083					k
W	D983	1141		e	j	j	f
W	D983	1156				l	f
W	D933	1382		g	l	k	
W	D343	1619					h
W	D343	1630					g
W	D343	1631					g
W	D343	1632					g
W	D933	1934		e	l	k	
W	D254	2322		d	k		
W	D933	2422					j
W	E96	2865					j
W	D1126	3203					k
W	E96	3355					k
W	C417	3393			m	m	m
W	C417	3394					d
W	D1172	3460					e
W	D343	3568		g	l		
W	D343	3569			l	l	
W	D188	3585					k
W	D933	3840	j		g	f	E
W	D343	3891					f
W	D343	4070				l	
W	D343	4559	k				
W	D343	4560					j
W	C488	4692					g
W	C473	4695	k				
W	D163	4841					g
W	D343	5834		e			k
W	D840	5839		g	k	j	g
W	D778	5858					g
W	D244	5949					f
W	D163	5967					g
W	D244	5971				h	g
W	D244	5972		h	k		
W	D163	5978				m	l
W	D1011	6920					g
W	D1011	6923		c			
W	E271	7085		e	k	k	g

Phase	Context	Bone ID	dP4	P4	M1	M2	M3
W	E270	7093					g
W	E278	7097		g	l	k	g
W	E278	7098		g	l	l	g
W	E271	7110					g
W	D188	7306					g
W	C426	8336			g	c	
W	C426	8337	k				
W	C426	8338	k				
W	C426	8339					c
W	D808	8385		d			
W	D808	8386		d	k		
W	D743	8413	a				
W	E96	8865		E			
W	E96	8869	k				
W	E96	8881		f	k		
W	E96	8891		d	j	g	f
W	D163	8934					k
W	D188	9060			m	l	f
W	D343	9068					f
W	D163	9087	k				
W	D244	9092					j
W	D188	9110					j
W	D188	9111					g
W	E96	9268					g
W	D822	9304				j	j
W	D343	9421					g
W	D343	9422					c
W	E270	9506					d
W	D343	9530					k
W	D1129	9674		e	j	g	d
W	D1129	9677					j
W	D252	9795		f	g	j	f
W	D484	9806			k	k	j
W	D755	9902		f			
W	D755	9903					g
W	D743	9908	j				
W	D743	9909	a				
W	D881	9938					g
W	D840	10304	a				
W	E96	10956					e
W	D244	10987		b			
W	D188	10992			l	k	
W	D188	10993					f
W	D252	11035					g
W	D631	11045					g
W	D612	11052		e			
W	D1139	11069					k
W	D1132	11090				h	f
W	D803	11105					g
W	D743	11189	a				
W	D933	11206	a				
W	D840	11264		f	l	k	g
W	D840	11265					j
W	D1670	11904					g
W	D188	12902					g
W	D1606	13116					j
W	D1814	13119				j	g
W	D1606	13121					k
W	D1606	13124					k
W	D1606	13125					c

Appendix 14 cont. Cattle: Ageing data: Mandibular tooth eruption and wear

Phase	Context	Bone ID	dP4	P4	M1	M2	M3
W	D1802	13135					g
W	D1868	13136					f
W	D335	13158	d				
W	D1591	13375					f
W	D1606	13537		e			
W	D1871	13544					j
W	D1871	13545					j
W	D1871	13546					g
W	D1871	13547					j
W	D335	13579					f
W	B521	14115					g
W	E96	14231					l
W	D1569	14297					j
W	D1591	14300					g
W	D1591	14301					g
W	C476	14733	m				
W	C476	14740					j
W	D102	14761					g
W	D335	14788		e		g	g
W	E96	14811					k
W	E96	15099	k				
W	E96	15110					g
W	E96	15111		e	k	j	f
W	E96	15112		e	g	g	
W	E96	15136					d
W	E96	15137		f	g	g	
W	E96	15138		E			f
W	E96	15165		g	l	k	k
W	E96	15166					k
W	E96	15171				g	
W	E96	15172					m
W	E96	15178		e	k	j	g
W	E96	15234					g
W	E96	15251	k				
W	E96	15252			k	k	g
W	D335	15289					g
W	E96	15501		e	k	k	
W	D163	15621			j	k	g
W	D664	15625					f
W	D1389	15644			k	h	g
W	E96	15654					g
W	B521	15696		g	l	k	
W	D335	15846			k	k	g
W	D335	15858				g	g
W	E96	15908				g	
W	E96	15922					j
W	E96	15940					e
W	E96	15951					g
W	E96	15969	k				
W	D2331	15991		e	j	g	f
W	D2378	15997					f
W	E96	16096					d
W	E96	16097					j
W	E96	16105					g
W	E96	16113					b
W	E96	16174		g	k	k	j
W	E96	16175					d
W	E96	16182					g
W	E96	16195		E	j	f	b
W	E96	16206					d
W	E96	16212			f	k	
W	E96	16618					g
W	E96	16629					j
W	E96	16645					g
W	D1777	16710	j				
W	D1731	16715				g	f b
W	D1769	16721					j h
W	E96	16735			E		
W	E96	16749			f	k	j g
W	E96	16753					g
W	E96	17095					j
W	E96	17121					g
W	E96	17131					g
W	D1663	17237				l	k g
W	D1557	17246					j
W	E96	17388			f		k g
W	E96	17389					l
W	E96	17390				g	f
W	E96	17433					g
W	E96	17434					k
W	D1996	17557			g	k	k g
W	D1369	17611					g
W	D1369	17623			f	l	g g
W	B306	17730	E				
W	C527	17743			E	j	f c
W	C527	17744					j
W	C527	17783				l	k j
W	C527	17784				l	g
W	D163	18046					k
W	C472	18236					g
W	C486	18248					g
W	D1871	18322			e		
W	D1951	18326	j				
W	D1951	18327					f
W	D1380	18337					k
W	D1946	18352					k
W	E96	18576			f	k	j g
W	E96	18577			f	k	k g
W	E96	18578					g g
W	E96	18579			c		
W	E96	18580					f
W	E96	18581					g
W	E96	18582					f
W	C501	18793					g
W	C501	18798					k k
W	C501	18799					g
W	C501	18800					b
W	C501	18801					l
W	C501	18836				l	j g
W	E96	18848					f
W	E96	18849					h
W	E96	18850					e
W	D2288	19001					g
W	E96	19447		f	k	j	g
W	C527	19553				l	k k
W	C527	19554		g	l	k	
W	C527	19555		b	k	g	d
W	C527	19556		g	l	l	l
W	C527	19557					j
W	C527	19574		g			

Appendix 14 cont. Cattle: Ageing data: Mandibular tooth eruption and wear

Phase	Context	Bone ID	dP4	P4	M1	M2	M3
W	C495	19586				h	g
W	C495	19587		g	l	k	k
W	D244	19706					g
W	D244	19851					b
W	D244	19858		e	k		
W	E96	19936			l	l	g
W	E96	19944					f
W	E96	19952		g	k		
W	E96	19953					d
W	E96	19966		e	k	g	g
W	E96	19970		d	k	j	f
W	E96	19971			m	l	l
W	D163	19977				k	
W	E96	20012					g
W	E96	20023		g			
W	E96	20032			l	g	g
W	E96	20055					g
W	D485	20076					g
W	D1955	20159					l
W	D1958	20171	j				
W	D1955	20172			m	l	
W	E96	20388				j	
W	D1569	20608					f
W	D1569	20623					g
W	E96	20940					g
W	E96	20949		g	l	j	h
W	E96	20950		g	l	k	j
W	E96	21126				j	g
W	E96	21213		E	g	g	
W	E96	21225		b	j		
W	E96	21226					g
W	E96	21233					h
W	E96	21238		e			
W	C468	21280			l	k	
W	C468	21320					g
W	C468	21325					b
W	E292	21475		e			
W	E96	21564		E	g	f	
W	E96	21565		c			
W	E96	21574			k	j	
W	E96	21586					g
W	E96	21615					j
W	C468	22146				j	g
W	C468	22147				f	b
W	C468	22161					f
W	C495	22265		g	m	m	l
W	C527	22266					c
W	C527	22273				k	g
W	D163	22851					g
W	E96	23170			k	j	f
W	E96	23171					e
X	D1288	321					g
X	B204	10007					g
X	D1171	11070					f
X	B86	13956			l	l	k
X	B86	13957			g	f	
X	D1642	15631		e			
X	C449	21035		e	k	j	b
X	C449	21036		e	k	k	b
X	C448	21038					g
X-Y	D81	110				g	
X-Y	D81	344					g
X-Y	D81	361	k				
X-Y	D81	362					l
X-Y	D81	376					a
X-Y	D81	827		E			
X-Y	D81	828					g
X-Y	D81	829					g
X-Y	D735	852					g
X-Y	D81	929					g
X-Y	D728	1066					j
X-Y	D81	1243		d			
X-Y	D81	2055					b
X-Y	D81	2077					j
X-Y	D81	2276			h	g	g
X-Y	D81	2284					f
X-Y	D81	2362					g
X-Y	D81	2363					f
X-Y	D81	2364					k
X-Y	D81	2833					g
X-Y	D81	3047					g
X-Y	D81	3048					d
X-Y	D81	3081					g
X-Y	D81	3103		f			
X-Y	D81	3104					e
X-Y	D81	3265					g
X-Y	D81	3542					j
X-Y	D81	3543					g
X-Y	D81	3544					f
X-Y	D81	3546					e
X-Y	D81	3547					j
X-Y	D81	3810					j
X-Y	D81	5097					g
X-Y	D81	5652					g
X-Y	D81	5653					g
X-Y	D728	5794			k	l	f
X-Y	D728	5795		E	j	f	
X-Y	D728	5847					g
X-Y	D81	6348	k				
X-Y	D81	6595					g
X-Y	D81	6631		b	k	h	
X-Y	D81	6641			e	V	
X-Y	D81	6659					j
X-Y	D81	6691					j
X-Y	D81	6692					k
X-Y	D81	6756		e		j	g
X-Y	D81	6771				k	
X-Y	D81	7128				j	g
X-Y	D81	7422		e	j	g	e
X-Y	D81	7916					g
X-Y	D81	7937					f
X-Y	D81	8472					b
X-Y	D81	8601					c
X-Y	D81	8665		e	k	j	g
X-Y	D81	8718					d
X-Y	D81	9614					b
X-Y	D81	10132			k	j	
X-Y	D81	10133					b
X-Y	D81	10182					j
X-Y	D210	10377					c

Appendix 14 cont. Cattle: Ageing data: Mandibular tooth eruption and wear

Phase	Context	Bone ID	dP4	P4	M1	M2	M3
X-Y	D81	12036					f
X-Y	D81	12037					j
X-Y	D81	12078					b
X-Y	D81	12079					k
X-Y	D81	12084					c
X-Y	D81	12439					g
X-Y	D81	12455					j
X-Y	D81	12456					d
X-Y	D81	12564					g
X-Y	D81	12565					g
X-Y	D81	12566					j
X-Y	D81	12567					k
X-Y	D81	12568					k
X-Y	D81	12569					g
X-Y	D81	12702					g
X-Y	D81	12703					g
X-Y	D81	12724	j				
X-Y	D81	12744					g
X-Y	D81	12881					l
X-Y	D81	13210		E		g	b
X-Y	D81	13241					e
X-Y	D81	13242					f
X-Y	D81	13280					c
X-Y	D81	13281					g
X-Y	D81	13306					e
X-Y	D81	13321		e	l	g	
X-Y	D81	13322					d
X-Y	D81	13621				g	
X-Y	D81	13622		d			
X-Y	D81	13623					g
X-Y	D81	13639					d
X-Y	D81	13641					f
X-Y	D81	13642					g
X-Y	D81	13643					f
X-Y	D81	13731		E	g	f	
X-Y	C308	13783			k	k	g
X-Y	D210	14910		f	l	k	j
X-Y	D81	14921			k	k	
X-Y	D81	14922					f
X-Y	D81	14935	j				
X-Y	D81	15200		e	l	k	g
X-Y	D81	16134		h	m	l	g
X-Y	D81	16135					g
X-Y	D81	16429				j	g
X-Y	D81	16430			k	k	
X-Y	D81	16431					b
X-Y	D81	16432					g
X-Y	D81	16445		g	k	k	j
X-Y	D81	16446					f
X-Y	D81	16447					g
X-Y	D81	16462		h	m		
X-Y	D210	16765					k
X-Y	D81	16906					j
X-Y	D81	16907	h				
X-Y	D81	16914				k	g
X-Y	D81	17047					g
X-Y	D81	17919					b
X-Y	D210	17937					g
X-Y	D210	18050					j
X-Y	D81	18420					g
X-Y	D81	18435				j	f
X-Y	D81	18459					g
X-Y	D81	18491					m
X-Y	D81	18683		g	k	k	j
X-Y	D81	18684		f	k	j	f
X-Y	D81	19369					l
X-Y	D81	19370					j
X-Y	D81	19393					g
X-Y	D81	19436					d
X-Y	D81	19694		e	j	g	f
X-Y	D81	19695					g
X-Y	D81	19702					j
X-Y	D81	19732					g
X-Y	D81	19909					j
X-Y	D81	20774		f	l	k	
X-Y	D81	20775					f
X-Y	D81	20787					j
X-Y	D81	20969					h
X-Y	D81	20998		e			
X-Y	D81	21157					g
X-Y	D81	21188					g
X-Y	D81	21664					f
X-Y	D81	21959					c
X-Y	D81	22488					g
X-Y	D81	22544					f
X-Y	D81	22634					j
X-Y	D81	22635					g
X-Y	D81	22854					j
Y	D419	147					j
Y	D419	148	j				
Y	D338	422					j
Y	D1332	902		e	j	j	
Y	D1332	903	f				
Y	D1332	1085			j	g	f
Y	D1332	1106	k		j	f	
Y	D928	1205					g
Y	D705	1437				g	f
Y	A332	1500			k	j	g
Y	D1231	1506	h		b	V	
Y	D1231	1507	h		b		
Y	D1231	1508		f	k	j	g
Y	D1231	1509			k	j	g
Y	D1231	1514					l
Y	D1158	1529					j
Y	D1231	1538					j
Y	D762	1547					f
Y	D340	1795					g
Y	D340	1801					g
Y	D340	1812					b
Y	D312	2005				f	b
Y	B120	2186					b
Y	D762	2410				k	j
Y	D762	2411					j
Y	D338	2750					g
Y	D346	2883		d	j	j	g
Y	D312	2935	l				
Y	D340	3003					l
Y	D318	3094		d	k	g	f
Y	D1333	3140	a				
Y	D320	3330		c	k	g	g

Appendix 14 cont. Cattle: Ageing data: Mandibular tooth eruption and wear

Phase	Context	Bone ID	dP4	P4	M1	M2	M3
Y	D1333	3437		f	l	k	j
Y	D762	3482					b
Y	D712	3495					l
Y	D464	3527					k
Y	D338	3664					f
Y	D352	3958	a				
Y	D1332	3977	k		j	f	E
Y	D1231	4010	b				
Y	D705	4046					f
Y	D312	4605		g	k	j	g
Y	D1231	4635	k		h	f	E
Y	D1231	4636	h		E		
Y	B120	5529	n				
Y	D762	5764				b	E
Y	D762	5798					j
Y	D706	5810					g
Y	D338	6013		d	j	g	g
Y	D338	6014		d	k	j	g
Y	D338	6015				h	
Y	D338	6033		c	j	g	e
Y	D340	6041		V	g	f	b
Y	D151	6171					g
Y	C184	6240				g	g
Y	D168	6412					g
Y	A345	6489					g
Y	A345	6501	k		h	f	V
Y	A318	6513					l
Y	D1332	6668					b
Y	D1333	6697		b	j	g	c
Y	D1158	6872					g
Y	D1158	6878					g
Y	D1158	6901	k				
Y	D1158	6906	h				
Y	D340	7118					g
Y	D1332	7184	a				
Y	D151	7862			m	k	k
Y	D151	7863			k		
Y	D151	7864					j
Y	D1332	8003		g	m	l	j
Y	D1332	8004					f
Y	A196	8303			j	f	e
Y	A196	8304					j
Y	D312	8502					f
Y	D349	8612		e	k	j	g
Y	D349	8613	a				
Y	D1231	8848					g
Y	D338	8897	k		j	f	b
Y	D338	8898	l		j	f	b
Y	D320	9134		b	j	g	d
Y	D320	9135		e		g	e
Y	D320	9136					g
Y	D762	9277		E	j	g	b
Y	D763	9308				j	g
Y	D704	9409					f
Y	D705	9438				k	g
Y	D762	9918		d	k	g	f
Y	D762	9923			k	j	d
Y	D762	9924					h
Y	D837	9940					g
Y	D762	9949					b

Phase	Context	Bone ID	dP4	P4	M1	M2	M3
Y	A318	10305		E	h	f	E
Y	A318	10306	k		g	g	E
Y	A318	10307		E	j		
Y	D224	10389					f
Y	D312	10423	g				
Y	D318	10503					g
Y	D338	10566		d	h		
Y	D1333	10715			j		b
Y	D1333	10716			l	k	g
Y	D1158	10757	k		j	f	E
Y	D898	10839	k				
Y	D762	10844				j	g
Y	D898	10876					j
Y	D762	10895	k		k	f	b
Y	D762	10919	k				
Y	D837	10942	l				
Y	D704	11243	k		g	f	a
Y	D762	11274					k
Y	D705	11338	f				
Y	D706	11340					g
Y	D340	11508		b	k	g	d
Y	D338	11518			m	m	
Y	D1335	11612		g			
Y	D1335	11613					d
Y	D1332	11629					E
Y	D1332	11639		k	h	g	d
Y	D1158	11667		e			
Y	D318	12004		d	k		
Y	D318	12005	k		h	f	a
Y	C207	12199					g
Y	D216	12549					g
Y	D312	12705		f	l		
Y	D320	13270					e
Y	D312	13296					j
Y	C184	13444		f	m	l	
Y	C184	13445					l
Y	D168	13492					k
Y	D168	13508				g	g
Y	D168	13527				k	g
Y	D320	13589					f
Y	D320	13590					b
Y	D312	13599					g
Y	D312	13752					l
Y	D320	14174		g		k	
Y	D320	14175					e
Y	C270	14617	j		g	f	a
Y	D150	14742	m				
Y	D320	14764		E	j	g	c
Y	D329	15305	k		E		
Y	D312	15318	l				
Y	D1158	15619		d		g	f
Y	D1282	15841		E	g	f	c
Y	D214	16031				k	f
Y	D329	16815	k				
Y	D318	16911					g
Y	D320	17455					d
Y	D312	17470					j
Y	D329	17575				l	
Y	D312	17661	h				
Y	D312	17662					g

Appendix 14 cont. Cattle: Ageing data: Mandibular tooth eruption and wear

Phase	Context	Bone ID	dP4	P4	M1	M2	M3
Y	D168	17785		g	l	k	
Y	C184	17907					g
Y	D329	17963			k	g	d
Y	D318	18394			k	g	f
Y	D318	18395					g
Y	D329	18402					g
Y	C409	18895		f	l	k	
Y	C409	18896		c			
Y	C409	18897					d
Y	D219	19637					f
Y	B299	19764		f	k	j	g
Y	B299	19774					g
Y	C203	20091		d	k	h	
Y	B120	21445					j
Y	D78	22208					c
Y	D78	22209					c
Y	C207	22340					g
Y	D151	23246		l	g	f	b
Y	D151	23247		e	k	j	f
Y	D151	23425					g
Y-Z	E74	566					g
Y-Z	E74	575				k	k
Y-Z	E74	591					g
Y-Z	E74	678					j
Y-Z	E74	691					j
Y-Z	D116	731			k	j	g
Y-Z	D116	737		e	k	j	g
Y-Z	D116	738				g	g
Y-Z	D116	739					j
Y-Z	D116	757			j	g	c
Y-Z	D116	758			e	k	
Y-Z	D116	769					g
Y-Z	D116	777			c	k	g
Y-Z	D116	812	k				
Y-Z	E81	1286					f
Y-Z	E81	1287					g
Y-Z	E74	1319					d
Y-Z	E74	1338					d
Y-Z	B277	1697				j	f
Y-Z	B277	1758			g	l	k
Y-Z	E74	3698					f
Y-Z	E74	3699					g
Y-Z	E74	3719					f
Y-Z	D116	4518				k	f
Y-Z	D116	4519					a
Y-Z	D116	4852			g	l	l
Y-Z	D116	4878			e	k	
Y-Z	C187	5153					g
Y-Z	D116	5878			c	j	g
Y-Z	D116	5897					f
Y-Z	D116	5984				k	g
Y-Z	C187	6262					a
Y-Z	E74	6387					d
Y-Z	D116	6646					g
Y-Z	D116	6665				g	g
Y-Z	D116	7275				g	c
Y-Z	E74	7761				k	
Y-Z	E74	7771					b
Y-Z	E74	7782					g
Y-Z	E74	8277					l

Phase	Context	Bone ID	dP4	P4	M1	M2	M3
Y-Z	D116	8809					a
Y-Z	D116	8961					k
Y-Z	D116	8988					e
Y-Z	D116	9033			m	l	m
Y-Z	D116	9045			h	j	g
Y-Z	D116	9046				f	b
Y-Z	D116	9052					k
Y-Z	D116	9064					f
Y-Z	E74	9170					g
Y-Z	E74	9171					m
Y-Z	E74	9172		g	l		
Y-Z	E74	9179			j	g	
Y-Z	E74	9198					b
Y-Z	B277	9536				j	f
Y-Z	B277	9537					g
Y-Z	B277	9548		e	k	k	
Y-Z	B277	9549					j
Y-Z	B277	9550					c
Y-Z	E250	9869		h	l	l	l
Y-Z	E74	10676					k
Y-Z	E74	10684					f
Y-Z	D116	11037					g
Y-Z	E74	11986	l				
Y-Z	E74	11991					j
Y-Z	E74	11992					j
Y-Z	E74	11993		E	k	g	b
Y-Z	D116	12055					b
Y-Z	B277	12147		f			
Y-Z	B277	12148					b
Y-Z	D116	12154	j				
Y-Z	B277	12219			k	g	
Y-Z	B277	12225		f	k		
Y-Z	B277	12593					g
Y-Z	B277	12632		f	l		
Y-Z	B277	12633		f	l		
Y-Z	C268	13005					f
Y-Z	C268	13006					g
Y-Z	C268	13007					g
Y-Z	C268	13008		d			
Y-Z	C268	13009					b
Y-Z	C268	13029		f	l	k	k
Y-Z	B277	13040					g
Y-Z	B277	13061	a				
Y-Z	B277	13062					f
Y-Z	B277	13070					j
Y-Z	E74	13086					l
Y-Z	E74	13093	m				
Y-Z	D116	13352		e	k	k	g
Y-Z	C267	13677		e		j	f
Y-Z	C268	13693				l	k
Y-Z	B277	13726					g
Y-Z	B277	14065				k	j
Y-Z	C240	15054		c	j	j	f
Y-Z	C240	15055		e	j	h	g
Y-Z	C240	15057		f	k	k	g
Y-Z	D116	15067		c	k	g	f
Y-Z	D116	15375		e	k	j	f
Y-Z	D116	15523					b
Y-Z	B277	15584					g
Y-Z	B277	15589			k	j	c

Appendix 14 cont. Cattle: Ageing data: Mandibular tooth eruption and wear

Phase	Context	Bone ID	dP4	P4	M1	M2	M3
Y-Z	B277	15590				j	g
Y-Z	B277	15601		e	k		
Y-Z	E74	15744					l
Y-Z	E74	15747		d	j	g	f
Y-Z	E74	15751		E			
Y-Z	C187	16374				k	k
Y-Z	D116	16916					j
Y-Z	C267	16947		e	k	k	f
Y-Z	C267	16948		e	k	k	g
Y-Z	C267	16949				k	
Y-Z	E74	16995					f
Y-Z	E74	17003					g
Y-Z	C267	17282			l		j
Y-Z	C267	17283		f	k	k	k
Y-Z	C267	17284		a	g	f	a
Y-Z	C267	17285	a				
Y-Z	C267	17287	j				
Y-Z	C267	17288					f
Y-Z	C267	17289	k				
Y-Z	C267	17290					f
Y-Z	C267	17291					a
Y-Z	C187	17893					j
Y-Z	C75	17961		e			
Y-Z	D233	18005					k
Y-Z	D116	18023					j
Y-Z	C240	18185				l	g
Y-Z	C240	18198			l	k	g
Y-Z	E74	18619					f
Y-Z	B277	18627					d
Y-Z	D116	18759		e	j	h	f
Y-Z	D116	18775		b	j	f	b
Y-Z	D116	18776		e	g		
Y-Z	D116	18777		d	k	j	f
Y-Z	D116	18936		a	j		
Y-Z	D116	18952		b	k		f
Y-Z	D116	19659			k		
Y-Z	D116	20004		E	g	f	
Y-Z	D116	20069					g
Y-Z	C268	20132			j	j	b
Y-Z	C268	20133		e	k	j	g
Y-Z	C268	20134		g	l	k	g
Y-Z	C268	20135					g
Y-Z	E74	20287				h	h
Y-Z	E74	20289					g
Y-Z	E74	20307					g
Y-Z	B277	20405		h	n	l	l
Y-Z	C187	20485					f
Y-Z	C187	20506					g
Y-Z	B277	20537				k	h
Y-Z	B277	20550					g
Y-Z	C240	20742		f	k	g	f
Y-Z	C240	20743		h			j
Y-Z	C240	20744		f	l	g	g
Y-Z	C240	20745		c	k		
Y-Z	C240	20746					f
Y-Z	C240	20754		E	h	f	b
Y-Z	C240	20755		d	k	h	f
Y-Z	C267	20905		f	l		
Y-Z	C187	21004		e			
Y-Z	C187	21016		g	l	k	k

Phase	Context	Bone ID	dP4	P4	M1	M2	M3
Y-Z	C240	21065					h
Y-Z	C240	21070			k	k	j
Y-Z	C187	21077				d	
Y-Z	D116	21502					b
Y-Z	D116	21900					l
Y-Z	C258	22175			k		
Y-Z	C231	22199				k	g
Y-Z	E74	22318					g
Y-Z	E81	22684					c
Y-Z	E81	22685					g
Y-Z	C187	23644		E	j		
Z	C89	19					h
Z	D100	23	j		g		
Z	D332	119			l	k	j
Z	D332	125					j
Z	D100	285		f	k	k	g
Z	D332	329					j
Z	D331	443					j
Z	D332	484					f
Z	D332	509		c	k	g	e
Z	D330	511	l				
Z	D372	622					b
Z	D331	643					f
Z	D310	720		d	k		
Z	D332	819		f	l	k	h
Z	D332	833		g	m	l	
Z	E184	957		d	k	j	f
Z	D305	1234					g
Z	E85	1309					g
Z	D103	1663					j
Z	D103	1679					l
Z	E172	1856		g	k		
Z	E172	1857					g
Z	D467	1926			m	l	l
Z	C80	2098	j				
Z	C80	2099					g
Z	C80	2100					j
Z	C80	2101		E			
Z	B150	2171					g
Z	B152	2176					j
Z	B136	2183					f
Z	D106	2316		g	l	k	
Z	D108	2328			k	l	
Z	D310	2495					m
Z	D372	2525					d
Z	D372	2526					j
Z	D331	2545		g	l		
Z	D372	2569		f	l	l	
Z	D100	2647		f			
Z	D100	2682		d	k	j	
Z	D100	2683		f	l		
Z	D283	2696		c	k	h	d
Z	D283	2723					a
Z	D306	2760			g	b	
Z	D306	2761				k	
Z	E185	2796		e	k	h	g
Z	E185	2797		e	k	j	f
Z	E185	2798					g
Z	E185	2799					k
Z	E185	2800					g

Appendix 14 cont. Cattle: Ageing data: Mandibular tooth eruption and wear

Phase	Context	Bone ID	dP4	P4	M1	M2	M3
Z	E172	2851			k	k	
Z	E172	2852		d	k	g	
Z	D306	3016					g
Z	D332	3227		E			
Z	D332	3228					g
Z	D467	3470		E	j	g	d
Z	B136	3605					d
Z	B136	3608					e
Z	D283	3724		c	j	g	f
Z	D283	3733					l
Z	D332	3769		g	l	k	j
Z	D372	3919					j
Z	D332	3931	f				
Z	D306	4030					d
Z	B99	4319					g
Z	B159	4333					b
Z	B170	4338					k
Z	D100	4454					g
Z	D100	4478					g
Z	D283	4492					j
Z	D283	4573					k
Z	C78	4705					f
Z	C78	4726					k
Z	D100	4739		E	h	f	b
Z	D100	4740			g	g	
Z	D100	4749		c	j	g	c
Z	D100	4750		d	k	j	
Z	C76	4830	l				
Z	C76	4831					j
Z	D100	4893		b			
Z	C89	4967	j				
Z	C76	4989		e	j	g	f
Z	C76	4990					l
Z	B172	5016	g		b		
Z	C78	5020					j
Z	C76	5054					e
Z	B136	5071			k	k	
Z	B136	5072					g
Z	D100	5088		g	k	k	f
Z	D100	5089					g
Z	D100	5105					j
Z	C94	5141					k
Z	C80	5166					f
Z	C74	5177			l	k	
Z	C74	5178					g
Z	C78	5201					f
Z	B172	5224		g	l		
Z	B172	5225				j	g
Z	E172	5238		g	l	k	f
Z	E172	5239			l	k	
Z	E172	5262					f
Z	E172	5263			g	f	
Z	E172	5264			l	l	
Z	E172	5271		f	k	k	g
Z	E172	5272			k	j	d
Z	C78	5326			k	h	d
Z	C94	5359					b
Z	C94	5360					b
Z	C78	5372				j	f
Z	C78	5373			k	f	

Phase	Context	Bone ID	dP4	P4	M1	M2	M3
Z	C78	5467					b
Z	C78	5468			j	f	
Z	C78	5488		b	k	h	
Z	C78	5511					k
Z	C78	5512					f
Z	C89	5520					k
Z	D100	5560		e	k	j	g
Z	D100	5561		e			
Z	C80	5622					m
Z	C76	5632					g
Z	C76	5633					g
Z	D283	5737					j
Z	D107	6082	l				
Z	D331	6098		f	l	j	g
Z	D331	6099					l
Z	D332	6102			f	b	
Z	D332	6110		e			
Z	D332	6111					c
Z	E85	6123			n	l	
Z	D100	6132			k	k	e
Z	D100	6140	k		k	f	a
Z	D100	6141			k	k	g
Z	D100	6200					c
Z	C191	6208		f	k		
Z	C88	6213					j
Z	C88	6214					g
Z	C191	6224		f	l		
Z	D283	6301					c
Z	C212	6405					j
Z	D310	6580					a
Z	D100	6604		g	m	l	k
Z	D100	6605		g	m	l	k
Z	D100	6826		e	k	k	j
Z	D100	6858	j		g		
Z	E185	7065					j
Z	D372	7145					g
Z	C78	7340			k	h	f
Z	C78	7341				k	j
Z	C78	7342			g	b	
Z	C78	7378		f	l	l	k
Z	B172	7399		h	m	m	
Z	E85	7574					b
Z	E85	7582		g			
Z	E85	7597			k	k	j
Z	D331	7629		g	l	k	j
Z	C188	7712					j
Z	C188	7713					b
Z	C188	7718		b	k	g	d
Z	C188	7740					g
Z	C188	7741					g
Z	E172	7818			j	g	f
Z	E172	7819					f
Z	E172	7820					j
Z	E172	7821					b
Z	E172	7837				f	a
Z	E172	7858				k	
Z	B150	7910					g
Z	B136	7964		h	m	l	
Z	C78	8096		e			
Z	B172	8114				l	k

Appendix 14 cont. Cattle: Ageing data: Mandibular tooth eruption and wear

Phase	Context	Bone ID	dP4	P4	M1	M2	M3
Z	C78	8139					d
Z	C78	8140					g
Z	C78	8141					j
Z	B147	8209				l	g
Z	D283	8527				k	
Z	D306	8538	j				
Z	D283	8577	f				
Z	D148	8702					f
Z	D148	8703					d
Z	D148	8704					g
Z	D100	8728	l				
Z	E172	9205			k	g	
Z	E172	9206					g
Z	D100	9349	g				
Z	D466	9483		c	j	g	f
Z	D466	9484					d
Z	D372	9575			j	g	f
Z	D104	9689					f
Z	D104	9690					f
Z	C188	9728		g	k	k	j
Z	C188	9729			k	g	g
Z	E221	9849					c
Z	B172	10028	j				
Z	B97	10031					j
Z	B197	10035			g	f	
Z	D100	10067			k	j	g
Z	D100	10079	k				
Z	D100	10080		e	k		
Z	D100	10084	j				
Z	D283	10429				g	d
Z	D283	10430					g
Z	D310	10438					g
Z	E185	10451		b	g	j	c
Z	E179	10458					b
Z	E185	10482				k	g
Z	D108	10486	l				
Z	D108	10487					b
Z	D332	10585			m	l	l
Z	E172	10629					b
Z	E172	10645					g
Z	E172	10646					d
Z	E172	10671		f	k	k	g
Z	E172	10672		f			g
Z	D463	10915	j		g	b	
Z	D463	10916			k	j	j
Z	D463	10917		f	l	l	g
Z	D331	10970		c	k	g	f
Z	D108	11396	k				
Z	E172	11408				j	f
Z	E172	11409			m	m	
Z	E172	11410					c
Z	E185	11481					g
Z	D323	11542					g
Z	C78	11830		E			
Z	C78	11840		f	g	f	b
Z	C78	11850	h				
Z	C78	11851					g
Z	E172	11939		e	k	k	g
Z	E172	11940				l	
Z	E172	11942				g	f

Phase	Context	Bone ID	dP4	P4	M1	M2	M3
Z	E172	11943					g
Z	D305	12015		E	k	f	b
Z	D100	12727				g	g
Z	D100	12766				l	
Z	D100	13174					g
Z	D310	13302		h	m	m	
Z	D310	13418	a				
Z	C106	13475	m				
Z	D100	13485					j
Z	D100	13521					j
Z	E172	13878					g
Z	E172	13938		d		g	d
Z	E172	13939		e	k	g	f
Z	E172	13940		f			
Z	E172	13941				j	f
Z	E172	13942					g
Z	E172	13943					g
Z	B136	14017					b
Z	D307	14359					k
Z	D100	14377					g
Z	D100	14408	m				
Z	D108	14426		f	l	k	
Z	D283	14542		f			
Z	D283	14562		g	l	k	j
Z	D283	14649	j				
Z	D283	14682				g	d
Z	E85	14885					j
Z	D100	14906					e
Z	D100	15008					b
Z	D100	15017					g
Z	D100	15026					h
Z	D100	15326					l
Z	D148	15450					j
Z	D283	15788					j
Z	D283	15825					f
Z	D108	15970			k	c	E
Z	D100	16052					k
Z	D100	16093	a				
Z	E172	16300				f	c
Z	E172	16301					g
Z	C191	16386					g
Z	D283	16505					l
Z	D283	16599					k
Z	D108	16879					n
Z	D310	16901					g
Z	D100	16940		g	k	j	h
Z	D108	17163		f			
Z	D100	17181		E	g	f	E
Z	D100	17185				l	g
Z	D100	17212		e	k	h	f
Z	D100	17213				g	d
Z	D100	17224					b
Z	B136	17331		g			
Z	D100	17515					g
Z	D100	17516					h
Z	D100	17528					f
Z	D100	17533		E			
Z	D100	17534		f			
Z	D100	17535					f
Z	D100	17544			k	k	

Appendix 14 cont. Cattle: Ageing data: Mandibular tooth eruption and wear

Phase	Context	Bone ID	dP4	P4	M1	M2	M3
Z	D108	17679				k	j
Z	C192	17880	h				
Z	D107	18130					f
Z	D372	18155					c
Z	D283	18302				k	g
Z	E185	18358				j	g
Z	E184	18373				k	g
Z	D100	18494				h	d
Z	D100	18504					g
Z	D100	18533			k	j	g
Z	D100	18555					f
Z	C78	18733					g
Z	D100	19624		b	h	f	b
Z	D100	19625	l				
Z	C188	19714	k				
Z	E172	19782					k
Z	E172	19790				m	g
Z	E172	19803				h	d
Z	E172	19804			l		
Z	E172	19819					g
Z	D100	19899			k	j	
Z	D100	20177					j
Z	D100	20178					g
Z	D100	20179					f
Z	D100	20192					f
Z	D283	20209				f	
Z	D283	20238					d
Z	E172	20336					f
Z	E172	20349				j	g
Z	E172	20350					e
Z	C188	20355					j
Z	C188	20367		g	l	k	
Z	C188	20368					j
Z	C188	20369	j				
Z	C188	20379		f	k	h	g
Z	C188	20380	l				
Z	B172	20476					g
Z	D100	20810	k				
Z	D100	20826					g
Z	D108	20982			k	j	j
Z	D283	21140	j				
Z	D107	21149				g	d
Z	D100	21249					l
Z	D100	21257					j
Z	C76	21270		e	k	g	f
Z	D100	21519			k	k	j
Z	D100	21816			k	j	g
Z	D100	21817			k	g	
Z	D100	21818					g
Z	D283	21981					a
Z	D100	22046					g
Z	D103	22055		f	j	c	a
Z	D283	22074	l				
Z	C188	22291		f	k	g	f
Z	C188	22298					g
Z	C90	22360					j
Z	C88	22365					e
Z	D100	22397					g
Z	D100	22419		g	k	j	g
Z	D100	22428			k	h	e

Phase	Context	Bone ID	dP4	P4	M1	M2	M3
Z	D100	22451	l		j		
Z	D100	22452			k	k	
Z	D100	22453			j	g	
Z	D100	22454				g	d
Z	D100	22455					d
Z	D100	22456					g
Z	D100	22457	l				
Z	D108	22474	f				
Z	D283	22594		E	j	g	b
Z	D306	22602		c	g	g	f
Z	D306	22603				g	j
Z	D306	22604					E
Z	C89	22709		e	k	j	g
Z	C89	22710				k	j
Z	C78	22719				k	g
Z	D100	22744	j		g	f	E
Z	D100	22788		f	k	j	g
Z	D100	22789				j	g
Z	D100	22802					d
Z	D100	22832			j	f	
Z	D305	22955					a
Z	E100	23185					g
Z	D104	23219					f
Z	D100	23241				k	g
Z	C80	23270		f		k	j
Z	D100	23281					g
Z	D100	23293		g	k	j	g
Z	D100	23313					j
Z	D100	23343					e
Z	D100	23416				k	h
Z	D100	23417					a
Z	B147	23443					g
Z	B147	23444					j
Z	D100	23482		d	k		
Z	D100	23483					f
Z	E85	23507			k	j	f
Z	E85	23508					f
Z	D100	23532		f	k	j	g
Z	D100	23533		f		j	g
Z	D100	23534					g
Z	C78	23551			g	f	
Z	C74	23588		d	j	f	
Z	C78	23614			k	j	d
Z	C78	23615		f	k	k	b
Z	C191	23626		g	l	k	j
Z	C74	23637		f	k	k	
Z	C74	23638	j				
Z	B170	23692					g
Z	C76	23706	e				
Z	B147	23713		f	l	k	g
Z	B147	23714		g	m	l	j
Z	B147	23715				l	j
Z	B147	23716					g
Z	C78	23732			j		

Appendix 14 cont. Cattle: Ageing data: Mandibular tooth eruption and wear

Phase	Context	Bone ID	L	B
T-V	D1005	10194		15.3
T-V	D1005	10199	35.7	15.1
T-V	D1005	10835	34.7	15.4
T-V	D941	11108	37.7	16.2
T-V	D941	11109		16.9
T-V	D2188	12268	35.5	14.7
T-V	D2188	12269		14.0
T-V	D2284	12315	35.0	16.0
T-V	D2284	12316	34.5	14.5
T-V	D2135	18681		14.3
T-V	D1885	18996	37.2	15.7
W	C533	185	35.0	16.0
W	C527	186		16.1
W	C527	187	34.1	16.3
W	C527	188	33.6	13.6
W	C536	213	29.2	14.7
W	C541	228	32.5	14.5
W	C553	250		14.9
W	D1139	317		15.0
W	D163	800	36.0	14.2
W	C440	974	36.5	15.8
W	D983	1141	34.1	14.9
W	D983	1156	35.1	14.5
W	D343	1619	35.0	14.5
W	D343	1630	36.6	15.9
W	D343	1631	34.9	15.4
W	D343	1632		14.3
W	D933	2422	38.8	16.0
W	E96	2865		14.2
W	D1126	3203	34.2	16.0
W	C417	3394	36.9	15.1
W	D1172	3460	34.0	14.5
W	D343	5834	35.2	14.9
W	D840	5839	38.7	16.2
W	D778	5858	34.0	15.1
W	D244	5949	35.0	15.7
W	D163	5967	34.3	15.0
W	D244	5971	31.2	14.1
W	E272	7080		14.0
W	E271	7085	37.8	16.7
W	E270	7093	35.8	14.9
W	E278	7097	37.4	16.0
W	E278	7098	37.1	16.0
W	D188	7306		14.6
W	C426	8339	37.3	15.1
W	E96	8891	36.0	14.8
W	D163	8934	40.7	17.4
W	D188	9060	36.2	15.1
W	D343	9068	34.0	14.0
W	D244	9091	33.7	14.5
W	D244	9092	35.1	14.9
W	D188	9111	32.7	14.0
W	E96	9268	36.8	14.8
W	D343	9421		14.2
W	E270	9506	32.7	14.3
W	D1129	9674	30.2	15.6
W	D252	9795	34.2	14.3
W	D484	9806	34.0	15.1
W	D755	9903	32.7	14.0
W	E96	10956	32.0	14.3

Phase	Context	Bone ID	L	B
W	D188	10993	36.4	15.5
W	D631	11045		15.3
W	D1139	11066		13.5
W	D1139	11069	37.6	14.9
W	D1132	11090		15.3
W	D840	11264	35.8	15.3
W	D840	11265	36.3	15.9
W	D188	12902	34.2	13.3
W	D1606	13116	33.9	14.3
W	D1606	13124	33.1	14.4
W	D1802	13135	34.3	14.6
W	D1868	13136	35.6	14.8
W	D1591	13375	34.0	15.2
W	D1871	13544	36.2	14.8
W	D1871	13545	33.1	15.1
W	D1871	13546	37.5	15.5
W	D1871	13547		15.6
W	B521	14115	36.1	15.0
W	D1569	14297	35.9	15.1
W	D1591	14300	35.6	14.7
W	C476	14740	34.4	14.6
W	D102	14761	36.9	15.5
W	E96	15110	35.6	16.3
W	E96	15111	34.6	14.2
W	E96	15138	34.8	14.8
W	E96	15165	35.0	15.2
W	E96	15166		16.0
W	E96	15172		13.9
W	E96	15178	34.3	14.5
W	E96	15234		15.4
W	E96	15252	34.3	14.8
W	D335	15289		15.8
W	D163	15621	33.6	14.9
W	D664	15625	33.2	14.4
W	D1389	15644	34.9	14.7
W	E96	15654		14.6
W	D335	15846		15.0
W	D335	15858	33.3	14.6
W	E96	15922		15.6
W	E96	15940	35.5	15.0
W	D2378	15997		14.8
W	E96	16096		15.4
W	E96	16097	36.3	16.3
W	E96	16105	40.0	17.0
W	E96	16113	34.9	14.7
W	E96	16174	34.4	15.3
W	E96	16182		17.2
W	E96	16195	34.9	15.2
W	E96	16618		15.2
W	D244	9091	33.7	14.5
W	D244	9092	35.1	14.9
W	D188	9111	32.7	14.0
W	E96	9268	36.8	14.8
W	D343	9421		14.2
W	E270	9506	32.7	14.3
W	D1129	9674	30.2	15.6
W	D252	9795	34.2	14.3
W	D484	9806	34.0	15.1
W	D755	9903	32.7	14.0
W	E96	10956	32.0	14.3

Appendix 15. Cattle: Biometry: Third molar measurements

Phase	Context	Bone ID	L	B
W	D188	10993	36.4	15.5
W	D631	11045		15.3
W	D1139	11066		13.5
W	D1139	11069	37.6	14.9
W	D1132	11090		15.3
W	D840	11264	35.8	15.3
W	D840	11265	36.3	15.9
W	D188	12902	34.2	13.3
W	D1606	13116	33.9	14.3
W	D1606	13124	33.1	14.4
W	D1802	13135	34.3	14.6
W	D1868	13136	35.6	14.8
W	D1591	13375	34.0	15.2
W	D1871	13544	36.2	14.8
W	D1871	13545	33.1	15.1
W	D1871	13546	37.5	15.5
W	D1871	13547		15.6
W	B521	14115	36.1	15.0
W	D1569	14297	35.9	15.1
W	D1591	14300	35.6	14.7
W	C476	14740	34.4	14.6
W	D102	14761	36.9	15.5
W	E96	15110	35.6	16.3
W	E96	15111	34.6	14.2
W	E96	15138	34.8	14.8
W	E96	15165	35.0	15.2
W	E96	15166		16.0
W	E96	15172		13.9
W	E96	15178	34.3	14.5
W	E96	15234		15.4
W	E96	15252	34.3	14.8
W	D335	15289		15.8
W	D163	15621	33.6	14.9
W	D664	15625	33.2	14.4
W	D1389	15644	34.9	14.7
W	E96	15654		14.6
W	D335	15846		15.0
W	D335	15858	33.3	14.6
W	E96	15922		15.6
W	E96	15940	35.5	15.0
W	D2378	15997		14.8
W	E96	16096		15.4
W	E96	16097	36.3	16.3
W	E96	16105	40.0	17.0
W	E96	16113	34.9	14.7
W	E96	16174	34.4	15.3
W	E96	16182		17.2
W	E96	16195	34.9	15.2
W	E96	16618		15.2
W	E96	17095		15.2
W	E96	17121		15.8
W	E96	17131		14.3
W	D1663	17237	33.7	14.6
W	D1557	17246	31.9	13.9
W	E96	17388	35.5	15.5
W	E96	17433	35.0	15.4
W	E96	17434		14.8
W	D1369	17611	36.8	16.3
W	D1369	17623	34.5	15.0
W	C527	17783	36.7	15.4

Phase	Context	Bone ID	L	B
W	D163	18046		14.7
W	C472	18236	38.5	16.3
W	C486	18248	36.2	15.4
W	D1951	18327	37.8	14.5
W	E96	18576	31.8	14.3
W	E96	18577	31.2	13.7
W	E96	18580	33.6	13.7
W	E96	18581	32.6	15.6
W	C501	18798	34.4	15.0
W	C501	18799	33.4	14.9
W	C501	18836	34.4	14.8
W	E96	18849		15.5
W	D2288	19001		14.9
W	E96	19447	33.8	14.3
W	C527	19553	37.0	16.5
W	C527	19556	35.2	15.2
W	C495	19586	35.9	15.1
W	D244	19851	36.4	15.0
W	E96	19944	34.0	13.9
W	E96	19953	35.1	14.9
W	E96	19966		14.4
W	E96	19970	35.0	14.5
W	E96	19971	38.3	16.4
W	E96	20012		15.4
W	E96	20013		15.0
W	E96	20032		13.7
W	E96	20055	36.9	16.2
W	D485	20076		14.8
W	D1955	20159	37.8	15.2
W	D1569	20608	37.6	15.7
W	D1569	20623		15.2
W	E96	20949	34.0	14.9
W	E96	21126	32.4	14.2
W	E96	21233		15.4
W	E96	21239	38.4	15.8
W	C468	21320	35.8	15.2
W	E96	21586		14.0
W	E96	21615		15.3
W	C468	22146	34.5	15.3
W	C468	22147	35.1	14.0
W	C468	22161	34.4	15.0
W	C495	22265	39.1	16.1
W	E96	23170	36.5	15.6
W	E96	23171		16.3
X	D1288	321	32.1	14.1
X	D1171	11070		16.2
X	B86	13956	38.5	17.0
X	C449	21035	33.4	15.6
X	C449	21036	33.3	15.3
X	C448	21038	33.5	15.2
X-Y	D81	344	35.3	15.2
X-Y	D81	376	33.5	14.6
X-Y	D81	377	34.0	14.2
X-Y	D81	828	34.6	15.4
X-Y	D81	829		14.9
X-Y	D735	852	31.9	14.2
X-Y	D728	1066	38.9	16.6
X-Y	D81	2077		15.6
X-Y	D81	2276	36.1	15.0
X-Y	D81	2362	41.8	17.0

Appendix 15 cont. Cattle: Biometry: Third molar measurements

Phase	Context	Bone ID	L	B
X-Y	D81	2363	33.7	14.5
X-Y	D81	2833		13.2
X-Y	D81	3047	33.8	15.0
X-Y	D81	3048	39.7	16.7
X-Y	D81	3081	35.0	15.6
X-Y	D81	3104		14.8
X-Y	D81	3544	33.5	14.4
X-Y	D81	3546	32.4	14.0
X-Y	D81	5097	36.4	15.1
X-Y	D81	5653	35.1	14.7
X-Y	D728	5794	34.9	15.6
X-Y	D728	5847	34.7	15.1
X-Y	D81	6595	34.3	14.8
X-Y	D81	6659	35.9	16.1
X-Y	D81	6691		15.2
X-Y	D81	6692		14.8
X-Y	D81	6756	35.2	14.8
X-Y	D81	7128	33.7	14.7
X-Y	D81	7422	38.8	16.0
X-Y	D81	7916		14.2
X-Y	D81	8665	35.1	15.2
X-Y	D81	8718	33.2	14.0
X-Y	D81	9614	34.1	15.2
X-Y	D81	10133	37.8	
X-Y	D81	10182	36.2	15.7
X-Y	D735	10279	33.2	16.5
X-Y	D210	10377	35.0	14.5
X-Y	D81	12036	31.7	13.8
X-Y	D81	12037	32.2	13.6
X-Y	D81	12084	35.7	15.0
X-Y	D81	12455	36.4	16.5
X-Y	D81	12456	34.2	15.0
X-Y	D81	12564	32.6	15.0
X-Y	D81	12566	35.7	15.7
X-Y	D81	12567	34.5	15.3
X-Y	D81	12569		14.9
X-Y	D81	12702	34.3	14.5
X-Y	D81	12703	32.7	14.2
X-Y	D81	12744	33.1	14.6
X-Y	D81	13241	35.0	15.1
X-Y	D81	13306	34.0	13.1
X-Y	D81	13322	36.5	15.6
X-Y	D81	13623		15.4
X-Y	D81	13639	37.3	15.5
X-Y	D81	13642	29.9	12.8
X-Y	D81	13643		14.9
X-Y	C308	13783	35.4	16.0
X-Y	D210	14910	37.4	16.8
X-Y	D81	14922	37.1	15.8
X-Y	D81	16134	33.0	16.2
X-Y	D81	16135	32.2	13.8
X-Y	D81	16429		15.2
X-Y	D81	16431		16.1
X-Y	D81	16432		14.1
X-Y	D81	16445	37.1	16.2
X-Y	D81	16446	38.8	15.7
X-Y	D81	16447	35.4	15.7
X-Y	D81	16537		14.6
X-Y	D210	16765		15.8
X-Y	D81	16906		17.0
X-Y	D81	16914	34.6	16.2
X-Y	D81	17919		15.6
X-Y	D210	18050	36.7	15.6
X-Y	D81	18420		14.5
X-Y	D81	18435	37.0	15.2
X-Y	D81	18459	38.4	15.6
X-Y	D81	18491	32.7	14.3
X-Y	D81	18683	35.3	15.4
X-Y	D81	18684	34.5	15.0
X-Y	D81	19369		15.5
X-Y	D81	19370	36.8	15.9
X-Y	D81	19436	36.7	15.9
X-Y	D81	19694		14.1
X-Y	D81	19702		16.3
X-Y	D81	19732		15.7
X-Y	D81	19909	35.5	15.4
X-Y	D81	20775		14.7
X-Y	D81	20787	34.2	14.9
X-Y	D81	20969		15.5
X-Y	D81	21157		15.9
X-Y	D81	21158	32.7	14.7
X-Y	D81	21664		14.4
X-Y	D81	22488	35.3	15.0
X-Y	D81	22544	32.5	14.5
X-Y	D81	22634	31.7	14.2
X-Y	D81	22635	34.4	15.4
X-Y	D81	22854	34.1	15.5
Y	D419	147	33.0	14.7
Y	D338	422	34.3	15.6
Y	D1332	1085	38.6	16.3
Y	D928	1205		15.3
Y	D705	1437	33.1	14.5
Y	A332	1500	36.3	15.0
Y	D1231	1508	37.0	16.1
Y	D1231	1509	33.2	15.0
Y	D1231	1514	35.9	15.8
Y	D1158	1529	36.1	15.7
Y	D1231	1538	36.0	16.1
Y	D762	1547	34.6	15.4
Y	D340	1801		16.3
Y	D340	1812	35.3	14.7
Y	D312	2005	35.5	15.3
Y	D762	2410	37.5	15.5
Y	D338	2750		14.9
Y	D346	2883	36.2	15.3
Y	D318	3094	30.8	14.2
Y	D320	3330	33.9	15.1
Y	D762	3482	36.6	15.9
Y	D464	3527	36.8	16.5
Y	D338	3664	33.1	15.3
Y	D705	4046	39.4	15.3
Y	D312	4605	35.5	16.5
Y	D1231	4635	38.1	16.2
Y	D706	5810	36.7	15.4
Y	D338	6013		15.4
Y	D338	6014	33.2	14.9
Y	D338	6033	34.4	14.6
Y	D340	6041		13.5
Y	D151	6171	36.3	15.6
Y	C184	6240	35.5	15.5

Appendix 15 cont. Cattle: Biometry: Third molar measurements

Phase	Context	Bone ID	L	B
Y	D168	6412	36.1	15.0
Y	A345	6489	37.4	15.5
Y	D1332	6668	35.5	16.2
Y	D1333	6697	33.2	14.7
Y	D1158	6872	33.5	14.4
Y	D1158	6878	36.9	15.3
Y	D340	7118	37.5	15.6
Y	D151	7862	37.8	15.6
Y	D151	7864	33.7	14.3
Y	D1332	8003	35.8	15.1
Y	D1332	8004	36.6	15.9
Y	A196	8303	32.1	14.8
Y	D312	8502	39.6	16.6
Y	D349	8612		15.1
Y	D1231	8848	32.8	14.4
Y	D338	8897	35.7	14.7
Y	D338	8898	35.9	14.8
Y	D320	9134	33.9	15.4
Y	D320	9135	36.4	14.6
Y	D320	9136	35.3	16.2
Y	D762	9277	34.2	14.9
Y	D763	9308	34.1	14.7
Y	D704	9409	36.4	16.0
Y	D705	9438	34.5	16.0
Y	D762	9923	33.8	15.5
Y	D837	9940	33.1	14.8
Y	D762	9949	35.4	14.7
Y	D224	10389	32.9	14.7
Y	D318	10503	35.7	16.2
Y	D1333	10716	37.5	15.5
Y	D762	10844		14.7
Y	D898	10876	37.9	16.2
Y	D762	10895	34.9	14.7
Y	D762	11274	38.1	15.8
Y	D340	11508	35.8	16.1
Y	D1335	11613	34.0	15.7
Y	D1332	11629	34.4	15.5
Y	D1332	11639	34.6	14.1
Y	D318	12005	33.5	15.3
Y	C207	12199		16.3
Y	D216	12549		13.7
Y	D312	13296	36.0	15.1
Y	D168	13492	35.6	15.6
Y	D168	13527	33.7	15.2
Y	D320	13590	34.6	14.1
Y	D312	13599	35.8	15.1
Y	D312	13752	33.5	15.2
Y	C270	14617	39.9	17.6
Y	D320	14764	34.9	14.6
Y	D1158	15619	35.2	15.7
Y	D214	16031	33.3	14.3
Y	D318	16911		15.3
Y	D312	17470	35.7	15.6
Y	D312	17662	41.4	17.4
Y	C184	17907	35.3	15.3
Y	D329	17963	36.2	16.3
Y	D318	18394	34.0	15.4
Y	D318	18395	36.3	15.5
Y	D329	18402	36.6	15.0
Y	C409	18897	35.2	15.2
Y	D219	19637	36.4	16.0
Y	B299	19764	33.6	15.3
Y	B299	19774		14.9
Y	B120	21445		14.8
Y	D78	22208	31.3	14.5
Y	D78	22209		14.0
Y	C207	22340	35.8	15.6
Y	D151	23247	37.2	15.5
Y	D151	23425	33.1	13.6
Y-Z	E74	566		14.3
Y-Z	E74	575	36.7	17.2
Y-Z	E74	591	32.2	14.6
Y-Z	E74	678		14.8
Y-Z	E74	691		15.5
Y-Z	D116	731	37.3	16.9
Y-Z	D116	737	34.3	14.3
Y-Z	D116	738	32.6	14.4
Y-Z	D116	739	33.6	15.0
Y-Z	D116	757	35.9	15.3
Y-Z	D116	758	33.7	15.3
Y-Z	D116	769	36.6	16.2
Y-Z	D116	777	36.0	16.1
Y-Z	E81	1286	33.1	14.1
Y-Z	E81	1287	35.5	15.4
Y-Z	E74	1319		15.0
Y-Z	E74	1338	34.8	14.4
Y-Z	B277	1697	35.9	15.4
Y-Z	B277	1758	34.5	15.3
Y-Z	E74	3698	33.4	14.5
Y-Z	E74	3699		14.2
Y-Z	E74	3719	37.7	16.4
Y-Z	D116	4518	32.6	14.9
Y-Z	D116	4519		14.4
Y-Z	C187	5153	33.8	14.9
Y-Z	D116	5878	32.9	14.7
Y-Z	D116	5897	34.2	15.0
Y-Z	D116	5984	32.5	14.3
Y-Z	C187	6262	32.7	13.3
Y-Z	E74	6383	33.7	14.6
Y-Z	D116	6646	36.0	14.8
Y-Z	D116	6665	31.7	14.0
Y-Z	D116	7260		14.4
Y-Z	D116	7275	34.9	14.8
Y-Z	D116	7276	37.8	16.2
Y-Z	D116	7314	37.2	16.4
Y-Z	E74	7771	35.2	16.0
Y-Z	E74	7782	36.5	15.2
Y-Z	E74	8277		14.4
Y-Z	D116	8988	35.5	15.6
Y-Z	D116	9045	37.8	16.7
Y-Z	D116	9046	32.2	14.2
Y-Z	D116	9052	37.4	16.1
Y-Z	E74	9170	36.2	15.6
Y-Z	E74	9171	34.6	14.8
Y-Z	B277	9536	36.0	16.0
Y-Z	B277	9537		15.1
Y-Z	B277	9549	35.0	15.3
Y-Z	B277	9550	38.2	16.4
Y-Z	E74	10684	33.8	13.5
Y-Z	D116	11037		14.8

Appendix 15 cont. Cattle: Biometry: Third molar measurements

Phase	Context	Bone ID	L	B
Y-Z	E74	11991	36.2	15.0
Y-Z	E74	11992	32.6	14.3
Y-Z	E74	11993	34.1	14.9
Y-Z	D116	12055	34.5	14.4
Y-Z	B277	12148	36.0	15.5
Y-Z	B277	12593	33.9	15.3
Y-Z	C268	13005	37.3	16.0
Y-Z	C268	13006		15.8
Y-Z	B277	13040	35.8	15.6
Y-Z	B277	13070	36.2	15.3
Y-Z	E74	13086	31.6	13.6
Y-Z	D116	13352	35.1	15.1
Y-Z	C267	13677	37.0	15.2
Y-Z	C268	13693	35.1	15.0
Y-Z	B277	13726		15.2
Y-Z	C240	15054	32.3	14.0
Y-Z	C240	15055		13.4
Y-Z	C240	15057	34.2	15.4
Y-Z	D116	15067	33.7	14.3
Y-Z	D116	15375	36.4	15.7
Y-Z	D116	15523		13.3
Y-Z	B277	15589	33.1	14.1
Y-Z	B277	15590	36.0	15.2
Y-Z	E74	15744		15.6
Y-Z	E74	15747	33.6	15.0
Y-Z	C187	16374		15.4
Y-Z	D116	16916	36.3	15.9
Y-Z	C267	16948	33.4	14.5
Y-Z	E74	16995	34.1	14.5
Y-Z	E74	17003		15.9
Y-Z	C267	17282	30.7	14.9
Y-Z	C267	17283	37.1	16.3
Y-Z	C267	17284	35.5	15.5
Y-Z	C267	17288	31.8	13.7
Y-Z	C267	17290	31.1	13.3
Y-Z	C267	17291		15.9
Y-Z	C187	17893	35.7	16.5
Y-Z	D233	18005	33.4	14.4
Y-Z	D116	18023	35.6	16.1
Y-Z	C240	18185	37.4	15.8
Y-Z	E74	18619		14.3
Y-Z	B277	18627	33.7	15.5
Y-Z	D116	18744	35.4	15.5
Y-Z	D116	18759	34.3	14.6
Y-Z	D116	18775		16.0
Y-Z	D116	18777		15.5
Y-Z	D116	18952	34.3	15.5
Y-Z	C268	20132	32.8	15.7
Y-Z	C268	20133		15.8
Y-Z	C268	20134	34.9	15.0
Y-Z	C268	20135		15.7
Y-Z	E74	20287		15.6
Y-Z	E74	20307	34.4	15.0
Y-Z	C187	20485	35.9	15.4
Y-Z	C187	20506	34.8	15.6
Y-Z	B277	20537	37.7	16.3
Y-Z	C240	20742	35.8	14.9
Y-Z	C240	20743	36.2	16.2
Y-Z	C240	20744	33.9	14.5
Y-Z	C240	20746		14.8
Y-Z	C240	20754	33.3	14.7
Y-Z	C240	20755	35.7	14.9
Y-Z	C187	21016	33.0	13.4
Y-Z	C240	21065		14.6
Y-Z	D116	21502	35.9	15.4
Y-Z	C231	22199	34.2	14.2
Y-Z	E81	22685	32.6	14.4
Y-Z	D116	22696		14.5
Y-Z	C160	23606	35.8	15.9
Z	C89	19		15.7
Z	D332	119	35.6	15.4
Z	D332	125		16.2
Z	D100	285	34.2	14.8
Z	D332	329		16.3
Z	D331	443	36.1	15.2
Z	D332	484		14.5
Z	D332	509	34.3	14.9
Z	D372	622	34.3	15.2
Z	D331	643		15.7
Z	D332	819	34.0	14.8
Z	E184	957	35.8	15.9
Z	D305	1234	34.4	15.7
Z	E85	1309		15.9
Z	D283	1343	21.2	8.1
Z	D100	1650	34.5	14.2
Z	D103	1663	37.7	16.1
Z	D103	1679	34.8	15.8
Z	D467	1926	36.5	16.4
Z	C80	2099	38.1	16.8
Z	B150	2171	34.6	14.8
Z	B152	2176	36.0	15.4
Z	B136	2183	28.8	13.5
Z	D372	2525	36.0	14.8
Z	D283	2696	31.7	14.8
Z	D283	2723	35.0	14.8
Z	E185	2796	36.8	15.9
Z	E185	2797	37.3	15.8
Z	E185	2798	37.5	16.2
Z	E185	2800	33.6	14.8
Z	D306	3016	37.1	15.6
Z	D332	3228	39.0	16.0
Z	D283	3253	36.8	15.9
Z	D467	3470	36.1	15.5
Z	B136	3605	33.3	14.7
Z	B136	3608	30.4	13.5
Z	D283	3724	33.2	15.9
Z	D332	3769	33.2	14.7
Z	D372	3919	39.5	16.4
Z	D306	4030	37.2	16.2
Z	B159	4333	37.2	16.5
Z	B170	4338	35.3	14.7
Z	D100	4454	32.8	14.5
Z	D100	4478	36.6	15.4
Z	D283	4492	37.4	15.4
Z	C78	4705	38.2	15.4
Z	D100	4739	35.4	16.2
Z	D100	4749	34.2	14.6
Z	C76	4989		15.6
Z	C76	5054	36.3	15.3
Z	B136	5072	34.5	15.0

Appendix 15 cont. Cattle: Biometry: Third molar measurements

Phase	Context	Bone ID	L	B
Z	D100	5088	37.9	16.7
Z	D100	5105	35.8	16.4
Z	C94	5141	36.6	15.9
Z	B172	5225	36.9	15.2
Z	E172	5238	35.4	15.5
Z	E172	5262	37.3	15.6
Z	E172	5271	34.6	15.2
Z	E172	5272	35.0	15.6
Z	C78	5326	33.7	15.4
Z	C94	5359	34.6	15.6
Z	C94	5360	34.7	15.8
Z	C78	5372	36.3	15.4
Z	C78	5467	34.1	13.8
Z	C78	5512	35.2	14.7
Z	D100	5560	35.2	16.0
Z	C76	5632	36.6	15.4
Z	C76	5633	33.8	15.7
Z	D283	5737		15.2
Z	D332	6111	37.3	15.8
Z	D100	6132	36.6	15.1
Z	D100	6140		15.3
Z	D100	6141	35.2	15.2
Z	D100	6200	38.0	15.1
Z	C88	6214	33.7	15.2
Z	D283	6301	35.9	14.9
Z	D310	6580	33.7	15.2
Z	D100	6604	31.7	14.3
Z	D100	6605	31.6	14.2
Z	D100	6826	34.0	15.2
Z	C78	7340		15.5
Z	C78	7341		14.6
Z	C78	7378	36.7	16.4
Z	E85	7597	37.2	16.4
Z	D331	7629	35.8	15.2
Z	C188	7712	35.5	14.8
Z	C188	7713	35.8	15.0
Z	C188	7718	37.1	15.9
Z	C188	7740	36.3	15.7
Z	C188	7741	33.2	13.2
Z	E172	7818	34.5	16.2
Z	E172	7819	34.0	14.6
Z	E172	7820	36.4	16.2
Z	E172	7821	35.0	14.7
Z	E172	7837	34.5	14.9
Z	B150	7910		13.9
Z	B172	8114	36.1	15.1
Z	C78	8139	33.0	14.0
Z	C78	8141	35.8	16.1
Z	B147	8209	31.0	14.3
Z	D148	8702	33.1	14.9
Z	D148	8704	33.4	15.1
Z	E172	9206	36.4	15.4
Z	D466	9483	30.8	13.9
Z	D466	9484	33.4	14.7
Z	D372	9575	32.6	14.1
Z	D104	9689	33.4	14.7
Z	C188	9728	36.9	15.8
Z	C188	9729	37.3	16.7
Z	D100	10067	38.1	16.3
Z	D283	10429	34.0	14.3
Z	D283	10430		15.1
Z	D310	10438	37.7	16.6
Z	E185	10451	33.7	15.1
Z	E179	10458	33.9	
Z	E185	10482	35.7	16.4
Z	D108	10487		13.2
Z	D332	10585		16.7
Z	E172	10629	36.5	15.9
Z	E172	10645	34.7	14.9
Z	E172	10671	35.4	15.8
Z	E172	10672		16.1
Z	D463	10916	35.0	15.0
Z	D463	10917	35.4	15.3
Z	D331	10970	37.6	15.9
Z	E172	11408	31.9	14.6
Z	E185	11481	37.4	15.6
Z	C78	11840	33.2	14.1
Z	C78	11851	37.5	15.8
Z	E172	11939	35.7	14.8
Z	E172	11942		15.1
Z	E172	11943		14.8
Z	D100	13174	37.9	16.7
Z	D100	13485	35.2	14.6
Z	D100	13521	31.5	14.1
Z	E172	13878	36.2	14.3
Z	E172	13938	33.7	14.9
Z	E172	13939	35.4	15.4
Z	E172	13941	35.0	14.3
Z	E172	13942	35.8	15.4
Z	E172	13943	33.0	14.8
Z	B136	14017	34.3	14.8
Z	D307	14359	36.2	15.5
Z	D100	14377	32.7	14.1
Z	D283	14562	37.0	15.9
Z	D283	14682	35.3	15.0
Z	D100	14906	33.6	14.6
Z	D100	15008		15.3
Z	D100	15017	34.4	15.0
Z	D100	15026	34.2	13.7
Z	D100	15326	37.2	17.1
Z	D148	15450		16.0
Z	D283	15788	36.9	16.4
Z	D100	16052	34.0	14.2
Z	E172	16300	33.2	14.9
Z	E172	16301	34.9	15.5
Z	C191	16386		13.8
Z	D283	16505		14.7
Z	D283	16599	36.3	16.4
Z	D108	16879	37.9	16.2
Z	D310	16901	30.7	13.3
Z	D100	16940	33.9	14.9
Z	D100	17185	35.2	16.1
Z	D100	17212	35.4	14.7
Z	D100	17213	35.0	16.1
Z	D100	17224		14.7
Z	D100	17515		15.0
Z	D100	17516	34.4	14.3
Z	D100	17528	34.2	14.7
Z	D108	17679	34.5	15.0
Z	D107	18130	32.1	14.3

Appendix 15 cont. Cattle: Biometry: Third molar measurements

Phase	Context	Bone ID	L	B
Z	D372	18155	36.0	15.5
Z	D283	18302	35.5	15.4
Z	E184	18373	35.8	15.2
Z	D100	18494	35.6	14.4
Z	D100	18504		15.6
Z	D100	18533	35.8	15.5
Z	C78	18733		15.7
Z	D100	19624	34.2	14.4
Z	E172	19782	33.2	15.6
Z	E172	19790	35.6	15.6
Z	E172	19803	33.3	14.4
Z	E172	19819	37.8	16.2
Z	D100	20177	34.2	14.5
Z	D100	20178	37.2	16.5
Z	D100	20179		15.3
Z	D100	20192		15.2
Z	D283	20238		13.9
Z	E172	20349	35.0	
Z	E172	20350	39.8	15.4
Z	C188	20355	34.1	14.6
Z	C188	20368	35.5	15.1
Z	C188	20379	37.0	16.9
Z	B172	20476	35.9	15.3
Z	D100	20826		15.3
Z	D108	20982		14.2
Z	D107	21149	32.9	14.1
Z	D100	21257	37.5	16.4
Z	D100	21519	35.8	15.4
Z	D100	21816	36.5	16.2
Z	D100	21818	34.8	14.5
Z	D283	21981	35.9	14.8
Z	D100	22046	34.6	15.6
Z	C188	22291	34.6	14.4
Z	C188	22298	36.7	15.7
Z	C90	22360	34.9	15.3
Z	C88	22365	37.4	16.0
Z	D100	22397	36.4	15.2
Z	D100	22419	34.6	14.4
Z	D100	22428	36.4	15.7
Z	D100	22454	37.4	15.8
Z	D100	22455	38.3	15.7
Z	D100	22456	35.2	14.2
Z	D283	22594	38.9	15.7
Z	D306	22603	35.3	15.2
Z	C89	22709	32.6	13.9
Z	C89	22710	36.4	15.1
Z	C78	22719	35.3	15.0
Z	D305	22955		16.5
Z	D104	23219		15.2
Z	C80	23270	32.3	14.5
Z	D100	23281	34.8	15.2
Z	D100	23313	34.4	15.7
Z	D100	23343	35.4	15.2
Z	D100	23416	36.1	14.7
Z	D100	23417	39.1	16.2
Z	B147	23444	32.5	14.6
Z	D100	23483	38.5	15.1
Z	E85	23507	35.5	15.4
Z	E85	23508	38.2	16.2
Z	D100	23534	34.6	14.2
Z	C78	23614	37.9	16.4
Z	C191	23626	33.9	14.9
Z	B147	23713	34.7	14.8
Z	B147	23714	37.1	15.8
Z	B147	23715	36.9	15.4
Z	B147	23716		14.9

Appendix 15 cont. Cattle: Biometry: Third molar measurements

Phase	Context	Bone ID	47	45	46
T-V	B603	6962		43.5	26.7
T-V	B632	7019		38.9	28.9
T-V	D941	11111	117.2	41.1	29.9
T-V	D2192	17573	10.4		32.0
W	D840	1957	105.0	46.4	31.0
W	D840	5841	92.0	37.2	27.5
W	C426	8340		42.3	21.7
W	D252	9820		43.0	32.9
W	D485	11029	146.8	54.4	33.6
W	D1389	11905		41.3	26.4
W	E96	15235		55.2	
W	E96	15909	99.5	39.4	27.3
W	E96	15930		64.4	54.8
W	D1369	16000		47.3	37.6
W	E96	16098		43.3	35.3
W	E96	16099		42.1	26.2
W	D335	17039		37.4	30.0
W	D335	17040		40.7	32.9
W	E96	17107		42.4	28.6
W	E96	20024		46.2	33.4
W	E96	20045	104.0	40.3	33.1
W	C417	21071	101.5	46.2	30.1
W	C440	21079		69.2	50.3
W	E96	21086	137.1	48.3	36.8
W	E96	21090		55.4	30.5
W	C527	21092		38.6	29.1
W	C440	21093		46.3	31.8
W	E271	21109		77.5	56.0
W	C527	22274		53.9	
X-Y	D81	1827		43.3	31.0
X-Y	D81	3291	88.5	37.1	26.3
X-Y	D81	3811		40.9	28.0
X-Y	D81	12458		33.9	28.7
Y-Z	C268	21072	101.3	44.2	26.7
Y-Z	C268	21073		46.0	26.2
Y-Z	C231	21075		52.3	40.0
Y-Z	C240	21078	112.1	51.0	32.4
Y-Z	C240	21080		54.7	37.6
Y-Z	C75	21089	110.9	44.7	29.6
Y-Z	C268	21100		41.4	30.7
Y-Z	C268	21101		43.6	31.6
Y-Z	C240	21112	117.6	42.4	31.4
Y-Z	D116	21503		46.8	33.8
Y-Z	E81	22686		48.5	36.6
Y-Z	C160	23607		47.7	36.9
Z	D332	508	98.7	44.2	
Z	D100	544		56.5	54.1
Z	D331	642		50.5	33.4
Z	D310	721	96.0	38.4	25.3
Z	D305	1235	108.0	35.2	29.7
Z	D103	1638		46.2	34.2
Z	E172	1844		39.5	25.2
Z	D310	2299	124.0	39.2	29.1
Z	D310	2494		44.5	31.4
Z	D372	2570		54.6	38.8
Z	D107	2737		52.2	35.9
Z	D306	2762		52.8	45.6
Z	D332	3807	114.0	39.2	28.2
Z	D100	4084		50.0	40.6
Z	D100	4451	136.9	38.8	31.7

Phase	Context	Bone ID	47	45	46
Z	D283	6360		52.6	36.7
Z	D100	6428		50.4	37.3
Z	D100	6614		56.4	39.6
Z	B150	7912		40.4	32.6
Z	D100	9335	131.0	40.5	31.8
Z	D100	9350		49.2	34.4
Z	D330	9597		53.2	42.5
Z	D283	11568		42.7	30.2
Z	D283	11886		53.5	38.5
Z	D100	11891	152.4	53.4	35.6
Z	D283	14308		55.5	43.6
Z	D100	14570		66.7	45.3
Z	D100	14571		36.3	24.7
Z	D283	16824		50.3	33.6
Z	D283	16825		49.6	32.6
Z	D306	17827	142.0	42.8	29.3
Z	C192	17881		55.7	35.0
Z	D283	18101			31.0
Z	E172	18356		55.6	
Z	E172	18357		59.3	42.9
Z	D108	19931		74.9	52.8
Z	D283	20771		52.9	42.1
Z	C188	21081		61.9	50.2
Z	E172	21084		57.0	43.5
Z	E172	21085		60.7	45.5
Z	B98	21087		46.7	35.2
Z	C88	21088	113.6	41.8	26.3
Z	E172	21091		49.2	32.5
Z	E172	21096		45.7	31.8
Z	D100	21102	172.7	51.6	37.8
Z	E172	21103	114.1	46.5	27.8
Z	C78	21105	149.8	52.1	32.4
Z	E185	21107		43.0	30.9
Z	E85	21108		67.1	44.2
Z	C188	21110		59.5	44.3
Z	E172	21111		41.9	27.7
Z	D100	21520		41.2	28.8
Z	D100	21882		67.5	44.9
Z	D283	21982		48.3	34.5

Appendix 16. Cattle: Biometry: Horncore measurements

Phase	Context	Bone ID	BT	HTC
T-V	D1324	11579	63.2	26.5
W	C527	203		26.2
W	D933	1935	60.7	
W	D1132	3192		29.9
W	D933	3842		27.8
W	D755	5815		27.8
W	D1011	6925		28.4
W	D936	10847	68.6	30.5
W	E96	14251		27.2
W	E96	14827	65.3	30.0
W	E96	15494		31.5
W	E96	16114	68.6	28.4
W	E96	16129		26.4
W	E96	16632		28.5
W	D1777	16711		27.9
W	D1731	16716	71.5	
W	D1871	18315	50.8	
W	D1871	18339		25.9
W	D1896	18349		29.0
W	C501	18789		29.4
W	E96	18851		29.1
W	D163	19978	65.2	26.9
W	D342	20581		29.0
W	E96	21114		30.8
W	E96	21122		27.2
W	E96	21577		28.5
W	E96	21608		26.1
W	E96	21611		28.2
W	D102	21826		30.4
W	C527	22243		27.7
W	D102	22707		29.6
X	C412	11701		29.8
X	B86	13958	68.1	29.1
X-Y	D81	365	28.9	
X-Y	D81	715		28.0
X-Y	D735	853		29.0
X-Y	D81	1244		30.0
X-Y	D81	1245		25.8
X-Y	D728	1415		25.8
X-Y	D81	2050		30.8
X-Y	D728	4057	87.3	37.2
X-Y	D81	6281	76.1	33.2
X-Y	D81	6773		25.3
X-Y	D81	9617	64.1	28.7
X-Y	D81	10136		28.6
X-Y	D81	10137	65.5	28.5
X-Y	D728	11231		28.6
X-Y	D81	11551		28.6
X-Y	D81	12110	62.8	25.9
X-Y	D81	12883		32.2
X-Y	D81	13324		30.4
X-Y	D81	13325		30.1
X-Y	D81	13327		27.7
X-Y	D81	13625	63.9	27.3
X-Y	C308	13784		31.0
X-Y	C308	13800		29.2
X-Y	D81	16433		33.1
X-Y	D81	16448		30.0
X-Y	D81	16539	66.6	27.4
X-Y	D210	17404		29.0

Phase	Context	Bone ID	BT	HTC
X-Y	D81	18475		30.7
X-Y	D81	18689		29.9
X-Y	D81	20402		28.7
X-Y	D81	20790	63.9	27.8
Y	D151	4	62.0	26.8
Y	D151	5	60.6	29.6
Y	D1231	948		31.4
Y	D702	1075	81.9	34.6
Y	D762	1195		30.8
Y	D705	1439		27.7
Y	A347	1498		28.0
Y	D705	1594		32.1
Y	D703	1636	64.6	27.2
Y	A318	2220		32.5
Y	D318	2453		29.0
Y	D346	2825		30.7
Y	D346	2885	70.0	28.7
Y	D312	3100		28.1
Y	D312	3315	66.0	29.6
Y	D338	3666		29.6
Y	D338	3682	68.4	29.8
Y	D716	3890		28.6
Y	D1332	3980	63.5	29.8
Y	D1231	3990		28.1
Y	D705	4048		28.4
Y	D78	4978		30.1
Y	D78	4979		31.2
Y	D352	5292		31.6
Y	D837	5398	27.1	
Y	D908	5414		28.5
Y	D762	5776		29.8
Y	D340	6084		26.8
Y	A318	6527	64.6	27.7
Y	D1158	6874		26.3
Y	D1333	7171	69.4	29.0
Y	D1333	7172	68.4	29.9
Y	D1333	7173		30.0
Y	D340	7491		29.8
Y	D312	7790		33.1
Y	D151	7866		28.2
Y	D151	7867	60.4	27.1
Y	D216	8480	61.5	28.0
Y	D312	8507		36.5
Y	D312	8508		30.6
Y	D349	8620		27.8
Y	D151	8724		32.5
Y	D1231	8855	75.5	32.3
Y	D318	9148	67.3	30.1
Y	D762	9292	64.9	29.5
Y	D762	9293		29.2
Y	D705	9399	71.2	28.8
Y	D705	9441		29.4
Y	D329	10407		29.3
Y	D329	10408	69.7	29.5
Y	D908	10829		32.1
Y	D746	10910		31.0
Y	D908	10934		27.8
Y	D1282	11056		29.6
Y	D338	11519		28.0
Y	D1332	11631	63.9	29.5

Appendix 17. Cattle: Biometry: Humerus measurements

Phase	Context	Bone ID	BT	HTC
Y	D1332	11644	72.0	33.6
Y	D1158	11653		32.8
Y	D320	11786		25.7
Y	D214	12862	60.9	26.9
Y	C184	13451	65.9	27.4
Y	D151	15401	67.4	31.0
Y	D151	15402		27.6
Y	D329	17576		29.3
Y	D168	17806		30.2
Y	D318	18396		27.8
Y	D329	18403		28.3
Y	C409	18905		30.9
Y	D168	20251		31.3
Y	D168	20252		29.6
Y	D168	20253		33.7
Y	D214	21953	81.3	35.8
Y	D168	23433		28.8
Y	B120	23460		29.6
Y-Z	C132	87	71.0	30.4
Y-Z	C132	271	65.1	29.0
Y-Z	E74	607		28.3
Y-Z	B277	1721	31.4	
Y-Z	B277	1750	70.2	29.4
Y-Z	B277	1751		29.7
Y-Z	E74	3694		27.4
Y-Z	D116	4370	68.4	28.6
Y-Z	D116	4525	73.8	32.8
Y-Z	D116	4543		29.1
Y-Z	D116	4872		31.1
Y-Z	D116	7261		30.4
Y-Z	E74	7769		31.4
Y-Z	E74	7772		30.8
Y-Z	D116	8994		29.6
Y-Z	D116	9034		34.1
Y-Z	D116	10122	65.1	28.3
Y-Z	B277	12207	65.2	28.5
Y-Z	B277	12208		30.4
Y-Z	C268	12996		29.7
Y-Z	B277	13072	69.6	29.1
Y-Z	C240	15059		26.3
Y-Z	D116	15063	66.3	27.7
Y-Z	D116	15076		29.3
Y-Z	D116	15389		27.7
Y-Z	D116	15526	87.9	27.4
Y-Z	B277	15554	73.3	33.5
Y-Z	B277	15587		30.5
Y-Z	E74	15760	71.5	32.0
Y-Z	D116	16591	66.6	29.5
Y-Z	C267	16951		29.5
Y-Z	B277	17720		30.0
Y-Z	C240	18202		27.9
Y-Z	B277	18641		32.2
Y-Z	D116	18745		30.0
Y-Z	D116	18746		28.4
Y-Z	D116	18944	65.7	28.2
Y-Z	C240	19521		27.4
Y-Z	C240	19522		30.0
Y-Z	C240	19523		31.1
Y-Z	D116	19644		30.3
Y-Z	C268	20120	74.0	33.4

Phase	Context	Bone ID	BT	HTC
Y-Z	C187	20499		30.4
Y-Z	B277	20517		32.3
Y-Z	B277	20518	60.6	26.0
Y-Z	B277	20551		30.1
Y-Z	C267	20896		28.1
Y-Z	C187	21017	66.2	28.8
Y-Z	C240	21042		30.0
Y-Z	C240	21043		29.3
Y-Z	C240	21067		29.8
Y-Z	D116	22097		28.0
Y-Z	C231	22166	68.5	29.2
Y-Z	C231	22189		27.8
Y-Z	E74	22315	66.3	29.1
Y-Z	E74	22325		29.6
Y-Z	E81	22688		30.4
Z	D100	25		27.9
Z	D372	158		27.9
Z	D332	331		28.7
Z	D331	471		31.6
Z	D331	491	77.1	32.1
Z	D466	1036		28.6
Z	D466	1037	71.0	30.8
Z	D283	1220	70.1	30.8
Z	D103	1666		30.9
Z	D103	1681	64.3	28.8
Z	E172	1874		25.8
Z	E172	1892		27.1
Z	D372	2572		29.6
Z	D283	2730	77.7	30.9
Z	E185	2777		29.9
Z	E185	2802		29.4
Z	E185	2844		29.8
Z	D100	2997		26.7
Z	D283	3735		31.5
Z	D331	3764		32.0
Z	D331	3784		29.6
Z	D306	4041		34.3
Z	C191	4392	66.1	27.6
Z	C191	4393		28.9
Z	D100	4469		32.7
Z	C112	4795		30.6
Z	E85	4960	65.9	28.7
Z	C76	4991		31.2
Z	D100	5090		30.9
Z	C80	5167		27.9
Z	C80	5168		29.1
Z	C74	5179		34.8
Z	C74	5180	68.0	27.2
Z	E172	5240		27.4
Z	C89	5456		28.3
Z	C78	5513		32.5
Z	D100	5563		27.1
Z	D100	5646	72.0	32.0
Z	D108	5712		27.2
Z	D106	5989		29.8
Z	D100	6143	67.0	29.5
Z	C191	6244		29.8
Z	D310	6586		26.7
Z	E85	7583		30.3
Z	C188	7704	70.1	29.7

Appendix 17 cont. Cattle: Biometry: Humerus measurements

Phase	Context	Bone ID	BT	HTC
Z	E172	7824		30.1
Z	D100	7951		31.6
Z	C76	8084		34.4
Z	B147	8210	66.4	31.2
Z	D283	8244	72.0	33.2
Z	D100	9338	65.3	30.6
Z	D100	9353	66.7	30.2
Z	D372	9576	68.5	30.6
Z	D104	9695	67.9	28.4
Z	D100	10054		28.7
Z	D107	10158		27.6
Z	E185	10241		33.0
Z	E185	10453	67.1	30.1
Z	E185	10484		30.5
Z	D108	10490		31.8
Z	E172	10663	62.8	27.4
Z	D466	10834		31.1
Z	E185	11248	67.5	28.8
Z	D463	11329		26.5
Z	E172	11425		31.0
Z	E172	11426	66.8	30.6
Z	E172	11447		31.9
Z	E185	11483		29.0
Z	D310	11553		26.9
Z	C80	11811		29.5
Z	E172	11931	68.5	
Z	D283	12020		31.0
Z	D283	12357		28.7
Z	D100	12729	66.4	29.2
Z	D100	12730		33.7
Z	D100	12737		28.2
Z	D283	13436	71.2	31.6
Z	D100	13522		33.5
Z	D103	13829		30.0
Z	D103	13830	72.1	30.0
Z	E172	13914		26.0
Z	E172	13934		26.3
Z	D100	14378		27.9
Z	D108	14527		26.0
Z	D283	14544		28.7
Z	D100	14598		27.7
Z	D100	15009	65.6	28.9
Z	D100	15328		30.6
Z	D108	15353		28.2
Z	D100	16065		30.1
Z	E172	16261		27.6
Z	E172	16262	68.8	29.5
Z	E172	16263		29.2
Z	D283	16672		32.4
Z	D283	16692		34.0
Z	D283	16827	72.2	30.8
Z	D100	16941		29.3
Z	D100	17227	69.3	29.7
Z	D283	17339	68.4	28.0
Z	D283	17344		20.0
Z	D100	18076		30.4
Z	D107	18123		29.8
Z	D283	18303		35.7
Z	D100	19503		27.9
Z	D107	19725		27.4
Z	D100	19820		34.1
Z	D100	19821	67.0	27.4
Z	C188	20356	66.0	28.6
Z	D283	21618	74.2	32.0
Z	D100	21884		29.8
Z	D100	21885		31.0
Z	D103	22056	84.2	34.0
Z	D100	22233		29.5
Z	D100	22471		28.7
Z	D108	22507		27.7
Z	D306	22605		30.3
Z	C89	22712		28.9
Z	D100	22757	65.2	28.4
Z	E85	23201		29.8
Z	E85	23509	68.7	28.6
Z	C76	23578		33.1
Z	C74	23640	82.3	35.3

Appendix 17 cont. Cattle: Biometry: Humerus measurements

Phase	Context	Bone ID	GL	SD	Bp	BFp	Phase	Context	Bone ID	GL	SD	Bp	BFp
T-V	B603	6965			81.0	74.6	Y-Z	C268	12998			70.9	65.3
T-V	B602	6987			68.6	63.6	Y-Z	D116	15525				80.7
W	D743	1906			75.6	70.0	Y-Z	D116	18762	244.0	33.5		
W	D1132	3452			62.4	57.7	Y-Z	E74	20303			71.3	65.4
W	C426	8341			66.4	62.5	Y-Z	C187	20513			90.2	81.5
W	D343	9831			71.6	65.4	Y-Z	B277	20552			83.1	75.7
W	D335	14789				62.2	Y-Z	C131	23719			69.5	63.9
W	E96	16240			70.9	65.7	Z	D372	159			75.2	69.3
W	E96	16241			80.7	73.1	Z	D100	286			73.1	67.5
W	D1557	17260			71.8	67.4	Z	D331	456			70.3	65.6
W	E96	20027			70.4	64.9	Z	D331	472			73.2	67.9
X	C412	11680			81.3	74.9	Z	D331	492			67.3	61.3
X-Y	D81	6633	280.0	36.3	79.2	73.0	Z	D372	624				65.7
X-Y	D81	9747			71.3	65.2	Z	D283	2725			78.5	73.2
X-Y	D210	12066				66.5	Z	D332	3770			78.2	71.6
X-Y	D81	12111			92.1	83.5	Z	D100	4430			73.1	68.9
X-Y	D81	12852			65.2	60.2	Z	D283	4506			73.4	67.4
X-Y	D81	14927			87.3	79.7	Z	D310	4588			69.3	62.4
X-Y	D81	16139			78.9	70.8	Z	D310	4589				63.7
X-Y	D81	16497			68.6	62.3	Z	C78	4733			32.7	31.0
X-Y	D81	16499			80.9	75.2	Z	C78	4793			78.0	74.1
X-Y	D81	17061	266.0	36.3			Z	C76	4832				63.8
Y	D1332	1089			72.0	66.5	Z	D100	5091				64.7
Y	D338	2752				61.9	Z	C94	5143			73.2	69.3
Y	D346	2886			74.4	68.5	Z	C80	5169			69.9	64.3
Y	D318	2923			73.9	67.1	Z	C78	5470				63.5
Y	D318	3095			69.3	63.5	Z	D100	5593			75.5	67.9
Y	D1333	3159			74.7	69.8	Z	C74	5607			74.8	68.3
Y	D320	3332			72.4	67.0	Z	D283	6364			71.9	67.7
Y	D320	3675			71.7	66.1	Z	D229	6539			77.0	71.3
Y	D1231	4660			72.7	68.1	Z	D100	6608				65.1
Y	D352	5293	249.5	34.3	67.3	63.8	Z	D332	7477			82.2	76.1
Y	D908	5416				65.7	Z	E172	7840			75.6	70.0
Y	D168	5668			75.6	69.2	Z	D108	8252			86.0	77.3
Y	D338	6017			71.8	65.9	Z	D100	9354			78.7	72.1
Y	D216	8446				64.2	Z	D466	9487	266.0	35.5		
Y	D312	8509				67.9	Z	D104	9697			68.5	63.5
Y	D312	8510			81.0	73.6	Z	D310	10149				64.1
Y	D338	8922				64.0	Z	E185	10478	260.0	36.7		
Y	D762	9295			70.3	63.5	Z	D372	10965				71.1
Y	D762	9927				68.7	Z	D473	11162				74.5
Y	D216	10403				68.3	Z	E172	11427			66.9	62.4
Y	D329	10409			70.5	67.4	Z	D310	11549			67.4	62.3
Y	D329	10410			74.6	69.8	Z	D106	11745			74.3	68.7
Y	D338	10568				64.8	Z	D106	11746				69.2
Y	D1231	10766			69.8	63.5	Z	C78	11867			70.9	65.3
Y	D762	10923				75.0	Z	D310	13420				61.7
Y	D1282	12530	265.0	38.8	75.8	71.2	Z	E172	13851			69.4	62.6
Y	D1231	12547	269.0			68.1	Z	B136	13979			66.3	61.4
Y	D329	12709			68.7	63.1	Z	D100	14581	268.5	35.8		69.4
Y	D312	13601			70.9	65.4	Z	D100	14994			75.0	69.0
Y	D151	15459				63.2	Z	D100	15329			77.8	70.2
Y	D320	17457				62.5	Z	C0088	15723				66.4
Y	B321	21870			70.0	64.2	Z	D100	16054			70.6	64.7
Y	D151	22239			68.7	64.3	Z	E172	16265			68.5	63.4
Y-Z	C132	272			72.4	66.4	Z	D283	16518			72.7	67.5
Y-Z	B277	1752			70.7	65.6	Z	D283	16693			68.6	63.9
Y-Z	D116	4845			92.6	83.6	Z	C80	17334			76.5	
Y-Z	C187	5154			68.4	64.3	Z	D100	17517			70.9	65.2
Y-Z	D116	8810			69.0	62.3	Z	D283	18304			70.1	65.4

Appendix 18. Cattle: Biometry: Radius measurements

Phase	Context	Bone ID	GL	SD	Bp	BFp
Z	D100	18557			73.9	68.4
Z	C112	18727	252.5	32.3		
Z	D108	20760	261.5	37.9	73.4	67.0
Z	D283	21142			81.8	76.5
Z	D100	21522			73.1	65.9
Z	D100	21887			73.7	68.0
Z	D103	22059			71.5	65.7
Z	D100	22429			67.9	60.6
Z	D100	22770			83.1	75.9
Z	E85	23203			84.7	78.6
Z	C80	23273			80.3	73.6
Z	D100	23297			69.9	63.5

Appendix 18 cont. Cattle: Biometry: Radius measurements

Phase	Context	Bone ID	GL	SD	Bp	Bd	BatF	1	2	3	4	5	6	a	b
T-V	D1164	6708			49.5										
T-V	B603	6966*	173.0	35.3	57.2	60.9	54.1	25.3	31.6	28.8	23.4	31.4	29.2	30.0	28.3
T-V	B603	6967				61.0	54.6	25.1	30.8	28.0	23.4	30.6	28.5	30.3	27.4
T-V	B602	6988			48.6										
T-V	B632	7020				55.0	51.2	22.6		26.6	21.8	28.3	26.7	25.7	25.8
T-V	C433	11722			52.7										
T-V	D2188	12266				52.5	48.4	21.2		25.0	20.0		24.5	25.5	23.8
T-V	D2284	15996				52.3	49.0	23.0	29.9	27.5	21.4	29.4	27.1	25.6	24.2
W	C553	246			47.9										
W	C553	251			50.2										
W	D790	865				46.5	42.6	18.7	25.2	23.2	20.2	25.7	23.0	21.7	22.6
W	C445	1011				53.0	49.9	21.8		25.2	20.0		25.8	25.5	24.7
W	D983	1175				56.6	51.1	20.9		26.1	22.1		25.3	25.9	27.5
W	D1569	1366	175.0	27.7	48.5	50.5	45.0	21.6	28.1	24.9	20.3	27.6	25.1	24.0	24.3
W	D933	1401			56.0										
W	D933	1568			52.7										
W	D933	1569				50.9	45.2	20.0	26.0	24.2	20.9		24.4	23.6	24.6
W	D254	2335			51.0										
W	D1265	3443				51.2	47.2	20.0		25.2	21.4		25.7	23.8	23.8
W	D914	3464			53.1										
W	D343	3572				52.1	47.1	21.5	29.3	26.6	23.2	29.1	26.7	24.6	25.7
W	D343	3573				48.9	44.6								
W	D343	3574				53.0	46.0	20.9	27.8	26.0	22.8	29.5	26.9	24.5	26.4
W	D906	3854			47.0										
W	D485	5939			49.3										
W	D244	5973			50.1										
W	D343	5975			50.5										
W	D1265	6685*				67.9	57.7	23.5	30.3	29.0	26.7	32.5	30.3	30.8	36.3
W	E272	7071				50.3	47.4	20.6		25.5	21.8	27.3	25.3	23.9	24.4
W	D102	7957	168.0	25.6	45.7	48.3	44.2	20.1	26.1	23.1	19.0	25.9	23.5	23.2	22.5
W	C426	8343	176.0	25.4	47.2	47.6	44.7	21.5	28.3	25.1	19.8	27.2	25.1	23.2	22.3
W	D1132	8832				51.0	46.5	21.2	28.4	24.6	19.7	27.8	25.2	24.5	23.5
W	E96	8876			49.4										
W	E96	8877				52.4	47.8	22.5	28.1	25.9	20.7	28.0	26.2	25.6	24.6
W	E96	8894			52.4										
W	E96	9261				51.1	44.6	18.3	25.9	24.1	20.1		24.3	23.5	25.4
W	E96	9272			46.7										
W	E270	9507				52.5	45.5	20.6	27.4	25.5	22.3	28.8	26.0	24.7	26.0
W	D1129	9675			55.0										
W	D1129	9679				49.8	44.9	20.7		23.9	20.3	25.9	24.5	24.2	23.3
W	D252	9796			58.2										
W	D343	9832				51.7	47.5	22.3		25.8	21.4		25.4	24.8	24.2
W	D343	9833				61.2	54.7	25.3		28.0	23.7		28.1	30.1	28.7

Appendix 19. Cattle: Biometry: Metacarpal measurements (* specimen with splayed condyles)

Phase	Context	Bone ID	GL	SD	Bp	Bd	BatF	1	2	3	4	5	6	a	b
W	D840	10262				60.8	54.4	22.4		27.6	23.9			27.9	29.8
W	D840	10263				58.6	52.6	22.9			25.5		29.5	27.1	27.6
W	D840	10264				52.0	46.9	22.8		26.2	21.0		26.3	25.3	23.7
W	D933	10783				53.2	51.1	21.5		24.7	20.2	27.3	25.5	25.1	25.2
W	D484	11011			49.0										
W	D484	11024			52.9										
W	D484	11025				49.6	44.1	20.5		25.4	22.0	28.4	25.8	23.3	23.7
W	D1139	11060				50.2	45.7							23.7	24.1
W	D841	11289			44.7										
W	D841	11290			51.0										
W	C423	11714	181.5	27.0	50.4	49.9	45.2	21.1	28.4	24.6	19.6	27.7	24.9	24.1	23.6
W	C423	11715			51.2										
W	D2144	11915				47.8	42.9	20.7	27.4	24.3	19.6	26.9	24.4	22.8	22.4
W	D2363	12291	177.0	26.9	46.6	47.8	45.3	20.8		24.1	19.3		24.2	23.1	22.4
W	D1612	13141				60.8	53.0	24.3	31.5	28.8	23.4	31.1	29.3	29.2	28.7
W	D1569	13387	170.0	26.7		51.3	46.0	21.3	28.2	24.5	19.7	27.4	25.0	25.0	24.0
W	D1569	13388				50.1	45.8	21.2	27.2	24.4	19.9	27.3	25.6	24.0	23.4
W	D1569	13392	161.0	24.8	44.9	47.7	43.6	19.9	26.1	22.7	18.9	26.2	23.8	22.9	22.4
W	D1569	13400				53.2	47.0	22.2			21.4	29.4	27.2	25.2	26.2
W	D1911	13571				50.6	47.2								
W	D335	14184				50.9	47.4	20.7	27.8	25.5	21.9	29.0	25.7	23.6	24.6
W	E96	14238	181.5	28.0	50.4	53.4	49.8	21.8		25.2	20.4		25.0	25.4	24.6
W	E96	14253				48.5	43.8								
W	E96	14254				50.8	47.0								
W	E96	14451				42.7	42.9	18.5			17.6			20.6	19.9
W	E96	14452				49.5	45.6	20.4		23.5	19.8			23.6	22.9
W	C278	14638				52.7	48.5	22.2	29.3	25.8	21.7	28.9	26.0	25.0	24.8
W	C515	14699			51.2										
W	D335	14790			53.7										
W	E96	14799				51.3	48.0	22.7		26.3	21.1	29.2	26.5	24.8	23.9
W	E96	14801			52.5										
W	E96	15115					44.5	18.9						24.0	
W	E96	15142				72.6	64.9				28.2			34.7	35.2
W	E96	15180			50.3										
W	E96	15184			50.5										
W	E96	15189				50.8	47.0	21.2			20.0			24.7	24.0
W	E96	15246				51.0	49.1								
W	E96	15258			50.4										
W	E96	15259				55.9	52.8	24.1		28.3	22.1			27.4	26.2
W	D163	15386			51.9										
W	E96	15486				47.6	43.4								
W	E96	15503				52.3	47.7	21.7			20.4			25.4	24.7
W	D1418	15638				50.0	45.4	21.7	28.0	25.5	20.6	27.4	25.4	23.8	23.5
W	D1418	15639				49.3	44.7	20.6	27.6	24.0	19.3	26.7	24.4	24.1	23.0
W	E96	15935				48.9	45.5							23.7	22.9
W	E96	15965				48.5	45.1	20.1		25.3	21.2		25.1	22.9	23.2
W	D2331	15992				52.3	48.2	22.5		26.3	21.4	28.4	26.5	24.6	24.3
W	D2356	15998			48.0										
W	D1369	16002				59.2	54.3	23.7	31.0	27.7	22.0	30.0	27.9	28.1	26.6
W	E96	16102			49.4										
W	E96	16103				50.2	46.3	21.8			20.0			23.9	23.6
W	E96	16115			49.6										
W	E96	16122				51.7	48.5	20.8		24.6	19.4	27.3	25.3	24.7	24.3
W	E96	16166			49.3										
W	E96	16167			49.2										
W	E96	16198			50.6										
W	E96	16199				59.8	53.7							28.5	28.1
W	E96	16200				48.9	44.9	18.2	25.6	23.5	20.0	26.7	23.3	22.2	24.2
W	E96	16220			51.0										
W	E96	16222				51.9	47.8	21.4			22.7			24.4	25.6

Appendix 19 cont. Cattle: Biometry: Metacarpal measurements (* specimen with splayed condyles)

Phase	Context	Bone ID	GL	SD	Bp	Bd	BatF	1	2	3	4	5	6	a	b
W	E96	16319			48.1										
W	E96	16343				49.7	44.5	20.6	27.2	25.5	22.2		25.1	24.4	23.5
W	E96	16344			57.2										
W	D2356	16402				48.8	43.3								
W	E96	16658				51.6	48.1								
W	E96	16743			55.3										
W	E96	16750			50.2										
W	D335	17043	180.0	27.7	48.9	52.7	48.3	21.7	29.0	26.4	20.0	27.9	25.9	25.5	24.9
W	E96	17096				47.8	43.3	21.2		24.4	20.1		24.3	22.7	22.1
W	E96	17392			53.4										
W	E96	17429			62.5										
W	D335	17478*	192.0	34.4	58.0	61.0	56.7	25.4	32.7	29.3	23.5		29.8	29.3	29.2
W	D335	17479				54.6	49.6	22.8	29.8	26.5	21.4	29.2	26.8		
W	D335	17653				57.2	53.2	24.4	32.4	29.3	23.2		28.7	28.1	26.8
W	C527	17748				53.4	50.5	21.8	28.3	25.6	20.9	27.9	25.8	25.7	25.3
W	C527	17749				57.4	52.6	20.7	28.6	26.1	22.8	29.2	25.7	25.4	27.9
W	C469	18232				52.6	48.6	21.5			20.1			25.1	24.5
W	C488	18243*	190.0	36.9	65.4	67.1	60.2	26.4		30.9	25.5			32.8	31.9
W	C526	18244				48.6	46.0							23.1	22.0
W	C474	18249				51.1	44.7	19.9		25.1	21.3			23.8	24.3
W	D163	18275			55.0										
W	D1965	18325	177.0	26.6	49.8										24.0
W	C501	18814				47.4	43.9								
W	E96	18852				43.7	41.6								
W	E96	18868				52.6	49.1								
W	E96	19476			54.3										
W	C527	19541				56.2	52.7	21.3		27.0	22.9		27.4	26.4	27.0
W	C527	19559			57.4										
W	C527	19590			55.4										
W	E96	19948			53.5										
W	D484	19990				67.0	58.6	24.0		30.4	25.4	33.5	30.3	33.5	31.8
W	E96	20016				48.9	45.9	20.7		24.1	19.9			23.8	22.9
W	E96	20028			51.8										
W	E96	20036				48.6	46.0	19.5		25.3				22.6	23.4
W	E96	20056					42.7				19.4				
W	D1569	20616				48.5	44.6	20.0			18.7			23.5	23.0
W	E96	20935				50.0	44.8				19.8			24.2	23.9
W	E96	21204			49.2										
W	E96	21215				52.5	48.4	21.8	28.7	24.9	20.6	28.0	24.9	25.1	24.3
W	E96	21227				50.2	47.9	21.8		25.3	20.1	27.8	25.4	24.1	23.4
W	E96	21241			51.6										
W	C468	21313			56.9										
W	C468	21326				51.0	46.4	21.8		25.0	19.9		24.9	24.3	23.1
W	C527	22021			59.0										
W	C527	22022			60.2										
W	C527	22244	182.5	27.3	49.3	53.1	48.8	21.9	28.8	26.1	20.2	27.9	26.1	25.7	24.9
W	C495	22254			64.1										
W	C495	22255				51.7	47.0	21.8		26.3	20.3		26.1	24.9	24.6
X	B86	13961			50.0										
X	B86	13962				53.3	47.9	20.5	28.8	26.7	21.8			25.3	26.0
X	D182	15049				54.8	49.4	21.3			22.1			25.5	25.7
X-Y	D81	142			60.4										
X-Y	D81	366	176.5	35.0	59.8	63.2	54.5	26.1	32.2	29.7	23.7	31.5	29.8	31.1	29.3
X-Y	D81	384			46.3										
X-Y	D81	483				51.5	47.8	21.4		25.0	19.9	26.4	25.0	24.7	24.2
X-Y	D81	697				52.0	48.1				21.3			25.3	24.3
X-Y	D728	840				51.6	46.7	20.3	27.9	25.6	21.5	28.2	25.3	24.6	24.8
X-Y	D735	885			48.1										
X-Y	D81	1258				50.1	45.0				19.5			24.1	23.9
X-Y	D81	1267				50.1	47.4	21.7	28.0	24.7	20.2	26.9	24.5	24.1	23.0

Appendix 19 cont. Cattle: Biometry: Metacarpal measurements (* specimen with splayed condyles)

Phase	Context	Bone ID	GL	SD	Bp	Bd	BatF	1	2	3	4	5	6	a	b
X-Y	D81	1350				51.3	46.9	21.3						24.7	24.8
X-Y	D81	2079				54.8	48.4	21.3	29.0	26.7	23.3	30.5	26.3	26.2	26.3
X-Y	D81	2080					42.7	19.5							23.4
X-Y	D81	2081				52.1	46.8							25.7	24.5
X-Y	D81	2835				56.4	51.4	24.9	31.5	28.3	24.0	31.0	28.2	26.8	26.9
X-Y	D81	3644				51.8	48.1	21.4	29.2	27.1	23.1	29.3	26.8	24.5	24.7
X-Y	D81	3650			49.9										
X-Y	D81	5098			49.9										
X-Y	D81	5099			45.3										
X-Y	D81	6282				49.6	47.5	21.4	28.0	25.2	20.3	26.7	25.0	23.4	23.4
X-Y	D81	6349				46.3	41.4								
X-Y	D81	6571			49.6										
X-Y	D81	6572			52.2										
X-Y	D81	6597				48.2	45.4	21.1		24.8	20.0	26.3	24.9	23.1	22.7
X-Y	D81	6635			55.5										
X-Y	D81	8433			53.2										
X-Y	D210	8463				51.5	47.7	20.8	27.9	24.5	19.5	27.1	25.2	24.8	24.4
X-Y	D81	9638				47.3	42.3	20.1		23.2	18.6		23.8	22.8	21.7
X-Y	D728	9888				53.2	49.4	20.4	27.9	25.8	22.1		26.0	24.3	25.9
X-Y	D81	10138				51.6	47.9								
X-Y	D728	11233				49.0	43.9	19.8	26.9	25.0	21.4	27.4	25.4	23.0	24.5
X-Y	D81	11546			47.9										
X-Y	D81	11878			51.4										
X-Y	D81	12041			46.9										
X-Y	D81	12042			47.6										
X-Y	D81	12043				49.7	45.9	21.5			20.1			24.5	23.3
X-Y	D81	12112			51.0										
X-Y	D81	12460			47.2										
X-Y	D81	12471			48.9										
X-Y	D81	12472			55.3										
X-Y	D81	12874				50.8	47.0	21.5		25.3	19.9		25.3	24.7	23.5
X-Y	D81	13284				48.8	45.3								
X-Y	D81	13329					46.4	22.1		26.5			26.7		
X-Y	D81	13632				52.3	48.0	21.4			19.8			25.4	24.8
X-Y	D81	13646				49.3	44.4								
X-Y	C308	13785				52.7	46.1	22.0		25.2	20.9	28.4	25.7	25.8	24.9
X-Y	C308	13801				48.4	44.5	20.2	27.1	24.1	19.6	26.1	24.2	23.4	22.7
X-Y	D81	14860				60.6	52.6	23.3		27.5	22.4	30.3	28.2	29.0	28.4
X-Y	D210	14913			55.0										
X-Y	D81	15203				54.1	49.7	22.0	30.0	27.6	23.0		27.9	24.9	25.7
X-Y	D81	16140			48.3										
X-Y	D81	16436			51.3			21.0		25.1	20.1			23.8	
X-Y	D81	16438				62.7	56.4	25.8		32.1	24.4	31.9	29.9	29.7	30.0
X-Y	D81	16439				54.3									
X-Y	D81	16449			53.3										
X-Y	D81	16558			45.4										
X-Y	D81	16559			51.7										
X-Y	D81	17594			49.9										
X-Y	D81	17820				57.7	52.4								
X-Y	D81	18131			47.7										
X-Y	D81	18177			51.8										
X-Y	D81	18492			50.6										
X-Y	D81	18690			51.3										
X-Y	D81	19374			52.8										
X-Y	D81	19404						22.4		26.4			26.3	25.1	
X-Y	D81	19734				60.4	56.7	25.7	32.6	30.3	23.5	31.6	29.7	28.6	27.9
X-Y	D81	19912				50.9	45.2	21.8			20.3			24.6	23.6
X-Y	D81	20275			47.6										
X-Y	D81	20802				49.9	44.7	21.7	28.3	25.0	20.2		25.4	24.3	23.3
X-Y	D81	20818				57.4	52.9	22.4		27.2	23.7		27.0	26.8	27.2

Appendix 19 cont. Cattle: Biometry: Metacarpal measurements (* specimen with splayed condyles)

Phase	Context	Bone ID	GL	SD	Bp	Bd	BatF	1	2	3	4	5	6	a	b
X-Y	D81	20971			62.4										
X-Y	D210	21367				53.0	48.5	22.4		26.0	20.4		26.2	25.3	25.1
X-Y	D81	22528			51.8										
X-Y	D81	22626			48.0										
X-Y	D81	22627					49.4	22.8		26.5	21.6		26.6		24.9
X-Y	D81	23325			56.3										
Y	D320	426				51.4	47.2	21.6		24.9			24.9	25.6	23.6
Y	D762	1197			52.9										
Y	A332	1471			48.1										
Y	A332	1472				51.3	46.9	19.7	27.0	24.4	20.4	26.9	23.7	24.3	24.7
Y	A332	1501			50.1										
Y	D705	1596			53.3										
Y	D340	1802			52.2	53.2	48.6	22.3		25.6	21.2		25.5	25.7	24.6
Y	D340	1813			49.5										
Y	A318	2221				50.0	46.5	20.8	27.2	23.9	19.0	26.7	24.6	24.1	23.4
Y	D318	2348			48.3										
Y	D746	2380				54.3	50.9	20.3	29.0	26.6	21.6	29.4	26.3	25.8	26.1
Y	D318	2455			49.3										
Y	D318	2456					44.5	20.4		23.6	18.7		23.7		23.3
Y	D312	2473				50.0	46.1	20.5	27.4	25.7	22.5		25.8	23.0	24.3
Y	D340	2808			47.8										
Y	D318	2924			53.3										
Y	D340	3011				52.4	48.8	21.2	27.7	25.4	21.5		25.5	25.4	25.0
Y	D1333	3141			61.9										
Y	D312	3317				62.4	60.4	27.1	34.6	31.3	25.3	33.6	31.1	30.7	29.6
Y	D762	3483			50.1										
Y	D713	3507			54.6										
Y	D464	3528				52.5	49.0	21.8		25.0	20.8	27.5	25.3	25.2	24.8
Y	D320	3676			50.0										
Y	D168	4911				52.4	47.9								
Y	D151	5081			57.9										
Y	D191	5123				57.1	51.5	22.7	28.6	27.0	21.3	28.8	27.1	27.9	26.6
Y	D168	5127			54.4										
Y	D338	5706				51.8	46.8	20.6	27.1	23.8	19.7	26.9	24.1	24.6	25.8
Y	D762	5777			51.1										
Y	D762	5778				48.9	43.6	21.7			20.8			23.4	23.1
Y	D706	5812			50.2										
Y	D746	5855				52.7	48.1	22.6	28.6	25.5	21.2	28.3	25.7	25.7	25.3
Y	D338	6035			58.4										
Y	D340	6086			56.8										
Y	A345	6502			50.0										
Y	D1332	7187				52.2	48.7	21.0	27.5	25.6	21.9	28.4	26.1	24.3	25.5
Y	D346	7434			60.4										
Y	D1158	7666				48.0	43.6	20.8		24.2	19.6		24.1	23.3	22.6
Y	D1158	7674			51.6										
Y	D151	7869	168.3	24.7	45.7	48.0	41.6	20.2	26.7	23.3	19.5	26.6	24.1	23.2	21.9
Y	D151	7870				50.1	45.1								
Y	D151	7871				49.6	45.1	19.3	25.1	23.5	20.8	26.1	23.3	23.2	23.9
Y	D1231	8025				63.6	58.3	26.3	33.8	30.6	23.9	33.2	30.7	31.4	29.6
Y	A253	8282			50.8										
Y	A041	8323				63.4	55.2	21.8	30.5	28.2	23.8	31.2	28.2	30.3	30.8
Y	D168	8748				63.0	55.8	24.9	32.3	29.1				30.3	
Y	D338	8904			50.6										
Y	D338	8907				50.1	45.1	18.5	25.9	23.7	20.3	26.8	23.5	23.6	24.7
Y	D318	9167				54.9	50.1	22.7	30.0	26.7	22.1	29.6	26.5	26.7	25.7
Y	D762	9280				54.3	50.1	23.0	30.4	27.4	21.4		27.0	26.1	25.5
Y	D762	9296				50.4	46.6	21.2		24.9	19.2		25.2	23.4	23.8
Y	D704	9416			50.4										
Y	D713	9458				50.7	46.1	20.2	27.3	25.3	21.2	28.1	25.8	23.5	24.0
Y	D714	9466			46.7										

Appendix 19 cont. Cattle: Biometry: Metacarpal measurements (* specimen with splayed condyles)

Phase	Context	Bone ID	GL	SD	Bp	Bd	BatF	1	2	3	4	5	6	a	b
Y	D837	9942				49.3	43.6	20.9		23.5	19.5		24.7	23.9	23.0
Y	D224	10392			62.0										
Y	D224	10393					52.9	24.5	30.2	27.7	23.0		27.5	27.9	
Y	D329	10413			49.6										
Y	D312	10424			51.6		47.4								
Y	D338	10577			48.2										
Y	D312	10600				51.7	50.2	20.1	27.7	25.2	21.4	29.1	26.3	24.4	24.9
Y	D1333	10722			51.3										
Y	D762	10898			51.7										
Y	D762	10924			49.9										
Y	D762	11295			50.9										
Y	D706	11341				66.1	59.3	25.7		30.4	24.4		30.1	31.3	31.2
Y	D338	11521				47.0	42.3	20.7	26.2	24.2	19.6	26.1		22.7	22.5
Y	D338	11522				51.7	46.1	21.7	28.4	25.5	20.5	27.4	25.9	24.2	25.1
Y	D338	11526				55.3	50.0	22.8	29.9	27.0	21.8	29.2	27.5	25.8	25.2
Y	D320	11789			44.1										
Y	D216	11875			50.5										
Y	D214	12864			50.9										
Y	D214	12867				49.8	44.4	20.5	27.7	24.2	19.1	27.2	24.8	24.2	23.3
Y	C184	13453				59.5	53.8	24.4	31.3	27.9	23.1	30.7	28.5	28.2	28.4
Y	D168	13504					51.8			27.8	22.7		27.8		26.4
Y	D168	13505				49.5	45.1	20.7	27.2	24.2	19.7	27.1	24.6	24.0	23.4
Y	D312	13602	183.0	28.1	50.4	51.2	46.5	23.2	30.5	27.3	21.8	29.8	27.2	24.4	24.1
Y	D312	13754	185.0	28.7	51.3	51.5	47.9	21.5	29.0	25.6	19.9		25.3	24.7	23.9
Y	C307	13819				48.2	44.2	21.5	27.0	25.1	19.8		25.5	23.0	22.7
Y	D312	14221			49.2										
Y	D312	14419	170.5	24.4	45.2	48.2	44.6							23.5	22.4
Y	C270	14630				52.8	47.0	21.9	29.7	26.4	20.9	28.7	26.2	25.2	23.9
Y	D216	14931				51.9	47.7	19.9		24.7	21.2	28.2	24.7	24.5	24.3
Y	D216	14950				51.6	46.0	21.7	28.0	25.3	20.1	27.1	25.0	25.1	25.0
Y	D214	15192			49.6										
Y	D214	15193			47.2										
Y	D329	15309				64.4	58.6	23.0	31.8	29.5	25.1		30.1	30.8	31.4
Y	D151	15405				48.2	44.0	21.4	28.7	25.4	20.1	27.6	25.0	23.3	22.5
Y	D151	15406				52.1	48.0	22.4		26.1	21.8	28.5	26.6	24.8	24.2
Y	D151	15461			46.5										
Y	D214	16018			52.8										
Y	D214	16019	167.0	24.8		50.6	44.8	21.5	28.3	25.4	19.7	27.4	25.4	24.2	24.0
Y	D214	16020	177.5	26.4	48.2	48.5	43.2	20.4	26.9	23.9	19.2	26.0	24.1	23.0	23.3
Y	D214	16021	184.5	28.1	51.9	52.0	48.7	23.0	30.4	27.7	21.1	29.2	27.2	25.1	24.2
Y	D214	16022*	174.0	28.2	52.4	52.5	48.5	21.4	27.7	24.7	20.2	26.9	25.3	25.0	24.1
Y	D320	16806				52.4	49.6	21.7	28.9	26.6	22.8	29.6	26.6	24.1	25.0
Y	D329	17023			53.6										
Y	D329	17024				52.6	49.1	22.5	29.4	26.5	21.3	29.1	27.0	25.1	24.8
Y	D320	17673				47.8	44.3				20.1		25.3	22.7	22.4
Y	B321	17725			53.5										
Y	D168	17791			52.4										
Y	D168	17792	194.5	31.5	53.4	57.0	52.7	23.8	31.4	27.9	22.3	30.5	28.0	27.2	26.5
Y	C409	18907			51.9										
Y	D168	19362			51.2										
Y	D216	19665			57.1										
Y	C203	20092				50.4	46.3	21.2			19.5		25.4	24.6	23.3
Y	C203	20093				53.4	48.8	21.8			21.4		25.9	25.3	25.3
Y	D168	20256			53.0										
Y	D224	20957			48.4										
Y	D216	21387				56.9		24.1	23.0	27.8	23.1	31.9	28.7	27.0	27.2
Y	D151	23255				50.5	45.2	22.2	28.6	26.0	20.4	28.0	26.5	24.4	23.0
Y	D168	23435				52.4	47.1	20.3		25.7	22.0		25.5	24.4	25.5
Y	D168	23436				51.3	47.3	21.8	28.7	25.4	21.0	28.2	25.9	24.7	24.1
Y	B120	23747			47.3										

Appendix 19 cont. Cattle: Biometry: Metacarpal measurements (* specimen with splayed condyles)

Phase	Context	Bone ID	GL	SD	Bp	Bd	BatF	1	2	3	4	5	6	a	b
Y-Z	C132	61					47.3	21.3		24.1	19.4		24.6	25.6	
Y-Z	C132	62					42.1	20.5	26.9	24.1	18.8	26.4	24.3	23.9	22.8
Y-Z	C132	273									20.8				25.5
Y-Z	E74	577			47.6										
Y-Z	E74	578				55.0	50.7	21.4					25.5	25.8	27.0
Y-Z	E74	593	180.0	27.1	48.9	51.0	46.5	21.3	22.7	25.0	19.6		25.2	23.8	24.4
Y-Z	E74	594	207.0	30.5	55.7	57.7	54.2	24.5		28.8	23.4		29.1	27.1	27.0
Y-Z	E74	692			45.5										
Y-Z	D116	771			48.0										
Y-Z	D116	782				50.7	46.8	23.2	29.0	25.8	21.3			24.7	23.9
Y-Z	E81	1288			58.6										
Y-Z	E81	1289							27.7	25.5	21.8	28.3	25.4		24.5
Y-Z	B277	1727			52.5										
Y-Z	B277	1728			51.1										
Y-Z	B277	1731			54.4										
Y-Z	B277	1759			53.8										
Y-Z	D116	4545				50.1	45.7	21.6	28.2	25.6	20.2	27.8	25.5	24.5	23.8
Y-Z	D116	4881			51.4										
Y-Z	D116	4882			55.6										
Y-Z	E74	4953			46.3						18.6	25.4	23.3		
Y-Z	C187	5192			46.7										
Y-Z	C187	5193				49.7	44.7	21.3			19.9	26.7	25.0	24.1	22.6
Y-Z	D116	5976			57.6										
Y-Z	C187	6254				52.5	48.3	22.5		26.6	21.4	29.1	26.6	25.0	24.5
Y-Z	C160	6258				52.6	49.1	21.2	29.1	26.5	22.4	29.4	26.8	24.8	24.9
Y-Z	D116	6648				61.1	55.3	26.4		30.4	24.3			29.9	28.7
Y-Z	D116	7286			50.1										
Y-Z	E74	7778				49.4	45.4								
Y-Z	E74	8262			45.8										
Y-Z	E74	8273				49.9	45.2								
Y-Z	E74	8276				45.1	42.6								
Y-Z	D116	8966				48.8	43.6								
Y-Z	D116	9003				53.7	48.3	22.7		26.2	21.2	28.1	26.0	26.7	25.1
Y-Z	D116	9035				53.2	50.6	22.0	28.9	25.6	20.3		26.4	25.3	25.0
Y-Z	D116	9128			50.0										
Y-Z	E74	9174				49.4	45.0	20.6		24.9	19.7	26.5	24.5	23.7	23.2
Y-Z	E74	9181			46.1										
Y-Z	E74	9182				53.2	48.5	22.8		26.1	21.8	28.4	26.6	25.1	24.7
Y-Z	B277	12212			48.8										
Y-Z	B277	12213			47.3										
Y-Z	B277	12214			54.4										
Y-Z	B277	12216				52.8	48.3	22.8	29.5	26.1	21.5	29.0	26.5	25.1	25.2
Y-Z	B277	12231	176.5	26.7	49.0	49.7	46.9	21.2	28.3	25.2	19.5	27.1	25.1	24.1	23.2
Y-Z	B277	12250			52.6										
Y-Z	B277	12251				50.6	45.1	21.4	27.3	23.9	20.7	26.8	24.5	24.5	23.6
Y-Z	B277	12599				53.1	47.1	22.8		26.6	20.8	29.7	27.7	25.7	25.1
Y-Z	B277	12621				53.7	50.2	22.6	29.3	26.5	21.0	28.8	26.9	26.1	25.1
Y-Z	B277	12625			53.0										
Y-Z	C268	13004				49.8	45.7	20.0		23.1	18.8		23.6	23.6	23.9
Y-Z	B277	13044	179.5	25.0	48.2	48.4	43.7	21.0	26.9	24.4	19.9	26.6	25.6	23.2	22.7
Y-Z	B277	13065				55.8	50.9	23.9	31.1	28.9	22.9	30.4	28.3	26.9	26.0
Y-Z	B277	13066				53.0	49.1	21.5	30.4	28.2	23.3	31.1	27.5	24.6	25.6
Y-Z	E74	13089			46.7										
Y-Z	E74	13102				48.3	44.2							23.5	22.4
Y-Z	C231	13531				51.9	47.0	22.7	28.9	26.5	21.4	28.8	26.7	24.8	24.5
Y-Z	B277	13705			53.2										
Y-Z	B277	13719				50.7	45.5								
Y-Z	B277	14056				52.4	48.6	22.5	29.4	26.7	20.2	28.5	26.4	25.7	23.9
Y-Z	B277	14058				46.5	43.4	21.4	29.3	25.5	20.0	28.2	26.1	22.1	21.1
Y-Z	B277	14071			48.7										

Appendix 19 cont. Cattle: Biometry: Metacarpal measurements (* specimen with splayed condyles)

Phase	Context	Bone ID	GL	SD	Bp	Bd	BatF	1	2	3	4	5	6	a	b
Y-Z	D116	15078			52.5										
Y-Z	D116	15079			60.0										
Y-Z	D116	15080				52.4	48.2	22.0	29.4	27.0	20.6	28.8	26.6	25.1	24.6
Y-Z	B277	15561			45.2										
Y-Z	B277	15562			55.0										
Y-Z	B277	15591			48.6										
Y-Z	B277	15592				59.2	52.7	24.2	30.5	27.0	22.1	30.0	27.3	28.9	28.3
Y-Z	E74	15768				51.4	47.7	20.0		24.6	20.8		24.4	24.0	24.6
Y-Z	C187	16377	188.5	33.0	55.8	58.8	53.1	24.0	30.9	28.0	22.4	30.4	28.1	28.5	27.0
Y-Z	E74	16993				49.3	44.0	20.8		25.8	22.2		25.8	23.3	23.9
Y-Z	E74	16996			57.2										
Y-Z	D116	17353				50.2	46.5	21.3		24.4	20.3		24.7	24.2	24.0
Y-Z	C240	18187			51.7										
Y-Z	C240	18188						21.2	28.0	25.1			26.4	25.0	
Y-Z	E74	18598				50.6	47.6								
Y-Z	B277	18642	224.5	39.3		71.5	67.9	30.0		33.4	28.3	37.2	33.6	33.2	32.2
Y-Z	B277	18662			51.3										
Y-Z	D116	18781				50.5	46.9	21.7	28.2	25.4	20.1	27.5	25.7	23.8	23.6
Y-Z	D116	18945				53.0	49.3	22.6	29.4		21.2	28.6	26.6	25.1	24.8
Y-Z	C240	19505			47.0										
Y-Z	C240	19506			48.7										
Y-Z	C240	19507			51.4										
Y-Z	D116	20064	202.0	29.5	54.1	55.0	51.9	22.7	30.0	26.6	21.3	29.3	26.8	25.9	25.8
Y-Z	C268	20123	167.0	24.4	44.5	47.5	42.6	19.3	25.4	22.7	18.0	24.6	22.4	23.1	22.4
Y-Z	E74	20284				54.4	52.0	21.6	28.4		23.0	29.4	27.4	25.0	26.2
Y-Z	E74	20296				51.6	45.6	21.1		24.0	19.9	26.9	25.5	25.7	23.9
Y-Z	C187	20502			56.8										
Y-Z	C187	20503				53.0	46.3	20.9		25.7	22.2	28.6	25.4	25.4	26.0
Y-Z	C187	20507				54.2	51.4	21.9	28.9	25.7	20.6	28.0	25.9	26.3	25.6
Y-Z	C240	20717				54.2	49.5	23.2	30.8	27.1	21.5	29.5	26.9	26.5	25.3
Y-Z	C267	20901			56.2										
Y-Z	C187	21006				49.5	44.8	21.0	27.0	24.3	19.9	26.9	24.5	23.8	24.0
Y-Z	D116	21506*	208.5	37.3	63.7	65.6	62.0	24.2	33.3	30.1	25.7	33.4	29.6	30.7	32.1
Y-Z	D116	21904				55.4	51.6	23.5	30.1	26.9	21.2	29.1	26.6	26.7	26.0
Y-Z	C258	22176				49.2	46.2	21.9	29.1	26.3	20.7	28.5	26.7	24.1	23.1
Y-Z	C231	22200				51.7	46.3	21.7	29.2		20.9		26.3	24.1	23.7
Y-Z	C187	22383			49.4										
Y-Z	D116	22620*	187.5	32.8	60.6	65.8	56.3	25.8		31.8	25.1	34.4	32.1	30.2	33.0
Y-Z	D116	23407			47.1										
Z	D332	121			67.8										
Z	D372	162				49.5	45.5	20.4	26.1	24.6	21.4	27.1	24.5	22.9	24.3
Z	D372	163				53.3	48.6	19.7			21.2			25.1	25.4
Z	D372	172						20.4		25.9	21.8	29.0	25.8	24.4	25.3
Z	C78	257			53.8										
Z	C78	258			51.7										
Z	D331	457				47.9	43.5	19.0	25.6	23.2	20.2	25.6	23.0	22.7	22.9
Z	D100	520				54.6	50.1	21.4	29.6	27.0	23.2	30.9	27.4	25.4	26.4
Z	D100	531				49.4	43.8	19.0	26.3	24.3	20.4	27.3	24.4	23.1	23.6
Z	D100	547			51.4										
Z	D100	548			50.2										
Z	D100	549			48.0										
Z	D100	550	196.0	28.6	55.3	55.5	51.4	24.2	52.4	28.3	21.8	30.8	27.8	27.0	25.4
Z	D332	616				52.5	47.0			25.1				25.0	25.4
Z	D372	627	181.0	30.1	51.6	54.0	49.8	23.1	30.8	27.0	22.1	30.0	26.6	25.7	25.1
Z	D372	636	182.0	29.9	50.4	52.9	49.6	21.3	28.3	24.9	19.9	27.5	25.1	25.6	24.9
Z	D372	637			47.6										
Z	E184	959	190.5	30.5	55.0			23.6		27.3		29.5	27.1		26.9
Z	D466	1038				50.6	46.1	20.1	25.2				24.8	24.2	24.5
Z	D100	1653			47.1										
Z	D100	1688			51.7										

Appendix 19 cont. Cattle: Biometry: Metacarpal measurements (* specimen with splayed condyles)

Phase	Context	Bone ID	GL	SD	Bp	Bd	BatF	1	2	3	4	5	6	a	b
Z	E172	1848				48.2	45.5	20.8		23.4	20.0		23.9	23.0	22.4
Z	E172	1875			50.5										
Z	E172	1876			51.5										
Z	E172	1877				52.2	46.7	22.0			21.1			24.6	25.4
Z	D100	2044			46.6										
Z	B98	2113				52.6	49.8	21.1	27.9	25.9	22.1		25.5	24.5	25.5
Z	B98	2121			51.6										
Z	B150	2130				51.1	45.4	20.0	27.8	25.4	21.4	28.3	24.9	23.6	24.3
Z	B98	2132			51.9										
Z	B150	2172			54.8										
Z	D306	2307				52.6		23.3	28.8	25.7		28.0	26.0	25.4	24.8
Z	D283	2339				53.6	50.0	22.2	28.7	26.0	23.0		26.3	24.8	26.5
Z	D310	2496			51.1										
Z	D310	2503				50.1	44.0	21.4	28.0	25.2	20.2	27.2		24.7	23.5
Z	D331	2547				58.0	52.4	24.2	31.1	27.7	22.8	30.4	28.0	26.9	27.8
Z	D372	2573				54.7	50.0	23.4		27.0	21.8		27.3	26.4	26.0
Z	D332	2606				58.0	54.0	24.2	31.8	28.1	22.8	31.0	28.8	28.0	26.4
Z	D100	2650			47.9										
Z	D100	2667				52.0	47.7	21.4	29.2	26.6	23.0	29.8	26.5	24.6	25.3
Z	D100	2684			52.5										
Z	D106	2713			64.6										
Z	D100	2998*				68.1	60.3	25.1	33.3	31.4	27.0		31.3	33.6	32.7
Z	D306	3019				53.6	48.9	22.6			21.2		26.8		25.8
Z	D332	3230			49.0										
Z	D473	3522			48.5										
Z	B136	3625			59.9										
Z	D372	3966			48.3										
Z	D306	4018			51.3										
Z	D306	4043			61.5										
Z	D283	4091			61.4	39.3	60.2	23.9	32.4	30.0	26.9	33.7	30.4	33.6	29.4
Z	D283	4092				49.4	45.9	20.2	27.0	24.6	18.9	26.1	24.0	23.6	23.1
Z	B99	4321*				53.2	47.4	20.7	28.0	24.1	19.7	27.4	25.0	25.3	25.4
Z	D100	4442				49.8	45.9	21.5	28.3	26.2	22.7	29.5	26.1	22.4	24.2
Z	D100	4443				50.3	46.9	19.9	26.2	24.0	18.3		24.0	24.5	23.2
Z	D100	4457			47.6										
Z	D100	4470			51.3										
Z	C89	4782			52.0		50.1				22.0		26.8		25.8
Z	C76	4940				59.9	49.5								
Z	E100	4956				51.4	45.8	22.7	29.3	26.5	20.8	28.2	26.3	24.7	24.3
Z	E100	4957				51.7	47.8	22.3	29.2	26.5	21.7	28.2	26.2	24.7	24.4
Z	C76	4992			45.6										
Z	C76	4993				54.4	49.1	23.9	31.6	28.2	22.4	30.5	28.2	26.4	25.2
Z	C74	5078			53.7										
Z	D100	5092				63.0	56.9	26.2	34.2	30.4	24.9	33.9	31.1	30.1	30.2
Z	D100	5110				53.1	50.7	21.6	28.9	26.0	20.2	28.0	25.7	25.2	25.2
Z	C94	5144	193.0	31.2	55.8	56.0	51.1	23.8	31.2	28.1	21.8	30.6	28.7	26.8	26.5
Z	C94	5145			60.7										
Z	C94	5146				53.9	50.1	23.1	29.5	26.8	22.1	28.8	26.3	25.6	25.5
Z	C80	5170*	185.0	30.4	51.2	53.8	48.6	22.5			21.6		26.5	25.7	25.3
Z	C74	5182			51.0										
Z	C74	5183			47.8										
Z	E172	5243				50.0	45.6	20.9		24.1	19.8		24.4	23.9	23.9
Z	C78	5328				53.1	47.4	22.5		26.2	20.7	28.9	26.3	25.5	24.4
Z	C78	5375			51.6										
Z	C78	5376				50.3	47.1	21.4	28.4	25.7	20.4	27.7	25.2	24.2	23.7
Z	C76	5450				52.6	50.1								
Z	C78	5471	186.0	29.9	54.2	54.5	49.3	23.4	31.7	28.2	21.7	30.4	28.5	26.0	25.0
Z	C78	5489			64.7										
Z	C78	5490			55.0										
Z	C89	5523	168.0	26.4	46.3	47.3	44.1	20.7	26.9	23.9	19.3	25.9	23.8	23.1	22.3

Appendix 19 cont. Cattle: Biometry: Metacarpal measurements (* specimen with splayed condyles)

Phase	Context	Bone ID	GL	SD	Bp	Bd	BatF	1	2	3	4	5	6	a	b
Z	D100	5595			49.2										
Z	C76	5636	204.5	64.8	35.0	70.7	60.2	26.6	34.6	30.8	24.2	32.9	30.8	33.8	33.8
Z	C76	5637*	189.0	28.8	52.4	54.4	50.2	23.4		27.1	21.9		27.0	26.0	25.7
Z	D108	5714				54.3	49.7	23.9	30.2	27.7	22.6	29.4	27.5	26.7	25.6
Z	E85	6126			56.6										
Z	E85	6127				46.9	42.7	20.8	26.6	24.1	19.2	25.5	24.0	22.7	22.0
Z	D100	6133	198.0	31.4	55.4	55.0	52.6	22.5	30.0	26.8	21.2	28.9	26.8	26.6	26.0
Z	E85	6156	185.0	26.5	48.8	52.1	46.9	21.6	27.9	25.3	20.1		25.0	25.7	24.9
Z	E85	6157				53.1	48.3	22.3	29.6	26.4	21.1	28.9	26.8	25.6	24.6
Z	E85	6174				51.5	48.4	22.3	29.5	26.6	21.0	28.8	26.6	25.1	24.6
Z	E85	6183			59.1										
Z	C191	6246			54.3										
Z	D310	6329			48.2										
Z	C101	6373				53.5	50.5	21.7		26.2	23.5			24.8	25.8
Z	C212	6406				61.8	54.5	25.7			24.8			29.9	29.5
Z	D229	6540					44.7	20.1	27.1	25.5	21.2	27.7	25.4		23.6
Z	D100	6860				55.7	51.4	21.6	28.6	26.4	22.4	29.7	26.5	25.5	27.6
Z	D372	7148				48.9	45.5								
Z	C76	7325				50.2	46.9	22.0	28.7	26.3	20.3		26.0	24.7	23.5
Z	C76	7326				57.3	54.5				21.6		26.9	27.8	27.1
Z	C76	7374	180.5	34.8		61.4	58.1	23.8	31.1	27.6	21.2	29.9	27.5	30.1	27.4
Z	D332	7479				50.6	47.7	22.3	29.4	27.2	23.5	30.2	27.3	23.9	24.7
Z	E85	7579				67.2	62.9	24.1		30.5	26.2		30.7	31.4	33.1
Z	E85	7611			46.4										
Z	E85	7617				52.1	47.5	22.4	28.7	26.0	21.0	27.8	26.1	25.3	24.4
Z	D331	7619	178.0	27.8	49.4	50.9	47.3	21.1		25.0	20.3		25.1	24.7	24.6
Z	C188	7700				64.5	59.2	26.6	34.0	30.3	23.8	32.6	30.1	31.0	30.7
Z	E172	7826			50.1										
Z	E172	7827				51.6	47.3	21.3	29.0	27.2	23.6	30.5	27.5	23.8	25.0
Z	E172	7831			51.5										
Z	D100	7892				53.1	49.6	23.4	30.5	26.8	22.1	30.3	27.8	25.5	24.7
Z	D100	7893			50.1										
Z	D100	7924				56.5	51.4	22.6	30.7	27.3	20.8	29.5	27.3	27.1	26.5
Z	B172	7971				53.5	46.2	22.2		25.8	20.8		25.6	25.6	25.2
Z	C76	8073				47.3	42.4	19.5		24.2	21.7		24.4	22.6	22.6
Z	C78	8143*	181.0		61.0	61.8	56.6	25.0	33.1	29.7	23.2	32.6	30.7	30.0	28.6
Z	C78	8160			55.4										
Z	C80	8175	179.5	34.5	58.5	61.3	56.6	24.2		28.2	22.9	30.9	28.7	29.7	28.8
Z	B172	8189				52.6	49.3	20.5	27.2	24.2	19.2	26.8	24.8	25.0	25.6
Z	B147	8211			49.6										
Z	D106	8233			49.2										
Z	D283	8528				53.4	50.0	20.4	27.9	25.4	21.7	28.3	25.0	25.8	25.6
Z	D283	8533				54.1	48.5	23.4	30.2	27.1	22.0	29.5	27.2	26.3	25.4
Z	D283	8560				57.2	52.2	23.1		27.8	22.2	30.9	28.1	27.6	27.1
Z	D100	9341				53.0	47.7	22.5	29.4	26.5	21.8	29.3	27.5	25.7	25.0
Z	D100	9357			55.6										
Z	D100	9394			50.5										
Z	D372	9578*	196.0	33.9	57.7	62.4	57.8	26.3	33.0	29.9	24.4	32.5	29.8	29.7	29.7
Z	D372	9588				47.6	43.5	20.4	26.1	23.2	19.5		23.2	22.7	22.0
Z	D104	9698	176.5	26.4	49.4	49.9	46.3	21.8	28.3	25.4	20.3	27.4	25.3	24.1	23.2
Z	D104	9699			49.4										
Z	C188	9722	185.5	29.8	53.7	53.7	50.0	22.9		26.7	21.5		26.5	25.6	24.8
Z	E221	9851			50.0										
Z	B147	9980				46.2	43.9	18.7	24.8	23.4	19.7			22.1	22.3
Z	B147	9995				52.6	48.2	22.4		26.0	20.6			25.2	24.6
Z	B147	10012			52.9										
Z	B159	10039				47.5	42.5	20.2		23.8	18.8		24.1	23.2	22.6
Z	D100	10043				57.0	52.8	23.1	31.7	28.0	21.9	30.8	28.0	27.2	26.8
Z	D100	10092				48.4	44.3	19.6	26.4	23.9	21.1	27.2	24.0	22.2	23.1
Z	D310	10151					46.1							24.7	

Appendix 19 cont. Cattle: Biometry: Metacarpal measurements (* specimen with splayed condyles)

Phase	Context	Bone ID	GL	SD	Bp	Bd	BatF	1	2	3	4	5	6	a	b
Z	E185	10232				51.9	48.8	22.5	29.6	26.9	21.3	29.1	27.3	24.7	24.5
Z	D108	10492			49.7										
Z	D332	10591			49.7										
Z	E172	10637				51.5	47.5	21.9	28.8	25.5	20.5	28.4	25.6	24.9	24.5
Z	D372	10999				52.3	49.1	21.6	28.2	26.2	23.2			23.7	24.8
Z	D283	11151				53.9	49.4	23.1			21.3		27.3	26.1	25.1
Z	E172	11431			48.4										
Z	E172	11433			47.4										
Z	E172	11434				51.3	47.0	22.0	28.3	25.9	21.2	28.0	25.3	24.4	23.9
Z	E185	11486			51.1										
Z	E185	11487				51.1	46.6				21.4			24.5	23.8
Z	D283	11557				52.8	48.8	21.1	29.1	27.1	22.4	29.8	27.0	24.7	25.0
Z	D106	11751			61.5										
Z	C80	11812				52.7	47.5	20.2	28.0	25.2	21.7	28.4	25.4	25.0	25.4
Z	C78	11854				54.9	50.5	21.4	30.2	27.7	22.6	30.7	27.0	25.6	26.5
Z	D100	11896*	184.0	35.2	56.4	62.8	53.6	23.0		27.8	22.0			31.3	27.3
Z	E172	11920	172.5	24.4	47.9	49.9	44.1	20.8	27.5	24.5	19.5	26.9	24.9	23.8	23.8
Z	E172	11921				52.6	48.6	22.5		26.0	20.9	28.3	26.0	25.5	24.6
Z	E172	11922				50.5	47.0	20.4	27.7	25.3	21.7	28.0	25.1	23.3	24.7
Z	E172	11929			47.8										
Z	D100	12350				55.1	51.1	23.1	30.5	27.8	22.1	30.3	28.2	26.2	26.0
Z	D283	12358			51.7										
Z	D283	12388			56.6										
Z	D283	12421			53.3										
Z	D283	12422			56.9										
Z	D100	12515				50.2	46.1	21.6			21.2			23.9	23.2
Z	C191	12664			50.3										
Z	D100	12771			49.1										
Z	D283	13232				54.2	51.1	24.1	31.4	26.9	22.6	30.0	26.9	26.2	25.3
Z	D310	13303				49.9	45.1							23.9	23.7
Z	D108	13319			51.7										
Z	D310	13421			50.9										
Z	D107	13433	188.0	28.2	52.7	52.8	49.5	23.1	30.7	26.2	21.6	30.2	27.2	25.2	24.9
Z	C112	13480			48.8										
Z	D103	13832	189.0	30.4	52.6	54.5	49.5	23.6	31.1	27.9				25.9	26.1
Z	E172	13855			54.3										
Z	E172	13856			48.4										
Z	E172	13857				54.6	50.8	21.9	29.2	25.8	20.7	28.3	26.4	25.6	26.1
Z	E172	13889			50.3										
Z	E172	13891				50.6	46.1	19.9		24.9				24.4	24.3
Z	E172	13893				50.0	46.0	19.3		24.3	20.6	27.4	24.2	23.0	23.6
Z	E172	13894				50.8	43.9								
Z	E172	13916				52.3	47.9	22.6	30.3	26.8	20.4		27.2	25.1	23.8
Z	B136	13998				48.3	43.5	20.7		24.4	19.7		25.1	23.4	22.7
Z	D308	14339	182.0	26.8	47.9	51.2	47.6	21.5	27.8	24.8	20.4	26.9	25.4	24.3	24.0
Z	D283	14341				51.8	47.0								
Z	D283	14342				64.0	57.4	26.2	32.5	28.8	24.3	32.5	30.2	30.6	30.0
Z	D108	14430					51.4								
Z	D108	14441*	185.0	36.1	62.0	65.3	57.4	25.8	33.5	30.2	23.7	32.8	30.3	31.2	30.7
Z	D108	14528			58.3										
Z	D283	14547			50.4										
Z	D283	14650	209.5	39.6	66.0	66.6	60.3	27.2	35.0	31.3	26.1	35.0	32.1	32.6	31.2
Z	D283	14668	196.0	30.1	55.0	55.2	52.7	23.8	31.2	27.8	22.1	30.4	27.8	26.7	25.8
Z	D100	14982				52.3	48.8	22.3	29.1	26.2	20.7	28.3	26.3	25.2	24.3
Z	D100	14995	185.5	29.0	51.3	54.1	49.2	22.2	29.6	26.0	20.6	28.7	26.3	26.2	25.1
Z	D330	15299			50.4										
Z	D100	15332			53.9										
Z	D100	15420			62.2										
Z	D100	16086			51.0										
Z	E172	16267			52.4										

Appendix 19 cont. Cattle: Biometry: Metacarpal measurements (* specimen with splayed condyles)

Phase	Context	Bone ID	GL	SD	Bp	Bd	BatF	1	2	3	4	5	6	a	b
Z	E172	16269				49.4		21.0	27.5	24.8	19.6	26.7	24.6	23.7	23.3
Z	E172	16298			46.8										
Z	C90	16391				49.8	46.2	20.5	27.2	24.0	19.3	26.2	24.0	24.1	23.8
Z	D283	16675			55.4										
Z	D310	16805						21.7	30.4	27.8		31.4	28.9	26.0	
Z	D108	16894	201.5	39.3	61.8		59.9							32.4	
Z	D100	16928			49.7										
Z	D100	16929				57.5	53.2	24.0	30.8	28.9	25.5	31.0	28.4	26.5	28.4
Z	D100	16943				53.0	49.2	21.6		25.5	20.3		25.7	26.0	24.4
Z	D100	17182			48.2										
Z	D100	17205			52.1										
Z	D100	17214				54.5	51.0	21.8	29.0	26.0	19.5	28.0	25.5	25.7	25.8
Z	D100	17229	188.0	27.5	52.0	51.9	47.3	22.2	29.5	26.3	20.7	29.1	26.6	24.8	24.0
Z	D100	17230	176.5	26.1		48.7	43.7	21.2	27.2	24.6	20.2		24.8	23.4	22.6
Z	B136	17332				48.0	42.7	21.1	28.3	25.2	20.1	28.0	25.8	22.8	22.5
Z	D100	17536					46.3			25.5	20.2	27.8	25.3		23.3
Z	D100	18069				52.8	48.8	21.4		25.6	20.0	28.3	26.1	25.0	
Z	D283	18305			47.3										
Z	D283	18309				51.8	48.2	22.3	29.3	26.1	20.9	28.5	26.3	25.3	23.6
Z	D108	18378			48.8										
Z	D100	18495				49.0	45.8								
Z	D100	18535	184.0	27.9	49.4		51.0	21.3		25.3	20.3				25.0
Z	D100	18536			59.2										
Z	D100	18556				64.7	60.4	26.9	35.0	30.8	25.5	34.5	31.4	31.2	30.0
Z	D108	18990			52.3										
Z	D148	19385						20.3	28.3	25.4		27.4	25.7	21.8	20.9
Z	D100	19622				52.3	47.2	21.6	28.6	26.1	20.3		26.3	25.6	25.3
Z	E172	19809				50.2	45.3	21.7		25.8	20.1		25.6	24.2	22.9
Z	E172	19810				51.2	46.5	21.0	27.7	24.9	20.0	27.6	25.5	24.5	24.0
Z	D100	19832				53.0	49.5	22.0	29.5	26.1	21.5	28.9	26.8	25.1	25.0
Z	D107	19846				50.4	46.6								
Z	D108	19894	189.0	27.9		55.2	50.1	23.3	31.1	27.8	22.1	31.2	28.4	26.1	25.8
Z	D100	19901				49.2	46.3	22.3		26.1	20.4		25.8	24.3	22.6
Z	E172	20326			50.1										
Z	E172	20328				46.1	40.9	20.5						22.1	21.7
Z	E172	20329				51.3	48.4	21.6			20.5	28.3	26.5	25.3	24.4
Z	E172	20338			48.8										
Z	E172	20339				56.1	49.8	23.2		26.3	21.9		26.5	27.0	26.5
Z	E85	20386*				53.1	44.9	21.7	28.9	25.8	20.7	28.7	26.5	25.7	26.0
Z	B172	20451*	203.0	37.8		66.3	57.4	27.2	35.6	31.3	24.8	33.7	31.2	32.4	30.2
Z	D108	20762			62.4										
Z	D108	20807				48.5	44.6	19.9			18.8			23.3	23.0
Z	D283	21143	190.5	30.5	52.2	54.5	50.4	22.8	30.3	27.3	22.1	29.4	27.4	26.1	25.5
Z	D107	21151	183.5	27.5	51.0	50.2	46.9	21.4	28.0	25.2	20.3	28.0	25.2	23.8	24.1
Z	B136	21431			47.9										
Z	D100	21523			50.3										
Z	D100	21524				57.0	51.7	22.3	30.5	26.9	20.7	29.5	26.9	27.0	26.7
Z	E85	21726*	201.0	33.3			57.6	27.1	34.1	30.4	25.1		30.2	32.0	
Z	D100	21891*				62.2	54.7	23.6		27.2	22.9			28.4	
Z	B136	21918				57.2	52.9						27.0	27.3	26.9
Z	B136	21919				49.5	44.3	20.7		25.4	21.9		25.4	23.0	23.2
Z	D283	21983	191.0	34.3	59.4	60.7	55.5	25.2	33.1	29.5	23.1	32.0	29.2	29.3	28.6
Z	D100	22049				51.5	49.3	22.7			20.6		26.3	24.9	23.8
Z	D100	22213				49.1	44.4	20.9		24.0	19.5	26.7	24.1	24.0	23.2
Z	D100	22401			69.4										
Z	D108	22478*	199.0	35.0	62.0	69.1	58.7	27.3	35.2	31.0	26.0	34.8	32.1	33.0	34.0
Z	D108	22509*	178.0	32.7	56.4	58.9	50.0	22.7	30.0	25.9	21.3	28.9	26.3	28.7	28.2
Z	D306	22606	193.0	28.2	53.8	52.2	47.9	22.7	30.7	26.7	21.2	30.0	27.4	25.2	24.4
Z	C86	22616			47.4										
Z	C78	22721			52.8										

Appendix 19 cont. Cattle: Biometry: Metacarpal measurements (* specimen with splayed condyles)

Phase	Context	Bone ID	GL	SD	Bp	Bd	BatF	1	2	3	4	5	6	a	b
Z	D100	22747			48.2										
Z	D100	22803				48.6	45.2	21.3	27.3	24.6	20.0	26.4	24.7	23.7	22.7
Z	E100	22870				54.9	52.5	23.1	30.3	26.6	22.0	29.5	27.6	26.2	25.7
Z	E100	22887				51.8	48.4	20.8	28.3	24.6	18.8	27.0	24.4	24.7	23.6
Z	D100	22902				53.2	47.1	20.4	29.2	26.3	22.1	30.3	26.3	24.5	25.5
Z	D100	22903				51.8	46.2	20.9		25.0	20.1	27.9	25.4	24.0	24.3
Z	D100	22921			51.1										
Z	D100	22922				45.8	41.4	19.7	26.0	23.2	18.2		22.6	22.2	21.1
Z	D283	22970			52.1										
Z	E85	23179	178.0	27.8	50.4	54.1	49.3	21.8	28.7	25.2	20.3	27.8	25.3	25.4	24.5
Z	E85	23206				59.1	57.8	21.8		26.9	22.8		26.5	27.3	27.7
Z	D103	23228	175.0	25.0	48.2		43.8	20.4		23.1	19.3		22.8		
Z	C80	23274				47.6	43.3	19.0		24.0	19.9		23.9	22.0	22.3
Z	D100	23300				51.2	46.2	20.2	26.6	24.3	18.9		23.9	24.1	24.6
Z	D100	23333				52.0	49.6	22.4	29.4	26.3	20.8		26.4	24.4	24.4
Z	C78	23553*	201.0	38.3	63.9	66.8	58.4							32.0	31.5
Z	C78	23600				48.5	44.1	19.8	26.4	23.0	19.4	26.2	23.7	23.0	23.0
Z	C78	23616					49.7			24.5	20.2	28.8	25.4		
Z	C74	23651			50.9										
Z	C74	23652				51.3	47.3	19.0	27.1	25.1	21.1	28.5	25.3	23.6	24.5
Z	D100	23697	180.0	27.6			46.8				21.6	28.4	26.3		24.6
Z	C76	23707				51.1	47.5	19.7		25.1	20.8		25.0	24.0	24.4

Appendix 19 cont. Cattle: Biometry: Metacarpal measurements (* specimen with splayed condyles)

Phase	Context	Bone ID	GL	SD	Bd	Dd
W	D743	1063			50.6	37.4
W	D163	5958			55.6	
W	D163	5959			53.4	37.0
W	D343	9100			52.7	39.8
W	D343	9523			54.4	42.7
W	D252	9797			53.5	40.2
W	D252	9825			51.7	37.4
W	D743	10217			62.3	46.0
W	D1418	14226			54.2	41.7
W	D335	14776			55.1	42.2
W	D1569	15634			54.2	42.1
W	D1777	16712			50.5	
W	D102	22231			52.4	39.1
W	D102	22706			55.1	40.2
X-Y	D81	1829			53.6	42.3
X-Y	D81	2070			58.4	41.8
X-Y	D81	2287			53.2	40.7
X-Y	D81	2562			56.3	41.5
X-Y	D81	2905			51.9	38.2
X-Y	D81	6350			55.7	41.5
X-Y	D81	7133			66.2	49.1
X-Y	D81	7388			54.5	40.7
X-Y	D728	9897			52.6	40.7
X-Y	D81	10513			59.1	43.2
X-Y	D728	11235			55.3	42.8
X-Y	D81	13212			57.9	45.3
X-Y	D81	13734			57.4	41.3
X-Y	C308	13787				37.5
X-Y	C308	13788				40.0
X-Y	D81	16501			57.4	44.3
X-Y	D81	18438			51.7	37.6
X-Y	D81	18694			56.5	43.2
X-Y	D81	19375			57.1	41.8

Phase	Context	Bone ID	GL	SD	Bd	Dd
X-Y	D81	19405			63.2	45.6
X-Y	D81	19437			53.4	38.8
X-Y	C306	19873			52.4	40.4
X-Y	C306	19874			52.0	
X-Y	D210	21330			56.3	
Y	D1332	908			66.5	49.9
Y	D1332	1090			60.6	45.0
Y	D1332	1110				49.6
Y	D1332	1136			55.6	41.1
Y	D762	1200			53.4	37.8
Y	D1231	1511			54.7	39.6
Y	D1143	1527			53.5	38.8
Y	D1158	1531			55.8	41.4
Y	D762	1553			54.7	40.0
Y	D705	1600			62.6	45.7
Y	D1231	1976			65.1	50.2
Y	A318	2223			54.4	41.4
Y	D318	2457			56.2	42.7
Y	D352	2533			56.2	43.1
Y	D340	2591			56.0	38.4
Y	D346	2611			64.2	49.7
Y	D340	2812			56.4	42.7
Y	D340	3012			56.6	43.4
Y	D1333	3144			56.8	41.3
Y	D1333	3165			53.4	40.0
Y	D352	3245			57.0	
Y	D312	3320			56.5	42.6
Y	D1333	3428			60.0	44.2
Y	D712	3474			57.7	42.3
Y	D1231	4002			55.3	40.8
Y	D1231	4644			65.9	47.6
Y	D151	5084			51.5	38.7
Y	D346	5280			58.5	44.7

Appendix 20. Cattle: Biometry: Tibia measurements

Phase	Context	Bone ID	GL	SD	Bd	Dd
Y	D352	5296			55.8	40.1
Y	D908	5420			57.5	39.9
Y	D78	5577			58.9	45.5
Y	D762	5780			59.4	41.4
Y	D762	5781			55.9	42.4
Y	D340	6088			61.2	44.1
Y	D168	6416			54.2	40.3
Y	D151	6450	316.0	32.6	55.6	41.6
Y	D1332	6672			55.6	42.0
Y	D1332	7188			56.4	42.3
Y	D1231	8028			51.5	40.7
Y	D219	8491			53.4	39.9
Y	D219	8492				40.8
Y	D346	8655			61.2	46.0
Y	D1231	8844			54.1	
Y	D338	8908			62.8	45.9
Y	D318	9150			53.3	40.5
Y	D762	9950			66.0	48.1
Y	D908	10208			52.8	
Y	D1333	10725			55.7	42.6
Y	D1231	10767			57.0	41.9
Y	D762	10817	323.0	34.9	54.9	41.5
Y	D762	10818			63.9	47.1
Y	D762	10927			55.7	41.8
Y	D1326	11575			57.5	42.7
Y	D1332	11635			57.2	42.6
Y	D1332	11646			56.5	
Y	D1332	11647			52.6	39.1
Y	D1158	11656			56.0	
Y	D1158	11657			56.1	42.0
Y	D1158	11670			69.3	49.6
Y	D340	11780			56.2	43.6
Y	D214	12497			52.2	38.6
Y	D214	12498			55.2	42.6
Y	D214	12499			55.7	42.3
Y	D329	13759			57.1	43.2
Y	D318	14201			58.2	44.6
Y	D150	14746			51.5	37.5
Y	D216	14932			55.0	40.8
Y	D168	15036			56.0	42.0
Y	D214	15195			53.1	38.2
Y	D214	16465			50.7	36.9
Y	D320	16788	277.0	30.2	46.7	34.8
Y	D320	17503			52.6	40.7
Y	D318	17601			59.8	46.0
Y	D312	17634			55.9	
Y	D168	17795			54.3	40.9
Y	D168	17808			54.5	41.8
Y	C184	17909			57.4	42.8
Y	D320	17998				41.4
Y	D455	18171			54.4	
Y	D455	18181			53.5	41.4
Y	D318	18398			57.0	41.6
Y	D318	18399			59.2	43.8
Y	D329	18405			58.4	44.0
Y	D214	19440			59.0	44.4
Y	B299	19760	300.5	31.3	51.9	38.6
Y	D168	20258			59.0	44.7
Y	D168	20259			51.5	38.9
Y	D168	20260			53.1	41.5

Phase	Context	Bone ID	GL	SD	Bd	Dd
Y	D168	20261			55.4	42.6
Y	B321	21871			49.7	38.2
Y-Z	E74	3702			56.4	44.0
Y-Z	D233	4848			55.5	
Y-Z	C187	5158			53.8	39.8
Y-Z	D116	7279			52.7	39.1
Y-Z	B277	9560			55.7	44.9
Y-Z	B277	13048			52.5	
Y-Z	B277	13074			58.1	44.7
Y-Z	C267	13678			54.9	41.2
Y-Z	D116	15382			62.1	46.7
Y-Z	B277	15564			56.1	41.6
Y-Z	B277	15588			51.4	
Y-Z	C187	16378			52.4	39.9
Y-Z	D116	16471			53.7	40.3
Y-Z	E74	16997			55.6	41.5
Y-Z	C240	18205			56.5	43.8
Y-Z	D116	18782			55.8	42.2
Y-Z	E74	20306			51.8	38.9
Y-Z	C187	20508			55.1	40.7
Y-Z	B277	20542			50.7	38.5
Y-Z	D116	20785			54.2	40.1
Y-Z	C267	20903			61.0	45.1
Y-Z	C240	21048			56.2	40.7
Y-Z	C240	21049			56.5	43.9
Y-Z	D116	22542			54.8	39.6
Z	C78	262			64.9	45.5
Z	D100	287			68.9	48.8
Z	D331	476				39.8
Z	D331	649			51.7	37.9
Z	D466	1040			54.7	40.3
Z	D283	1224			57.7	44.9
Z	D305	1236			64.3	46.5
Z	D283	1341			56.9	39.5
Z	D310	2497			56.3	44.0
Z	D310	2510			52.6	41.1
Z	D331	2550			55.8	41.7
Z	D372	2577			53.7	39.8
Z	D372	2578			58.7	42.5
Z	D372	2624			54.5	39.1
Z	D106	2720			59.0	43.4
Z	D332	2896			54.8	40.7
Z	D283	2968			60.0	46.2
Z	D473	3523			52.3	37.5
Z	D283	3728			55.3	43.4
Z	D372	3926			58.0	43.0
Z	C191	4396			56.7	40.8
Z	C191	4397			57.1	43.2
Z	D283	4497			50.9	
Z	C78	4708			62.5	44.8
Z	D100	4901			52.4	37.3
Z	C94	5150			57.3	43.9
Z	C78	5205			54.7	39.9
Z	D100	5566			58.6	44.3
Z	D100	5567			54.1	40.9
Z	D283	5738			56.2	42.6
Z	D100	6134			55.4	42.0
Z	D100	6147			58.6	
Z	D100	6205			54.4	42.4
Z	D283	6365			55.1	40.5

Appendix 20. Cattle: Biometry: Tibia measurements

Phase	Context	Bone ID	GL	SD	Bd	Dd
Z	C101	6374			54.5	42.4
Z	D100	6617			56.3	41.5
Z	D100	6840			59.3	43.0
Z	D100	6845			52.8	38.8
Z	C188	7701			52.2	36.3
Z	C188	7702			53.1	40.2
Z	C188	7727			55.7	42.7
Z	E172	7828			55.7	43.3
Z	C78	8146			50.9	38.3
Z	D283	8553			61.0	45.6
Z	D372	8648			54.1	42.6
Z	D372	8649			57.9	44.3
Z	D100	9361			59.5	45.1
Z	D100	9375			56.2	41.0
Z	D100	9388			60.0	46.1
Z	D372	9581			54.7	41.6
Z	D372	9589			61.5	45.5
Z	D104	9701			54.3	40.9
Z	D104	9702			54.0	41.7
Z	C188	9731			56.6	42.3
Z	E185	10243			54.1	41.5
Z	E185	10258			56.7	39.8
Z	D283	10434			70.7	51.1
Z	D283	10435			55.6	40.2
Z	E172	10642			50.5	
Z	D467	10914				42.0
Z	D331	10972			54.5	42.0
Z	E185	11238			54.2	42.6
Z	D106	11753			54.9	41.0
Z	C80	11813			65.3	49.2
Z	E172	11930			53.6	
Z	D283	12072			55.5	
Z	D283	12073			53.3	39.7
Z	D100	12408			57.2	43.1
Z	D283	12425			55.1	41.6
Z	C191	12654			52.0	40.0
Z	D100	12741			53.7	39.7
Z	D310	13422			61.6	47.9
Z	D100	13486			56.5	40.6
Z	D103	13838			56.7	42.2
Z	D103	13839			54.4	41.9
Z	D103	13840			55.4	41.5
Z	E172	13886			52.9	38.4
Z	E172	13887			54.5	40.4
Z	E172	13918			52.0	38.9
Z	D100	14381			58.6	
Z	D108	14432			54.2	41.6
Z	D283	14550				40.4
Z	D100	14574			56.2	40.0
Z	D100	15013			57.0	
Z	D330	15300			54.8	
Z	D100	15334				41.3
Z	D100	15439			59.7	45.7
Z	D283	15794			56.1	
Z	D100	16056			55.2	41.4
Z	E172	16276			62.1	46.2
Z	E172	16277			53.0	41.5
Z	D283	16506			57.0	44.9
Z	D283	16522			66.1	51.3
Z	D283	16837			55.5	43.4
Z	D108	16895			58.4	45.0
Z	D108	17167			57.9	42.5
Z	D100	17206			54.7	41.0
Z	D108	17683			58.1	43.5
Z	C78	17913			57.5	43.7
Z	D107	18099			54.2	
Z	D283	18105			65.7	47.0
Z	D108	18381			53.5	41.8
Z	D108	18382			65.6	48.2
Z	D100	18558			60.5	46.4
Z	D100	18710			56.1	43.3
Z	D148	19384			54.4	40.5
Z	D108	19896			57.6	
Z	D100	20181			57.5	
Z	D100	20201			50.6	41.2
Z	D108	20763			64.4	48.3
Z	D108	20986			57.7	44.7
Z	D100	21543			55.5	40.1
Z	E85	21727			62.6	45.8
Z	E85	21728			55.2	42.3
Z	D283	21998			51.9	40.3
Z	D283	22006			55.9	42.0
Z	D100	22409			60.6	46.5
Z	D100	22749			58.3	41.0
Z	D100	22772			60.1	
Z	D100	22835			52.8	40.3
Z	E100	22875			58.6	42.8
Z	D100	22904			56.4	40.5
Z	D100	22925			54.0	40.7
Z	D283	22972			55.3	43.6
Z	E100	23189			67.0	52.5
Z	D103	23233			56.7	41.7
Z	D100	23245			55.6	42.5
Z	D100	23302				45.9
Z	D100	23315				45.3
Z	D100	23334			53.3	40.6
Z	D100	23359			55.4	40.5
Z	C78	23734			64.3	48.1

Appendix 20. Cattle: Biometry: Tibia measurements

Phase	Context	Bone ID	GLl	Bd	Dl
T-V	B603	6968	64.8	41.0	36.6
T-V	D2175	12139		38.0	
T-V	D673	15626		37.8	
W	D743	1908	60.0	37.1	32.3
W	D1635	2234	60.5	40.6	33.8
W	D1126	3204	59.0	35.3	
W	D343	4071	58.3	36.6	32.3
W	D767	5820	64.6	45.4	38.8
W	D983	5872	60.8	39.0	33.5
W	D163	5960	56.2	33.3	30.5
W	D102	7958	54.5	34.0	29.7
W	C426	8351	61.4	40.4	34.1
W	C426	8378	65.7	38.9	35.3
W	D343	8830	59.2	36.1	33.2
W	D1129	9676		38.6	33.8
W	D343	9835		36.2	
W	D755	9906	63.7	43.6	34.8
W	D840	10265		38.5	
W	D957	10795	60.8	36.5	
W	C543	12912	57.1	35.1	31.4
W	D1814	13541	60.9	35.7	33.0
W	D1785	13572		34.4	
W	B521	14096	62.1	41.2	
W	E96	14257	60.2	36.8	33.8
W	E96	14258	64.6	39.9	
W	D1591	14302		34.3	
W	C515	14710	55.7	33.5	31.5
W	D335	14777	68.4		
W	E96	15105	55.7		30.5
W	E96	15116	58.7		
W	E96	15125		44.3	
W	D335	15291	60.8	35.7	32.3
W	E96	15495		37.3	
W	D1569	15635	59.5	36.7	32.9
W	D335	15865	59.1	37.9	32.7
W	D244	15987	56.3	36.2	31.0
W	E96	16223	66.6	41.9	36.9
W	E96	16739	56.5		
W	C527	17773	59.9	39.3	32.9
W	E96	18588	59.2		35.0
W	C501	18803	54.6	37.0	30.0
W	C501	18828	60.4		
W	E96	18884	61.1	37.4	33.8
W	D881	19359		38.3	32.4
W	E96	20018	59.3	35.1	32.2
W	E96	20029		35.0	
W	C468	21307	64.3	40.8	
W	E96	21568	54.3		30.6
W	E96	21569	61.6	38.1	33.2
W	D163	21690	52.2	34.9	30.0
W	C468	22139		37.0	
W	C495	22253	59.7	39.1	32.5
W	E96	23174	61.0	39.2	34.6
W	E96	23175	66.7	43.8	36.1
W	E96	23176	63.9	38.7	34.4
W	E96	23177	62.3	39.8	34.3
X	B344	8381		41.2	
X-Y	D81	387	62.2	38.4	33.0
X-Y	D81	698	64.3	40.8	34.7
X-Y	D728	842	56.0	36.1	31.6
X-Y	D81	930	56.9	36.7	29.9
X-Y	D728	1068		35.1	
X-Y	D728	1419	58.2	36.6	31.7
X-Y	D81	2071	59.2	39.0	32.7
X-Y	D81	2557	61.2	37.0	32.0
X-Y	D81	2906	63.0	38.3	
X-Y	D81	3051	59.2	36.5	31.4
X-Y	D81	3052	65.1	42.4	36.5
X-Y	D81	3053	57.0	35.7	31.4
X-Y	D81	3285	59.8	36.3	32.7
X-Y	D81	6761	64.6	37.2	34.6
X-Y	D81	6762		37.8	32.5
X-Y	D735	8406	58.0	35.3	31.7
X-Y	D81	8434	62.2	40.4	
X-Y	D81	8605	63.2	40.0	34.1
X-Y	D735	10283	63.4	40.3	35.0
X-Y	D81	11803	66.5		
X-Y	D210	12101	62.3	36.8	34.9
X-Y	D81	12572	63.9	39.1	35.5
X-Y	D81	12714	59.2	37.0	32.2
X-Y	D81	12715	62.4	39.2	34.5
X-Y	D81	12716		39.2	
X-Y	D81	12751			32.2
X-Y	D81	12854	60.2	36.1	33.0
X-Y	D81	12877		38.1	
X-Y	D81	13213	62.7	38.4	35.0
X-Y	C308	13803		34.5	29.6
X-Y	D81	14393	54.5	34.8	30.3
X-Y	D81	14973	59.2	36.9	32.9
X-Y	D81	15823	61.6	39.7	33.1
X-Y	D81	16142	68.9	42.7	37.1
X-Y	D81	16581		37.2	32.0
X-Y	D81	16582		38.1	33.2
X-Y	D81	16908	60.5	39.2	34.6
X-Y	D81	16909	61.1	36.4	33.4
X-Y	D81	17924	56.1	34.3	31.1
X-Y	D81	18423	58.5	36.0	32.3
X-Y	D81	18440	64.7	40.8	35.5
X-Y	D81	18696	56.7	35.0	32.1
X-Y	D81	20803	57.5	35.5	32.9
X-Y	D81	20974	58.9	37.0	33.0
X-Y	D81	22515	60.0		
Y	D746	880	59.0	37.3	32.0
Y	D1332	1091	58.0	36.3	30.9
Y	D1332	1124	60.8	38.9	33.5
Y	A332	1495	56.9	36.9	33.7
Y	D1231	1512	69.0	44.7	38.5
Y	D1158	1532	69.5	46.0	38.3
Y	D1231	1977	58.0	36.1	32.5
Y	D312	2011	62.0	36.5	34.2
Y	D318	2022	67.6	41.1	36.8
Y	D318	2023	60.5	38.4	34.6
Y	A318	2200	59.4	36.0	32.1
Y	D346	2614	62.0	40.6	35.5
Y	D346	2887	64.8	40.5	35.5
Y	D320	2911	57.6	35.9	32.2
Y	D1333	3146	60.9	39.6	34.2
Y	D312	3321	58.6	36.2	32.1
Y	D313	3472	57.0	35.3	31.5
Y	D338	3685	57.6	34.8	

Appendix 21. Cattle: Biometry: Astragalus measurements

Phase	Context	Bone ID	GLl	Bd	Dl
Y	D714	3870	60.0	39.1	34.0
Y	D168	4772	63.3	39.1	34.9
Y	D168	4776	67.2	42.9	37.3
Y	B120	5530	61.4	38.9	33.5
Y	D762	5868	59.1	36.7	32.7
Y	D338	6027	54.8	34.4	
Y	D151	6452	59.8	36.4	34.0
Y	A345	6474	64.4	39.7	35.3
Y	A345	6504	59.2	36.4	33.2
Y	A187	6737	58.6	37.8	32.8
Y	A240	6746		40.4	34.0
Y	D1143	6913	59.1	35.8	32.1
Y	D1333	7176	63.8	42.8	35.5
Y	D1333	7177	59.7	37.4	32.4
Y	D1332	7189	66.3	42.8	37.0
Y	D1332	7190	66.6	42.0	36.4
Y	D1158	7223	60.1	38.8	34.3
Y	D1231	7245	55.1	37.0	31.0
Y	D1282	7646	59.3	36.6	33.3
Y	D1158	7681	60.8	37.4	34.0
Y	D151	7874	57.9	33.1	31.4
Y	D168	7923	64.7	41.1	36.2
Y	D1332	7988	64.0	42.5	35.2
Y	D1332	7997	64.0	41.3	36.8
Y	D1332	8006	65.3	40.8	35.6
Y	D1231	8026	68.1	41.9	37.6
Y	D1231	8029	60.6	39.2	33.3
Y	D219	8493	58.4	36.7	32.3
Y	D312	8511		38.2	33.3
Y	D1158	8840	62.7	38.7	34.4
Y	D318	9152	61.1	37.4	34.1
Y	D762	9283	57.4	34.8	31.2
Y	D705	9454		35.6	
Y	D762	9930	64.7	41.3	35.9
Y	A318	10358	69.2	44.2	38.3
Y	A318	10359	52.7	32.9	29.8
Y	D224	10394		39.4	
Y	D329	10414	58.4	36.8	32.1
Y	D338	10570	63.0	38.0	
Y	D1326	10712	61.6	40.0	35.0
Y	D1333	10726	61.3	38.5	33.3
Y	D1231	10769	68.8	45.1	39.4
Y	D346	10984	59.8	37.7	32.2
Y	D1282	11057	62.6	41.3	35.7
Y	D704	11245	60.4	36.9	33.5
Y	D705	11287	60.4	38.7	33.3
Y	D338	11524	57.0	35.5	30.9
Y	D1326	11585	56.9	35.2	31.0
Y	D1335	11586	60.9	38.0	35.1
Y	D1332	11636	60.2	36.7	34.2
Y	D1332	11640	69.5	47.4	39.7
Y	D1158	11658	67.7	43.7	37.6
Y	D1158	11659	71.5	44.7	39.5
Y	D338	11775	58.9	37.0	33.3
Y	D318	12006	57.8	36.6	33.1
Y	D318	12007	56.8	37.7	31.1
Y	D214	12481	55.0	34.5	29.0
Y	D214	12501	57.4	38.4	32.2
Y	D214	12502	59.1	36.4	32.2
Y	D216	12555		34.7	31.0
Y	D214	12868	55.2	36.1	31.4
Y	C184	13452	56.8	33.8	32.3
Y	D312	13744	57.5	37.1	32.4
Y	D329	13760	63.0	38.2	35.0
Y	D318	14204	59.8	34.6	33.1
Y	D150	14747	56.6	34.4	30.6
Y	D214	15197	56.7	33.5	31.2
Y	D320	15280	61.7	38.1	35.5
Y	D329	15308	62.1	38.7	34.4
Y	D151	15407	56.8	36.1	32.6
Y	D318	16145	59.3	36.8	33.2
Y	D214	16466	56.9	37.0	32.7
Y	D329	17026	59.3	36.4	33.2
Y	D216	17057	62.2	37.8	34.6
Y	D318	17586	58.8	36.4	31.7
Y	D329	17626	62.4	39.2	34.7
Y	D320	17674			33.4
Y	D318	17708	66.8		36.5
Y	D168	17798	57.8	36.5	31.1
Y	D168	17807	57.8	38.3	31.8
Y	D318	17989	61.1	38.9	35.0
Y	D329	18406	57.7	34.7	31.3
Y	D219	18716	71.5	43.6	39.9
Y	C409	18922	60.0	38.6	33.3
Y	D219	19432	62.8	42.8	35.9
Y	D214	19441	57.1	34.1	32.0
Y	B299	19749	56.4	37.7	31.6
Y	B299	19750	62.6	38.0	34.7
Y	C207	20118	57.5	39.2	32.3
Y	C207	20119	57.2	35.2	31.4
Y	D168	20262	68.6	43.3	36.9
Y	D168	20263	61.9	36.3	33.7
Y	D168	20264	60.7	38.9	34.0
Y	D168	20265	65.5	39.1	34.6
Y	D168	20266	66.4	40.3	37.1
Y	D168	20267	64.5	39.3	36.9
Y	D168	20268	61.4	38.0	33.9
Y	A318	20401	62.2	37.4	35.4
Y	D224	21375	62.1		35.0
Y	D224	21376	62.2	39.6	33.6
Y	B321	21838	60.9	39.2	35.5
Y	B120	21924	56.7		31.6
Y	D214	21955	57.5	34.9	31.9
Y	C207	22346	61.2	37.8	33.9
Y	D168	23310	61.9	37.7	35.5
Y-Z	E74	570	63.3		33.0
Y-Z	E74	571	58.7	36.1	32.6
Y-Z	B277	1733	63.8	39.4	35.7
Y-Z	B277	1745	66.1	40.7	
Y-Z	D116	4371	59.0	36.3	32.6
Y-Z	D116	5884	61.0	35.0	32.5
Y-Z	C187	6255	66.1	43.2	37.6
Y-Z	D116	7282		44.9	36.0
Y-Z	E74	7745		35.9	30.2
Y-Z	D116	8960	68.6	45.3	37.7
Y-Z	D116	8984	62.4	38.3	33.7
Y-Z	D116	9012	56.5	35.0	31.3
Y-Z	E74	9183	56.2	34.3	30.5
Y-Z	E74	9195	62.3		34.8
Y-Z	B277	9533	65.2	40.5	35.9

Appendix 21 cont. Cattle: Biometry: Astragalus measurements

Phase	Context	Bone ID	GLl	Bd	Dl
Y-Z	E74	10700	60.6	39.1	33.7
Y-Z	B277	12149	61.1	38.1	33.5
Y-Z	B277	12222	60.0	37.3	32.3
Y-Z	B277	12255	64.8	40.1	35.9
Y-Z	B277	12256	59.1	36.8	32.7
Y-Z	B277	12600		41.8	33.3
Y-Z	B277	12601	60.0	37.1	33.0
Y-Z	B277	12626	60.4	39.7	33.0
Y-Z	B277	13049	61.9	39.6	33.3
Y-Z	E74	13084	65.7	40.3	35.5
Y-Z	D116	13355		44.9	38.0
Y-Z	B277	13727	62.4	42.4	
Y-Z	B277	13728	66.3	38.6	37.0
Y-Z	B277	14023	68.0	44.3	
Y-Z	D116	15070	60.3	39.3	33.7
Y-Z	D116	15082	58.4	36.0	32.9
Y-Z	C187	16379	57.7	36.4	32.0
Y-Z	C267	16960	57.8		32.0
Y-Z	C267	17296	65.2	41.4	36.1
Y-Z	C267	17297	58.0	37.3	32.2
Y-Z	D116	17355	58.7	36.0	32.7
Y-Z	D233	17372		43.6	
Y-Z	C240	18206	59.4	37.6	32.7
Y-Z	D116	18297	59.9	36.4	33.6
Y-Z	D116	18468	60.9	37.6	33.5
Y-Z	B277	18669	63.4	39.0	35.0
Y-Z	B277	18673	66.6	40.9	36.4
Y-Z	B277	18674	58.9	37.1	30.9
Y-Z	D116	18954	65.8		37.1
Y-Z	C240	19512	64.8	42.2	35.3
Y-Z	C240	19513	68.9		37.6
Y-Z	B277	20707	55.7	36.6	31.2
Y-Z	C240	20718	67.4	44.8	38.2
Y-Z	C240	20719	57.7	34.8	32.1
Y-Z	C187	21022	61.6	38.1	33.7
Y-Z	D116	21494	58.2	35.8	31.1
Y-Z	C231	22168	60.6	39.0	33.0
Y-Z	C231	22190	58.5	39.3	32.0
Y-Z	C187	22392	60.8		32.8
Y-Z	C187	22393	62.2	42.2	33.7
Y-Z	D116	22543	59.1	26.9	32.5
Y-Z	E81	22698	65.6	43.3	36.5
Z	D100	31	56.9	37.1	32.5
Z	C78	263	58.8	38.5	32.5
Z	D100	288	65.6	46.6	37.3
Z	D100	289	64.9	41.0	36.0
Z	D100	303	64.9	42.3	36.6
Z	D100	308	66.0	43.6	36.0
Z	D331	477	61.9	37.6	33.5
Z	D331	478	53.9	33.9	29.1
Z	D331	495	71.8	44.2	38.5
Z	D331	501	62.6	40.1	33.7
Z	D283	1225	60.3	40.4	32.5
Z	D283	1342	63.2	38.4	34.5
Z	D103	1668	58.7	37.8	32.4
Z	D331	1825	59.5	38.4	34.2
Z	E172	1859	59.0	37.5	31.7
Z	E172	1860	60.1		
Z	B98	2133	57.6	34.4	31.4
Z	D229	2330	58.1	35.5	30.6
Z	D310	2498	61.4	39.7	33.5
Z	D310	2511	57.2	35.6	30.9
Z	D372	2579	65.9	44.4	36.3
Z	D372	2584	64.3	45.0	35.9
Z	E85	2634	61.1		41.4
Z	D100	2652	56.7	34.1	31.1
Z	D100	2687	61.2	42.4	35.1
Z	E185	2784	66.6	40.3	36.6
Z	E185	2785	57.4	36.7	31.2
Z	E185	2846	57.1	38.9	33.1
Z	D332	2897	58.2	36.9	32.1
Z	D332	2898	59.0	37.7	32.1
Z	D306	3020	69.0	42.7	36.7
Z	D332	3772	63.0	37.7	34.0
Z	D331	3804	61.5	40.0	34.2
Z	D283	4014	61.3	40.7	33.7
Z	D283	4015	70.0	44.4	38.0
Z	D306	4019	70.9	43.5	38.5
Z	D306	4020	67.4	43.4	36.5
Z	D306	4045	62.2	39.0	35.0
Z	D283	4095		38.9	33.5
Z	D108	4361	61.9	40.4	34.6
Z	D100	4432	62.5	41.4	35.9
Z	D283	4575	59.7	38.7	32.5
Z	C112	4798	59.8	39.1	32.0
Z	C76	4840	61.0	38.1	34.3
Z	D100	4903	59.1	37.1	31.0
Z	D100	4904	55.4	35.4	31.4
Z	D100	5111	66.3	43.6	37.9
Z	C74	5184		41.8	36.7
Z	C74	5185	62.0	37.2	33.4
Z	C78	5213	58.3	35.8	32.6
Z	E172	5265	60.2	36.0	32.6
Z	C78	5377	61.5	38.9	33.9
Z	C76	5506	57.1	37.4	31.5
Z	D100	5568	54.7	34.9	30.8
Z	C76	5639	60.8	38.2	32.9
Z	D100	5648	65.9	42.0	
Z	D100	5677	65.3	44.3	36.4
Z	E85	6149	63.2	38.6	
Z	D100	6206	60.4	36.4	32.8
Z	C88	6217	56.7	35.6	30.8
Z	C76	6236	61.4	39.7	33.3
Z	C191	6248	64.9	40.8	36.5
Z	D283	6306	63.7	44.4	35.7
Z	D283	6366	57.8	36.5	32.8
Z	C101	6376	64.7	40.0	
Z	D100	6828	66.6	42.3	35.8
Z	B152	7323	60.4	39.6	33.2
Z	C78	7347	61.5	38.3	33.9
Z	C78	7348	60.4	37.1	33.6
Z	D331	7466	59.1	37.9	32.2
Z	E172	7842	63.0	40.5	34.7
Z	E172	7859	56.7	35.7	30.3
Z	B136	7905	56.4	35.8	30.7
Z	B150	7914	63.4	37.6	35.2
Z	C76	8086		37.3	34.1
Z	C78	8147	62.8	40.2	34.8
Z	C78	8163	57.8	35.1	31.9
Z	C78	8164	65.1	39.8	35.6

Appendix 21 cont. Cattle: Biometry: Astragalus measurements

Phase	Context	Bone ID	GLl	Bd	Dl
Z	B172	8190	52.9	33.6	29.1
Z	D283	8530	62.3	38.1	
Z	D100	9362	64.0	42.7	36.1
Z	D100	9383	61.9	38.6	35.0
Z	D332	9608		38.2	
Z	D104	9703	54.9	34.6	31.0
Z	188	9724	62.8	39.6	35.8
Z	D283	9761	62.8	44.1	34.9
Z	B147	9996		36.7	
Z	D100	10048	61.3	40.8	34.8
Z	D100	10069	59.4	37.8	32.9
Z	D100	10110	62.3	38.5	34.6
Z	D108	10167	67.9	45.2	38.9
Z	E179	10462	55.2	35.3	33.2
Z	E185	10470	55.9	35.4	31.1
Z	D108	10494	57.8	37.3	32.2
Z	E172	10650	58.5	36.9	32.1
Z	D372	10978	60.7	40.2	32.2
Z	D463	11155	60.1	38.7	32.8
Z	D463	11317	60.6	37.4	
Z	E185	11464	57.5	36.1	33.4
Z	E185	11465		37.5	
Z	E185	11466	63.1	38.2	35.2
Z	E185	11467	56.3	36.1	31.3
Z	C78	11868	66.6	42.8	36.0
Z	D283	12362	57.3	35.3	31.8
Z	D100	12732			38.4
Z	D100	12742	67.9	45.4	36.8
Z	D100	13181	63.1	40.8	35.5
Z	D283	13233	63.6	41.2	35.0
Z	D283	13437	61.3	38.3	34.3
Z	D100	13487	63.0	40.0	35.2
Z	D103	13841	61.4	38.9	34.2
Z	D103	13842	60.8	39.7	35.2
Z	E172	13945		37.6	32.4
Z	B136	14005	58.0	37.6	32.6
Z	B136	14006	62.3	40.0	33.8
Z	D106	14322	62.5	37.8	34.5
Z	D283	14346	61.2	43.4	33.8
Z	D283	14551		40.2	34.9
Z	D283	14552	66.2	38.5	35.8
Z	D283	14566	64.2	43.4	36.5
Z	D283	14567	64.3	41.5	35.8
Z	D100	14606		40.2	32.9
Z	D100	14997	57.2		
Z	D100	15421			36.1
Z	C88	15724	68.7	43.2	
Z	D283	15795	68.0	42.8	36.7
Z	D100	16077	59.8	37.2	33.6
Z	E172	16285	59.4	38.2	33.7
Z	E172	16287		37.4	
Z	C191	16396	61.8	64.6	54.4
Z	D283	16507			36.3
Z	D283	16508	60.7	36.2	33.5
Z	D283	16676	59.3	39.7	33.4
Z	D108	16896	67.0	45.3	38.0
Z	D310	16902	59.6		33.2
Z	D108	17169	62.5		33.7
Z	D108	17170		36.8	
Z	D100	17207		36.1	
Z	D100	17232	61.2	35.9	32.4
Z	D100	17811	56.6	33.9	31.2
Z	D100	18077	56.2	35.9	32.1
Z	D100	18538	63.6	39.5	34.4
Z	D100	18539	61.0	37.0	32.9
Z	C78	18736	61.3	38.1	34.8
Z	D100	19610			34.3
Z	D100	19632	57.3	36.8	31.7
Z	E172	19781	59.9	37.6	33.1
Z	E172	19792	63.0	40.5	34.6
Z	D100	19824	60.8	36.8	32.1
Z	C188	20373	66.4	41.0	34.6
Z	D283	21136	63.9	39.3	35.4
Z	D100	21894	59.1	34.7	32.5
Z	D100	22217	58.8	36.9	32.6
Z	D100	22218	53.3	35.5	30.2
Z	D100	22219	61.7		35.0
Z	C78	22356	59.9	37.5	32.4
Z	D100	22402	63.6	38.8	34.8
Z	D100	22403	61.0	38.4	34.6
Z	D100	22458	61.4	42.3	35.2
Z	D108	22477	59.4	35.6	32.9
Z	D306	22608	67.4	43.1	37.0
Z	C86	22618	61.2	36.1	34.0
Z	D108	22643	62.4		33.9
Z	C89	22714	59.9	37.7	34.0
Z	D100	22760	58.8	38.2	32.5
Z	E85	23208	58.4	35.7	32.0
Z	E85	23212		39.8	34.8
Z	D100	23282	60.1	38.2	33.5
Z	D100	23303	64.9	41.8	36.1
Z	D100	23304	57.6	33.1	31.7
Z	D100	23345	65.9	43.2	37.5
Z	D100	23360	66.3	42.5	35.4
Z	D100	23378	62.5	40.3	34.8
Z	E85	23498	62.9	39.2	34.1
Z	E85	23511	57.0	35.6	32.5
Z	C78	23556	61.6	36.3	33.8
Z	C76	23582	58.0	35.6	31.1
Z	C78	23618	64.4	37.0	35.7
Z	C191	23627	60.3	36.4	
Z	C74	23641	63.2		35.7
Z	D100	23700	56.2	37.3	31.3

Appendix 21 cont. Cattle: Biometry: Astragalus measurements

Phase	Context	Bone ID	GL	DS	C	C+D
T-V	D1005	893	116.6		25.1	42.9
T-V	B603	6970			29.7	47.4
T-V	B603	6971			26.1	47.4
T-V	D1005	10197		42.9		
T-V	D2284	12318		39.1	25.4	42.5
T-V	D2284	12327		43.3	28.3	48.2
W	D790	866				38.3
W	D743	1050		43.4	27.4	48.3
W	D254	2972			24.1	42.9
W	D1132	3194		39.8		43.1
W	D933	3846	121.4	41.5	27.0	46.4
W	D757	5806			27.4	43.9
W	D163	5961			24.5	46.2
W	E278	7108		33.9	21.8	40.0
W	D1348	7214		42.1		
W	C426	8352		37.5	24.2	40.3
W	C426	8353			26.0	44.8
W	C426	8379		41.5	24.7	47.1
W	E96	9247		37.7	23.5	42.6
W	E96	9274		39.1		
W	D343	9472		39.9	23.1	40.8
W	D940	11203		37.6		
W	D335	14187		43.0	27.3	46.3
W	D1555	14230	114.8		26.0	44.1
W	E96	14242	122.0	39.7	25.4	44.0
W	E96	14243	117.2			
W	D1591	14303			22.7	41.5
W	E96	14803	126.3	43.9	27.4	46.7
W	E96	14830	114.5	36.1	23.4	41.1
W	E96	15239	132.7		28.5	47.9
W	E96	15240	121.2	41.1	24.4	44.2
W	E96	15247		41.3	26.1	46.8
W	D335	15276		43.8	27.5	41.2
W	D335	15292		37.9	23.8	40.6
W	D1569	15637		43.7	23.6	45.4
W	E96	15673		35.3	20.2	38.1
W	E96	15924			24.1	41.6
W	E96	16636		40.3		43.1
W	E96	16648	113.4		23.3	43.4
W	D188	17367	110.0	39.5	23.7	42.6
W	D335	17654		43.4	26.2	46.5
W	C527	17758		38.3	24.9	42.9
W	C527	17760			26.0	
W	D1896	18344		38.5	23.2	44.8
W	E96	19950	108.7			
W	E96	19972		39.9	25.2	45.4
W	D342	20582		39.5	24.8	43.2
W	D1569	20588		42.3	26.5	47.5
W	E96	21206		42.5	26.5	47.2
W	C468	21281		37.4		
W	C468	21294		39.8	22.1	42.7
W	C468	21323		42.5	26.7	44.9
W	C495	22116			23.0	40.8
W	C495	22117	116.6	41.5	23.8	42.4
W	D102	22232		42.4	25.0	46.4
X	B86	13963		41.4	25.9	44.8
X-Y	D81	369			20.7	39.6
X-Y	D728	1069	112.1	41.2	24.1	42.4
X-Y	D81	3293		38.3	24.7	42.2
X-Y	D81	3561			26.0	45.3
X-Y	D81	3645		38.4	23.3	41.7
X-Y	D81	6285	111.1	39.4	24.1	41.4
X-Y	D81	6286			24.9	41.7
X-Y	D81	6287		38.8	24.6	43.5
X-Y	D81	6638		42.0	24.2	47.5
X-Y	D81	6639	119.2	41.3	26.3	44.9
X-Y	D81	6777			29.4	48.8
X-Y	D81	7389	115.8		25.3	44.8
X-Y	D81	7917		38.7	24.1	41.6
X-Y	D735	8407		42.6	24.4	43.6
X-Y	D81	8457		39.4	24.0	45.6
X-Y	D81	8719			25.1	45.4
X-Y	D81	9630			24.2	40.7
X-Y	D735	10285		40.7		
X-Y	D81	10514			29.5	49.4
X-Y	D210	12069		42.8		48.9
X-Y	D81	12694			24.7	42.0
X-Y	D81	12718		40.8	24.5	46.4
X-Y	D81	13308	114.8	38.2	26.1	44.1
X-Y	D81	13341		35.1	21.5	40.2
X-Y	D81	14394	120.5	40.9	25.3	45.5
X-Y	D81	14844	120.3		24.7	45.0
X-Y	D81	15204		44.2	26.8	48.6
X-Y	D81	16143			25.4	43.9
X-Y	D81	16452			22.9	42.7
X-Y	D81	17066		38.8	22.5	41.9
X-Y	D210	18054		39.7	23.3	44.6
X-Y	D81	18425			24.4	44.6
X-Y	D81	19377		39.4		
X-Y	D81	19390		40.0		
X-Y	D81	19391		42.8	22.9	43.7
X-Y	D81	19697		37.5	24.3	41.4
X-Y	D81	20793		37.1	22.9	40.4
X-Y	D81	21176			26.6	45.7
X-Y	D81	21177			24.4	41.8
X-Y	D81	22534	114.0		25.5	44.6
X-Y	D81	22553			27.5	47.1
X-Y	D81	22631		41.6	26.5	44.0
Y	D1332	1113		42.8	24.6	46.2
Y	A332	1492	127.0	47.3		
Y	D340	2592		39.8	23.4	
Y	D340	2814		41.7	23.9	45.8
Y	D340	2815		40.3	25.2	44.3
Y	D340	2816		39.4	23.7	41.4
Y	D346	2828	129.4	46.0	27.8	50.0
Y	D346	2888		41.0	25.6	44.6
Y	D1333	3145		43.4		
Y	D1333	3429	135.9	46.0	27.2	48.6
Y	D1333	3430		41.6	24.1	45.1
Y	D1333	3438	134.5	46.5	26.9	47.5
Y	D712	3497		37.7	22.4	41.0
Y	D338	3686	140.4	46.5	27.7	51.6
Y	D713	3872		42.4	29.3	49.5
Y	D1231	4000		45.2	28.8	47.7
Y	D312	4610	119.5	42.3	27.2	47.0
Y	D312	4611		43.5		
Y	D1231	4638	138.6	47.4	29.6	52.2
Y	D168	4777		39.8	23.7	43.9
Y	D346	5281		43.3	29.1	49.6
Y	D346	5282		42.0	25.6	45.6

Appendix 22. Cattle: Biometry: Calcaneum measurements

Phase	Context	Bone ID	GL	DS	C	C+D
Y	D908	5421	115.5	41.9	25.2	43.2
Y	D908	5422	113.1	37.6	23.6	42.8
Y	D908	5423		38.8	24.3	44.2
Y	D78	5578			24.2	44.1
Y	D318	5754			27.1	47.5
Y	D762	5766		42.0	24.8	44.4
Y	D762	5767			26.4	47.7
Y	D762	5803			29.2	48.0
Y	D706	5813		43.9	29.3	47.1
Y	D746	5856		42.6		
Y	D340	6089		41.5		
Y	A345	6491			23.9	41.8
Y	A345	6503	114.4	40.9		43.5
Y	A318	6516	106.9	35.1		
Y	D1332	6675		45.4	29.7	49.1
Y	A240	6747		44.0		47.6
Y	D340	7162			28.0	45.9
Y	D1332	7191			28.8	51.4
Y	D168	7333		39.1	24.2	43.5
Y	D346	7438		43.4	26.3	46.4
Y	D1158	7673	118.6	42.2	27.1	46.2
Y	D1143	7697		43.4		
Y	D312	7796			28.5	51.2
Y	D168	7942		42.2	26.7	47.7
Y	D168	7943		43.9	26.6	45.9
Y	D1332	8007	124.5	41.6	25.5	47.2
Y	D219	8494	115.6	41.1	24.7	44.1
Y	D219	8495		42.1	25.7	44.8
Y	D349	8625		40.8	23.6	44.6
Y	D318	9153	129.0	45.6	28.6	48.1
Y	D837	9943			21.5	40.5
Y	A318	10360			26.5	45.6
Y	A318	10361		35.6	23.6	42.7
Y	A318	10362			27.7	50.5
Y	D224	10395	116.2	42.0	26.2	44.8
Y	D1333	10727		40.7	27.9	46.5
Y	D1333	10728		40.9	26.3	44.7
Y	D908	10935		42.5	27.3	46.6
Y	D706	11345		44.0	25.4	47.4
Y	D703	11346			26.1	46.2
Y	D338	11525	106.2	37.8	23.4	40.7
Y	D1335	11617		42.3	26.2	46.0
Y	D340	11781		42.9	26.8	46.8
Y	D318	11998		46.7		
Y	D214	12503		40.0	25.8	43.8
Y	D320	13596		39.6	24.4	41.3
Y	D329	13761	117.9	44.5	26.2	47.4
Y	D318	14202	120.0	41.4	26.2	45.0
Y	D150	14748		37.9	23.6	42.0
Y	D168	15037	119.0	37.4	24.2	43.2
Y	D214	15198			23.5	42.2
Y	D320	15283			23.5	43.4
Y	D214	16042		43.6	27.0	48.0
Y	D320	16789		35.6	24.4	43.4
Y	D216	17058			26.1	44.3
Y	B120	17318		42.4	25.0	47.1
Y	D329	17627		42.0	24.2	45.1
Y	D329	17628			25.2	46.2
Y	D312	17635	118.1	42.0	27.1	46.4
Y	D318	17709		38.8	24.7	44.6

Phase	Context	Bone ID	GL	DS	C	C+D
Y	D168	17797		42.1	27.3	44.9
Y	D216	18146	117.4			
Y	D219	18717	112.0	41.6		
Y	C409	18910		44.3	25.7	49.0
Y	B299	19751			24.1	44.0
Y	B299	19752			25.3	42.8
Y	C207	20098	113.6	38.4	22.7	42.0
Y	C207	20099		37.8		
Y	D168	20269	121.5	42.4	25.8	46.7
Y	D168	20270		41.3	25.5	45.2
Y	D168	20271		42.0	25.5	44.3
Y	D214	21954			29.0	49.3
Y-Z	E74	584			28.6	
Y-Z	D116	734		43.5		
Y-Z	D116	764	112.3	38.3	24.4	42.5
Y-Z	D116	772	114.8		21.2	41.0
Y-Z	D116	784	125.3	42.5	23.3	47.4
Y-Z	B277	1732	115.4	38.7	23.1	41.1
Y-Z	E74	3696	130.3	43.6	25.7	43.1
Y-Z	D116	4532		40.4	25.7	44.1
Y-Z	D116	4857	124.5	42.5	27.8	46.9
Y-Z	D116	5914			28.7	46.5
Y-Z	D116	5935			27.8	47.2
Y-Z	D116	8823		40.8		
Y-Z	D116	8928		38.5	23.7	41.3
Y-Z	D116	8950		40.4	23.6	44.6
Y-Z	D116	9002		43.2	24.0	
Y-Z	E74	9184	110.2	39.0	24.3	44.5
Y-Z	B277	9540		42.0	28.4	
Y-Z	E74	10689	118.9	42.8	26.2	45.9
Y-Z	E74	11969	127.8	44.8		
Y-Z	E74	11972			28.1	47.0
Y-Z	B277	12257			29.1	49.8
Y-Z	C268	13012		39.3	25.7	43.5
Y-Z	E74	13104		38.9	23.3	43.3
Y-Z	B277	13729			25.6	45.4
Y-Z	B277	14025		41.8	26.3	
Y-Z	B277	15565		48.0	28.7	49.5
Y-Z	B277	15566		41.0	24.7	44.6
Y-Z	E74	15745			23.4	41.4
Y-Z	E74	15752		42.4	25.3	45.6
Y-Z	C267	17298		44.3		
Y-Z	C267	17299		41.2	24.1	42.9
Y-Z	C233	17574		41.7		
Y-Z	D116	17869		41.7	24.4	43.8
Y-Z	C187	17897		46.0	28.5	48.5
Y-Z	C187	17898	118.1	38.5	22.2	40.6
Y-Z	C124	17903	119.3	42.6	25.4	45.3
Y-Z	C75	17949	115.9		24.7	45.1
Y-Z	C240	18207	124.7	45.0	29.1	48.3
Y-Z	C240	18208		42.8	26.0	48.9
Y-Z	D116	18451			25.6	43.5
Y-Z	D116	18784		40.4		45.8
Y-Z	D116	18947		43.3	25.6	44.2
Y-Z	C240	19508		42.8	27.7	48.9
Y-Z	C240	19509		39.5	23.3	43.0
Y-Z	C240	19510		42.3		
Y-Z	C268	20136			23.9	41.7
Y-Z	E74	20283		42.2		
Y-Z	C187	20509		44.1	28.0	47.4

Appendix 22 cont. Cattle: Biometry: Calcaneum measurements

Phase	Context	Bone ID	GL	DS	C	C+D
Y-Z	B277	20708		35.0	22.6	41.1
Y-Z	C240	20722		39.4	22.6	41.5
Y-Z	C240	20723		40.1	23.6	43.2
Y-Z	C187	22384		44.7		
Y-Z	C187	22385		40.9	25.8	46.0
Y-Z	C187	22386		43.6		
Y-Z	D116	22647			23.9	42.4
Z	D100	42	114.2		22.0	40.3
Z	D100	290	144.6	48.1	29.5	50.2
Z	D310	722			23.3	43.3
Z	E184	954			27.4	50.7
Z	D473	1953		40.4	24.5	45.8
Z	D108	1997		43.5	24.5	45.8
Z	D306	2308	116.4	37.2	21.5	40.6
Z	D332	2561		40.0	24.3	44.0
Z	D372	2627	121.7	43.2	25.3	44.8
Z	E85	2635			23.0	44.0
Z	D100	2653			21.5	39.4
Z	D331	2766		40.0	24.6	42.4
Z	E185	2787		41.1	24.8	46.7
Z	E185	2788			26.0	43.2
Z	D306	3021		48.4	28.4	50.4
Z	D306	3022		48.1	27.2	49.2
Z	D372	3217	121.5	44.4	26.1	46.9
Z	D283	3261	121.3	39.5	25.6	45.0
Z	D463	3537		41.3	24.6	45.1
Z	D466	3877			25.1	44.0
Z	D283	4096	115.0	41.9	24.9	44.5
Z	D100	4434		41.4	23.9	44.0
Z	D307	4624		43.7	27.9	46.5
Z	C76	4963		44.0	25.6	47.7
Z	C76	4994		40.1	25.5	44.9
Z	C76	4995		39.0	27.4	44.8
Z	C113	5013		44.8	28.7	46.6
Z	C76	5036		41.9	26.4	47.8
Z	D100	5113			29.1	50.3
Z	D100	5129		42.1	25.8	
Z	C78	5214	119.8	40.5	26.9	46.5
Z	C78	5215			25.0	44.1
Z	E172	5254	113.8	41.4	23.7	43.7
Z	E172	5266		37.3	23.5	43.6
Z	E172	5275			23.1	41.2
Z	C78	5329	116.1	36.6	24.5	43.0
Z	C89	5457		42.9	29.3	47.8
Z	C89	5525	142.5	46.1	27.4	49.4
Z	C89	5526			25.1	39.5
Z	D108	5747	117.4	36.5	25.4	44.0
Z	D332	6107	133.8	47.0	27.3	47.6
Z	D100	6135		40.5	26.4	44.9
Z	D100	6136		40.9	25.3	43.3
Z	E85	6186	123.9	41.6		
Z	C191	6230		37.6	25.0	42.0
Z	D310	6296		38.4	23.3	42.8
Z	D306	6317	156.2		32.5	55.9
Z	D100	6432		41.8	28.6	47.7
Z	D100	6618		39.9	26.6	43.9
Z	D100	6829		40.7	26.8	45.1
Z	E260	7070			22.8	41.1
Z	D372	7151		38.4	24.2	40.4
Z	D372	7456			26.1	45.0

Phase	Context	Bone ID	GL	DS	C	C+D
Z	D331	7467		40.1		
Z	E85	7606		43.0		
Z	E85	7612			25.3	44.3
Z	D331	7631		40.8		
Z	D100	7898			24.3	44.3
Z	C78	8121	114.3	40.9	24.9	45.1
Z	D100	9376		41.1	26.6	44.9
Z	D372	9580		45.2	26.5	48.0
Z	D372	9590			26.1	46.0
Z	D104	9704		40.4	26.1	42.8
Z	C188	9726		44.2		
Z	D283	9762	124.4		25.7	47.4
Z	B80	9960		44.3	25.8	46.3
Z	B99	9977	112.5	41.7	24.7	43.8
Z	B99	9978		40.4	27.7	43.2
Z	B147	9997			22.9	45.3
Z	D100	10049			24.6	45.0
Z	D100	10075	128.6	41.4	24.6	47.5
Z	D108	10168	136.6	47.9	31.5	53.1
Z	E185	10245			25.5	41.8
Z	D283	10532	112.1		26.0	43.7
Z	E172	10674			24.3	44.3
Z	D463	11318		42.2	26.4	44.8
Z	D283	11359	122.5	40.7	25.4	45.5
Z	D106	11749		40.4	24.6	46.4
Z	D106	11754		45.7	28.2	48.6
Z	C78	11856			27.5	44.7
Z	E172	11951			25.3	
Z	E172	11952			24.6	42.8
Z	E172	11953		40.6	24.1	44.6
Z	D100	12394			23.1	43.2
Z	D100	12519		41.0	25.6	41.9
Z	D100	12520		43.6	27.9	47.1
Z	D100	12743		42.0	25.3	45.1
Z	D283	13234		43.2	24.9	47.3
Z	D283	13440		41.0	25.7	47.9
Z	D103	13843		38.9	23.4	43.4
Z	D103	13844		40.6	24.0	43.2
Z	E172	13936		41.9	24.0	46.0
Z	E172	13946			23.2	41.8
Z	B136	13990			27.1	45.9
Z	D100	14382			25.6	42.9
Z	D100	14583		40.7	25.5	44.8
Z	D100	14983	119.3	43.3	24.4	44.3
Z	B155	15715			21.0	40.6
Z	D283	15796	123.3	43.7	25.6	47.2
Z	D283	15797		42.0	25.9	44.6
Z	D100	16069		39.9	24.1	42.3
Z	D283	16484			26.1	46.1
Z	D283	16678		44.4	25.8	46.8
Z	D283	16829			24.1	44.1
Z	D108	16881		46.5	30.7	52.7
Z	D108	17149		43.5	24.0	44.0
Z	D108	17168		40.5		
Z	C192	17888	113.6	40.3	22.6	43.1
Z	D100	18084			24.2	46.0
Z	D100	18507		40.3	25.1	46.3
Z	D100	18541		47.7	28.8	49.3
Z	D100	18542	121.8	40.0	25.9	46.5
Z	D100	19412		40.8	25.5	44.6

Appendix 22 cont. Cattle: Biometry: Calcaneum measurements

Phase	Context	Bone ID	GL	DS	C	C+D
Z	D100	19612	119.9	40.4	25.5	45.6
Z	E172	19783	113.0		24.9	42.5
Z	E172	19784			25.8	42.9
Z	E172	19793			29.0	47.2
Z	D100	19825		35.3	21.7	39.5
Z	D100	20183		45.4	27.8	
Z	D283	20226	113.9	36.7	24.7	43.6
Z	D283	20227		39.5		
Z	C188	20358		41.6	24.9	45.4
Z	D108	20764		43.0	28.2	49.4
Z	D100	20813			28.6	49.2
Z	D100	21544	113.7	37.2	24.6	43.0
Z	D100	21545		42.2		
Z	D100	21546		44.4	27.6	50.4
Z	D283	21619			27.1	47.6
Z	D283	22008		41.9	25.6	45.9
Z	D100	22433		43.9	26.9	48.0
Z	D100	22434		38.6	23.0	40.3
Z	D100	22750			26.0	47.3
Z	D100	22761		39.0	24.4	44.6
Z	D100	22762		38.6	24.9	41.6
Z	D100	22794	107.8	36.9	21.9	42.5
Z	D148	22915			26.9	45.5
Z	D100	23338		44.0	27.1	49.7
Z	D100	23379		44.3	26.2	47.8
Z	B147	23477			26.0	46.9
Z	D100	23535		44.9	28.9	49.4
Z	C78	23557		45.9	29.1	49.0
Z	C78	23558	137.6	44.9	28.8	50.6
Z	C76	23574		37.1	22.8	40.0
Z	C76	23583	118.8	44.7	27.1	46.9
Z	C78	23619		40.8	25.4	45.3
Z	C74	23642	115.3	42.1	23.7	44.8
Z	B152	23688		40.6	24.1	43.0
Z	D100	23701		40.0	25.8	44.3
Z	C76	23708	139.9	45.6		
Z	C76	23730		43.4		

Appendix 22 cont. Cattle: Biometry: Calcaneum measurements

Phase	Context	Bone ID	GL	SD	Bp	Bd	BatF	1	2	3	4	5	6	a	b
T-V	D1164	6709			46.8										
T-V	D1164	6710				46.0	42.0	20.4	27.3	24.6	19.5	27.2	25.4	22.4	21.7
T-V	B632	6934				47.7	47.4	20.3	27.0	24.0	19.9	26.3	24.7	24.2	21.5
T-V	B603	6992			37.4										
T-V	B632	7021				48.2	44.9	21.6	28.5	26.1	19.6	27.6	25.9	23.5	22.5
T-V	D1075	10872			38.4										
T-V	D1075	10873				47.1	43.4	20.3		24.0	18.8		23.4	23.0	21.2
T-V	D941	11115				48.5	46.6	20.9	28.9	26.4	19.9	28.1	26.5	23.2	22.5
T-V	D710	11241				51.0	47.7	21.8	30.1	26.9	20.6	28.9	26.6	25.0	23.5
T-V	C433	11742		38.7											
T-V	D2188	12271				47.5	44.9	21.3	28.7	24.9	19.6	27.4	24.9	22.9	21.7
T-V	D2284	12319		48.2											
T-V	D2267	12325		43.8											
T-V	D2298	14478		41.2											
T-V	D2153	17554		40.6											
W	D163	795				51.5	45.6	20.6	27.7	25.5	21.9		25.5	24.2	24.6
W	C440	978		42.8											
W	C440	979		44.6											

Appendix 23. Cattle: Biometry: Metatarsal measurements

Phase	Context	Bone ID	GL	SD	Bp	Bd	BatF	1	2	3	4	5	6	a	b
W	D227	1077				47.5	42.8	21.8							
W	D983	1161			39.7										
W	D983	1162			42.7										
W	D767	1188			41.8										
W	D907	1211			37.5										
W	D1569	1367			41.3										
W	D1265	1518				57.3	52.3	23.7	31.5	28.6	23.0	30.5	28.3	27.1	26.0
W	D343	1620			39.3										
W	D254	2042			41.5										
W	D254	2324			40.3										
W	D254	2325				47.3	44.0	20.4		24.5	20.0	27.1	25.0	22.8	21.7
W	E96	2872				47.6	44.0	19.8		24.2	18.6		24.4	23.2	22.0
W	D1132	3195			46.1										
W	D1126	3213				46.3	43.3	20.5		24.0	19.7		24.7	21.9	21.4
W	C417	3379		40.5											
W	C417	3380				46.1	43.2	19.8	26.8	23.7	18.4	26.6	24.0	21.9	21.2
W	D343	3576		39.2											
W	D343	3577				47.1	43.1	21.0	27.7	25.0	19.7	26.8	25.0	23.3	21.4
W	D343	3578				50.3	46.4	19.8			18.8			24.2	22.8
W	D906	3856				46.7	43.0	20.6			19.0			22.6	21.5
W	C489	4686		43.6											
W	D1011	6924				44.7	42.2	19.3		23.3	18.0		23.5	21.6	20.3
W	E272	7072				45.2	41.7	19.8			18.4	25.6	24.4	21.8	21.1
W	E277	7088		40.9											
W	D343	7449				46.4	43.0				18.6		23.7	21.8	21.4
W	C404	7502		40.9											
W	C404	7521				54.2	48.5	21.7	28.6	25.8	20.4	27.9	26.1	26.7	24.5
W	C426	8344		40.8		44.2	42.5	19.4	27.1	23.7	18.1		24.3	21.4	20.8
W	C426	8345		41.1											
W	D773	8427				48.0	44.4	19.7	27.7	24.1	19.0	27.2	24.8	22.9	22.3
W	E96	8884				47.6	43.9	19.4			18.5			22.7	22.4
W	D343	9069				53.8	50.2	22.7	29.0	26.1	21.3	28.6	26.1	26.0	25.5
W	D244	9078		40.7											
W	D244	9097				45.7	44.1	19.9		23.9	18.9		23.8	22.0	21.4
W	E96	9248				48.0	44.7	21.1		25.4	20.2		25.8	23.6	22.4
W	E96	9269				51.8	47.5	21.8	28.7	25.9	20.4	28.1	25.6	24.7	24.4
W	E96	9273		38.5											
W	D343	9323				48.9	46.0	18.5	27.1	24.9	20.2	28.4	25.2	22.9	23.7
W	D343	9324		40.3											
W	D343	9447						23.4	30.5	27.7				28.7	
W	D1129	9681				47.3	43.4			25.3	20.2		25.7	23.0	21.5
W	D252	9798		40.0											
W	D163	9803		44.2											
W	D484	9813				47.6	44.2	21.1	28.4	25.5	19.9	27.5	25.2	22.8	22.0
W	D343	9836		39.8											
W	D840	10267				48.3	45.4	21.1	28.4	24.9	19.7	27.5	25.9	23.4	22.4
W	D840	10268				46.7	45.8	19.7		23.4				22.6	
W	D804	10303		47.0											
W	D755	10869				54.6	51.0	24.5						26.5	25.5
W	D188	10996				52.4	47.6	21.8		25.2				26.1	23.9
W	D484	11013				45.3	42.4	20.0		23.7	18.8		23.7	22.5	21.0
W	D631	11048				45.8	44.2	20.3		24.3	19.3		24.7	22.8	21.5
W	D343	11177				53.7	48.8	20.0	26.6	24.0	18.8	26.4	25.2	25.7	24.6
W	D743	11190				48.5		21.2	28.2	25.0	19.8	27.4	25.5	23.1	22.9
W	D188	12173				45.4	43.1								
W	D2187	12323				51.2	48.9	22.3	29.6	26.8				24.3	23.4
W	D1606	13122	199.5	21.9	41.6	45.2	42.6	19.7		23.5	18.7		24.4	21.8	20.8
W	D1569	13142				49.6	47.0	21.9	29.7	26.5	20.5	28.7	27.1	24.4	22.7
W	D1606	13538			40.4										
W	E96	14255				49.7	47.1	21.5		26.2	20.3		26.4	23.8	22.9

Appendix 23 cont. Cattle: Biometry: Metatarsal measurements

Phase	Context	Bone ID	GL	SD	Bp	Bd	BatF	1	2	3	4	5	6	a	b
W	E96	14264				48.6	45.3	21.4	29.1	26.3	20.5	28.3	26.8	23.8	23.3
W	E96	14265				45.6	43.6	20.3		24.6			24.5	22.1	21.1
W	E96	14266				50.3	47.7	22.0			19.9			24.7	22.9
W	E96	14275			39.7										
W	D1591	14282				45.3	41.7	19.1	26.2	23.3	18.4	25.9	23.8	21.5	21.0
W	D1591	14283				47.1	44.7							22.5	21.9
W	E96	14454			43.5										
W	E96	14456				46.4	43.9	20.4	28.2	24.8	19.5	27.5	25.4	22.1	22.0
W	E96	14457				48.8	45.8	21.0			19.9		25.2	23.9	22.4
W	E96	14458				47.7	44.9	20.4	27.6	24.5	19.7	26.8	24.6	23.0	21.8
W	C515	14709			41.2										
W	E96	14804	217.5	24.2	43.3	48.8	45.9	21.6		25.5	19.5		25.4	23.4	22.3
W	E96	14838				45.5	42.8	20.7		23.9	19.1		24.8	22.3	20.8
W	E96	15117			39.4										
W	E96	15126	197.0	22.1	38.5	44.5	41.7	19.2		23.2	17.9		23.0	21.6	20.5
W	E96	15127			40.2										
W	E96	15128				47.1	44.5								
W	E96	15129				44.8	42.1	18.8	25.6	22.4	18.0	25.4	23.4	21.2	20.4
W	E96	15161	201.0	22.4	42.8	48.2	44.9	21.1		25.2	20.1			23.1	22.0
W	E96	15226				47.2	44.2	20.3		24.6	19.4		25.4	22.9	21.5
W	E96	15241				45.7	42.7	20.0		24.3	19.4		24.4	22.2	20.9
W	E96	15264				48.2	44.7	19.3			19.1			23.2	22.6
W	E96	15489			42.3	49.3	46.0	22.5	29.1	26.3	21.2	28.0	26.6	24.4	22.7
W	E96	15497				48.6	45.1	21.4		25.7	20.0		26.1	23.4	22.6
W	E96	15518				47.3	44.1	21.1			19.9			23.0	21.9
W	D1418	15640				49.5	45.8	20.4	28.5	25.7	19.4	27.6	25.4	23.9	22.5
W	E96	15660			39.1										
W	E96	15662			44.3										
W	E96	15663				50.9	46.8	21.3		25.0	20.3			24.5	23.7
W	D335	15849			44.2										
W	E96	15912				45.5	40.8							22.5	20.8
W	E96	15913				46.4	43.5	20.6	27.8	25.4	19.2	26.6	24.8	22.4	21.1
W	E96	15925				48.3	46.0	22.0	29.2	25.7	20.4	28.1	26.0	23.2	22.4
W	E96	15939				46.5	43.4								
W	D163	15985				44.2	42.1								
W	E96	16110			52.0										
W	E96	16111			41.3										
W	E96	16170			38.3										
W	E96	16209				43.7	40.8	18.0	25.6	23.5	18.8		23.5	20.0	21.3
W	E96	16242				46.4	43.1	21.0	28.4	25.1	20.5	28.0	25.6	21.9	21.8
W	E96	16328				48.3	44.4								
W	E96	16638				46.7	44.4	20.8	27.9	25.3	19.7	27.1	25.7	22.5	21.8
W	E96	16651					46.4	20.5			19.4		25.0		
W	E96	16663				50.5	46.1	21.8			20.6			24.3	23.0
W	D335	17045			43.0										
W	E96	17112				47.9	46.4	20.1	27.7	24.9	18.9		25.1	23.0	21.5
W	E96	17401			42.3										
W	E96	17430			39.6										
W	E96	17438				46.9	43.4	21.2	28.3	25.7	20.2	28.2	26.5	22.8	21.9
W	E96	17451				48.7	46.2								
W	D335	17509				49.3	46.2	21.2	29.0	26.1	19.8	28.1	25.9	23.4	22.5
W	D1996	17560				49.8	46.9	21.5		26.1	20.0	28.9	26.0	24.5	23.1
W	C527	17755			42.9										
W	C527	17756				48.4	44.5	20.9		24.9	19.3		24.8	23.6	22.2
W	C472	18239				49.0	46.7	21.3		25.5	19.9		26.1	23.1	22.8
W	D163	18276			38.5										
W	D1871	18333				48.5	45.4	19.4			19.4			22.9	22.5
W	E96	18590				50.0	47.4	21.8	28.5	25.7	20.2	28.0	25.5	23.6	22.9
W	C501	18806			40.8										
W	C501	18830				45.0	42.3	19.8	27.0	24.3	18.4	26.4	24.9	21.4	20.7

Appendix 23 cont. Cattle: Biometry: Metatarsal measurements

Phase	Context	Bone ID	GL	SD	Bp	Bd	BatF	1	2	3	4	5	6	a	b
W	E96	18857				44.7	41.5	19.1			18.6			21.2	20.4
W	E96	18875				44.2	42.0	19.9			19.3			21.0	20.0
W	E96	18876				53.3	47.2	21.6			20.3		25.5	25.8	24.8
W	E96	18893			39.8										
W	C527	19544			39.8										
W	C527	19562					43.7								
W	C527	19576			40.2										
W	C527	19591			45.7										
W	C527	19592			40.4										
W	C445	19682			43.4										
W	C426	19688				55.1	52.2	23.5	32.2	28.4	22.4	31.4	28.7	27.0	24.9
W	E96	19958				47.4	42.8	20.5	27.8	25.0	19.7		25.6	23.6	21.7
W	E96	20009			42.8										
W	E96	20020				53.4	48.5	24.2		28.8	22.8		29.3	25.7	24.7
W	E96	20042				48.0	44.4								
W	E96	20050				45.8	43.0	20.4			19.6		24.6	22.0	20.7
W	E96	20057				47.3	44.4	21.6		25.5	19.4		25.4	22.9	21.3
W	E96	20410		44.5											
W	C421	20419		45.5											
W	D1569	20599				48.6	44.7	21.0		25.0	20.3	27.8	25.5	23.4	22.3
W	E96	20930				46.9	45.8	20.9	27.8	24.7	20.2		25.3	22.1	21.8
W	E96	21117				44.1	41.6	20.1		24.8	19.1		25.1	21.2	20.4
W	E96	21207				48.1	44.6	20.9		25.0	20.4		25.8	22.7	22.3
W	E96	21208				45.0	41.5	20.0	27.6	24.4	18.7	26.9	25.2	21.9	21.3
W	E96	21217		49.6											
W	E96	21228				46.8	44.4	19.6			18.4			22.3	21.8
W	E96	21237		42.0											
W	C468	21304				44.3	40.6	18.2		23.0	17.4	24.9	23.5	21.2	21.0
W	C468	21311				47.2	45.3	20.1	27.6	24.0	18.8	27.0	24.7	22.3	22.0
W	E96	21570				48.8	46.6	19.4			18.8		24.0	23.4	22.7
W	C527	22279		42.8											
X	D502	5791		50.1											
X	C412	11696				45.3	41.5	19.2	26.5	22.7	18.5	26.0	23.3	22.2	21.4
X	D1372	16769		41.0											
X	B292	18624		42.4											
X-Y	D81	116		46.5											
X-Y	D81	372				50.7								24.6	23.2
X-Y	D81	373				47.7	44.5	20.5		24.1	19.1		24.2	22.7	22.3
X-Y	D81	701				48.0	45.1	20.4	27.4	23.9	19.0	26.5	24.8	22.7	22.0
X-Y	D81	702				55.0	48.4	22.3	30.0	26.9	20.7		28.2	26.2	25.9
X-Y	D81	718		44.4											
X-Y	D728	844				52.4	47.3	20.6		26.9	22.2	30.3	26.5	23.8	25.2
X-Y	D728	1071				44.2	41.6	19.8		23.4	19.4		23.6	21.5	20.3
X-Y	D81	1259		42.1											
X-Y	D81	1830				54.1	50.7	22.8	30.0	26.4	21.5	29.4	27.2	25.5	23.8
X-Y	D81	1831				46.5	41.4	19.8			19.0			22.1	21.4
X-Y	D81	2053				45.2	42.6	19.6		23.2	18.1			21.6	20.8
X-Y	D81	2280				54.6	50.3	30.4						25.3	26.7
X-Y	D81	3295				48.0	46.2	21.3		24.9	20.1		25.5	22.9	21.6
X-Y	D81	3296				45.4		19.8	26.3	23.5		25.7	23.5	21.8	21.2
X-Y	D81	3556				45.0	41.7	20.8			19.7	26.1	24.6	21.5	20.8
X-Y	D81	3557				44.2	42.6	19.8		23.1	18.7		24.1	21.2	21.0
X-Y	D81	3558				49.8	45.1	21.8			20.2			24.0	22.8
X-Y	D81	3559				43.8	40.1	20.0	25.7	23.0	18.1	25.0	23.5	21.2	20.2
X-Y	D81	3755						19.7	27.2	24.0		26.4	24.6	22.3	
X-Y	D81	3818				44.0	40.3	19.3	25.8	22.7	18.0		23.2	20.8	20.4
X-Y	D81	3908				48.6	44.3	21.0	27.9	24.4	19.5	27.4	25.2	23.0	22.7
X-Y	D81	5656				50.4	47.0	20.3			19.0		23.4	23.9	23.5
X-Y	D728	5851				47.0	43.3				18.1			22.5	21.2
X-Y	D81	6288		41.1											

Appendix 23 cont. Cattle: Biometry: Metatarsal measurements

Phase	Context	Bone ID	GL	SD	Bp	Bd	BatF	1	2	3	4	5	6	a	b
X-Y	D81	6289			39.3										
X-Y	D81	6353			39.8										
X-Y	D81	6574			39.6										
X-Y	D81	6764			45.5										
X-Y	D81	6780				58.1	53.3	25.3	33.5	30.2	24.0	32.2	29.8	27.7	27.0
X-Y	D81	7424			41.3										
X-Y	D81	8438			39.0										
X-Y	D81	8608				49.1	46.2								
X-Y	D81	8609				43.7	40.2	19.2		21.8	17.7		22.0	21.7	20.4
X-Y	D81	9621	209.0	21.7	39.1	47.8	43.2	21.2		24.9	19.7	26.9	25.0	23.0	21.7
X-Y	D81	9622			40.0										
X-Y	D81	9631				45.2	43.0								
X-Y	D81	10141				47.8	43.9	21.8		25.5	20.6		26.6	22.5	22.3
X-Y	D81	10142				47.7	45.4	20.0	27.8	24.5	19.6	26.9	25.2	23.4	22.3
X-Y	D81	10143				48.1	44.9	21.0	28.6	24.8	20.4	27.9		23.3	22.1
X-Y	D210	10379				48.0	46.2	21.3	29.0	25.9	20.1	27.7	25.9	22.9	22.3
X-Y	D210	10380				51.7	51.9	21.6	29.2	25.8	19.7	27.8	25.6	24.6	23.1
X-Y	D728	11236									21.1	28.2	26.1		23.6
X-Y	D81	12048	217.0	25.6	45.0	50.4	47.2	21.7		26.2	21.0		26.2	24.2	22.9
X-Y	D210	12102			43.7										
X-Y	D81	12116					52.1								
X-Y	D81	12475			42.4										
X-Y	D81	12476				46.2	43.8	20.1	27.1	24.7	20.1	27.3	25.6	22.0	21.5
X-Y	D81	12573			42.6										
X-Y	D81	12575				54.1									
X-Y	D81	12576				45.9	43.0								
X-Y	D81	12577				47.9	45.1	21.7	28.8	25.9	20.3		25.7	23.2	21.7
X-Y	D81	12719				49.3	46.6	22.6		25.9	21.3		26.5	23.8	22.4
X-Y	D81	12752			42.7										
X-Y	D81	12754				48.8	45.5	22.2		27.0	21.2	29.2	27.4	23.7	22.3
X-Y	D81	12855			51.7										
X-Y	D81	13337				46.5	43.4	20.4	27.1	24.2	19.3	26.9	24.7	22.1	21.7
X-Y	D81	13338			41.1										
X-Y	D81	13629			43.8										
X-Y	D81	13630					42.3	19.7		23.1	18.3	25.4	24.2		21.0
X-Y	D81	13631				55.1	50.8	23.6	31.4	28.1	21.5	30.8	28.7	26.4	25.3
X-Y	C308	13805			39.5										
X-Y	C308	13817			39.3										
X-Y	D81	14925				46.9	43.8	20.4			19.4			22.8	21.7
X-Y	D81	15205				46.7	43.8	20.0		23.9	19.1	26.2	24.2	23.0	21.7
X-Y	D81	16453			38.5										
X-Y	D81	16458			45.0										
X-Y	D81	16545			41.4										
X-Y	D81	16546			39.5										
X-Y	D81	16564					44.3								
X-Y	D81	16580					46.0								
X-Y	D81	17067				43.9	40.5	19.0	25.5	22.0	17.6	24.6	22.8	21.3	20.0
X-Y	D210	17406			42.3										
X-Y	D81	17669			48.5										
X-Y	D210	17938				50.0	46.4	21.1	29.5	26.1	19.6	28.2	26.2	24.4	23.0
X-Y	D81	18426			36.5										
X-Y	D81	18462			42.5										
X-Y	D81	18479					43.3								20.8
X-Y	D81	18697				48.4	46.8	20.9		25.2	19.4		25.3	23.3	22.4
X-Y	D81	18698				47.2	44.1								
X-Y	D81	19397				46.5	43.3	19.6	26.9	24.4	19.0		24.4	22.3	21.5
X-Y	D81	19704				47.3	44.2	20.5		24.0	19.2		24.8	22.6	21.9
X-Y	C306	19876					42.0	20.2			18.6		24.5		
X-Y	D81	20781				48.2	42.6	21.6	28.5	25.2	20.0	27.6	26.0	22.7	22.7
X-Y	D81	21178			41.8										

Appendix 23 cont. Cattle: Biometry: Metatarsal measurements

Phase	Context	Bone ID	GL	SD	Bp	Bd	BatF	1	2	3	4	5	6	a	b
X-Y	D81	21179				48.6	45.4	20.8	27.9	25.1	19.8	27.0	25.2	23.6	22.3
X-Y	D210	21332				52.3	47.6	22.7		27.8	21.1		27.6	25.9	23.7
X-Y	D81	21977	216.0	29.0		59.5		23.6	31.7	28.1				28.4	27.7
X-Y	D81	22535	187.5	25.8	45.6	54.8	51.6	21.6	28.8	25.9	19.8			27.5	
X-Y	D81	22628			41.3										
X-Y	D81	22629				47.5	44.0	19.6						22.7	21.6
X-Y	D81	22637			43.4										
Y	D1332	909				49.9	46.3	20.5	28.4	24.9	19.4		25.3	23.3	23.2
Y	D1282	912			51.0										
Y	D1231	952			48.3										
Y	D705	1431			47.5										
Y	A332	1473				46.4	43.9	21.2		25.9	20.0	26.8	26.2	22.3	21.3
Y	A332	1493			41.6										
Y	A332	1494					43.7				18.0	26.2	24.0	22.8	
Y	D705	1602			44.9										
Y	A318	2213			42.6										
Y	D746	2382				47.2	44.0	20.7	27.4	24.2	19.5	27.0	24.7	22.4	21.4
Y	D762	2417			45.0										
Y	D352	2535					46.8	21.1	28.2	24.7	19.4	26.8	25.0	23.5	22.1
Y	D340	2593				48.7	45.4	21.0	28.7	24.9	19.3	27.7	25.5	23.2	22.5
Y	D338	2756			40.4										
Y	D346	2829				47.3	44.0	20.9	28.9	25.5	19.5	27.7	25.2	23.1	21.8
Y	D338	3069				46.5	42.1	21.8	28.8	25.6	19.2	27.4	26.1	22.5	21.2
Y	D312	3078			43.0										
Y	D1333	3147				50.1	46.2	21.0	28.8	25.4	19.6	28.0	26.1	24.0	23.1
Y	D1333	3148				48.2	45.1	21.5	29.3	26.0	20.6	28.6	26.3	23.2	21.9
Y	D320	3335				48.3	45.4	21.0	28.9	25.3	20.0	28.1	25.9	23.1	22.5
Y	D1333	3439				48.6	48.1	20.5	27.3	24.2	19.0	26.2	24.3	23.7	21.7
Y	D1332	3982				51.5	49.5	20.3		24.6	19.1		24.5	24.6	24.2
Y	D1231	4639									18.1	23.9	22.7		20.1
Y	D1231	4661			46.5										
Y	D346	5283			46.1										
Y	D352	5297			41.8										
Y	D837	5401				43.8	40.7	19.3		24.0	20.0		23.7	20.8	21.4
Y	D837	5402			39.5										
Y	D703	5406				46.0	43.0	20.6	27.4	24.1	18.7			21.9	
Y	D762	5430				49.0	44.1	21.5	27.9	26.1	19.7	27.4	25.9	23.8	22.8
Y	D78	5579			42.4										
Y	D78	5580					43.7	21.3	29.4	26.4	19.6	28.7	26.5	23.2	
Y	D340	6044				50.8	46.6	21.3			20.7	27.7	25.5	23.6	23.6
Y	C184	6241			45.1										
Y	D151	6451				48.2	45.2	22.1	29.6	26.2	21.4	28.8	26.9	23.1	22.2
Y	A345	6492				47.2	44.8	20.6	27.5	23.7	19.1	26.5	25.0	22.7	21.7
Y	D1158	6880			43.6										
Y	D1231	7244			44.3		46.3								
Y	D168	7335				47.2	44.4	20.8	28.7	25.2	20.0	27.8	25.4	22.6	22.0
Y	D151	7872			49.8										
Y	D151	7873				46.8	43.2	20.6	28.1	24.8	19.1	27.5	25.0	22.9	22.0
Y	D1332	8008			39.9										
Y	A241	8324				57.4	51.8	20.7		26.7	21.5	30.3	26.0	26.2	28.4
Y	D216	8484				47.6	44.8	20.7	27.9	24.4	19.6	27.4	25.1	23.1	21.8
Y	D216	8485				48.3	45.3	20.1	27.4	24.6	18.9	26.7	24.5	23.5	22.2
Y	D349	8626				54.3	46.9	22.5	30.5	27.6	21.5		27.3	26.7	25.6
Y	D1231	8851			47.0										
Y	D338	8911			42.3										
Y	D320	9142				45.5	41.0	20.6	26.6	24.0	18.9	26.2	24.2	21.5	21.0
Y	D320	9143							29.4	26.1	21.0		26.4		24.4
Y	D837	9945				52.9	51.0	22.6	31.0	28.0	20.9		27.5	24.8	24.3
Y	D762	10191				44.3	40.7	20.1		23.8	19.5	26.3	24.7	20.8	21.2
Y	D338	10571				52.2	50.2							25.1	24.3

Appendix 23 cont. Cattle: Biometry: Metatarsal measurements

Phase	Context	Bone ID	GL	SD	Bp	Bd	BatF	1	2	3	4	5	6	a	b
Y	D1333	10729				46.9	44.8	20.3		24.9			25.9	22.0	21.8
Y	D727	10810			43.6										
Y	D908	10936				45.7	41.0								
Y	D762	11280				49.8	44.4	20.8		25.0	19.1		24.8	24.7	22.3
Y	D713	11334				48.9		21.0	28.6	25.4	20.2	28.0	26.6	23.3	22.6
Y	D338	11527				47.8	44.9	19.8						22.8	21.9
Y	D1231	11604			42.8										
Y	D1335	11618			43.6										
Y	D1335	11619				47.4	44.1	22.0	29.2	26.5	21.0	28.1	26.4	23.0	21.5
Y	D1158	11660			42.5										
Y	D1158	11672				47.2	43.6	20.7	27.0	25.1	19.1	26.7	25.0	22.6	21.4
Y	D318	11999	205.0	25.9			49.0	21.2		24.9	19.9		25.2		22.2
Y	C207	12201			41.9										
Y	D214	12505				47.9	45.0	21.2	28.7	25.3	20.2	27.3	25.5	22.9	22.0
Y	D329	12712			51.7										
Y	D214	12869			40.4										
Y	D151	13255			40.3										
Y	D151	13256				46.9	42.7	19.6			18.9	26.9	24.5	22.7	21.8
Y	D320	13274				48.7	45.6	21.1	28.9	26.5	20.5		25.8	23.4	22.8
Y	D320	13275				45.2	42.9	20.1		24.5	18.9	26.1	24.3	22.0	20.7
Y	D216	13313				51.5	47.6	21.7	28.9	25.4	20.2		26.3	24.7	24.0
Y	D216	13314				60.5	58.9	24.2	33.3	29.3	22.2	31.8	29.2	29.0	28.4
Y	C184	13454				51.7	49.0	20.7	30.1	26.7	20.2	28.7	26.2	24.6	23.9
Y	D320	13597				47.5	43.8	19.7	27.2	24.3	18.4	26.7	24.4	22.8	22.0
Y	D150	14744			42.8			22.5	29.8	26.5				23.2	
Y	D168	15038	205.0	24.1	41.3	47.4	45.7	19.1	26.6	23.6	17.4	25.6	23.6	23.2	21.6
Y	D168	15040				47.9	45.0	20.1		24.1	19.0	26.7	24.5	22.9	21.9
Y	D151	15412				43.1	40.7	19.0						20.9	20.2
Y	D151	15463				47.2	42.8								
Y	D320	15888				48.2	45.0	20.6	28.4	25.3	19.0		26.1	23.6	22.8
Y	D214	16024	230.0	27.0	46.0	52.9	55.0	23.5		28.7	21.2			25.0	24.8
Y	D214	16025				47.5	44.0	20.4		25.0	19.2		24.5	23.5	21.8
Y	D214	16467			39.0										
Y	D320	16790			40.5										
Y	D329	17027			43.3										
Y	D320	17465			39.8										
Y	D329	17581	214.5	24.0	44.3	49.6	48.5	20.9	29.0	25.6	19.3	27.4	25.4	23.6	22.6
Y	D320	17675			44.6										
Y	D318	17710				49.0	47.8	21.6	29.0	26.1	20.4	27.9	25.9	23.5	22.0
Y	D168	17787				47.0	42.7	20.0			18.6			22.4	21.2
Y	C184	17910				45.4	41.3	20.3		24.4	18.7		24.6	21.8	20.8
Y	D216	18147				47.7	45.0	20.9	29.3	25.7	19.5	28.0	25.7	23.0	21.2
Y	D329	18407	210.0	24.0	43.2	47.7	44.3	20.1	27.5	24.1	19.0	26.8	24.5	22.6	21.5
Y	D168	19363			45.9										
Y	B299	19753			43.2										
Y	B299	19754					57.6	23.4		29.6	23.5	31.4	28.3	27.7	
Y	D168	20272				57.9	55.0	23.8	31.5	28.2	21.9		28.0	28.8	26.0
Y	D224	20960				50.3	47.8	21.9		27.1	20.6	29.8	27.0	25.3	22.9
Y	D320	20995				49.2	45.4	20.5		24.1	19.3	25.5	24.2	24.8	22.3
Y	D1231	21278			45.9		49.4	20.0		24.0	19.3		25.0		
Y	D216	21394				46.4	42.2	19.5	26.9	24.0	18.9	26.4	24.1	22.6	21.4
Y	D216	21395				47.7	45.4	20.8	28.0	24.5	19.1	27.3	24.4	23.0	21.9
Y	D151	23256	195.5	22.2	39.2	51.0	44.1	20.0	27.2	24.1	18.6	25.7	23.6	27.3	21.8
Y	D151	23257			42.1										
Y	D168	23311				47.7	44.8	21.0	28.9	25.4	19.8	28.1	25.5	22.9	21.9
Y	A78	23387			40.1										
Y	D151	23431			47.3	52.4	51.0	21.8		26.3	20.4			25.1	24.6
Y-Z	C132	77	215.5	23.8	42.7	49.4	47.5	20.7		25.3	19.0	26.6	24.9	24.0	22.3
Y-Z	E74	603			44.8										
Y-Z	D116	742			39.5										

Appendix 23 cont. Cattle: Biometry: Metatarsal measurements

Phase	Context	Bone ID	GL	SD	Bp	Bd	BatF	1	2	3	4	5	6	a	b
Y-Z	D116	745				49.4	44.3	22.1	29.9	26.1	20.5		26.4	23.8	22.0
Y-Z	D116	773			40.6										
Y-Z	D116	785			46.0										
Y-Z	D116	786			42.9										
Y-Z	E81	1291			42.5										
Y-Z	E81	1293				45.3	43.2	20.4		23.9	19.4		24.6	21.7	21.0
Y-Z	B277	1724				58.0	49.6	23.0			21.0	30.0	26.8	29.2	25.5
Y-Z	B277	1734			43.7										
Y-Z	B277	1766				45.3	43.3	20.4	27.9	24.6	19.3	27.0	24.9	21.2	21.1
Y-Z	D116	4372					43.0	21.2		24.8	20.2		24.7	23.0	
Y-Z	D116	4847			45.9										
Y-Z	D116	4858				45.7	43.8	21.0	26.6	24.6	19.1		23.7	22.5	21.0
Y-Z	D116	4884			40.9										
Y-Z	C187	5195	212.0	23.5	43.9	51.3	49.9	21.9	29.3	25.9	21.2	29.0	26.6	24.3	22.8
Y-Z	C187	5196				43.3	38.9	19.5	26.2	23.1	18.0	25.3	23.8	20.9	20.3
Y-Z	D116	5900				47.3	43.5	21.5	28.8	25.9	20.4	28.4	26.9	22.6	22.0
Y-Z	D116	5924			40.8										
Y-Z	E74	6384				61.9	56.2	25.3	33.3	30.3	23.4	32.2	30.1	30.3	28.1
Y-Z	E74	6395				46.7	43.1	20.8		24.4			25.2	22.5	21.0
Y-Z	E74	7749			41.0										
Y-Z	E74	7960				45.2	41.4	20.2	26.7	23.4	18.2	25.7	23.9	21.6	20.8
Y-Z	C131	8181				44.1	41.4								
Y-Z	D116	8824			39.7										
Y-Z	D116	8929				52.3	48.8	22.0	30.3	26.5	20.5	29.2	26.9	25.2	24.0
Y-Z	D116	8938			40.0										
Y-Z	D116	8946			41.8										
Y-Z	D116	9013				46.4	41.8	20.2		24.1	18.1	25.0	23.5	23.8	19.9
Y-Z	D116	9036			42.0										
Y-Z	D116	9053				43.4	38.7	19.0	25.5	23.5	17.7	24.8	23.5	20.9	20.0
Y-Z	E74	9185				48.4	45.4	21.4		24.9	19.8		25.1	23.6	22.2
Y-Z	E74	9203	193.5	20.8	39.5	44.8	43.1	19.6	25.6	22.5	18.6	24.5	22.7	21.3	21.1
Y-Z	E74	9211				45.4	42.0	19.7	26.9	24.1	18.7	26.4	24.3	21.7	21.0
Y-Z	B277	9541			45.3										
Y-Z	D116	11028				50.7	47.2	21.7	29.3	26.6	20.6		26.1	23.8	23.3
Y-Z	E74	11966				49.8	47.5	21.7	28.2	25.6	20.3	27.3	25.3	23.7	22.9
Y-Z	D116	12188			52.3										
Y-Z	B277	12217			44.6										
Y-Z	B277	12245			39.2										
Y-Z	B277	12252			45.6										
Y-Z	B277	12253			41.0										
Y-Z	B277	12254				48.4	46.3	20.9		24.6	19.8		25.5	22.9	22.2
Y-Z	B277	12602			44.6										
Y-Z	B277	12627			42.2										
Y-Z	C268	13000				46.3	42.2	19.4	26.4	23.3	17.8		23.5	22.6	21.6
Y-Z	C268	13001				52.8	49.7	22.4	30.7	26.7	21.2	29.8	27.4	25.3	24.1
Y-Z	C268	13002				46.6	43.7	21.5	28.3	25.5				22.2	
Y-Z	C268	13003				46.4	43.5							21.0	22.5
Y-Z	B277	13050			45.9										
Y-Z	B277	13051			44.1										
Y-Z	D116	13220			40.8										
Y-Z	D116	13356	219.0	23.2	42.1		46.7				20.6	28.3	26.0		22.7
Y-Z	B277	13708			44.1										
Y-Z	B277	13709				51.2	48.2	22.8	30.5	27.3	21.9		27.7	25.0	24.0
Y-Z	B277	13710				47.3	43.9	20.9	29.0	26.1	19.8		25.9	22.6	22.0
Y-Z	B277	14057			45.0										
Y-Z	D116	15083			46.5										
Y-Z	D116	15391			50.0										
Y-Z	B277	15593			42.1										
Y-Z	B277	15594			43.0										
Y-Z	E74	15742			49.7										

Appendix 23 cont. Cattle: Biometry: Metatarsal measurements

Phase	Context	Bone ID	GL	SD	Bp	Bd	BatF	1	2	3	4	5	6	a	b
Y-Z	E74	15743			41.8										
Y-Z	E74	15753				49.4	46.6	20.8		25.3	19.9		25.5	23.4	22.7
Y-Z	E74	15765				48.1	44.3	20.8	28.9	26.0	19.6	28.0	25.7	23.0	22.2
Y-Z	E74	15769				52.1	47.7	23.0		26.9	21.5		27.3	25.3	23.0
Y-Z	D116	16595				44.5	42.3	19.6		23.8	18.3			21.7	20.6
Y-Z	D116	16922			39.1										
Y-Z	C267	16961				47.7	43.1	19.8	27.3	24.3	19.6	26.6	25.0	22.7	22.3
Y-Z	C267	16962				47.3	44.0	19.6	26.4	23.9	18.5	26.0	24.4	23.0	21.7
Y-Z	E74	17010				48.0	46.1	21.5	28.4	26.2	19.7	27.3	25.5	22.8	21.7
Y-Z	E74	17012	214.5	25.3	25.6	52.9	49.3	22.9	31.0	27.3	21.4	30.2	27.3	26.0	24.1
Y-Z	C267	17300				45.7	42.4	19.4	27.0	24.0	18.7	26.4	24.4	22.2	21.4
Y-Z	C267	17301				56.8	51.9	22.8	30.4	27.5	21.2	29.8	27.3	28.1	25.3
Y-Z	D116	17379	216.5	25.6	43.7	52.1	48.3	21.9	29.9	26.4	20.1	28.5	26.5	25.2	23.2
Y-Z	B277	17723			42.8										
Y-Z	C75	17947			45.7						21.0		27.6		22.8
Y-Z	C75	17950				54.3	46.9	21.1		24.5	20.0			26.6	25.0
Y-Z	D233	18004				49.0	44.6	21.5	29.0	25.7	19.4		26.1	23.8	22.2
Y-Z	D116	18015			42.8										
Y-Z	D116	18017				50.3	47.4	20.6	28.0	24.6	19.4	27.0	25.2	24.6	23.0
Y-Z	D116	18018				48.5	45.0	20.7		26.4	20.2		25.9	22.5	22.5
Y-Z	D116	18035			41.9										
Y-Z	D116	18045			43.6										
Y-Z	C240	18192			52.5										
Y-Z	C240	18193				52.6	52.0	22.8	31.7	29.1	21.6	30.8	29.0	25.1	24.1
Y-Z	C240	18209				50.6	47.4	20.9		26.0	20.3		26.3	24.2	23.2
Y-Z	D116	18452	229.0	29.2	49.1		56.2	23.8		29.1	22.7		29.4		28.3
Y-Z	D116	18469				53.9	50.0	23.4		27.6	21.8	30.3	28.3	25.9	24.8
Y-Z	B277	18646					46.4		28.1	26.0	19.0	26.9	24.6		22.6
Y-Z	D116	18749			44.1										
Y-Z	D116	18769			40.0										
Y-Z	D116	18939						21.6	29.8	26.9				25.3	
Y-Z	D116	18978					44.1								
Y-Z	C240	19514			44.8										
Y-Z	C240	19515			40.5										
Y-Z	D116	20071				46.3	43.7	20.6	28.1	25.4	19.6		24.8	22.3	20.9
Y-Z	C268	20126				46.8	44.9							22.3	20.8
Y-Z	C187	20490			41.7										
Y-Z	C187	20510				58.8	57.4	24.4	31.9	29.2	23.9	31.2	29.7	28.0	27.1
Y-Z	B277	20519			45.9										
Y-Z	B277	20544				50.9	47.9	20.6		24.5	19.1		25.0	24.7	23.7
Y-Z	B277	20565			43.0										
Y-Z	C240	20724	209.0	21.9	41.9	46.1	43.6	20.2	27.6	24.4	18.9		24.6	22.3	21.7
Y-Z	C240	20725			41.4										
Y-Z	C267	20904			42.8										
Y-Z	C240	21050			45.0										
Y-Z	C240	21051				61.2	56.8	24.5		28.8	23.7	32.9	29.7	29.4	28.5
Y-Z	D116	21487				48.9	46.1	22.3	30.2	26.7	20.9	29.5	27.0	23.9	22.6
Y-Z	D116	21508				55.4	52.9	22.6		25.9	20.4	28.0	26.4	25.1	26.5
Y-Z	B277	21853			40.2										
Y-Z	B277	21880				52.2	48.7	23.1	32.1	28.4	22.2	31.9	29.4	24.2	24.0
Y-Z	D116	21906			43.1										
Y-Z	C231	22202				48.7	46.3	21.1		26.6	20.1		26.3	23.2	22.7
Y-Z	C187	22387			44.0	48.1	46.5	21.6			20.9		26.3	23.5	
Y-Z	D116	22569			42.4										
Y-Z	D116	22570			47.3										
Y-Z	D116	22649				50.1	46.3	21.8	29.0	25.9				23.7	23.6
Y-Z	E81	22692				47.6	44.0	18.9		23.4	17.9		23.3	23.2	21.4
Y-Z	C160	23608			51.4										
Y-Z	C160	23609			43.1			20.6	28.0						
Z	D332	123			41.6										

Appendix 23 cont. Cattle: Biometry: Metatarsal measurements

Phase	Context	Bone ID	GL	SD	Bp	Bd	BatF	1	2	3	4	5	6	a	b
Z	C78	264						25.3	34.0	31.4				33.0	
Z	D332	334	227.0	25.7	27.3	53.6	49.6	23.3	31.8	28.1	21.8	31.2	28.3	25.7	24.8
Z	D332	341				58.7	54.7	23.7		27.8	22.0	30.6	28.4	28.2	27.0
Z	D100	532	222.5	29.0	52.4	61.8	56.2	23.7	32.5	28.5	22.0	30.6	28.1	31.1	26.6
Z	D100	553	227.5	29.1	55.2	60.7	54.6	24.1	33.2	28.7	22.5	31.7	28.9	29.2	27.5
Z	D331	651	210.0	25.0	43.3		45.4	21.5	29.1	25.9	19.6	28.0	26.0		
Z	D331	652			40.5										
Z	E85	1302			44.8										
Z	E85	1312				47.0	43.1	21.5	28.9	25.9	21.7	28.5	27.1	22.6	22.2
Z	E85	1321			35.6										
Z	D100	1654			41.3	48.6	45.4	20.0	27.5	24.1	19.1	27.5	25.0	23.1	22.7
Z	D103	1684			44.2										
Z	E172	1878			39.5										
Z	D229	2030				52.1	49.6	20.8		25.5	21.7		25.0	25.1	24.9
Z	C80	2097			43.8		44.8	21.0		25.6		27.8	25.7	21.5	
Z	C80	2106				51.3	48.2	21.1		24.4	20.3		25.4	24.5	23.1
Z	C80	2107				48.9	45.6	21.0	29.0	26.0	21.0	28.9	26.8	23.2	22.8
Z	B98	2122	198.5	26.8	46.0	56.0	49.3	22.1	29.6	26.9	20.2		26.6	27.9	25.2
Z	B150	2157			42.2										
Z	B150	2159				48.3	44.2	21.3	28.0	25.0	19.3	27.3	25.1	24.8	21.4
Z	D306	2310			42.4										
Z	D283	2486			48.5										
Z	D310	2509				49.4		21.6		26.0	20.3	27.7	25.7	23.9	22.0
Z	D332	2560				55.5	50.9	20.4	28.6	26.3	22.3		26.0	25.1	26.5
Z	D372	2581			42.8										
Z	D372	2585			38.5										
Z	E85	2636				60.3	57.9	24.3		29.3	23.3	31.3	29.1	29.3	28.0
Z	E85	2641			40.5										
Z	D100	2654				50.2	45.9	21.0	28.4	25.3	19.7	27.1	26.0	24.0	23.3
Z	D100	2655				53.5	49.8	22.6	30.0	26.8	22.5	29.6	27.6	26.0	24.2
Z	D100	2673			39.7										
Z	D100	2686			47.3										
Z	D305	2740				50.8	48.0	20.8		25.3	19.9		25.7	24.5	23.4
Z	E185	2789				41.6	20.4			19.2		24.7		22.3	
Z	E185	2790				47.4	44.5	21.8	28.2	24.7	20.3	27.4	25.2	22.9	21.9
Z	E172	2856			47.2										
Z	E177	3121				45.7	42.0	19.3		23.5	18.4		24.0	21.9	21.4
Z	D372	3218			48.0										
Z	D332	3232				59.7	52.8	22.3	30.4	28.0	23.9	32.0	28.5	26.7	29.0
Z	D283	3341			46.7										
Z	E172	3346				50.8	47.8	20.8	29.2	26.2	20.4	29.0	26.3	25.0	23.1
Z	D283	3743				52.7	49.0	22.0	29.8	26.8	21.1	29.7	27.9	24.8	24.9
Z	D331	3785			41.7										
Z	D344	3795			44.5										
Z	D283	3865			42.8										
Z	D332	3937				47.0	43.4	20.4	27.7	24.9	19.7		25.1	22.7	22.0
Z	D306	4022				51.6	48.4	20.0	28.3	26.1	22.0	29.0	25.7	23.3	24.3
Z	D306	4032			46.0										
Z	D463	4074				45.6	43.3	19.2			17.6		22.8	22.2	21.0
Z	B99	4323			43.6										
Z	B99	4324			41.5										
Z	B98	4336			41.3										
Z	D108	4362				54.5	52.7	23.9	33.0	29.1	23.3	31.9	29.2	26.3	25.4
Z	D283	4376				47.1	45.1	19.8	27.0	24.1	18.7	25.8	24.0	23.1	21.8
Z	D100	4448			42.7	48.5	45.2							23.8	22.8
Z	D100	4464				49.5	45.3	21.2	29.1	25.4	20.5	28.6	26.7	23.5	23.0
Z	D100	4472			43.5										
Z	D100	4474				51.5	48.0	22.5	30.0	26.2	21.2	29.2	27.3	24.2	23.5
Z	D100	4481				49.1		21.2		24.4	20.0		25.5	23.5	22.4
Z	D310	4592				46.5	44.0	20.4	26.9	23.6	18.4	26.2	24.4	21.6	21.5

Appendix 23 cont. Cattle: Biometry: Metatarsal measurements

Phase	Context	Bone ID	GL	SD	Bp	Bd	BatF	1	2	3	4	5	6	a	b
Z	C78	4731				49.9	47.4	22.1		26.6	21.2		27.0	23.8	22.7
Z	C78	4763	217.0	26.0	46.3	52.3	50.3	23.2	31.3	28.4	22.0	30.5	28.2	25.0	23.8
Z	C112	4799				46.3	43.0	19.8	26.3	24.6	19.5		24.7	22.1	21.5
Z	E85	4919				44.8	42.8								
Z	E100	4929			44.6										
Z	C80	5171			45.8										
Z	C74	5187	210.0	23.6	41.7	49.2	47.6	21.9	28.3	25.6	20.4	27.3	25.9	23.5	21.9
Z	C74	5188			46.8										
Z	E172	5249			37.7										
Z	E172	5250				54.7	51.3	23.4	30.1	27.2	22.2	29.9	28.0	26.0	25.9
Z	E172	5276				46.9	43.8	20.3	26.5	23.8	18.9	25.8	24.3	22.4	22.2
Z	C78	5493			39.7										
Z	D100	5569			52.8										
Z	D100	5649			45.7										
Z	D283	5739			45.7										
Z	D305	5742				54.0	43.9	20.0	27.2	26.1	21.9	28.7	26.2	23.1	28.8
Z	D331	6101				50.8	46.7	21.9	28.3	26.0	21.1	28.4	26.5	23.9	23.2
Z	E85	6128				48.5	45.8	20.8	28.3	25.0	19.3		24.8	23.6	22.4
Z	D100	6180				47.9	45.1	20.2	27.8	24.7	19.3	27.0	24.9	23.5	22.1
Z	C191	6210	219.0	24.6	40.9	48.2	46.6	21.1	28.2	24.9	19.8	27.3	25.3	22.7	22.1
Z	D229	6544				47.7	46.3	21.1	27.9	24.6	19.6	26.6	24.9	23.0	22.0
Z	D310	6589			41.0										
Z	D100	6847			41.4										
Z	E185	7063	230.0	25.6	47.1	53.7	48.6	23.6	32.8	29.0	22.1	32.3	29.7	26.5	24.6
Z	D372	7152				50.4	47.7	22.0		26.4	21.0		26.6	24.0	23.2
Z	C76	7328				46.2	41.9	20.3	27.3	24.5	19.0	26.4	24.8	22.4	21.1
Z	D372	7457				45.7	42.3	18.6	25.4	22.7	17.8	25.0	23.6	22.1	21.5
Z	D331	7468			42.4										
Z	E85	7580			44.4										
Z	E85	7618				46.3	43.0	20.2	27.4	24.2	18.5	26.4	24.3	23.0	20.8
Z	C188	7706				49.0	44.6	20.4		23.7	20.0		24.2	24.1	22.3
Z	C188	7732			40.8										
Z	E172	7845			47.6										
Z	E172	7860			42.4										
Z	D100	7895			45.8										
Z	D100	7954	208.5	44.7	23.4	50.9	47.1	22.6	30.7	27.5	21.2	29.5	27.3	24.7	24.0
Z	D100	7955			41.4										
Z	C76	8075						23.0		28.0			28.5		
Z	C78	8100	196.0	21.3	41.6		43.3	20.1	26.8	23.7	18.7	26.5	24.3	23.3	
Z	B152	8108				50.9	46.7	23.0	30.8	26.8	21.4	30.5	27.6	24.3	23.5
Z	C78	8126			50.7										
Z	C78	8165				52.8	49.1	22.4	29.9	27.2	23.3	30.5	27.0	24.7	25.3
Z	D283	8248			45.1										
Z	D283	8531			40.9										
Z	D283	8532			43.4										
Z	D283	8534				50.7	45.9	21.1	28.5	25.3	20.4	28.5	26.1	24.2	23.9
Z	D283	8557				47.6	45.4	19.2		24.5	21.0		24.4	21.7	23.4
Z	C94	8684				48.9	44.9	20.7		25.3	20.0		26.1	23.9	22.9
Z	D148	8707			43.0										
Z	E172	9210	203.0	21.6	41.7	46.1	44.1	19.1	25.9	23.0	18.1	24.9	22.9	22.4	20.7
Z	D100	9377	199.5	28.3	50.0	58.0	48.1	22.8	30.7	27.5	21.3	29.6	27.8	29.2	26.3
Z	D466	9497			42.1										
Z	D466	9498				50.8	46.7	22.4		26.8	21.7	29.9	27.4	24.4	23.3
Z	D372	9582			42.2										
Z	D330	9598				48.2	44.9	22.5	29.7	26.7	21.2	28.6	26.9	23.2	22.3
Z	D104	9705			38.9										
Z	D104	9706			44.2										
Z	D104	9718			43.5										
Z	D283	9769				50.4	45.9	21.7	29.5	25.8	20.2	28.5	26.1	24.1	22.6
Z	B97	10032			45.8										

Appendix 23 cont. Cattle: Biometry: Metatarsal measurements

Phase	Context	Bone ID	GL	SD	Bp	Bd	BatF	1	2	3	4	5	6	a	b
Z	D100	10093				47.5	42.6	20.9		25.1	19.0		25.5	23.3	22.1
Z	D100	10094				44.6	41.5	19.1	26.6	23.8	17.8	25.1	23.5	22.3	20.7
Z	D100	10095				48.0	45.2	19.9			19.2			22.7	22.1
Z	D310	10152			41.2										
Z	D108	10169			41.2										
Z	E185	10229				45.3	42.7	20.2		23.7	18.8			21.9	21.1
Z	E185	10233				47.8	44.9	20.5		25.0	19.6		25.3	23.5	21.9
Z	D310	10445				48.2	45.9	21.2	28.9	25.0	19.9	28.4	26.3	22.8	22.4
Z	E179	10465				50.6	47.2	20.2	27.8	24.4	18.9	27.0	24.6	23.5	22.8
Z	E185	10471				55.3	50.4	22.2	30.0	27.4	23.1	30.6	26.9	24.4	26.5
Z	E185	10481				52.6	52.4	22.2	29.9	26.8	21.9	29.4	27.3	25.0	24.3
Z	D108	10495				60.3	57.4	24.3	33.7	29.3	23.5	32.7	29.7	28.4	28.2
Z	E172	10648			46.1										
Z	E172	10649				50.6	44.9	20.3	27.6	24.2				24.2	
Z	E172	10673			41.4						19.3	27.5	25.5		22.4
Z	D331	10973			51.5										
Z	D372	11000				47.0	42.5	21.0	28.2	25.5	20.0		25.6	23.1	21.5
Z	E185	11239				46.5	43.3	21.0	28.5	25.7	19.8		25.6	22.7	21.7
Z	E172	11435			43.2										
Z	E172	11436			42.9										
Z	E172	11437			38.8										
Z	E172	11438			43.7										
Z	E172	11440				46.8	44.1	18.9		23.3	18.7		23.5	22.6	21.7
Z	E172	11441				47.0	44.2	19.3		23.5				22.8	
Z	D106	11755			40.4										
Z	C80	11817			49.5										
Z	C80	11818				55.3	51.3	23.4		27.1	21.2	30.0	27.5	26.5	25.6
Z	C78	11828			43.2										
Z	C78	11831				43.3	38.4	18.7	25.3	22.5	17.5	24.9	23.2	21.1	19.8
Z	D283	11893	221.0	30.6	50.6		58.2								
Z	E172	11918	192.0	20.6	35.5	43.7	40.8	17.9	25.0	21.7	16.8		22.0	21.4	20.3
Z	E172	11919				47.0	43.7	21.5		25.5	19.8		25.8	22.7	21.5
Z	E172	11923				44.0	41.5								
Z	E172	11937				44.4	41.9	18.7	25.4	22.9	18.2	25.2	23.5	21.2	20.2
Z	D283	12074	208.0	25.6	43.6	49.6	46.0	21.6	29.0	25.9	20.7	28.6	26.4	24.0	23.0
Z	D283	12359			40.4										
Z	D283	12360			41.9										
Z	D100	12398			44.3										
Z	D100	12399				46.9	48.1	20.1	27.2	24.0	19.9	26.4	25.0	22.2	21.3
Z	D283	12426				50.0	47.3	21.7	28.6	25.3	20.5	28.4	26.0	24.4	22.9
Z	D100	12521			41.6										
Z	D330	12674	217.0	30.3	48.9	60.5	54.2	22.2	30.4	26.5	20.8	29.6	27.5	28.9	27.9
Z	D100	12733				48.4	43.0								
Z	D100	13205			47.2										
Z	D283	13235			46.9										
Z	D283	13236			42.3										
Z	D310	13304			40.9										
Z	D103	13845	207.0	24.0	41.2	48.2	45.6	19.7	27.1	24.2	19.0	26.6	24.3	23.3	
Z	D103	13846				46.7	43.7	20.9	27.6	25.1	20.4	27.1	25.8	22.2	21.9
Z	D103	13847				56.5	51.8	22.8			22.0			27.4	25.7
Z	E172	13860				47.7	44.6	21.0	28.3	25.7	19.8	27.6	25.9	23.0	
Z	E172	13861				47.7	43.5	20.2	26.9	24.4	18.8			23.1	21.6
Z	E172	13900	209.0	23.5	42.2	52.7	47.4				20.6			25.3	
Z	E172	13902				53.0	49.9								
Z	E172	13920			41.8										
Z	E172	13921			45.8										
Z	E172	13922				44.7	40.0	20.1		23.9	19.4			21.3	20.4
Z	E172	13923				49.7	45.8	21.5	29.6	25.4	19.8	28.6	25.6	23.8	23.2
Z	B136	13983			44.4										
Z	D283	14311			43.5										

Appendix 23 cont. Cattle: Biometry: Metatarsal measurements

Phase	Context	Bone ID	GL	SD	Bp	Bd	BatF	1	2	3	4	5	6	a	b
Z	D283	14312				60.0	56.9	23.4	33.0	30.0	25.0	33.9	29.8	28.1	28.5
Z	D283	14350			43.2										
Z	D100	14383			39.5										
Z	D283	14568			45.9										
Z	D100	14584	215.5	23.7	45.7	50.3	46.3	21.4	29.4	25.6	20.7	29.1	26.6	23.8	23.1
Z	D100	14585	210.5	27.5	46.6	50.9	46.8	22.4		26.5	21.2	29.1	27.2	24.4	24.0
Z	D100	14599				47.9	44.6	21.2	29.2	25.8	19.7	28.0	25.9	22.6	21.4
Z	D283	14651			51.5										
Z	D100	14984			40.8										
Z	D100	15335			39.1										
Z	D100	15336					41.0								
Z	D100	15440			45.0										
Z	D148	15452				43.9	40.4	18.3	25.7	22.9	17.2	25.3	22.8	21.6	20.5
Z	D108	15896			40.6										
Z	D100	16071			42.8										
Z	D100	16078			40.7										
Z	E172	16278			46.6										
Z	E172	16279				45.9	43.5	19.5		23.6	18.8		24.1	21.7	21.4
Z	E172	16299				49.8	46.4	21.4	29.2	26.4	20.7	29.0	26.9	23.3	23.9
Z	C89	16384				49.0	46.8	19.3	27.0	24.1	19.0	26.3	24.4	23.1	22.7
Z	C90	16392				47.3	42.7	21.2	28.1	24.7	19.0	27.5	25.3	22.6	22.2
Z	D283	16830			43.1										
Z	D108	17171				49.4	44.8	20.5	29.3	25.7	19.2	28.4	26.2	23.9	22.2
Z	D100	17547			50.6										
Z	D108	17687	213.5	24.1	42.4	49.0	46.6	22.5	30.5	26.8	21.4	29.8	27.2	23.1	22.6
Z	D108	17688			44.3										
Z	D283	17823				50.7	47.2	21.2	28.8	24.9	19.8	28.4	26.0	23.8	23.3
Z	D283	18114			43.9										
Z	D107	18125					42.5	19.9		24.6	19.5	26.5	24.4		20.7
Z	D372	18174			41.4										
Z	E172	18365				45.4	41.6	20.2	27.3	24.8	18.8	26.3	24.9	23.0	20.2
Z	E185	18366	194.5		40.3	48.8	48.7	20.2			19.0	26.6	25.0		21.7
Z	D108	18385			48.0										
Z	D100	18517	220.5	24.4	43.5	48.3	46.2	21.3	29.4	26.8	20.2	28.7	26.4	22.7	22.0
Z	D100	18543			45.5										
Z	D100	18544				52.5	50.2	21.0		25.7	20.0		25.9	25.6	24.1
Z	C112	18728				47.8	45.3	19.8	27.6	25.0	18.6	26.6	24.5	22.9	22.1
Z	D100	19501	217.5	27.3	48.0	60.2	52.7	23.4	32.6	29.9	22.7	31.8	29.4	31.2	26.4
Z	D100	19633			40.6										
Z	D100	19634			44.6										
Z	D108	19741				49.8	45.6	21.0		25.3	20.2		25.7	24.0	22.8
Z	E172	19812			39.5										
Z	E172	19813								29.3	25.1		28.8		29.1
Z	E172	19814				54.8	48.8	21.6	28.9	25.7	20.1		25.6	26.2	24.3
Z	E172	19815				47.4	43.7							23.5	21.3
Z	E172	19816				46.8	41.7	20.4	27.8	24.4	19.2	27.5	25.3	22.5	22.1
Z	D100	19826			44.1										
Z	D100	19828				47.8	45.4	20.9	29.3	25.7	19.8	27.7	26.6	23.1	22.0
Z	D100	19902			43.5										
Z	D100	20193				53.1	49.7	21.6		25.9	21.0		26.8	25.7	24.3
Z	D283	20211	226.0	28.3	47.5	52.7	50.6	23.0	31.7	28.2	21.1	30.3	28.0	25.6	24.3
Z	D283	20212				54.1	49.9	21.7	29.3	26.3	19.6	28.1	26.7	25.8	24.4
Z	D283	20218	201.5	24.0	42.4	49.5	45.9	20.9		25.7	20.3		26.8	23.3	22.9
Z	E172	20346				46.8	43.9	19.6	27.1	24.0	19.2	26.3	23.9	22.3	22.1
Z	C188	20374	199.5	24.5	42.4	51.1	46.5	21.0	28.1	24.8	20.4	27.7	25.6	23.8	23.5
Z	C188	20375				48.9	45.8	19.8		25.1	19.6		24.7	23.7	22.2
Z	E185	20408			47.7										
Z	D108	20797	207.5	22.9	40.8		45.8	21.2		25.0	20.0		25.3	23.1	
Z	D100	20814				54.6	51.5	22.9		28.0	22.2	31.5	29.1	25.6	25.4
Z	D283	21137	194.5	22.2	40.6	47.4	44.4	20.2	26.7	23.7	18.5	25.6	23.7	23.2	21.9

Appendix 23 cont. Cattle: Biometry: Metatarsal measurements

Phase	Context	Bone ID	GL	SD	Bp	Bd	BatF	1	2	3	4	5	6	a	b
Z	D283	21138			40.9	47.8	44.2	21.2	28.9	24.9	19.8	27.9	25.0	22.7	22.2
Z	D107	21152			42.5										
Z	D107	21153				49.4	45.9	21.8	29.7	26.3	21.0	28.6	26.3	23.8	23.7
Z	C76	21263				48.8	44.8	20.3	27.8	24.7	18.7	26.8	24.8	23.4	22.1
Z	B136	21432					44.0	21.2		25.6	19.7		26.1	23.4	
Z	D100	21527				49.5	46.1	21.6	29.4	26.3	20.4	28.4	26.4	24.1	22.6
Z	D100	21528				57.4	54.2	23.8	33.3	29.0	23.0	32.7	29.3	27.7	27.2
Z	D283	21620			42.2										
Z	D283	21621			45.5										
Z	E85	21729				46.7	43.2	20.2	26.8	24.0	18.3	25.5	24.3	22.1	21.0
Z	D100	21895			43.5										
Z	D100	21896			43.7										
Z	D283	21984	217.0	26.0	43.7	51.7	48.8	22.4	30.5	27.1	21.0	29.4	27.4	25.0	24.0
Z	D100	22051				57.2	56.2	23.8	32.6	28.9	22.4		29.9	27.5	26.8
Z	D103	22064	198.0	22.5	39.9		41.3	19.7		24.2	18.4	26.2	24.5	22.5	
Z	D103	22065			48.4										
Z	D103	22066			45.8										
Z	D283	22076			43.0	48.9	46.0	20.9		26.1	20.0	28.2	25.9	23.8	22.9
Z	D283	22077			43.1										
Z	D100	22230				53.2	48.6	23.0	31.6	27.2	21.3	30.1	26.9	25.6	24.6
Z	C188	22295			44.5										
Z	C188	22308			43.1										
Z	D100	22405				56.2	51.5	22.5	29.8	26.8	22.0	29.2	27.1	26.1	25.4
Z	D100	22421				45.0	41.6	21.0		24.0	18.8	26.0	24.4	21.8	20.4
Z	D100	22435				45.9	42.7	20.4	26.7	23.8	18.6	26.0	24.3	21.5	20.5
Z	D100	22459			39.5	45.4	42.2	19.4		23.5	18.5		23.5	21.9	20.5
Z	D100	22460			39.2										
Z	D108	22510				55.5	53.0	23.2		27.8	21.6			26.4	25.4
Z	D306	22609			45.3	53.6	50.4	22.8			20.9			26.6	24.0
Z	D306	22610				57.1	51.1	22.7		27.1	20.9	30.0	27.5	27.3	26.1
Z	D306	22611				47.1	43.5	19.8	27.5	24.2	17.8	26.0	24.4	23.0	21.4
Z	D108	22661				49.4	46.5	21.8		24.9	20.3	28.5	25.5	24.2	22.6
Z	C78	22725				54.4	52.4	22.8		26.7	21.1	30.3	27.6	27.1	24.6
Z	D100	22742			44.5		47.6	21.6		25.9	20.3		26.4		23.2
Z	D100	22763			49.4										
Z	D100	22808			54.8										
Z	D100	22809			43.4										
Z	D100	22810				45.9	41.4	20.7	27.6	24.9	19.2	26.3	24.7	22.0	20.9
Z	D100	22819				45.0	40.6	19.0	26.0	22.9	17.5	25.4	23.0	21.7	20.5
Z	E100	22871				49.4	46.0	21.4		26.1	20.3		26.1	23.6	22.7
Z	E100	22888				47.3	42.4	19.7	26.6	23.7	18.4		26.3	23.5	20.6
Z	D100	22905			46.3										
Z	D100	23305			38.8	45.2	42.1	19.0	24.5	23.0	17.3	23.9	22.4	22.6	20.1
Z	D100	23340					42.9	20.4	27.4	24.0	19.2	26.3	24.1	21.8	
Z	D100	23362			46.1										
Z	D100	23421				46.5	43.2	19.3	26.8	23.0	17.7	25.4	23.2	22.7	21.6
Z	B147	23446			42.0										
Z	B147	23447				47.2	43.2	20.5	27.8	24.4	19.6	27.2	25.1	22.7	21.3
Z	D100	23484				47.5	43.9	19.8		24.7	18.9				21.5
Z	D100	23485				51.1	47.3	22.6		26.6	20.6	29.0	26.8	24.3	22.8
Z	E85	23512			43.0	50.3	47.3	22.0	29.9	25.4	20.2		25.5	24.3	23.2
Z	E85	23513			46.3										
Z	D100	23536				48.2	44.5	20.6	27.3	24.1	19.3	26.8	24.8	24.0	22.0
Z	D100	23548			44.7										
Z	C78	23567			43.2										
Z	C76	23584				48.5	45.1	20.9	29.3	26.1	20.5		26.1	23.2	22.6
Z	C78	23601				57.0	51.8	21.2		25.9	20.2	27.9	26.3	26.7	26.0
Z	C78	23602				58.1	53.0	23.9		28.3	21.8		27.8	28.1	25.9

Appendix 23 cont. Cattle: Biometry: Metatarsal measurements

Phase	Context	Bone ID	Species	dP4	P4	M1	M2	M3
T-V	D1215	1546	S	j				
T-V	D1013	2392	S	m				
T-V	B618	7052	S	c		V		
T-V	D1164	11073	S					b
T-V	D2284	12322	S				g	c
W	D1591	138	S	d		a		
W	C527	208	S				e	
W	C536	214	S		e	k	h	f
W	C539	219	S					c
W	D743	875	S	k				
W	C440	1024	S				h	c
W	D743	1055	S	b		E		
W	D755	1194	S				f	d
W	D933	1379	S				h	c
W	D1265	1525	S				e	b
W	D254	2973	S		d			
W	D1132	3185	S					b
W	D1132	3199	S		f	m	h	d
W	D1132	3200	S		c	g	d	
W	D1132	3211	S					a
W	C417	3391	S		d	h		
W	C417	3396	S				e	c
W	C417	3411	S		b	g	e	E
W	C417	3413	S		c	f	d	
W	D343	4068	S	k		d		
W	C468	4679	S		c			
W	D757	5807	S		d	j	f	
W	D840	5844	S		f			
W	D163	5893	S			c	V	
W	E270	7096	S				f	d
W	D163	7296	S	e				
W	C404	7509	S					c
W	B520	8779	S		f	n		
W	D163	8958	S		d			
W	D163	8959	S	c				
W	D343	9103	S	c				
W	D802	9303	S					b
W	D343	9525	S			f	e	
W	D767	9879	S				e	a
W	D755	9907	S		f			
W	D743	9915	S		b	f		
W	D907	10302	S			h	e	
W	D931	10807	S	j				
W	D163	11022	S					e
W	D252	11036	S		d	j		
W	D840	11146	S	f		d		
W	D755	11302	S					a
W	D343	11309	S					a
W	D1389	11761	S	f				
W	D2378	12290	S		d			
W	D2301	12334	S	c		V		
W	D335	12684	S					E
W	D335	13167	S				E	V
W	D335	13168	S		b		e	V
W	D1569	13373	S		b	j	f	
W	D1834	13554	S			f	e	
W	D1834	13555	S			f	c	
W	D335	13585	S		f	m		
W	D335	13586	S	k		d		
W	B521	14092	S			h	e	

Appendix 24. Pig: Ageing data: Mandibular tooth eruption and wear

Phase	Context	Bone ID	Species	dP4	P4	M1	M2	M3
W	B521	14103	S		b	j	d	E
W	B521	14106	S				f	e
W	E96	14259	S		e			
W	D1569	14286	S		c	f	d	
W	E96	14463	S	f				
W	C515	14704	S		c			
W	E96	14822	S					b
W	E96	15109	S			h	d	
W	E96	15134	S		d	h		
W	E96	15163	S					a
W	D335	15294	S	k		d		
W	D335	15295	S	j				
W	D335	15296	S				d	
W	E96	15484	S	l		e		
W	E96	15499	S			f	d	V
W	E96	15505	S	e		E		
W	D1418	15642	S		f			
W	B521	15692	S		f			
W	B521	15708	S	f		c		
W	D335	15869	S		f			
W	E96	16181	S	k		f		
W	E96	16203	S				e	V
W	E96	16373	S	k				
W	D2391	16419	S	f				
W	E96	16758	S				f	b
W	D102	16784	S	k				
W	E96	17099	S				f	c
W	D1606	17258	S					j
W	E96	17444	S				d	
W	B306	17731	S	g		d	E	
W	C527	17768	S				g	c
W	D334	18289	S	a				
W	D1380	18338	S					d
W	C501	18846	S					c
W	C527	19585	S		c			
W	C527	19604	S	d		h	f	
W	E96	19976	S			f		
W	E96	20010	S			e		
W	D1569	20577	S				g	e
W	D1569	20578	S		f			
W	D1569	20613	S				e	b
W	E96	20929	S				e	E
W	E96	21121	S				j	e
W	E96	21211	S					b
W	C468	21318	S		c	f	d	
W	E96	21585	S				d	V
W	D163	21692	S			g	f	
W	C527	22029	S	j		d	E	
W	C468	22155	S	h		f	E	
W	C495	22262	S			g	d	
X	C412	11690	S	j				
X	B292	18625	S					k
X	B86	21444	S	l				
X	B86	21455	S					e
X-Y	D81	146	S	a				
X-Y	D81	391	S		e	l		
X-Y	D81	392	S	d				
X-Y	D728	850	S			e	E	
X-Y	D81	1833	S			e	b	
X-Y	D81	2086	S			h	e	

Appendix 24 cont. Pig: Ageing data: Mandibular tooth eruption and wear

Phase	Context	Bone ID	Species	dP4	P4	M1	M2	M3
X-Y	D81	2293	S		d	j	e	b
X-Y	D81	2294	S			h	d	
X-Y	D81	2371	S		e	m	h	
X-Y	D81	3057	S					a
X-Y	D81	3224	S			e	d	
X-Y	D81	3273	S					a
X-Y	D81	3297	S					f
X-Y	D81	3304	S				e	a
X-Y	D81	3305	S					a
X-Y	D81	5590	S		c	g		
X-Y	D81	5591	S					a
X-Y	D81	6358	S				f	c
X-Y	D81	6601	S		c	h		
X-Y	D81	6602	S			f	d	
X-Y	D81	6790	S				d	V
X-Y	D81	7393	S					b
X-Y	D81	10147	S					e
X-Y	D81	10185	S			h	e	
X-Y	D81	10374	S					a
X-Y	D210	10384	S			a	V	
X-Y	D210	10385	S		b	e	d	
X-Y	D728	10891	S					c
X-Y	D81	11806	S		c	f		
X-Y	D81	11883	S	d				
X-Y	D81	12859	S					c
X-Y	D81	12879	S			h	e	E
X-Y	D81	13636	S			e		
X-Y	D81	13637	S					h
X-Y	C308	13796	S			h	e	a
X-Y	C308	13810	S		c	j		
X-Y	C308	13811	S		c	h		
X-Y	C308	13812	S		c	j	e	
X-Y	C308	13814	S		b			
X-Y	D81	14405	S	m				
X-Y	D81	14847	S	d		E		
X-Y	D210	14855	S				j	d
X-Y	D81	14866	S					E
X-Y	D210	14870	S					j
X-Y	D81	14928	S					a
X-Y	D81	15207	S		b	h	e	
X-Y	D81	15835	S					e
X-Y	D81	16553	S	e		b		
X-Y	D81	16554	S				j	
X-Y	D210	17082	S		d			
X-Y	D210	17083	S			b		
X-Y	D210	17414	S	c				
X-Y	D210	17933	S		g			
X-Y	D210	17945	S				m	j
X-Y	D210	18061	S				h	f
X-Y	D81	18178	S					b
X-Y	D81	18493	S	e				
X-Y	D81	18983	S					E
X-Y	D81	19378	S		c			
X-Y	D81	19379	S					e
X-Y	C306	19879	S	a				
X-Y	D81	20981	S				d	E
X-Y	D81	21002	S		e	j		
X-Y	D81	21003	S		b			
X-Y	D81	21168	S	k		e		
X-Y	D210	21334	S		f			

Appendix 24 cont. Pig: Ageing data: Mandibular tooth eruption and wear

Phase	Context	Bone ID	Species	dP4	P4	M1	M2	M3
X-Y	D210	21335	S					a
X-Y	D210	21370	S				f	a
X-Y	D210	21371	S		b			
X-Y	D81	21966	S		b			
X-Y	D81	22573	S					a
X-Y	D81	22574	S					e
X-Y	D81	22633	S	d		b		
Y	D168	302	S	f		c		
Y	D168	307	S		c	f		
Y	D338	430	S	k		d	E	
Y	D320	433	S				a	
Y	D1282	914	S			f	d	
Y	D1282	915	S	m				
Y	D1143	935	S				g	c
Y	D1143	938	S		d	h		
Y	D705	1084	S	c				
Y	D1332	1099	S		b	d	c	V
Y	D1332	1115	S	c				
Y	D1332	1116	S					f
Y	D1332	1127	S		d			
Y	D928	1208	S			g	d	V
Y	D928	1209	S			f		
Y	A332	1481	S		d	j		
Y	A332	1482	S	d				
Y	D1231	1513	S		e	f		
Y	D762	1558	S		d	l	e	b
Y	D746	1637	S			g	g	
Y	D352	1837	S	l				
Y	D1231	1982	S		d	l		
Y	D1231	1992	S	c				
Y	D352	2542	S				e	b
Y	D340	2595	S			m	h	f
Y	D340	2821	S		c	j	d	
Y	D318	2919	S		d	h	d	
Y	D318	2920	S		d	g		
Y	D340	3013	S			e	d	
Y	D340	3014	S					E
Y	D340	3015	S		d	j		E
Y	D318	3098	S	d		E		
Y	D312	3102	S		d			
Y	D329	3110	S	f				
Y	D1333	3134	S	e		d		
Y	D1333	3153	S	f		e	E	
Y	D1333	3161	S		f			
Y	D312	3326	S		f		m	e
Y	D312	3327	S	d		E		
Y	D320	3337	S					c
Y	D712	3478	S					d
Y	D704	3493	S			f	b	
Y	D712	3501	S	j				
Y	D712	3502	S					a
Y	D313	3516	S	a				
Y	D338	3670	S		b	e	d	
Y	D320	3680	S		b	e	d	
Y	D313	3864	S			k	d	
Y	D714	3884	S				g	d
Y	D340	3955	S			j		
Y	D1231	3994	S			k	f	E
Y	D1231	3995	S			m	k	f
Y	D1231	3996	S				g	f

Appendix 24 cont. Pig: Ageing data: Mandibular tooth eruption and wear

Phase	Context	Bone ID	Species	dP4	P4	M1	M2	M3
Y	D312	4618	S			d	E	
Y	D312	4619	S	d				
Y	D1231	4647	S		b	g	d	
Y	D1231	4648	S					b
Y	D78	4984	S		e	j	h	e
Y	D78	4985	S					j
Y	D168	5128	S	a		V		
Y	D352	5302	S		E	f	b	
Y	D352	5304	S	c				
Y	D168	5323	S				e	a
Y	D908	5424	S		b	g	e	a
Y	B120	5464	S					a
Y	B120	5551	S				e	V
Y	D762	5772	S			k		
Y	D762	5784	S				f	d
Y	D762	5785	S		b			
Y	D762	5786	S			f	d	
Y	D885	5865	S	j				
Y	D338	6019	S		b	f		
Y	C184	6243	S	e		V		
Y	A345	6485	S	l		e	E	
Y	A318	6532	S		f	m		
Y	A318	6534	S					b
Y	D1332	6679	S	b				
Y	A196	6753	S	e				
Y	D340	7113	S		d	f	e	
Y	D352	7125	S	j		c		
Y	D1332	7202	S	b		V		
Y	D1332	7203	S		e			
Y	D1333	7216	S	a				
Y	D1158	7219	S		d			
Y	D1158	7248	S				f	d
Y	D346	7443	S				m	f
Y	D340	7462	S	d				
Y	D1282	7650	S					e
Y	D1282	7651	S			m	j	e
Y	D1282	7656	S	E				
Y	D312	7805	S	c				
Y	D151	7881	S		c	f		V
Y	D1332	7990	S	j		d		
Y	D1332	8000	S		c	j	e	
Y	D1332	8001	S		c	f		
Y	D1332	8010	S	d		b		
Y	D1231	8038	S		d	m	f	
Y	A241	8301	S					a
Y	A241	8302	S			l	g	c
Y	A241	8326	S		b	g		V
Y	D216	8487	S					f
Y	D312	8515	S	k				
Y	D318	9157	S		d	m		
Y	D762	9299	S		c	h	e	
Y	D763	9313	S	j		d	E	
Y	D763	9320	S					a
Y	D705	9403	S				f	c
Y	D713	9415	S		e			
Y	D313	9463	S			h	e	
Y	D313	9464	S		d			
Y	D714	9469	S		f	j	f	
Y	D762	9931	S		b	g	d	
Y	D762	9952	S					d

Appendix 24 cont. Pig: Ageing data: Mandibular tooth eruption and wear

Phase	Context	Bone ID	Species	dP4	P4	M1	M2	M3
Y	D837	10299	S		b	l		
Y	A318	10312	S				m	e
Y	A318	10313	S		d	m	j	f
Y	A318	10314	S		b			
Y	A318	10315	S		f	m	h	
Y	A318	10316	S			m	f	
Y	A318	10318	S	k				
Y	A318	10319	S					b
Y	D329	10419	S				d	b
Y	D329	10522	S	b				
Y	D338	10581	S					b
Y	D340	10624	S	a				
Y	D1333	10739	S					a
Y	D1158	10761	S		e	m	k	
Y	D419	10948	S					a
Y	D1282	11062	S	e				
Y	D762	11283	S		b			
Y	D746	11347	S			j	g	c
Y	D338	11501	S		c			
Y	D340	11516	S	j				
Y	D338	11533	S		c	h	f	
Y	D340	11536	S				d	E
Y	D1231	11606	S		b	j	f	
Y	D1231	11608	S		a			
Y	D1332	11642	S	k		e		
Y	D1332	11649	S	c				
Y	D1158	11662	S		c	f	e	b
Y	D338	11771	S			f	a	
Y	D318	12002	S				f	c
Y	D318	12012	S		f	m	m	
Y	D214	12510	S	g			V	
Y	D216	12558	S					E
Y	D329	12669	S		d	g	e	c
Y	C184	13462	S			f	e	
Y	D329	13764	S		d			
Y	C307	13823	S				f	c
Y	C307	13825	S	E				
Y	D318	14207	S		c	j	f	
Y	D312	14424	S					f
Y	D312	14425	S					f
Y	D214	14882	S					a
Y	D216	14944	S		c	h		
Y	D216	14952	S				g	e
Y	D216	14970	S		f			
Y	D168	15042	S	k		d	E	
Y	D168	15044	S					j
Y	D312	15319	S		g	n	k	
Y	D329	15321	S	f		d		
Y	D1158	15620	S				e	c
Y	D329	16817	S				f	b
Y	D329	17029	S		d	h		
Y	D329	17030	S		f	m	h	h
Y	D312	17054	S			f	c	V
Y	B120	17325	S			d	V	
Y	D214	17422	S				b	
Y	D320	17506	S	k		f		
Y	D329	17631	S	h		e	E	
Y	D318	17986	S		d	j		
Y	D318	18416	S			h	d	V
Y	D219	18721	S		d			

Appendix 24 cont. Pig: Ageing data: Mandibular tooth eruption and wear

Phase	Context	Bone ID	Species	dP4	P4	M1	M2	M3
Y	C409	18899	S		d	h	e	
Y	C409	18900	S	f		b		
Y	C409	18901	S	f		b		
Y	C409	18931	S	k		f		
Y	C409	18932	S	j				
Y	D216	19418	S	c				
Y	D219	19434	S		b	f	e	
Y	D219	19640	S				e	V
Y	B299	19758	S			k	f	b
Y	B299	19763	S		c			
Y	B299	19770	S					b
Y	B299	19771	S	b				
Y	C207	20106	S		f	k	k	k
Y	D168	20273	S		b	g	d	V
Y	D224	20962	S		d	h		
Y	D224	21379	S				d	V
Y	D168	21718	S					c
Y	B321	21843	S		e	g	f	c
Y	D214	21911	S	j				
Y	D214	21957	S					E
Y	C207	22351	S		d	k	f	
Y	B120	23750	S				d	b
Y-Z	C132	53	S					b
Y-Z	C132	68	S					a
Y-Z	C132	80	S				f	a
Y-Z	C132	280	S					a
Y-Z	D116	403	S	a				
Y-Z	E74	689	S	d		b		
Y-Z	D116	736	S	k		c		
Y-Z	D116	751	S	g		c		
Y-Z	D116	752	S				l	h
Y-Z	D116	780	S		d	h	f	
Y-Z	D116	1273	S				d	
Y-Z	E81	1295	S	l		d		
Y-Z	B277	1698	S					b
Y-Z	B277	1773	S			j	e	
Y-Z	D116	4378	S			k	g	
Y-Z	D116	4538	S		b	g	e	
Y-Z	D116	5899	S					a
Y-Z	D116	5933	S					a
Y-Z	C160	6264	S					a
Y-Z	E74	6447	S					a
Y-Z	D116	7265	SUS?					c
Y-Z	D116	7293	S				c	
Y-Z	E74	7552	S		e	k	e	
Y-Z	E74	8274	S	g		c		
Y-Z	C160	8691	S	g		d	E	
Y-Z	C160	8698	S	f		d		
Y-Z	D116	8826	S		b	m	e	b
Y-Z	D116	8827	S				d	V
Y-Z	D116	8943	S					f
Y-Z	D116	8991	S				f	b
Y-Z	D116	8997	S			f	b	
Y-Z	D116	9041	S			d	V	
Y-Z	E74	9178	S				d	V
Y-Z	B277	9535	S					a
Y-Z	E249	9861	S		d			
Y-Z	E74	10706	S					c
Y-Z	E74	11962	S	h				
Y-Z	E74	11963	S		f			

Appendix 24 cont. Pig: Ageing data: Mandibular tooth eruption and wear

Phase	Context	Bone ID	Species	dP4	P4	M1	M2	M3
Y-Z	D116	12056	S			j	f	
Y-Z	D116	12057	S					a
Y-Z	B277	12238	S		c			
Y-Z	B277	12239	S			g	e	b
Y-Z	B277	12240	S			f		
Y-Z	B277	12630	S		c			
Y-Z	B277	12836	SUS?					f
Y-Z	C268	13031	S		e	m	h	d
Y-Z	B277	13054	S		g	n	m	
Y-Z	B277	13055	S	h				
Y-Z	B277	13079	S		E	h	b	
Y-Z	C268	13697	S			h	e	
Y-Z	B277	13724	S		d	h	f	
Y-Z	B277	13725	S					E
Y-Z	B277	14035	S				e	
Y-Z	B277	14052	S	f		d	V	
Y-Z	D116	15540	S				e	E
Y-Z	B277	15570	S		f	m	l	
Y-Z	B277	15571	S		d	j	f	
Y-Z	B277	15572	S					d
Y-Z	B277	15609	S			d	E	V
Y-Z	B277	15610	S		d	f		
Y-Z	E74	15770	S		d	f	d	
Y-Z	E74	15772	S	f				
Y-Z	C187	16382	S	f		d	V	
Y-Z	C267	16975	S	j		d	E	
Y-Z	C267	16976	S					E
Y-Z	C267	16977	S			h	d	
Y-Z	C267	16978	S			f	e	
Y-Z	C267	16979	S				E	
Y-Z	C267	16980	S					a
Y-Z	E74	16994	S			f	d	
Y-Z	E74	17000	S					E
Y-Z	E74	17019	S				g	d
Y-Z	D116	17356	S			d		
Y-Z	D116	17425	S					a
Y-Z	C187	17899	S	k		e	E	
Y-Z	C187	17900	S				g	a
Y-Z	D233	18008	S			j	e	a
Y-Z	D233	18009	S					a
Y-Z	D116	18028	S	f				
Y-Z	C240	18213	S			j	d	V
Y-Z	D116	18300	S			f	f	d
Y-Z	D116	18472	S		e	j		
Y-Z	E74	18618	S			j	f	
Y-Z	B277	18649	S					e
Y-Z	B277	18663	S		e		f	
Y-Z	D116	18756	S		c			
Y-Z	D116	19647	S			j	e	
Y-Z	D116	19654	S				h	e
Y-Z	D116	19661	S		e	m	h	c
Y-Z	C144	20110	S			k		
Y-Z	C268	20145	S		c		d	E
Y-Z	E74	20298	S					g
Y-Z	E74	20299	S		f			
Y-Z	C187	20497	S			k	f	
Y-Z	C187	20515	S		d			
Y-Z	B277	20715	S		d			
Y-Z	C240	20738	S	k				
Y-Z	C187	21011	S	f		d	e	

Appendix 24 cont. Pig: Ageing data: Mandibular tooth eruption and wear

Phase	Context	Bone ID	Species	dP4	P4	M1	M2	M3
Y-Z	C240	21055	S		c	g	f	E
Y-Z	C240	21056	SUS?				g	e
Y-Z	C240	21057	S		b	g	e	V
Y-Z	C240	21058	S					e
Y-Z	D116	21490	S		c	g	f	
Y-Z	D116	21500	S	k		d	V	
Y-Z	D116	21501	S	d		V		
Y-Z	D233	21505	S				m	e
Y-Z	D116	21699	S		b			
Y-Z	D116	21907	S	k		d	E	
Y-Z	D116	22101	S		c	g		
Y-Z	D116	22102	S		f	m	j	f
Y-Z	C231	22193	S	b				
Y-Z	E74	22323	S			f	d	
Y-Z	E74	22327	S	f		d		
Y-Z	C187	22396	S		b	f	e	
Y-Z	D116	22652	S		c	g	d	
Y-Z	D116	22653	S			f	e	
Y-Z	D116	23411	S		e	l	g	e
Y-Z	D116	23412	S					c
Y-Z	C187	23636	S		b		g	
Y-Z	C187	23670	S	d				
Y-Z	C131	23724	S				e	a
Y-Z	C131	23725	S	k		e		
Y-Z	C131	23726	S	c		V		
Z	D100	32	S		c	g	e	
Z	D100	33	S	j		c		
Z	D100	34	S				a	
Z	D100	43	S		a	f	b	
Z	D372	168	S					E
Z	D372	179	S	j		d		
Z	C78	267	S		d			
Z	D100	293	S			f	E	
Z	D100	294	S			k	h	E
Z	D100	305	S	h				
Z	D331	342	S	a				
Z	D331	452	S			d	c	
Z	D332	485	S					a
Z	D331	505	S				b	
Z	D330	513	S					a
Z	D100	524	S			e	e	
Z	D100	555	S		b			
Z	D372	639	S			l		
Z	D331	658	S	d				
Z	D372	660	S	a				
Z	D310	725	S					g
Z	D466	1045	S			k	h	
Z	D305	1239	S				f	
Z	D103	1646	S				j	f
Z	D103	1672	S				f	d
Z	D100	1693	S			g	e	d
Z	E172	1866	S					d
Z	E172	1898	S		d			
Z	D473	1955	S			e	d	
Z	B150	2167	S	f				
Z	B150	2196	S		c	h	d	
Z	D229	2331	S	a				
Z	D283	2492	S		e	j	e	
Z	D310	2501	S		d	f	e	
Z	D310	2515	S		b		c	E

Appendix 24 cont. Pig: Ageing data: Mandibular tooth eruption and wear

Phase	Context	Bone ID	Species	dP4	P4	M1	M2	M3
Z	D372	2586	S		c	g	e	b
Z	D372	2587	S			f	c	
Z	E85	2645	S					a
Z	D100	2681	S			j	d	
Z	D100	2692	S		e			
Z	D306	2764	S			d	E	
Z	D305	2959	S	d		a		
Z	D332	3236	S		c	f	e	
Z	D283	3262	S					b
Z	D100	3593	S	a				
Z	B136	3622	S				e	b
Z	D283	3731	S					b
Z	D283	3757	S			d		
Z	D331	3781	S				e	b
Z	D332	3793	S			h	e	
Z	D344	3800	S	a				
Z	D332	3942	S			k	f	
Z	D332	3943	S				h	c
Z	D332	3944	S	c				
Z	D306	4025	S	h		d	E	
Z	D306	4026	S					a
Z	D306	4038	S			j	e	b
Z	D306	4039	S			e	c	
Z	D283	4100	S					c
Z	B99	4325	S	b				
Z	B170	4339	S					f
Z	C191	4411	S					d
Z	C191	4412	S					d
Z	C191	4413	S				e	E
Z	C191	4414	S	k		e	d	
Z	D100	4436	S		d	f	f	c
Z	D100	4445	S					a
Z	D100	4455	S				k	f
Z	D283	4500	S					c
Z	D283	4517	S	d		V		
Z	D332	4632	S	f				
Z	D332	4633	S					a
Z	C76	4672	S		b	f	d	E
Z	C78	4715	S			h	e	a
Z	C78	4716	S	f		c	V	
Z	C78	4717	S	f		a		
Z	C78	4718	S				m	
Z	D100	4744	S				E	V
Z	D100	4745	S		f	n		
Z	D100	4755	S		b			
Z	D100	4756	S		b			
Z	D100	4789	S		d	h	e	
Z	C76	4811	S	c				
Z	C76	4836	S				e	a
Z	D100	4907	S	f		d		
Z	C76	4944	S					f
Z	C76	4966	S		d			
Z	C76	4999	S	c		V		
Z	C78	5027	S					b
Z	D100	5119	S		d	j	e	a
Z	D100	5120	S					E
Z	C78	5209	S					d
Z	C78	5210	S					c
Z	C78	5220	S			h	e	
Z	E172	5257	S			g	e	d

Appendix 24 cont. Pig: Ageing data: Mandibular tooth eruption and wear

Phase	Context	Bone ID	Species	dP4	P4	M1	M2	M3
Z	D332	5316	S					b
Z	C94	5365	S			f	e	E
Z	C78	5380	S			f	d	b
Z	C78	5381	S			g	e	
Z	C76	5447	S					b
Z	C78	5502	S	h		a		
Z	C76	5508	S		b	h		
Z	B186	5559	S					c
Z	D100	5572	S					e
Z	D100	5602	S		d			
Z	D100	5681	S					c
Z	D108	5717	S			j	e	
Z	D106	5994	S				m	j
Z	D106	5995	S	d				
Z	D307	6050	S			m		
Z	D332	6119	S		d	k		
Z	D100	6138	S				e	b
Z	D100	6145	S		b	h	f	
Z	E85	6155	S				e	b
Z	D100	6190	S	g				
Z	C191	6232	S		c	f		
Z	D283	6336	S					a
Z	D108	6346	S	k				
Z	D283	6368	S				d	b
Z	C101	6379	S		b	f	e	V
Z	D100	6402	S					a
Z	D100	6434	S	h		d	E	
Z	D100	6435	S				f	
Z	D100	6436	S		b	f	d	
Z	D310	6594	S					E
Z	D100	6622	S		f			
Z	D100	6627	S	a				
Z	D100	6832	S					c
Z	D100	6842	S		f	n	j	e
Z	D100	6862	S		e			
Z	D100	6863	S					E
Z	D372	7157	S			m	g	
Z	D372	7158	S					E
Z	D372	7312	S		d	k		
Z	B80	7417	S			m	f	
Z	D332	7482	S		d			
Z	D332	7483	S					c
Z	D331	7627	S			d	b	
Z	C188	7733	S	k		f	b	
Z	E172	7851	S	f		d		
Z	D100	7899	S				d	a
Z	D100	7900	S					b
Z	D100	7975	S	f				
Z	C78	8052	S	k		d		
Z	C78	8066	S			f	e	
Z	C78	8067	S					b
Z	C76	8089	S		b	f		
Z	C76	8090	S		f	l		
Z	C78	8133	S	d		g	f	
Z	C78	8170	S		e			
Z	C80	8177	S	k				
Z	C80	8178	S				d	b
Z	C80	8179	S	b				
Z	D283	8249	S			h	f	
Z	D283	8250	S		f	m		

Appendix 24 cont. Pig: Ageing data: Mandibular tooth eruption and wear

Phase	Context	Bone ID	Species	dP4	P4	M1	M2	M3
Z	D108	8257	S		e	j	f	
Z	D306	8539	S					b
Z	D283	8559	S				c	V
Z	D283	8578	S			e	E	
Z	D108	8582	S	j				
Z	D148	8710	S		b	f		
Z	D100	9345	S		c	j		
Z	D100	9364	S					c
Z	D100	9380	S	f		c		
Z	D100	9392	S	m				
Z	D372	9585	S		e	m	h	c
Z	D372	9595	S					a
Z	D330	9600	S				e	d
Z	D104	9712	S					b
Z	D104	9714	S		d			
Z	C188	9735	S		b	g	d	
Z	D283	9770	S		e	h	e	
Z	D466	9947	S	d				
Z	B147	10005	S		d	k		
Z	B147	10017	S					E
Z	D100	10077	S		d			
Z	D100	10078	S		f			
Z	D100	10097	S		b	f		
Z	D100	10098	S			g	d	
Z	D100	10113	S	d		V		
Z	D310	10154	S			f	b	
Z	D310	10155	S					a
Z	D107	10159	S	a				
Z	D108	10173	S					d
Z	D108	10178	S	a				
Z	E185	10247	S				g	c
Z	E185	10254	S	e		d		
Z	D310	10448	S		c			
Z	D108	10517	S					a
Z	D283	10546	S		e	j		
Z	D332	10617	S	g				
Z	E172	10660	S			f	d	
Z	D466	10800	S					a
Z	D372	10967	S				f	b
Z	D372	10981	S		f	l	h	e
Z	D372	11003	S			d	a	
Z	E185	11253	S		c	g		
Z	D100	11385	S				f	d
Z	D108	11397	S	j		b		
Z	D307	11401	S					a
Z	E185	11476	S	a				
Z	D310	11563	S		d			
Z	D310	11564	S				e	c
Z	D106	11756	S				f	a
Z	C78	11845	S		b	d		
Z	C78	11862	S	g		d	E	
Z	C78	11874	S	h				
Z	D283	11897	S		f			
Z	D305	12018	S			f	e	
Z	D100	12339	S				e	E
Z	D283	12367	S			h	f	b
Z	D283	12368	S					d
Z	D283	12369	S					f
Z	D100	12396	S		c			
Z	D283	12417	S		b	h		

Appendix 24 cont. Pig: Ageing data: Mandibular tooth eruption and wear

Phase	Context	Bone ID	Species	dP4	P4	M1	M2	M3
Z	D283	12417	S		b	h		
Z	D283	12430	S					V
Z	D283	12451	S	d		E		
Z	D283	12452	S		b	j	d	
Z	D100	12525	S					k
Z	D330	12676	S					f
Z	D100	12772	S		c	h	e	b
Z	E172	12847	SUS?					e
Z	D100	12991	S		c	h	e	
Z	D100	13185	S	j				
Z	D100	13207	S			m	k	e
Z	D100	13208	S				m	h
Z	D283	13238	S					c
Z	E172	13868	S		d			
Z	E172	13930	S					e
Z	E172	13952	S				e	a
Z	D283	14368	S		f			
Z	D283	14371	S					e
Z	D100	14385	S					c
Z	D108	14434	S		c	f	e	b
Z	D108	14443	S		c			
Z	D283	14556	S	m		e		
Z	D283	14557	S		d	j	f	
Z	D283	14569	S					E
Z	D85	14754	S				m	g
Z	D100	14989	S					e
Z	D100	15006	S				k	e
Z	D100	15016	S				h	d
Z	D100	15022	S		c			
Z	D100	15346	S			h	f	
Z	D100	15347	S	f		d		
Z	D100	15348	S			d	V	
Z	D108	15359	S	j		f		
Z	D100	15429	S			j	f	e
Z	D100	15445	S	h		d	e	
Z	D100	15446	S	f			V	
Z	D108	15898	S		e			
Z	D108	15899	S	d		a		
Z	D108	15974	S			f		
Z	D108	15975	S	c				
Z	D100	16081	S	d				
Z	D100	16082	S					a
Z	E172	16308	S				d	
Z	D283	16681	S		d	h	e	
Z	D283	16689	S					f
Z	D283	16694	S				h	d
Z	D317	16803	S		c	f	d	
Z	D283	16831	S		d			
Z	D283	16838	S			k	f	a
Z	D108	16886	S		e	h	f	b
Z	D108	16898	S			e	E	
Z	D108	16899	S				f	b
Z	D310	16904	S	j				
Z	D100	16946	S	d				
Z	D108	17151	S				f	b
Z	D100	17193	S	f				
Z	D100	17194	S	b				
Z	D100	17195	S				b	
Z	D100	17217	S				h	d
Z	D100	17233	S		e	j		

Appendix 24 cont. Pig: Ageing data: Mandibular tooth eruption and wear

Phase	Context	Bone ID	Species	dP4	P4	M1	M2	M3
Z	D100	17540	S		c	h	e	V
Z	D108	17693	S		d			
Z	D283	17826	S					c
Z	D306	17831	S	m		f	E	
Z	D100	18073	S	b		V		
Z	D283	18107	S				d	V
Z	D283	18108	S		c			
Z	D393	18161	S		e	m		
Z	D372	18168	S					e
Z	D372	18176	S			h	f	
Z	D100	18501	S		e	j		
Z	D100	18502	S					f
Z	D100	18510	S		f	m	f	d
Z	D100	18522	S		f			
Z	D100	18523	S			j	d	
Z	D100	18524	S		c	h	e	
Z	D100	18561	S	d			V	
Z	C78	18739	S		f			
Z	C78	18740	S		d	g		
Z	D148	19386	S	f		e		
Z	C188	19721	S	d				
Z	D100	19830	S		c			
Z	D100	19839	S		c			
Z	D100	19840	S		d	h		
Z	D100	19843	S		c	j	d	
Z	D100	19844	S			h	d	
Z	D107	19849	S		d	h	e	
Z	D108	19898	S		e	k	h	
Z	D100	19905	S		c	h	d	
Z	D100	20195	S		b	g		
Z	D100	20206	S				f	e
Z	D283	20219	S					a
Z	D283	20232	S	k		d		
Z	D283	20233	S	f		d		
Z	D283	20244	S		g			
Z	C188	20363	S					a
Z	D100	20823	S			h	d	
Z	D108	20989	S	k		d	V	
Z	D108	20990	S			j	f	
Z	D108	20991	S					e
Z	D108	20993	S			g	d	
Z	D100	21251	S					c
Z	D100	21252	S		b	g	d	
Z	D100	21535	S			m	h	
Z	D283	21623	S	f				
Z	D283	21635	S		E	f	c	
Z	D100	21735	S	j				
Z	D283	21987	S					E
Z	D283	21993	S		g	n	j	
Z	D283	22002	S					e
Z	D103	22069	S		b	g	d	E
Z	D103	22070	S			E		
Z	D283	22085	S	d		a		
Z	D283	22086	S		f	e	a	
Z	D283	22087	S				e	V
Z	C88	22369	S	b				
Z	C113	22375	S					c
Z	D100	22416	S		b	h		
Z	D100	22417	S					E
Z	D100	22424	S		c			

Appendix 24 cont. Pig: Ageing data: Mandibular tooth eruption and wear

Phase	Context	Bone ID	Species	dP4	P4	M1	M2	M3
Z	D100	22426	S		d			
Z	D100	22439	S					d
Z	D100	22440	S					E
Z	D100	22472	S		c			
Z	D108	22483	S	j		d		
Z	D108	22665	S		c			
Z	D108	22667	S		E	e		
Z	D108	22669	S		b			
Z	C89	22716	S		f			
Z	D100	22743	S			m	k	
Z	D100	22797	S	e				
Z	E100	22877	S				g	c
Z	D100	22929	S			f	b	
Z	D305	22959	S	h		d		
Z	D283	22973	S		c	j	e	c
Z	D104	23225	S		b	g	e	
Z	D100	23318	S			e	d	E
Z	D100	23319	S	j		d	a	
Z	D100	23335	S			h	e	V
Z	D100	23356	S					a
Z	D100	23364	S					b
Z	D100	23422	S		c	j		
Z	D100	23490	S			h		a
Z	D100	23491	S				g	e
Z	D100	23492	S	d		b		
Z	C88	23503	S		c			
Z	E85	23516	S					c
Z	E85	23517	S					a
Z	D100	23545	S					a
Z	D100	23549	S	d				
Z	D100	23592	S	f		d		
Z	C78	23603	S	f		c	V	
Z	C78	23623	S					E
Z	D100	23662	S		c	j	g	
Z	D100	23684	S	d				
Z	C76	23709	S	b				
Z	C78	23736	S	c				
Z	C78	23737	S		f			

Appendix 24 cont. Pig: Ageing data: Mandibular tooth eruption and wear

Phase	Context	Bone ID	Taxa	L	WP
T-V	B618	7052	S	19.3	8.0
V	D1215	1546	S	18.0	8.4
W	D1591	138	S	19.7	8.2
W	D743	1055	S	19.4	8.5
W	D343	4068	S		8.0
W	D163	7296	S	18.3	8.2
W	D163	8959	S	20.1	8.6
W	D343	9103	S	19.2	8.3
W	D931	10807	S		7.5
W	D840	11146	S		8.4
W	D2301	12334	S	18.8	7.7
W	D335	15295	S		8.4
W	E96	15484	S		7.7
W	E96	15505	S		8.0
W	E96	16373	S		8.9
W	D2391	16419	S		9.0
W	B306	17731	S		8.8
W	D334	18289	S	20.2	
W	C527	19604	S	19.0	8.0
W	C527	22029	S		7.9
W	C468	22155	S		8.1
X	C412	11690	S		7.9
X-Y	D81	146	S	19.4	8.6
X-Y	D81	392	S	19.6	8.7
X-Y	D81	11883	S	18.3	8.1
X-Y	D81	14847	S	20.0	8.2
X-Y	D81	16553	S	18.2	8.3
X-Y	D210	17414	S	20.0	9.0
X-Y	D81	21168	S		8.4
X-Y	D81	22633	S		8.6
Y	D168	302	S	19.3	8.6
Y	D338	430	S	18.1	8.3
Y	D705	1084	S	18.6	7.2
Y	D1332	1115	S	19.1	8.2

Appendix 25. Pig: Biometry: Fourth deciduous premolar measurements

Phase	Context	Bone ID	Taxa	L	WP
Y	A332	1482	S	19.2	8.2
Y	D352	1837	S	16.5	8.2
Y	D1231	1992	S	18.6	7.9
Y	D318	3098	S	18.2	7.8
Y	D329	3110	S	20.8	9.0
Y	D1333	3134	S	19.9	9.2
Y	D1333	3153	S	18.9	9.0
Y	D312	3327	S	20.4	9.1
Y	D712	3501	S	18.5	7.7
Y	D313	3516	S	18.9	8.5
Y	D312	4619	S	20.7	8.6
Y	D168	5128	S	20.0	8.9
Y	D352	5304	S	19.7	8.4
Y	D885	5865	S	18.6	8.4
Y	C184	6243	S	19.1	8.2
Y	A345	6485	S	16.5	7.9
Y	D1332	6679	S	19.6	9.1
Y	A196	6753	S	18.3	7.8
Y	D352	7125	S	18.7	8.5
Y	D1332	7202	S	19.5	8.2
Y	D1333	7216	S	20.3	
Y	D340	7462	S	19.6	8.8
Y	D312	7805	S		8.6
Y	D1332	8010	S	19.3	8.0
Y	D763	9313	S		8.3
Y	A318	10318	S		8.4
Y	D329	10522	S		9.0
Y	D340	10624	S		8.6
Y	D1282	11062	S		7.9
Y	D340	11516	S		8.3
Y	D1332	11642	S		8.8
Y	D1332	11649	S	19.7	8.4
Y	D214	12510	S	18.9	8.3
Y	C307	13825	S	21.4	
Y	D168	15042	S		8.3
Y	D329	15321	S		8.6
Y	D320	17506	S		8.1
Y	D329	17631	S		8.8
Y	C409	18900	S		7.8
Y	C409	18901	S		8.1
Y	C409	18932	S		8.5
Y	D216	19418	S	17.9	7.6
Y	B299	19771	S	20.4	
Y-Z	D116	403	S	20.0	8.9
Y-Z	D116	736	S	18.2	8.2
Y-Z	D116	751	S		9.0
Y-Z	E74	8274	S	19.0	8.7
Y-Z	E74	11962	S		8.7
Y-Z	B277	14052	S		8.3
Y-Z	E74	15772	S		8.4
Y-Z	C187	16382	S	18.3	8.1
Y-Z	C267	16975	S		7.6
Y-Z	C187	17899	S		8.8
Y-Z	D116	18028	S		8.2
Y-Z	C240	20738	S		7.7
Y-Z	C187	21011	S		8.1
Y-Z	D116	21500	S		8.4
Y-Z	D116	21501	S	18.9	8.7
Y-Z	D116	21907	S		8.4
Y-Z	C231	22193	S	20.4	8.9

Phase	Context	Bone ID	Taxa	L	WP
Y-Z	E74	22327	S		8.6
Y-Z	C187	23670	S	18.5	8.6
Y-Z	C131	23725	S		8.0
Y-Z	C131	23726	S	17.9	8.3
Z	D100	33	S	18.5	8.3
Z	D372	179	S	17.6	8.6
Z	D100	305	S	17.2	7.9
Z	D331	342	S	20.4	8.2
Z	D331	658	S	19.3	8.2
Z	D372	660	S	19.2	8.1
Z	B150	2167	S	20.0	9.4
Z	D229	2331	S	20.2	8.6
Z	D305	2959	S	19.0	8.4
Z	D344	3800	S	19.6	8.0
Z	D332	3944	S	19.5	8.0
Z	B99	4325	S	20.0	8.2
Z	C191	4414	S		8.3
Z	D283	4517	S	19.5	8.4
Z	D332	4632	S	21.4	9.6
Z	C78	4716	S	17.9	7.8
Z	C78	4717	S	19.0	8.7
Z	C76	4811	S	20.0	8.7
Z	D100	4907	S	19.3	9.1
Z	C76	4999	S	18.1	7.5
Z	C78	5502	S	18.7	8.4
Z	D106	5995	S	18.9	8.0
Z	D100	6190	S	18.9	8.5
Z	D108	6346	S		8.1
Z	D100	6434	S	18.0	8.4
Z	D100	6627	S	18.7	8.2
Z	C78	8052	S		8.4
Z	C78	8133	S	19.9	8.7
Z	C80	8177	S		8.9
Z	C80	8179	S	18.8	
Z	D100	9380	S	18.9	8.4
Z	D466	9947	S	18.1	8.0
Z	D100	10113	S	19.3	8.5
Z	D107	10159	S	18.5	8.5
Z	D108	10178	S	20.4	
Z	E185	10254	S	19.2	8.9
Z	D332	10617	S		8.5
Z	D108	11397	S		8.2
Z	E185	11476	S	19.8	8.6
Z	C78	11862	S		8.0
Z	D283	12451	S	20.9	9.0
Z	D100	15347	S		8.5
Z	D108	15359	S		8.5
Z	D100	15446	S		8.3
Z	D108	15899	S		8.4
Z	D108	15975	S		8.2
Z	D100	16081	S	19.1	7.9
Z	D310	16904	S		8.8
Z	D100	16946	S	19.6	8.2
Z	D100	17193	S		8.1
Z	D100	17194	S	21.0	8.8
Z	D100	18073	S	19.2	8.2
Z	D100	18561	S	19.9	8.7
Z	D148	19386	S		8.9
Z	C188	19721	S	19.5	8.3
Z	D283	20232	S		8.9

Appendix 25 cont. Pig: Biometry: Fourth deciduous premolar measurements

Phase	Context	Bone ID	Taxa	L	WP
Z	D283	20233	S		8.2
Z	D108	20989	S		8.3
Z	D283	21623	S		7.9
Z	D100	21735	S		8.6
Z	D283	22085	S	20.3	8.6
Z	C88	22369	S	19.7	8.1
Z	D108	22483	S		9.0
Z	C89	22716	S		8.4
Z	D100	22797	S	20.3	8.4
Z	D100	23319	S		8.7
Z	D100	23492	S	19.8	8.5
Z	D100	23549	S	21.1	8.9
Z	D100	23592	S		8.4
Z	C78	23603	S		9.1
Z	D100	23684	S	19.9	8.8
Z	C76	23709	S	20.1	8.2
Z	C78	23736	S	20.8	9.6

Appendix 25 cont. Pig: Biometry: Fourth deciduous premolar measurements

Phase	Context	Bone ID	Taxa	WA	WP
W	C536	214	S	9.3	10.2
W	D1132	3200	S	9.3	10.3
W	C417	3411	S	10.0	10.5
W	C417	3413	S	10.0	10.9
W	D343	4068	S	9.6	10.2
W	D757	5807	S	9.8	10.4
W	D163	5893	S	10.2	11.2
W	D343	9525	S	10.0	10.9
W	D907	10302	S	9.8	10.4
W	D252	11036	S	9.6	10.4
W	D840	11146	S	10.1	11.1
W	D1569	13373	S	9.9	11.1
W	D1834	13554	S	13.2	13.2
W	D335	13586	S	9.0	9.5
W	B521	14092	S	11.1	11.2
W	D1569	14286	S	10.5	11.8
W	E96	15109	S	10.2	10.9
W	E96	15134	S	9.7	10.4
W	D335	15294	S	10.0	
W	E96	15484	S	8.9	10.1
W	E96	15499	S	9.8	10.3
W	B521	15708	S	10.1	10.6
W	E96	16181	S	8.9	10.0
W	B306	17731	S	10.6	11.1
W	C527	19604	S	8.8	9.6
W	E96	19976	S	10.0	10.7
W	E96	20010	S	9.2	9.7
W	C468	21318	S	8.8	9.5
W	C527	22029	S	9.2	9.9
W	C468	22155	S	9.8	9.9
X-Y	D728	850	S	9.9	10.4
X-Y	D81	1833	S	9.2	9.8
X-Y	D81	2086	S	9.8	11.1
X-Y	D81	2293	S	9.4	10.0
X-Y	D81	2294	S	10.0	10.6
X-Y	D81	3224	S	10.3	10.7
X-Y	D81	3226	S	9.9	11.3
X-Y	D81	3304	S	12.9	13.5
X-Y	D81	5590	S	9.5	10.4

Phase	Context	Bone ID	Taxa	WA	WP
X-Y	D81	6601	S	10.5	10.6
X-Y	D81	6602	S	10.0	10.6
X-Y	D210	10385	S	10.2	11.1
X-Y	D81	13636	S	10.2	10.7
X-Y	C308	13796	S	9.7	10.8
X-Y	C308	13811	S	9.6	10.5
X-Y	D81	14847	S	9.5	
X-Y	D81	15207	S	10.9	11.5
X-Y	D81	16553	S	9.9	10.4
X-Y	D210	17083	S	9.4	10.2
X-Y	D81	21002	S	10.2	10.5
X-Y	D81	21168	S	10.4	10.9
Y	D168	302	S	10.1	10.9
Y	D168	307	S	9.5	10.0
Y	D338	430	S	10.3	11.1
Y	D1282	914	S	10.4	10.8
Y	D1143	938	S	11.0	11.7
Y	D1332	1099	S	10.3	10.9
Y	D928	1208	S	10.0	
Y	D928	1209	S	9.9	10.2
Y	A332	1481	S	9.6	10.6
Y	D1231	1513	S	10.4	11.0
Y	D340	2821	S	9.4	10.0
Y	D318	2919	S	9.2	10.4
Y	D318	2920	S	10.1	10.4
Y	D340	3013	S	10.6	11.7
Y	D1333	3134	S	10.0	11.0
Y	D1333	3153	S	10.0	10.8
Y	D704	3493	S	10.0	10.5
Y	D338	3670	S	9.9	11.0
Y	D320	3680	S	9.8	10.9
Y	D313	3864	S	9.2	10.0
Y	D312	4618	S	9.5	9.7
Y	D1231	4647	S	10.5	11.1
Y	D78	4984	S	10.0	11.1
Y	D352	5302	S	10.0	10.7
Y	D168	5324	S	10.4	10.6
Y	D762	5772	S	9.4	10.0
Y	D338	6019	S	10.4	11.6

Appendix 26. Pig: Biometry: First molar measurements

Phase	Context	Bone ID	Taxa	WA	WP
Y	A345	6485	S	9.2	10.3
Y	D340	7113	S	9.8	10.0
Y	D352	7125	S	9.8	10.8
Y	D151	7881	S	9.8	10.2
Y	D1332	7990	S	10.0	11.1
Y	D1332	8000	S	9.5	10.1
Y	D1332	8001	S	10.5	10.5
Y	A041	8326	S	10.5	11.0
Y	D762	9299	S	9.1	9.6
Y	D763	9313	S	9.9	10.4
Y	D714	9469	S	9.9	10.9
Y	D762	9931	S	9.5	9.9
Y	D837	10299	S	10.1	11.1
Y	D338	11533	S	9.1	10.0
Y	D1231	11606	S	8.9	9.5
Y	D1332	11642	S	10.2	10.7
Y	D338	11771	S	9.3	10.8
Y	D318	12012	S	9.8	
Y	D329	12669	S	10.3	11.1
Y	C184	13462	S	10.8	11.5
Y	D318	14207	S	9.2	10.1
Y	D216	14944	S	9.6	10.6
Y	D168	15042	S	9.6	
Y	D329	15321	S	9.8	10.5
Y	D312	17054	S	10.2	11.4
Y	B120	17325	S	8.8	9.3
Y	D320	17506	S	9.4	10.1
Y	D329	17631	S	10.7	10.9
Y	C409	18899	S	9.3	10.2
Y	C409	18900	S	9.8	10.4
Y	C409	18901	S	10.0	10.5
Y	C409	18931	S	10.3	11.0
Y	D219	19434	S	10.0	10.9
Y	B299	19758	S	9.8	10.4
Y	D168	20273	S	10.0	
Y	D224	20962	S	9.0	9.7
Y	B321	21843	S	10.2	10.5
Y	C207	22351	S	9.6	10.2
Y-Z	C132	80	S	13.4	13.7
Y-Z	D116	736	S	9.7	10.6
Y-Z	D116	751	S	10.7	11.3
Y-Z	D116	780	S	9.9	11.0
Y-Z	E81	1295	S	10.8	10.9
Y-Z	D116	4538	S	9.9	10.2
Y-Z	E74	7552	S	9.8	10.5
Y-Z	E74	8274	S	9.7	10.4
Y-Z	C160	8691	S	10.3	11.2
Y-Z	C160	8698	S	10.1	10.8
Y-Z	D116	9041	S	9.7	10.5
Y-Z	D116	12056	S	10.7	11.0
Y-Z	B277	12239	S	9.0	10.1
Y-Z	B277	12240	S	10.3	10.8
Y-Z	B277	13079	S	10.9	11.5
Y-Z	C268	13697	S	10.3	11.2
Y-Z	B277	14052	S	9.8	10.6
Y-Z	B277	15571	S		10.7
Y-Z	B277	15609	S	9.8	10.7
Y-Z	B277	15610	S	10.4	11.1
Y-Z	E74	15770	S	10.8	10.9
Y-Z	C187	16382	S	9.5	10.3
Y-Z	C267	16975	S	9.1	
Y-Z	C267	16977	S	9.6	10.9
Y-Z	C267	16978	S	9.0	10.1
Y-Z	E74	16994	S	9.4	10.0
Y-Z	D116	17356	S	9.0	9.9
Y-Z	C187	17899	S	10.0	11.0
Y-Z	D233	18008	S	9.0	10.2
Y-Z	C240	18213	S	12.7	12.8
Y-Z	D116	18300	S	9.8	9.9
Y-Z	C187	20497	S	9.2	10.2
Y-Z	C187	21011	S	9.2	10.6
Y-Z	C240	21055	S	9.5	10.3
Y-Z	C240	21057	S	9.9	10.7
Y-Z	D116	21490	S	10.1	11.2
Y-Z	D116	21500	S	10.4	11.0
Y-Z	D116	21907	S	9.7	10.4
Y-Z	D116	22101	S	10.1	10.8
Y-Z	E74	22327	S	10.2	10.9
Y-Z	C187	22396	S	9.9	10.8
Y-Z	D116	22652	S	9.8	10.6
Y-Z	D116	22653	S	10.1	11.0
Y-Z	D116	23411	S	9.6	10.3
Y-Z	C187	23636	S	9.4	10.3
Y-Z	C131	23725	S	9.9	10.6
Z	D100	32	S	10.9	11.8
Z	D100	33	S	10.2	11.1
Z	D100	43	S	11.1	11.9
Z	D100	294	S	10.8	11.1
Z	D331	452	S	10.6	10.9
Z	D100	524	S	11.0	12.1
Z	D0466	1045	S	9.7	10.0
Z	D473	1955	S	9.4	10.5
Z	B150	2196	S	10.6	11.3
Z	D283	2492	S	10.8	11.0
Z	D310	2501	S	9.8	10.6
Z	D372	2586	S	10.1	10.7
Z	D372	2587	S	10.7	11.4
Z	D100	2681	S	8.2	9.6
Z	D306	2764	S	9.1	9.6
Z	D305	2959	S	10.2	10.6
Z	D283	3757	S	9.6	10.3
Z	D332	3793	S	10.0	10.5
Z	D306	4038	S	8.6	9.5
Z	D306	4039	S	10.1	11.0
Z	C191	4414	S	9.8	10.0
Z	D100	4436	S	9.8	10.0
Z	C78	4715	S	9.8	10.3
Z	C78	4716	S	9.7	10.5
Z	D100	4789	S	10.2	11.1
Z	D100	4907	S	11.0	11.1
Z	D100	5119	S	10.7	11.5
Z	C78	5220	S	10.0	10.6
Z	E172	5257	S	10.9	11.6
Z	C94	5365	S	9.9	10.9
Z	C78	5380	S	9.7	10.8
Z	C78	5381	S	10.7	11.2
Z	C78	5502	S	9.8	10.4
Z	C76	5508	S	9.5	10.1
Z	D332	6119	S	9.7	10.3
Z	D100	6145	S	9.9	10.5

Appendix 26 cont. Pig: Biometry: First molar measurements

Phase	Context	Bone ID	Taxa	WA	WP
Z	C191	6232	S	9.1	9.8
Z	C101	6379	S	9.1	10.1
Z	D100	6434	S	9.6	10.8
Z	D100	6436	S	10.2	11.0
Z	D372	7312	S	11.2	12.2
Z	D331	7627	S	9.9	10.8
Z	C188	7733	S	9.9	10.8
Z	C78	8052	S	9.7	10.5
Z	C78	8066	S	9.7	10.3
Z	C76	8089	S	10.0	10.3
Z	C76	8090	S	9.9	10.4
Z	C80	8178	S	10.5	11.0
Z	D108	8257	S	9.7	11.2
Z	D283	8578	S	9.4	10.1
Z	D148	8710	S	10.0	11.1
Z	D100	9345	S	9.5	10.4
Z	D100	9380	S	10.0	10.3
Z	C188	9735	S	10.8	10.8
Z	D283	9770	S	9.4	10.7
Z	B147	10005	S	9.6	10.2
Z	D100	10097	S	9.7	10.5
Z	D100	10098	S	9.6	10.3
Z	D310	10154	S	10.6	10.9
Z	E185	10254	S	9.6	10.7
Z	E172	10660	S	10.2	11.0
Z	D372	10981	S	9.7	10.3
Z	E185	11253	S	9.4	10.4
Z	D108	11397	S	9.6	10.4
Z	C78	11845	S	10.4	10.8
Z	C78	11862	S	9.2	10.4
Z	D305	12018	S	9.9	10.9
Z	D283	12367	S		9.9
Z	D283	12452	S	9.7	10.7
Z	D100	12772	S	9.9	10.3
Z	D100	12991	S	9.7	10.2
Z	D283	14556	S	9.9	10.4
Z	D283	14557	S	10.0	10.2
Z	D100	15346	S	8.6	9.3
Z	D100	15348	S	9.4	10.6
Z	D108	15359	S	10.0	10.2
Z	D100	15445	S	9.6	10.4
Z	D108	15974	S	9.8	10.7
Z	D283	16681	S	9.3	10.3
Z	D317	16803	S	10.0	10.5
Z	D108	16886	S	10.0	10.5
Z	D108	16898	S	9.8	10.3
Z	D100	17233	S	11.0	
Z	D100	17540	S	10.1	10.4
Z	D306	17831	S	9.0	10.2
Z	D372	18176	S	9.6	10.6
Z	D100	18501	S	9.3	10.3
Z	D100	18523	S	10.0	10.7
Z	D100	18524	S	10.6	10.7
Z	C78	18740	S	9.3	10.3
Z	D100	19843	S	10.4	11.0
Z	D108	20989	S	9.4	10.5
Z	D108	20990	S	9.8	10.4
Z	D108	20993	S	10.1	10.5
Z	D100	21252	S	9.4	9.9
Z	D283	21635	S	9.8	10.3
Z	D103	22069	S	9.6	10.3
Z	D108	22483	S	10.7	11.4
Z	D100	22929	S	10.0	10.7
Z	D305	22959	S	9.1	9.6
Z	D283	22973	S	9.7	10.4
Z	D104	23225	S	9.8	10.5
Z	D100	23318	S	10.2	11.0
Z	D100	23319	S	9.6	11.2
Z	D100	23335	S	10.1	10.7
Z	D100	23490	S	11.0	11.4
Z	D100	23492	S	10.4	11.0
Z	D100	23592	S	9.9	10.4
Z	C78	23603	S	10.3	11.0

Appendix 26 cont. Pig: Biometry: First molar measurements

Phase	Context	Bone ID	Taxa	WA	WP
T-V	D2284	12322	S	12.1	12.4
W	C527	208	S	12.1	13.0
W	C536	214	S	11.6	12.4
W	C440	1024	S	11.9	13.2
W	D933	1379	S		13.4
W	D1265	1525	S	12.9	13.5
W	D1132	3199	S	13.1	13.0
W	D1132	3200	S	12.5	12.6
W	C417	3396	S	13.1	14.0
W	C417	3411	S	12.5	13.5
W	C417	3413	S	13.1	13.9
W	D757	5807	S	12.8	13.1
W	E270	7096	S	12.6	13.0
W	D343	7317	S	12.7	12.8
W	D343	9525	S	12.8	13.3
W	D767	9879	S	14.1	14.5
W	D743	9915	S	9.6	10.3
W	D907	10302	S	13.0	13.6
W	D335	13168	S	13.1	13.2
W	D1569	13373	S	13.3	14.1
W	D1834	13554	S	15.4	14.4
W	B521	14092	S	14.2	14.0
W	B521	14103	S	12.3	12.9
W	B521	14106	S	13.5	13.9
W	D1569	14286	S	14.2	14.6
W	E96	15499	S	13.0	13.7
W	E0096	16203	S	13.6	14.7
W	E96	16758	S	13.8	15.0
W	E96	17099	S	13.9	14.7
W	E96	17444	S	13.3	13.8
W	C527	17768	S	13.9	12.9
W	C527	19604	S	11.5	12.0
W	D1569	20577	S	11.9	13.0
W	D1569	20613	S	13.8	14.4
W	E96	20929	S	13.3	14.0
W	C468	21318	S	10.8	12.1
W	E96	21585	S	13.2	14.0
W	D163	21692	S	12.7	12.4
W	C495	22262	S	12.9	13.4
X-Y	D81	1833	S	12.2	12.7
X-Y	D81	2086	S	13.1	14.3
X-Y	D81	2293	S	12.3	13.1
X-Y	D81	2294	S	13.1	13.5
X-Y	D81	3224	S	13.4	13.5
X-Y	D81	3304	S	15.4	14.7
X-Y	D81	6358	S	12.6	13.6
X-Y	D81	6602	S	13.0	13.8
X-Y	D81	6790	S	13.7	14.2
X-Y	D81	10185	S	12.3	12.8
X-Y	D210	10385	S	13.4	14.0
X-Y	D81	12879	S	11.9	12.8
X-Y	C308	13796	S	12.9	13.7
X-Y	C308	13812	S	11.0	11.1
X-Y	D210	14855	S	13.5	13.7
X-Y	D81	15207	S	14.0	14.5
X-Y	D210	18061	S	12.1	12.8
X-Y	D81	20981	S	11.8	12.2
X-Y	D210	21370	S	12.6	13.3
Y	D320	433	S	12.6	13.7
Y	D1282	914	S	13.9	13.6
Y	D1143	935	S	12.1	13.3
Y	D1332	1099	S	13.8	13.9
Y	D928	1208	S	13.5	14.1
Y	D762	1558	S	12.3	12.6
Y	D340	2595	S	12.0	12.7
Y	D340	2821	S	12.1	12.4
Y	D318	2919	S	12.0	13.8
Y	D340	3013	S	14.0	14.7
Y	D338	3670	S	13.0	14.8
Y	D320	3680	S	12.9	14.7
Y	D313	3864	S	11.9	12.3
Y	D714	3884	S	12.9	13.8
Y	D1231	3994	S	12.3	12.6
Y	D1231	4647	S	13.6	14.2
Y	D78	4984	S	13.4	14.3
Y	D352	5302	S	13.7	14.4
Y	D168	5323	S	12.9	
Y	D908	5424	S	12.7	12.7
Y	B120	5551	S	12.9	13.5
Y	D762	5784	S	12.8	13.6
Y	D762	5786	S	12.8	14.2
Y	D340	7113	S	12.3	13.3
Y	D1158	7248	S	13.5	13.4
Y	D1282	7651	S	12.2	12.9
Y	D1332	8000	S	11.4	12.0
Y	A241	8302	S	13.5	14.0
Y	D762	9299	S	12.0	12.3
Y	D705	9403	S	11.7	13.2
Y	D313	9463	S	12.2	12.4
Y	D714	9469	S	12.5	14.5
Y	D762	9931	S	11.9	12.0
Y	A318	10313	S	12.1	12.9
Y	A318	10316	S	11.8	12.4
Y	D329	10419	S	13.3	14.9
Y	D1158	10761	S	14.1	14.1
Y	D746	11347	S	12.7	12.8
Y	D338	11533	S	11.6	13.2
Y	D340	11536	S	12.3	13.1
Y	D1231	11606	S	11.6	11.9
Y	D338	11771	S	12.1	13.2
Y	D318	12012	S	12.4	
Y	D329	12669	S	12.5	13.8
Y	C184	13462	S	14.2	14.4
Y	D318	14207	S	12.2	12.4
Y	D216	14952	S	12.9	13.5
Y	D312	15319	S	12.5	12.9
Y	D1158	15620	S	11.3	11.7
Y	D329	16817	S	13.1	13.7
Y	D329	17030	S	12.0	12.9
Y	D312	17054	S	13.3	13.8
Y	D214	17422	S	12.6	14.0
Y	C409	18899	S	12.2	13.2
Y	D219	19434	S	13.0	13.7
Y	B299	19758	S	13.0	13.6
Y	D168	20273	S	12.9	13.9
Y	D224	21379	S	13.0	12.3
Y	B321	21843	S	13.1	13.7
Y	C207	22351	S	12.4	12.8
Y	B120	23750	S	13.0	13.9
Y-Z	D116	752	S	11.5	13.0

Appendix 27. Pig: Biometry: Second molar measurements

Phase	Context	Bone ID	Taxa	WA	WP
Y-Z	D116	780	S	12.7	14.0
Y-Z	D116	1273	S	11.8	12.6
Y-Z	B277	1773	S	13.3	13.5
Y-Z	D116	4538	S	12.2	12.7
Y-Z	D116	7293	S	13.9	14.2
Y-Z	E74	7552	S	13.2	13.7
Y-Z	C160	8691	S	13.5	13.8
Y-Z	D116	8826	S	12.3	12.4
Y-Z	D116	8991	S	14.6	14.6
Y-Z	D116	8997	S	12.0	12.6
Y-Z	E74	9178	S	13.2	13.5
Y-Z	D116	12056	S	13.4	13.1
Y-Z	B277	12239	S	11.9	13.6
Y-Z	C268	13031	S	12.8	13.0
Y-Z	C268	13697	S	12.8	13.2
Y-Z	B277	13724	S	12.3	13.8
Y-Z	B277	14035	S	12.7	12.9
Y-Z	D116	15540	S	12.0	13.2
Y-Z	E74	15770	S	13.4	
Y-Z	C267	16977	S	12.3	13.5
Y-Z	C267	16978	S	11.3	12.5
Y-Z	E74	16994	S	12.5	12.9
Y-Z	E74	17019	S	12.1	13.0
Y-Z	C187	17900	S	11.9	12.7
Y-Z	D233	18008	S	11.4	12.8
Y-Z	C240	18213	S	14.2	14.4
Y-Z	D116	18300	S	12.3	12.5
Y-Z	B277	18663	S	14.0	14.2
Y-Z	D116	19647	S	12.7	13.8
Y-Z	D116	19654	S	12.8	14.2
Y-Z	D116	19661	S	12.5	13.0
Y-Z	C268	20145	S	12.8	13.5
Y-Z	C187	20497	S	11.8	12.7
Y-Z	C187	21027	S	12.9	13.7
Y-Z	C240	21055	S	12.9	13.3
Y-Z	C240	21057	S	13.0	13.9
Y-Z	D116	21490	S	12.6	13.0
Y-Z	E74	22323	S	13.9	14.0
Y-Z	C187	22396	S	13.1	13.3
Y-Z	D116	22652	S	12.4	13.0
Y-Z	D116	22653	S	13.1	13.8
Y-Z	D116	23411	S	12.5	12.8
Y-Z	C131	23724	S	13.2	14.1
Z	D100	32	S	14.0	14.7
Z	D100	43	S	14.5	14.7
Z	D100	293	S	11.6	12.5
Z	D100	294	S	14.2	14.4
Z	D331	452	S	13.8	14.1
Z	D331	505	S	12.3	13.0
Z	D100	524	S	15.2	15.9
Z	D466	1045	S	12.0	12.8
Z	D305	1239	S	13.4	13.5
Z	D103	1646	S	12.2	13.3
Z	D103	1672	S	13.6	13.3
Z	D100	1693	S	12.6	12.8
Z	D473	1955	S	13.1	14.0
Z	B150	2196	S	13.2	13.2
Z	D310	2501	S	12.7	12.9
Z	D310	2515	S	13.0	13.5
Z	D372	2586	S	13.5	14.5

Phase	Context	Bone ID	Taxa	WA	WP
Z	D372	2587	S	13.8	14.1
Z	D100	2681	S	10.2	11.0
Z	D332	3236	S	13.4	14.0
Z	D331	3781	S	13.5	14.0
Z	D0332	3793	S	12.9	13.5
Z	D332	3942	S	13.3	14.0
Z	D332	3943	S	12.2	12.7
Z	D306	4038	S	11.1	12.4
Z	D306	4039	S	12.8	13.3
Z	C191	4413	S	12.1	12.9
Z	C191	4414	S	12.7	13.3
Z	C76	4672	S	13.6	14.0
Z	C78	4715	S	12.3	12.8
Z	D100	4789	S	13.9	14.5
Z	C76	4836	S	13.0	14.1
Z	D100	5119	S	13.5	14.3
Z	C78	5220	S	12.1	13.1
Z	E172	5257	S	13.7	14.2
Z	C94	5365	S	13.2	13.9
Z	C78	5380	S	13.1	13.0
Z	C78	5381	S	13.0	14.0
Z	D100	6145	S	12.8	13.6
Z	D283	6368	S	12.6	12.9
Z	C101	6379	S	12.1	12.9
Z	D100	6435	S	13.3	13.5
Z	D100	6436	S	13.5	15.0
Z	D100	6842	S	11.2	12.1
Z	D372	7157	S	11.2	11.4
Z	D331	7627	S	12.6	13.6
Z	D100	7899	S	12.2	13.0
Z	C78	8066	S	12.6	13.4
Z	C78	8133	S	13.2	13.3
Z	D283	8249	S	12.6	13.7
Z	D108	8257	S	12.6	13.2
Z	D283	8559	S	12.3	13.2
Z	D372	9585	S	13.0	12.7
Z	D330	9600	S	14.7	15.5
Z	C188	9735	S	13.5	13.7
Z	D283	9770	S	12.2	13.8
Z	D100	10098	S	12.9	12.9
Z	E185	10247	S	12.3	12.4
Z	E172	10660	S	13.0	
Z	D372	10967	S	12.5	12.7
Z	D372	10981	S	12.3	13.2
Z	D372	11003	S	13.5	14.0
Z	D310	11564	S	13.1	13.5
Z	D106	11756	S	13.2	13.5
Z	D305	12018	S	12.4	12.8
Z	D100	12339	S	12.8	13.6
Z	D283	12367	S	11.7	
Z	D283	12452	S	12.7	13.5
Z	D100	12772	S	12.9	13.4
Z	D100	12991	S	12.8	12.7
Z	D100	13207	S	12.3	13.2
Z	E172	13952	S	13.1	13.7
Z	D108	14434	S	12.1	12.5
Z	D283	14557	S	12.3	13.0
Z	D100	15006	S		13.0
Z	D100	15016	S	13.8	14.4
Z	D100	15346	S	11.3	11.7

Appendix 27 cont. Pig: Biometry: Second molar measurements

Phase	Context	Bone ID	Taxa	WA	WP
Z	D100	15429	S	12.9	
Z	E172	16308	S	12.7	13.1
Z	D283	16681	S	12.3	13.3
Z	D317	16803	S	12.6	13.0
Z	D283	16838	S	14.0	14.5
Z	D108	16886	S	12.8	12.7
Z	D108	16899	S	13.3	14.1
Z	D108	17151	S	13.0	13.4
Z	D100	17195	S	12.5	13.0
Z	D100	17217	S	12.9	13.6
Z	D100	17540	S	12.6	12.9
Z	D283	18107	S	12.9	13.3
Z	D372	18176	S	12.9	13.5
Z	D100	18510	S	13.3	14.5
Z	D100	18523	S	12.7	13.8
Z	D100	18524	S	13.1	12.8
Z	D100	19843	S	13.5	13.6
Z	D100	19844	S	12.5	13.2
Z	D107	19849	S	12.9	13.3
Z	D108	19898	S	11.9	12.9
Z	D100	19905	S	12.1	12.8
Z	D100	20206	S	12.7	13.4
Z	D100	20823	S	12.1	13.3
Z	D108	20990	S	12.7	12.8
Z	D108	20993	S	12.5	13.0
Z	D100	21252	S	12.6	13.1
Z	D100	21535	S	13.0	12.9
Z	D283	21635	S	13.2	13.3
Z	D103	22069	S	12.2	12.4
Z	E100	22877	S	12.9	13.5
Z	D100	22929	S	13.0	13.7
Z	D283	22973	S	12.1	12.8
Z	D104	23225	S	12.8	13.0
Z	D100	23319	S	13.1	13.9
Z	D100	23335	S	13.2	13.8
Z	D100	23491	S	12.3	13.3
Z	D100	23662	S	14.1	15.0

Appendix 27 cont. Pig: Biometry: Second molar measurements

Phase	Context	Bone ID	Taxa	L	WA	7
T-V	D2284	S	12322		13.0	12.4
W	C539	S	219	33.3	15.2	14.2
W	C440	S	1024		14.4	13.8
W	D755	S	1194		15.3	15.0
W	D933	S	1379	34.8	14.8	13.7
W	D1265	S	1525	37.0	14.4	14.2
W	D1132	S	3185	33.1	14.2	13.2
W	D1132	S	3199		14.8	14.2
W	D1132	S	3211	32.1	14.3	14.3
W	C417	S	3396	35.4	15.5	15.5
W	E270	S	7096	33.1	15.1	14.9
W	C404	S	7509	33.4	14.6	13.7
W	D802	S	9303	33.1		14.5
W	D163	S	11022	29.3	14.6	14.1
W	D343	S	11309		15.7	15.3
W	B521	S	14106		15.1	13.3
W	E96	S	14822	32.2	14.8	14.1
W	E96	S	17099		16.3	16.6
W	C527	S	17768		15.7	
W	D1380	S	18338	33.6		14.3
W	E96	S	19963	32.0	14.9	14.0
W	D1569	S	20577		14.9	14.5
W	E96	S	21121		14.6	14.6
X	B292	S	18625		14.7	14.6
X	B86	S	21455	32.3	14.6	14.1
X-Y	D81	S	3273	30.5	14.1	12.9
X-Y	D81	S	3297		13.8	13.5
X-Y	D81	S	3305	35.4	15.8	14.8
X-Y	D81	S	5591	31.8	14.6	13.7
X-Y	D81	S	6358	32.0	14.9	15.2
X-Y	D81	S	7393		12.7	12.7
X-Y	D81	S	10147	34.1	16.3	15.9
X-Y	D728	S	10891	30.4	13.9	13.7
X-Y	D81	S	12859		14.0	13.9
X-Y	D210	S	14855		15.1	14.7
X-Y	D81	S	14928	34.1	15.1	14.0
X-Y	D81	S	15835		14.9	14.8
X-Y	D210	S	17160	35.3	14.6	14.1
X-Y	D81	S	17928	27.8	14.2	12.7
X-Y	D210	S	18061		14.9	14.0
X-Y	D81	S	19379		14.8	13.8
X-Y	D81	S	19444	33.0	14.6	14.1
Y	D1143	S	935		13.9	14.0
Y	D1332	S	1116	31.7	15.1	14.4
Y	D928	S	1208		15.6	15.0
Y	D762	S	1558	31.2	14.2	13.5
Y	D352	S	2542	35.3	15.8	14.6
Y	D340	S	2595		14.9	14.4
Y	D340	S	3014	38.2	16.0	16.0
Y	D320	S	3337	33.7	14.4	13.5
Y	D712	S	3478	33.9	15.7	15.8
Y	D712	S	3502	33.2	14.3	13.7
Y	D714	S	3884	35.5	15.3	14.6
Y	D1231	S	3996		15.2	14.2
Y	D1231	S	4648	31.7	14.4	14.3
Y	D78	S	4984		15.5	14.8
Y	D78	S	4985	33.4	14.9	14.8
Y	D168	S	5323	32.3	14.8	14.0
Y	D908	S	5424		15.2	14.0
Y	B120	S	5464	31.2	13.7	13.3
Y	B120	S	5551		14.6	14.4
Y	D762	S	5784		14.8	14.8
Y	A318	S	6534	36.0	16.6	15.8
Y	D1158	S	7248		15.0	13.7
Y	D346	S	7443		14.6	14.0
Y	D1282	S	7650	31.8	14.0	13.9
Y	D1282	S	7651		14.5	13.2
Y	A241	S	8301	34.3	15.1	15.4
Y	A241	S	8302		14.8	14.2
Y	D216	S	8487	30.0	14.2	13.3
Y	D762	S	9952		14.6	14.6
Y	A318	S	10312		13.9	12.7

Appendix 28. Pig: Biometry: Third molar measurements

Phase	Context	Bone ID	Taxa	L	WA	7
Y	A318	S	10313		14.2	14.4
Y	A318	S	10319	32.9	15.6	14.7
Y	D329	S	10419	32.6	15.6	14.2
Y	D338	S	10581	31.9	15.1	14.4
Y	D1333	S	10739	37.0	17.5	15.9
Y	D318	S	12012		14.2	
Y	D329	S	12669		13.9	14.0
Y	D312	S	14424		14.4	15.1
Y	D312	S	14425		13.8	13.0
Y	D214	S	14882		15.5	14.7
Y	D168	S	15044		14.4	13.0
Y	D329	S	16817	36.0	14.1	14.0
Y	B299	S	19758		15.1	14.6
Y	C207	S	20106		15.4	
Y	D168	S	21718		15.1	14.3
Y	B321	S	21843	34.8	15.0	14.6
Y	B120	S	23750		15.6	14.4
Y-Z	C132	S	53	34.0	14.8	15.2
Y-Z	C132	S	280	32.9	15.8	15.2
Y-Z	D116	S	752		13.4	13.8
Y-Z	B277	S	1698	33.1	15.1	15.0
Y-Z	D116	S	5899	36.4	17.8	15.6
Y-Z	D116	S	5933		14.6	14.4
Y-Z	C160	S	6264	38.1	16.2	
Y-Z	E74	S	6447	33.3	15.2	13.6
Y-Z	D116	SUS?	7265	43.8	16.8	16.3
Y-Z	D116	S	8943		15.4	15.2
Y-Z	D116	S	8991	35.0	15.9	15.4
Y-Z	E74	S	10706	36.0	16.0	15.6
Y-Z	D116	S	12057	33.1	15.2	14.3
Y-Z	B277	SUS?	12836	41.6		16.5
Y-Z	C268	S	13031		14.4	13.8
Y-Z	B277	S	15571		12.9	13.2
Y-Z	B277	S	15572	35.2	15.6	14.1
Y-Z	E74	S	17000	38.2	15.8	15.1
Y-Z	E74	S	17019		12.8	12.8
Y-Z	D116	S	17425		15.3	14.5
Y-Z	D233	S	18009		14.3	14.6
Y-Z	D116	S	18300	34.9	15.0	14.4
Y-Z	B277	S	18649		16.0	15.4
Y-Z	D116	S	19654		14.9	13.8
Y-Z	E74	S	20298	35.9	14.7	14.5
Y-Z	C240	SUS?	21056		19.9	19.3
Y-Z	C240	S	21058		15.6	15.0
Y-Z	D116	S	23411		14.5	14.0
Y-Z	D116	S	23412		14.4	14.4
Z	D100	S	294		15.1	14.7
Z	D332	S	485	29.8	14.4	13.9
Z	D330	S	513	30.7	16.8	15.1
Z	D310	S	725	38.2	17.0	
Z	D103	S	1646		14.0	13.9
Z	D103	S	1672	30.2	14.0	14.3
Z	D100	S	1693		15.0	14.4
Z	E172	S	1866	31.9	15.4	14.4
Z	D310	S	2515		13.8	13.4
Z	D372	S	2586	34.8	15.6	14.6
Z	D283	S	3262	37.2	16.3	15.2
Z	B136	S	3622	33.6		15.3
Z	D331	S	3781	32.3	15.6	14.0
Z	D332	S	3943	32.0	14.4	13.7

Phase	Context	Bone ID	Taxa	L	WA	7
Z	D306	S	4026	32.1	14.4	13.4
Z	D306	S	4038		12.8	12.5
Z	D283	S	4100	29.6	14.2	13.2
Z	B170	S	4339	36.3	15.0	14.5
Z	C191	S	4411	31.3	14.8	14.6
Z	C191	S	4412	26.2	14.6	13.1
Z	D100	S	4436	31.1	13.9	13.6
Z	D100	S	4445	28.9	14.0	13.7
Z	D100	S	4455	30.8	14.5	
Z	C76	S	4836	36.8	15.6	15.0
Z	C76	S	4944	32.8	15.9	14.4
Z	C78	S	5027	30.7	14.5	14.9
Z	D100	S	5119	32.7	15.1	14.7
Z	C78	S	5209	30.0	14.3	13.8
Z	C78	S	5210		17.1	16.2
Z	E172	S	5257	35.8	16.0	16.0
Z	D332	S	5316	36.5	15.8	15.3
Z	C78	S	5380	36.5	15.6	14.5
Z	C76	S	5447	33.5	15.3	14.8
Z	B186	S	5559	28.5		13.4
Z	D100	S	5681	32.4		14.3
Z	D106	S	5994		15.2	13.9
Z	D100	S	6138	33.5	15.2	13.9
Z	E85	S	6155	36.1	14.8	14.8
Z	D283	S	6336	34.0	15.0	14.4
Z	D283	S	6368		15.0	14.6
Z	D100	S	6402	36.5	15.3	14.4
Z	D100	S	6832	32.3	14.3	13.4
Z	D100	S	6842		13.7	13.5
Z	D332	S	7483	35.2	15.6	14.0
Z	D100	S	7899	29.9	14.9	13.9
Z	D100	S	7900		16.7	15.6
Z	C78	S	8067	35.6	15.3	14.7
Z	D306	S	8539	36.4	14.8	14.0
Z	D100	S	9364	32.1	15.4	14.8
Z	D372	S	9585		15.2	13.4
Z	D330	S	9600	41.9	18.1	17.8
Z	D310	S	10155	35.0	17.5	16.0
Z	D108	S	10173	33.7	14.5	14.0
Z	E185	S	10247	31.2	13.7	13.1
Z	D466	S	10800	35.0		
Z	D372	S	10981		14.4	14.1
Z	D100	S	11385		14.2	13.1
Z	D307	S	11401		14.8	13.9
Z	D310	S	11564	28.9		13.6
Z	D283	S	12367	34.2	15.1	14.6
Z	D283	S	12368		14.8	15.1
Z	D100	S	12772	32.6	15.8	14.9
Z	E172	SUS?	12847	42.2	17.2	16.7
Z	D100	S	13208		15.6	14.6
Z	D283	S	13238		14.5	13.4
Z	E172	S	13930	30.5	13.5	13.5
Z	D283	S	14371	33.2	15.2	15.2
Z	D85	S	14754		13.1	12.0
Z	D100	S	14989	32.6	13.6	13.7
Z	D100	S	15006	28.7	14.3	14.0
Z	D100	S	15016		15.4	14.5
Z	D100	S	15429		14.5	14.4
Z	D100	S	16082	33.2	14.4	13.5
Z	D283	S	16694		16.0	15.3

Appendix 28 cont. Pig: Biometry: Third molar measurements

Phase	Context	Bone ID	Taxa	L	WA	7
Z	D108	S	16886		14.7	13.6
Z	D108	S	17151		15.4	14.6
Z	D100	S	17217	31.5	15.3	14.5
Z	D283	S	18107		15.2	14.5
Z	D372	S	18168		14.1	13.8
Z	D100	S	18510		16.7	16.0
Z	D100	S	20206		15.7	14.8
Z	D283	S	22002		15.8	15.6
Z	D103	S	22069		12.9	13.4
Z	C113	S	22375		14.7	13.8
Z	D100	S	22417		14.1	13.6
Z	D100	S	22439		14.8	13.8
Z	D100	S	22440		13.1	13.1
Z	E100	S	22877		15.1	14.1
Z	D283	S	22973	32.4	13.7	13.4
Z	D100	S	23364	36.8	14.4	14.2
Z	D100	S	23491		14.9	14.5
Z	E85	S	23516	34.0	14.7	14.5
Z	E85	S	23517	32.0	14.7	13.7
Z	D100	S	23545		13.7	13.5

Appendix 28 cont. Pig: Biometry: Third molar measurements

Phase	Context	Bone ID	Taxa	BT	HTC
W	C404	S	7510		19.4
W	D343	S	9452	32.1	19.2
W	B434	S	9672	31.1	18.5
W	D931	S	10882	36.8	21.6
W	D406	S	11326	33	19.8
W	D1232	S	11582	32.5	19.5
W	D335	S	14192	29.6	16.8
W	D244	S	19708	30.3	18.2
W	D163	S	19999	34.3	20
W	C527	S	22045	30.4	18.1
X-Y	D81	S	7394	35.5	20.2
X-Y	D210	S	14939	31	18
X-Y	D81	S	16569	37	19.7
X-Y	D81	S	17598	30.3	17
X-Y	D81	S	17609	39.6	24.4
X-Y	D81	S	18443	32.3	20.2
X-Y	D81	S	18485	31.2	18.3
X-Y	D81	S	19402		19.7
Y	D312	S	2016	36.6	20.9
Y	A318	S	2205	30.2	16.6
Y	A318	S	2206	32.7	18
Y	D1333	S	3162	31.7	17.6
Y	D1333	S	3163	31.8	18.2
Y	D78	S	4987	30.9	18.6
Y	D338	S	6031	30.1	
Y	A345	S	6487	32.4	18.8
Y	D1333	S	6698	34	19.5
Y	D1332	S	7204	34.7	20.3
Y	D168	S	7339	31.4	17.8
Y	D312	S	7808	42.6	25.4
Y	D1231	S	8853	34.4	20.6
Y	A318	S	10324	33.9	18.1
Y	D318	S	10507	31.3	17.9
Y	D762	S	10928	34.2	19.9
Y	D338	S	11502	31.4	19.5
Y	D216	S	12560	31.8	18.4
Y	D329	S	12670	32.7	17.2
Y	D320	S	13598	33.8	19.6
Y	D312	S	13608	32.9	19.6
Y	D151	S	15417		18.6
Y	D329	S	15876	30.5	19.1
Y	D214	S	16046	35.6	20.8
Y	D224	S	19422	35.6	20.7
Y-Z	B277	S	9546	32.7	20
Y-Z	B277	S	12151		23.3
Y-Z	B277	S	12609	32.1	19.8
Y-Z	B277	S	12849	33.9	
Y-Z	E74	S	15750	33.3	19
Y-Z	C267	S	17312		18.6
Y-Z	D116	S	22103	35.9	21.5
Z	D332	S	129		17.9
Z	E184	S	961	33.2	19.8
Z	B136	S	2142	31.5	20.5
Z	D306	S	2311	33.3	19.4
Z	D106	SUS?	2320	43.5	25.4
Z	D332	S	3777	29.9	17.7
Z	D332	S	3945	30.6	17.1
Z	D283	S	4499	31.3	18.7
Z	C112	S	4951		18.9
Z	C78	S	5334	33.3	19.2
Z	C76	S	5687	31.3	17.2
Z	D332	S	6120		23
Z	D332	S	6121	31.9	18.5
Z	D100	S	6623	32	19.2
Z	B172	S	7973	32.9	18.6
Z	B147	S	8223	29.9	18.3
Z	D104	S	9715	30.5	18
Z	D108	S	10174		19.2
Z	E179	S	10466	30.9	19.1
Z	D283	S	10547	32	18.3
Z	E172	S	11423	33.5	19.5
Z	C78	S	11863	35.3	18.8
Z	D305	S	12019	41.7	25.6
Z	D283	S	12378	33.8	18.5
Z	C188	S	12659	32.5	18.6
Z	C191	S	12838	34.6	19.3
Z	D100	S	13209	32.6	17.6
Z	D310	S	13428	36.2	21.7
Z	D310	S	13429	33.7	20.1
Z	E172	S	13937	29.9	18.8
Z	B136	S	14011		18.9
Z	D100	S	14592	31.6	19.1
Z	D100	S	14610	32.4	18.8
Z	D283	S	14655		17.7
Z	D100	S	14759	34.2	20.7
Z	D100	S	15028	41.3	24.4
Z	D148	S	15455	29.8	16.6
Z	E172	S	16311	32.2	20.2
Z	D283	S	16832	30.7	18
Z	D100	S	17218	32.4	19.3

Appendix 29. Pig: Biometry: Humerus measurements

Phase	Context	Bone ID	Taxa	BT	HTC
Z	D372	S	18159		18
Z	D108	S	18392	33.4	19.8
Z	C188	S	19716	32.3	18.6
Z	D100	S	20187	30.7	17.2
Z	D283	SUS?	20220	41.8	24.7
Z	D283	SUS?	20221	44.1	23.9
Z	D283	SUS?	20222		24.8
Z	B136	S	21434	33	18.6
Z	D283	S	21995	32.6	18.2
Z	D103	S	22071		19.5
Z	D283	S	22600		20.7
Z	D100	S	22799	34.8	19.1
Z	D100	S	22811	30.3	20.2

Appendix 29 cont. Pig: Biometry: Humerus measurements

Phase	Context	Bone ID	Taxa	Bd	Dd
T-V	B603	S	6982	29.8	27.6
W	D163	S	5966	27.7	25.8
W	C407	S	7532	29.1	26.3
W	D936	S	10853	29.8	29.3
W	D755	SUS?	10871		36.8
W	B521	S	14104	27.8	24.9
W	D163	S	15983	28.5	
W	D102	S	21734	30.0	26.9
X-Y	D210	S	1370	30.4	25.3
X-Y	D81	S	2087	28.0	24.3
X-Y	D210	S	8470	29.5	27.8
X-Y	D81	S	12880	29.1	25.5
X-Y	D210	S	17414	29.4	26.3
Y	D1332	S	1118	30.1	27.8
Y	D340	S	1818	31.6	
Y	D318	S	2462	32.0	28.2
Y	D705	S	4051	27.9	27.2
Y	D151	S	7884	29.9	25.2
Y	D168	S	7946	29.8	25.5
Y	D1332	S	8013	29.0	26.0
Y	D346	S	8657	30.0	27.4
Y	D346	S	8658	29.8	25.2
Y	D1231	S	8854	29.8	26.0
Y	D704	S	9418	29.9	27.7
Y	A318	S	10328	28.8	27.0
Y	D338	S	10583	27.5	25.3
Y	D1333	S	10743	28.7	25.6
Y	D1231	S	11597	36.8	34.2
Y	D1231	S	11609	26.4	
Y	D1335	S	11626	28.5	27.6
Y	D151	S	13259	35.5	32.9
Y	D312	S	13300	30.6	28.2
Y	D312	S	17643	27.6	25.6
Y	D219	S	19435	30.9	25.6
Y	A318	S	19477	29.0	
Y-Z	C132	S	5345	36.4	31.9
Y-Z	D116	S	7280	30.3	27.1
Y-Z	D116	S	7281	29.5	25.5
Y-Z	B277	SUS?	12816	40.2	34.8
Y-Z	C268	S	13035	28.8	26.8
Y-Z	C231	S	13514	29.1	26.9
Y-Z	B277	S	15614	30.3	

Phase	Context	Bone ID	Taxa	Bd	Dd
Y-Z	D116	SUS?	17078	37.2	31.2
Y-Z	D116	S	17079	30.2	26.4
Y-Z	D116	S	18787	26.8	
Y-Z	D116	S	19655	28.4	26.9
Y-Z	C268	S	20148		25.5
Y-Z	E74	S	20300	27.6	26.7
Y-Z	B277	S	20524	32.6	30.1
Y-Z	C267	S	20917	29.4	
Y-Z	D116	S	21701	28.2	25.2
Y-Z	C160	S	23612	31.3	25.5
Z	D100	S	296	28.0	24.5
Z	E172	S	1867	29.4	24.7
Z	B168	S	2193	28.8	26.3
Z	D100	S	2993	29.3	24.2
Z	D372	S	3930	29.0	25.5
Z	D331	S	3974	34.6	30.5
Z	D108	S	4352	27.2	23.4
Z	D108	S	4353	29.6	26.4
Z	D108	S	4367	31.1	27.6
Z	C191	S	4417	31.4	27.8
Z	C191	S	4418	30.3	26.9
Z	C191	S	4419	32.8	26.6
Z	C191	S	4420	27.6	24.6
Z	D283	S	4585	32.9	27.6
Z	C80	S	5176	33.4	25.3
Z	E172	S	5258	27.6	24.3
Z	C76	S	5392	30.4	26.2
Z	D108	S	5750	29.9	25.7
Z	D100	S	6403	26.4	24.8
Z	D100	S	6613	29.3	24.9
Z	D372	S	7159	32.6	28.1
Z	C76	S	7330	29.3	26.1
Z	C188	S	7711	26.0	23.0
Z	C78	S	8136	29.5	28.4
Z	D100	S	9367	32.4	30.4
Z	D100	S	9382	29.8	26.0
Z	E185	S	10256	28.3	25.1
Z	D466	S	10801	29.9	27.6
Z	D283	S	11558	33.1	31.2
Z	D283	S	12453	28.5	25.5
Z	C188	SUS?	12806	36.9	30.7
Z	E172	SUS?	12824	36.5	32.7

Appendix 30. Pig: Biometry: Tibia measurements

Phase	Context	Bone ID	Taxa	Bd	Dd
Z	E172	SUS?	12824	36.5	32.7
Z	E172	S	13932	29.0	26.4
Z	D100	S	14578	30.2	28.6
Z	B132	S	15732	26.3	24.0
Z	D283	S	16488	27.2	25.3
Z	D108	S	16535	29.8	26.2
Z	D317	S	16799	28.4	25.5
Z	D108	S	16889	28.1	23.5
Z	D100	S	17525	27.3	25.7
Z	D283	S	18308	29.8	27.6
Z	D283	S	18311	24.8	18.6
Z	D100	S	19416	28.0	25.9
Z	D100	S	19627	28.2	
Z	D108	S	19712	26.4	23.6
Z	D100	S	21536	31.0	25.8
Z	D100	S	21898	28.9	26.8
Z	C191	S	22338	28.6	28.3
Z	D100	S	22444	27.4	23.5
Z	D108	S	22671	30.4	27.6
Z	D103	S	23236	27.1	25.5
Z	C78	S	23564	35.2	31.5
Z	D100	S	23595	29.8	24.3
Z	C74	S	23654	27.1	25.5
Z	C76	S	23753	29.2	25.8

Appendix 30 cont. Pig: Biometry: Tibia measurements

Phase	Context	Bone ID	Taxa	GLl	GLm
W	C527	S	210	41.0	37.4
W	D983	S	1153	42.5	38.2
W	D163	S	7297	38.5	37.5
W	B448	S	9654	38.9	36.3
W	D1137	S	11096	39.6	36.4
W	D2173	S	13115	39.1	35.0
W	E96	S	15164	44.0	39.9
W	D1569	S	20591	40.0	37.8
X-Y	D81	S	145	40.3	36.9
X-Y	D81	S	2373	42.0	39.9
X-Y	D81	S	3060	41.7	38.9
X-Y	D81	S	9626	38.4	35.7
X-Y	D81	S	12130	37.7	35.5
X-Y	D81	S	12467	49.0	45.8
X-Y	D81	S	12583	37.3	
X-Y	D81	S	15822	40.2	37.0
X-Y	D81	S	16571	46.7	42.7
X-Y	D81	S	17929		45.0
X-Y	D81	S	21340	41.5	37.3
Y	D1332	S	1103	41.5	38.5
Y	D928	S	1210	37.5	34.3
Y	A332	S	1483	42.8	39.5
Y	D762	S	1933	43.4	40.5
Y	D1231	S	1993	48.9	44.7
Y	D346	S	2893	42.7	38.6
Y	D1333	S	3164	39.5	36.7
Y	D1333	S	3170	39.8	36.8
Y	D312	S	3329	44.7	40.9
Y	D1231	S	3997	40.1	37.3
Y	D1231	S	4665	40.7	35.8
Y	D338	S	6040	41.7	38.8
Y	D168	S	6427	39.8	37.2
Y	A318	S	6524	42.2	39.1
Y	D312	S	7812	38.0	35.5
Y	D1332	S	8014	43.9	40.1
Y	D1231	S	8034	39.5	36.3
Y	D303	S	8581	37.2	35.1
Y	D338	S	8926	37.2	34.1
Y	D320	S	9146	37.8	35.2
Y	D1335	S	11627	38.4	35.7
Y	D214	S	12511	42.6	40.8
Y	D216	S	12562	41.1	38.7
Y	D168	S	13501	41.7	37.9
Y	D216	S	14953	39.6	36.2
Y	D78	S	19355	45.4	40.7
Y	B120	S	23752	42.9	38.8
Y-Z	C132	S	55	43.9	41.1
Y-Z	C132	S	70	40.5	38.4
Y-Z	D116	S	1274	45.0	42.2
Y-Z	D233	SUS?	4850	51.7	47.7
Y-Z	C160	S	8692	40.4	38.6
Y-Z	D0116	S	9026	38.4	35.9
Y-Z	B277	S	12614	38.1	35.5
Y-Z	B277	SUS?	12795	51.1	46.6
Y-Z	D0116	S	15074	42.1	39.6
Y-Z	E74	S	17001	38.2	36.0
Y-Z	E74	S	17008	43.8	40.1
Y-Z	B277	S	18668	45.5	40.4
Y-Z	D0116	S	19934	40.0	36.4
Y-Z	C187	S	23657	51.0	45.3
Z	D331	S	466	39.0	36.1
Z	E184	S	963	42.5	38.7
Z	D100	S	1662	40.8	37.7
Z	B150	S	2169	41.4	39.2
Z	D331	S	2773	43.2	39.2
Z	D283	S	2982	40.7	37.2
Z	D100	S	2994	41.7	38.4
Z	D332	S	3008	39.7	37.1
Z	D306	S	3028	38.0	34.6
Z	D306	S	3029	50.5	45.3
Z	D372	S	3837	42.3	39.5
Z	D283	S	4101	38.3	35.5
Z	D283	S	4377	35.4	31.9
Z	C191	S	4422	39.0	35.2
Z	C78	S	4736	40.3	36.9
Z	D100	S	4760	38.5	36.4
Z	C112	S	4952	42.0	38.5
Z	C78	S	5031	45.2	40.8
Z	C94	SUS?	5366	50.9	46.4
Z	C76	S	5644	38.6	34.6
Z	D310	S	6297	38.8	35.3
Z	D229	S	6541	41.6	38.5
Z	D100	S	6867	41.4	38.5
Z	B136	S	7970	36.7	33.4
Z	C78	S	8172	37.4	34.5
Z	D330	S	9601	38.2	34.2

Appendix 31. Pig: Biometry: Astragalus measurements

Phase	Context	Bone ID	Taxa	GLl	GLm
Z	E185	S	10248	43.6	39.2
Z	D283	S	10549	46.5	42.4
Z	D372	S	11006	41.6	38.6
Z	E179	SUS?	12841	53.1	47.6
Z	E179	S	12842	43.8	40.1
Z	D100	S	14992	37.7	34.0
Z	D100	S	15448	42.4	38.1
Z	D283	S	16605	41.1	39.1
Z	D283	S	16840	40.4	38.0
Z	D108	S	16900	42.5	38.7
Z	D100	S	17197	38.0	35.1
Z	D100	S	18565	40.7	36.7
Z	D100	S	18574	39.7	36.8
Z	C78	S	18741	39.9	36.4
Z	D283	S	20247	42.3	39.7
Z	D108	S	20768	36.1	33.5
Z	D283	S	22091	36.5	34.8
Z	D283	S	22867	44.0	
Z	D100	S	22908		39.8
Z	E100	S	23194	45.6	42.4
Z	E100	S	23195	41.8	38.8
Z	D100	S	23366	44.6	41.0
Z	C78	S	23565	49.5	44.4
Z	D100	S	23599	42.6	39.1

Appendix 31 cont. Pig: Biometry: Astragalus measurements

Phase	Context	Bone ID	Taxa	GL
X	B292	SUS?	18626	92.6
Y	D705	S	4052	77.4
Y	D312	S	4621	77.4
Y	B120	S	5535	84.0
Y	B120	S	5552	76.9
Y-Z	D116	S	6657	93.9
Y-Z	E74	S	8272	84.8
Y-Z	B277	SUS?	12804	102.5
Y-Z	E74	S	17009	95.1
Z	D100	SUS?	537	95.1
Z	C188	S	9733	79.8
Z	D100	S	10105	91.1
Z	D100	S	11386	96.0
Z	D283	S	16604	99.7
Z	C78	S	23566	99.8

Appendix 32. Pig: Biometry: Calcaneum measurements

Phase	Context	Bone ID	Species	dP4	P4	M1	M2	M3
T-V	B621	6997	O					11G
T-V	B639	7041	O		15A	15A	14B	11G
T-V	B645	7047	O		9A	9A	9A	
T-V	B632	7049	OVA	16L		7A	V	
T-V	D791	10862	OVA	17L		9A	7A	
V	D1274	326	OVA	13L				
V	B603	6973	OVA	16L		9A	7A	V
V	B643	7007	OVA	E				
V	B643	7008	OVA	10N				
V	B618	7012	O	5L				
V	B602	7031	OVA	12L		E		
V	D1005	10202	O					11G
V	D1005	10836	O		12S	9A	9A	11G
V	D1013	10880	OVA	18L		9A	7A	
V	D1005	11126	OVA	23L				
V	D1234	11601	O					11G
V	C433	11705	O					E
V	C433	11729	O		9A	9A	9A	5A
V	C433	11731	O			9A	4A	
V	C433	12828	OVA	17L		9A	8A	
V	D2371	16414	O		8B			
W	C546	235	O					2A
W	C445	972	CAH	E				
W	C440	989	CAH	18L		8A	5A	
W	C440	996	O		14S	12A	9A	11G
W	C440	1001	OVA	21M		9A	5A	
W	C440	1002	OVA	1A				
W	C445	1012	OVA	14L		6A		
W	D743	1051	O		7A			

Appendix 33. Sheep/goat: Ageing data: Mandibular tooth eruption and wear

Phase	Context	Bone ID	Species	dP4	P4	M1	M2	M3
W	D983	1170	OVA	23L		9A	6A	
W	D983	1178	OVA	14L		9A	4C	
W	D933	1407	O			9A	7A	
W	D933	1572	OVA	23L		9A	5A	
W	D933	1573	O		12S	10A	9A	11G
W	D774	1932	O					E
W	D743	1947	O		9A	9A		
W	D743	1961	OVA	23L		9A	5A	
W	D840	2441	O		4A	9A	8A	11G
W	D758	2445	CAH	13L		E		
W	D1132	3182	O		12S	11A	9A	11G
W	C417	3375	OVA	3A				
W	D1265	3444	OVA	21M		9A	7A	E
W	D840	5822	OVA	17M				
W	D163	5964	OVA	E				
W	B448	6462	O		12S	9A	9A	9G
W	B458	6471	OVA	E				
W	E271	7100	O					2A
W	C404	7524	CAH	8L				
W	C527	8016	O		9A	9A	7A	7A
W	D808	8392	OVA	13L		V		
W	D755	8418	CAH	13L				
W	B448	8767	OVA	16L				
W	E96	8885	O					2A
W	E96	8886	O					2A
W	D188	9124	OVA	13L				
W	E96	9258	O		9A	11B		
W	E96	9263	OVA	14L		2A		
W	E96	9264	OVA	11L				
W	E96	9275	O		11C	12A	9A	11G
W	E270	9510	O					9H
W	D767	9875	O		12S			
W	D767	9876	O					11G
W	D840	10271	O		9A	9A	9A	
W	D840	10276	OVA	14L				
W	D957	10885	OVA	18L		9A	7A	
W	D983	11218	O					E
W	D840	11270	O			9A	6A	
W	D810	11305	OVA	23L				
W	D2378	12296	O					5A
W	D334	12699	O			9A	7A	2A
W	E96	12801	CAH	7L				
W	C417	12815	OVA	20L		9A	4A	
W	D1606	13127	O					11G
W	D335	13165	O		V	9A	6A	V
W	D1858	13575	O					9G
W	B521	14083	O		3C			
W	B521	14097	O		4A	9A	8A	2A
W	B521	14098	OVA	11L				
W	B521	14099	O			9A	7A	2A
W	B521	14100	O					2A
W	E96	14459	O			9A	6A	
W	E96	14462	OVA	8L				
W	C278	14640	OVA	19M				
W	C476	14718	OVA	E				
W	C476	14741	O		9A	9A	9A	8A
W	D335	14781	O			15A	9A	11G
W	E96	14834	O					11G
W	E96	15131	O		9A	9A	9A	
W	E96	15162	OVA	13L				

Appendix 33 cont. Sheep/goat: Ageing data: Mandibular tooth eruption and wear

Phase	Context	Bone ID	Species	dP4	P4	M1	M2	M3
W	E96	15675	O		E	9A	7A	E
W	B521	15680	O			9A	9A	
W	B521	15704	O		8A	9A		
W	E96	15959	O					9G
W	E96	16133	O					9G
W	E96	16172	O		9A	9A		
W	E96	16178	OVA	16L		9A	7A	
W	E96	16193	OVA	1B				
W	E96	16194	O					5A
W	E96	16201	O		9A	9A	9A	
W	E96	16226	O				11B	11G
W	E96	16237	O					11G
W	E96	16351	O					11G
W	E96	16370	OVA	17L		9A		
W	E96	16642	O					11G
W	E96	16744	O					4A
W	E96	16745	OVA	16L		8A	7A	
W	E96	16755	O					11G
W	D335	17482	O			9A	7A	
W	C527	17761	O		8A	9A		
W	D1896	18345	O					4A
W	C501	18809	OVA	13L		E		
W	E96	18879	OVA	14L				
W	D881	19360	O		9A	9A	9A	7A
W	C404	19483	O		9A	9A	9A	10H
W	C527	19569	O					2A
W	C527	19570	O					2A
W	C527	19580	O	23L				
W	E96	19961	O		8B	9A	8A	
W	E96	19969	O			9A	9A	
W	D1569	20576	OVA	22L		9A	6A	
W	D1555	20594	O					11G
W	D1569	20607	OVA	22L		9A	6A	
W	D163	20828	O		11S	9A		
W	E96	20952	CAH	16L		7A	2A	
W	E96	21118	OVA	14L				
W	E96	21218	O					4A
W	E96	21219	O		12S			
W	C468	21285	O		11S			
W	C468	21297	O					9G
W	C495	22122	O		9A	9A	9A	7A
W	C495	22123	O		9A	9A	8A	2A
W	C495	22124	OVA	16L				
W	C468	22142	O					9G
X	D1288	325	O					E
X	D446	3948	O		11S	10A	9A	11G
X	B204	9988	OVA	11L				
X	C412	11688	O		12S	12A	9A	
X	C412	11702	O			9A	7A	1B
X	B86	21935	O					4A
X	B86	21936	O					11G
X-Y	D81	708	O		7A	9A	9A	2A
X-Y	D735	887	O					5A
X-Y	D81	1251	O					5A
X-Y	D728	1421	O				9A	8G
X-Y	D81	2291	O					2A
X-Y	D81	3912	O		7A	9A	7A	4A
X-Y	D81	6355	OVA	16L		9A	7A	
X-Y	D81	6357	O			9A	7A	
X-Y	D81	7418	OVA	13L				

Appendix 33 cont. Sheep/goat: Ageing data: Mandibular tooth eruption and wear

Phase	Context	Bone ID	Species	dP4	P4	M1	M2	M3
X-Y	D81	8476	O			9A	6A	
X-Y	D81	9634	O		8A			
X-Y	D81	9752	OVA	16L		9A		
X-Y	D81	9778	O					8A
X-Y	D728	9900	O			8A	7A	
X-Y	D81	11879	OVA	17L		9A		
X-Y	D81	12052	O					2A
X-Y	D81	12089	O					4A
X-Y	D81	12090	O					1A
X-Y	D81	12704	O					7G
X-Y	D81	13214	O		9A	9A	9A	11G
X-Y	D81	13289	O					11G
X-Y	D81	14846	OVA	12L				
X-Y	D81	15838	O					8G
X-Y	D81	16551	O					7A
X-Y	D210	17411	O		9A	6A		
X-Y	D210	18057	O					11G
X-Y	D81	18981	O					8G
X-Y	D81	19700	O			9A	7A	2A
X-Y	D81	21001	O		6A	9A	8A	
X-Y	D81	21165	O					8G
X-Y	D81	22592	O		8A			
X-Y	D81	22623	O					2A
X-Y	D81	22640	O					9G
Y	D168	301	OVA	12L				
Y	D338	429	O		12S	9A	9A	8G
Y	A332	1457	O		12S	11A	9A	
Y	A332	1459	O			9A	6A	
Y	A241	1488	OVA	E				
Y	A332	1497	O		4A	9A	8A	
Y	D1231	1515	O			9A	6A	
Y	D340	1808	O			8A	6A	
Y	A318	2224	OVA	11L				
Y	D346	2830	OVA	23L		9A	7A	E
Y	D318	2952	CAH	2B				
Y	D312	3080	OVA	13L				
Y	D338	3089	OVA	16L				
Y	D1333	3152	OVA	13L		E		
Y	D1333	3158	OVA	13L		5A		
Y	D1333	3433	OVA	3A				
Y	D313	3510	OVA	21M		9A	5A	V
Y	D703	4081	O					11G
Y	D168	5137	CAH	8M				
Y	D151	5630	O					11G
Y	D338	6038	O		9A	9A	9A	9G
Y	A345	6478	OVA	17L		9A	6A	V
Y	A345	6482	OVA	16L		9A	7A	V
Y	A345	6498	O					8G
Y	A318	6538	OVA	1A				
Y	A318	6751	O					5A
Y	A186	6755	O		5A	9A	9A	
Y	D216	6798	O					E
Y	D219	6800	OVA	19M				
Y	D1158	6909	OVA	20L				
Y	D1332	7195	CAH	2B				
Y	D1231	7239	OVA	16L		9A	7A	V
Y	D346	7439	OVA	16L		9A		
Y	B120	7936	CAH	14L				
Y	A253	8289	OVA	15A		9A	7A	
Y	D349	8618	O					9H

Appendix 33 cont. Sheep/goat: Ageing data: Mandibular tooth eruption and wear

Phase	Context	Bone ID	Species	dP4	P4	M1	M2	M3
Y	D352	8673	OVA	14L		5A		
Y	D78	8738	CAH	1B				
Y	D151	8758	CAH	13L				
Y	D320	9144	O		9A	9A		
Y	D704	9477	OVA	14L		5A		
Y	A318	10332	O		14S	11B	9A	10G
Y	A318	10333	O			7A		
Y	A318	10347	OVA	16L		9A	2A	
Y	D1333	10735	O		11S	12A	9A	11G
Y	D1333	10736	O					10G
Y	D712	11182	O		9A			
Y	D746	11227	O		9A	9A	9A	
Y	D338	11530	OVA	17L		9A	6A	
Y	D338	11531	OVA	23L		9A	5A	
Y	D338	11770	OVA	20L		8A	6A	
Y	D318	12009	O					9G
Y	D216	13367	OVA	17L		9A	4A	
Y	C184	13459	OVA	14L				
Y	D219	13667	CAH	E				
Y	C307	13821	OVA	12L				
Y	D338	14219	O					8G
Y	C270	14632	O			9A	4A	
Y	D318	16163	OVA	13L				
Y	D312	17637	CAH	14L				
Y	D318	17701	OVA	14L		7A		
Y	D329	17713	OVA	17L				
Y	D168	17801	OVA	16L		5A		
Y	D320	17978	O				8A	6A
Y	D320	17979	O					11G
Y	C409	18928	O					11G
Y	D1335	20830	OVA	E				
Y	D1335	20831	OVA	E				
Y	C207	21266	OVA	17L				
Y	D216	21396	O		8B	9A	9A	5A
Y	D216	21397	OVA	14L				
Y	D216	21423	O					5A
Y	B120	21447	O					9G
Y	A78	23390	OVA	16L		8A		
Y	D168	23441	O		15A	15A		
Y	B120	23468	OVA	22L		9A	7A	
Y	D151	23505	OVA	13L		E		
Y-Z	E74	562	O					8G
Y-Z	E74	572	O					1A
Y-Z	E74	693	O					11G
Y-Z	D116	748	O					11G
Y-Z	B277	1772	O			15A	9A	
Y-Z	C187	5614	OVA	13L				
Y-Z	D116	5925	O		12S	14C	9A	11G
Y-Z	E74	6456	O					5A
Y-Z	D116	7292	O			9A	5A	
Y-Z	E74	7547	O					2A
Y-Z	E74	7554	O		8B	9A	9A	5A
Y-Z	E74	7563	OVA	13L				
Y-Z	E74	7571	OVA	13L				
Y-Z	D116	8930	OVA	16L		9A	6A	
Y-Z	D116	8970	OVA	16L		9A	2A	
Y-Z	D116	8971	OVA	12L				
Y-Z	D116	8987	O				9A	10G
Y-Z	D116	9022	OVA	13L		E		
Y-Z	E74	9219	O					11G

Appendix 33 cont. Sheep/goat: Ageing data: Mandibular tooth eruption and wear

Phase	Context	Bone ID	Species	dP4	P4	M1	M2	M3
Y-Z	E74	10696	CAH	22L				
Y-Z	E74	10702	OVA	12L				
Y-Z	E74	11968	O		9A	9A	9A	7A
Y-Z	E74	11971	O					10G
Y-Z	E74	11973	O					E
Y-Z	E74	11978	O					7G
Y-Z	B277	12233	O		6T	9A	7A	1B
Y-Z	B277	12641	OVA	16L				
Y-Z	E74	12788	O		9A	9A	9A	9G
Y-Z	B277	12826	OVA	17M		9A	5A	
Y-Z	E74	13094	O					5B
Y-Z	D116	13221	O					11G
Y-Z	B277	14059	O			9A	7A	
Y-Z	B277	14079	OVA	13L				
Y-Z	D116	15089	O		8A	9A	9A	4A
Y-Z	D116	15090	O			9A	3A	
Y-Z	D116	15469	O					8G
Y-Z	B277	15608	O		6A	9A	8A	4A
Y-Z	D116	15824	O		7A	9A	7A	4B
Y-Z	E74	17006	O		9A	9A		
Y-Z	C267	17304	O			9A	6A	
Y-Z	C267	17305	OVA	14L		5A		
Y-Z	C267	17306	O					E
Y-Z	C267	17307	OVA	17L				
Y-Z	D116	18043	OVA	13L				
Y-Z	E74	18605	O					E
Y-Z	E74	18611	O		14S	12A		
Y-Z	B277	18628	O		9A	9A	9A	
Y-Z	B277	18629	O					6G
Y-Z	D116	18752	O			9A	7A	
Y-Z	D116	18753	O			8A	5B	V
Y-Z	D116	18754	OVA	13L				
Y-Z	D116	19924	O					2A
Y-Z	B277	20554	O					9G
Y-Z	B277	20712	CAH	1A				
Y-Z	C240	20734	O			9A	6A	
Y-Z	C187	21031	OVA	16L				
Y-Z	C187	21032	OVA	14L				
Y-Z	C187	21034	CAH	10N				
Y-Z	C240	21052	OVA	14L		9A	6A	
Y-Z	B277	21856	O					3A
Y-Z	E74	22104	O					7A
Y-Z	C231	22205	CAH	13L				
Z	C89	17	O					7G
Z	D331	461	O					6A
Z	D332	514	OVA	16L				
Z	D100	559	OVA	17M				
Z	E85	1279	O		15A	15A	15A	11G
Z	E85	1280	O		6A	9A	9A	5A
Z	E85	1333	OVA	19M		9A	2A	
Z	E85	1334	O		15A	15A	15A	11G
Z	D103	1670	O				E	
Z	B98	2115	O		8A			
Z	B98	2116	O					4A
Z	B150	2161	OVA	8L				
Z	B150	2164	O					5A
Z	B152	2180	OVA	13L				
Z	B168	2192	O			9A	5A	
Z	B168	2194	OVA	16L				
Z	D310	2297	O					2A

Appendix 33 cont. Sheep/goat: Ageing data: Mandibular tooth eruption and wear

Phase	Context	Bone ID	Species	dP4	P4	M1	M2	M3
Z	D283	2490	O				12A	11G
Z	E85	2633	O		9A	9A	8B	3B
Z	E185	2805	OVA	13L				
Z	D332	3034	OVA	16L				
Z	D306	3308	OVA	13L				
Z	D473	3525	CAH	13L				
Z	B136	3619	O		9A	9A	9A	8G
Z	D283	3638	O		E	9A	7A	
Z	D283	3639	O		9A	9A	9A	10G
Z	D283	3756	O					9G
Z	D332	3773	O		8B	9A	9A	6A
Z	D344	3796	O					11G
Z	D283	4098	O			9A	7A	6A
Z	C191	4409	O					11G
Z	E85	4924	O					4A
Z	E100	4931	OVA	16L				
Z	C112	4949	O					11G
Z	E85	4970	O		7T	9A	8A	2A
Z	E85	4971	O					10G
Z	E85	4977	O					11G
Z	B172	5007	O					8G
Z	C76	5058	OVA	13L				
Z	B172	5064	O					11G
Z	D100	5117	OVA	17M		9A	3A	
Z	C80	5174	O					10G
Z	C78	5207	O		9A	9A		
Z	C78	5208	O					10G
Z	C78	5218	O					E
Z	E172	5255	O				9A	10G
Z	C78	5332	OVA	14L		7A		
Z	C78	5499	OVA	21M		9A	7A	
Z	D100	5570	OVA	13L				
Z	D100	5651	O		9A	9A	9A	7A
Z	D310	5760	O		15A			
Z	E85	6129	O					1A
Z	E85	6187	O		9A	11B	9A	
Z	E85	6188	O		9A	10A	9A	11G
Z	D100	6611	O			9A	6A	
Z	D100	6853	CAH	16L		E		
Z	C78	7358	OVA	13L				
Z	C76	7375	O		V	9A	7A	
Z	C76	7376	O					6A
Z	B172	7403	OVA	13L				
Z	B172	7406	O			14A	9A	11G
Z	B172	7407	O		V	9A		
Z	B172	7408	O					E
Z	D372	7493	OVA	12A				
Z	E85	7585	OVA	13L				
Z	C188	7710	CAH	2A				
Z	C188	7719	OVA	14L				
Z	C188	7720	CAH	13L				
Z	C188	7737	O			9A	5A	
Z	C78	8063	OVA	16L		5A	V	
Z	C78	8064	O					11G
Z	C76	8077	OVA	13L		E		
Z	C76	8088	O		8A	10A	8A	4A
Z	B172	8116	O	23L		9A	7A	
Z	C78	8151	OVA	17L		9A	7A	
Z	C78	8152	O		14S	15A		
Z	B172	8196	OVA	17L		9A	V	

Appendix 33 cont. Sheep/goat: Ageing data: Mandibular tooth eruption and wear

Phase	Context	Bone ID	Species	dP4	P4	M1	M2	M3
Z	B172	8197	OVA	18L		9A	7A	V
Z	B172	8198	OVA	8L		E		
Z	B172	8201	O		12S	9A	9A	8G
Z	B172	8202	O		15A	15A	15A	11G
Z	B147	8213	O			9A	7A	1B
Z	D108	8540	O		9A	9A	9A	
Z	D100	9384	OVA	17L		9A	1B	
Z	D100	9385	O		9A	9A	9A	8G
Z	D100	9389	O		E	9A	7A	E
Z	D108	9787	CAH	7L				
Z	E221	9852	O					8G
Z	B80	9969	OVA	20L		9A	7A	
Z	B147	9981	OVA	14L		7A	V	
Z	B98	9983	CAH	13L				
Z	B147	10000	OVA	17L		8A	2A	
Z	B147	10001	OVA	12L				
Z	B149	10022	O				9A	11G
Z	B149	10023	O					10G
Z	B172	10025	OVA	19M		9A	6A	
Z	D100	10060	O		9A	9A		
Z	D100	10070	OVA	17L				
Z	D100	10096	O				9A	6A
Z	C78	11832	OVA	23L				
Z	C78	11838	O		15A	15A		11G
Z	D283	12428	OVA	17M		9A	6A	
Z	D283	12429	O					2A
Z	D100	12775	OVA	14L				
Z	D100	12776	CAH	1B				
Z	D100	13184	OVA	14L		3C		
Z	D310	13426	O					6A
Z	C106	13471	OVA	17L		9A	6A	
Z	E172	13926	OVA					11G
Z	D283	14313	O					2A
Z	E85	14888	O					8G
Z	D100	15341	OVA	14L		5B		
Z	D100	15342	O		9A			
Z	D100	15343	O				8A	5A
Z	D100	15426	O		9A	9A	7A	
Z	C90	16393	O				7A	2A
Z	D283	16686	O		8A	9A	5A	
Z	D283	16705	OVA	21M				
Z	D108	16884	CAH	13L		E		
Z	D108	17172	OVA	14L				
Z	D283	17824	CAH	13L				
Z	D100	18079	O					11G
Z	D100	18086	OVA	14L		9A		
Z	D283	18106	O		11C			
Z	D372	18157	O					2A
Z	D100	18521	OVA	14L				
Z	C78	18737	O					5A
Z	D100	19614	OVA	18L				
Z	D100	19630	O			9A	7A	2A
Z	D100	19636	O			9A		
Z	D100	19829	OVA	14L				
Z	E172	20347	O					8G
Z	B172	20434	O			15A	9A	11G
Z	B172	20435	O			9A	7A	
Z	B136	21433	O			9A	8A	2A
Z	D100	21550	OVA	18L				
Z	D100	21739	O	14L				

Appendix 33 cont. Sheep/goat: Ageing data: Mandibular tooth eruption and wear

Phase	Context	Bone ID	Species	dP4	P4	M1	M2	M3
Z	D283	21985	O		E	9A	8A	V
Z	D283	22082	O					E
Z	D100	22413	O		12S	10A		
Z	D100	22701	OVA	14L				
Z	C78	22727	O			9A	7A	E
Z	D283	22869	O					7A
Z	E100	22885	O		5A	9A	8A	
Z	D148	22918	O		E	9A		
Z	D283	22975	O			9A		
Z	D100	23291	O		E	9A	8A	E
Z	D100	23292	O		E	9A	8A	V
Z	D100	23424	OVA	20L		9A	7A	V
Z	B147	23451	O				7A	E
Z	B147	23525	O		8A	9A		
Z	B147	23526	OVA	E				
Z	C78	23569	O		E	9A	7A	E
Z	C76	23577	O				9A	5A
Z	B152	23690	O		2B	9A	7A	
Z	B152	23691	OVA	17L				

Appendix 33 cont. Sheep/goat: Ageing data: Mandibular tooth eruption and wear

Phase	Context	Bone ID	Taxa	L	B
T-V	B603	OVA	6973	14.7	5.9
T-V	B602	OVA	6984	17.6	6.1
T-V	B643	OVA	7007	18.0	5.9
T-V	B643	OVA	7008	17.7	6.2
T-V	B602	OVA	7031	16.8	
T-V	B632	OVA	7049	14.7	5.7
T-V	D1013	OVA	10880	16.0	5.9
T-V	D1005	OVA	11126		5.3
W	C445	CAH	972	16.2	6.2
W	C440	CAH	989	14.8	6.1
W	C440	OVA	1001	14.0	6.2
W	C445	OVA	1012	16.3	5.8
W	D983	OVA	1178	15.0	6.2
W	D933	OVA	1572	14.3	6.0
W	D758	CAH	2445	16.7	6.2
W	C417	OVA	3375	17.5	5.7
W	D840	OVA	5822	16.2	6.4
W	B458	OVA	6471	18.8	5.9
W	E270	OVA	7102	18.5	6.2
W	C404	CAH	7524	17.4	6.8
W	B448	OVA	8767	15.9	6.0
W	D188	OVA	9124	18.0	5.8
W	E96	OVA	9263		5.6
W	E96	OVA	9264	17.7	
W	D957	OVA	10885		5.6
W	D810	OVA	11305		6.1
W	E96	CAH	12801	18.0	7.0
W	C417	OVA	12815		5.4
W	B521	OVA	14098	16.7	5.8
W	E96	OVA	14462	18.4	6.0
W	C476	OVA	14718	17.0	5.7
W	E96	OVA	15162	17.6	5.8
W	E96	OVA	16178		6.0
W	E96	OVA	16193	17.5	6.0
W	E96	OVA	16370		5.8
W	D2356	OVA	16405	17.9	5.7

Phase	Context	Bone ID	Taxa	L	B
W	E96	OVA	16745		6.2
W	C501	OVA	18809	15.9	
W	E96	OVA	18879		6.6
W	E96	CAH	20952	16.5	
W	E96	OVA	21118		6.5
W	C495	OVA	22124		6.4
X	B204	OVA	9988	17.0	6.0
X-Y	D81	OVA	7418	18.7	7.0
X-Y	D81	OVA	11879		5.7
X-Y	D81	OVA	14846	16.5	6.0
X-Y	D81	OVA	21338		6.0
X-Y	D81	OVA	21339		6.5
Y	D168	OVA	301	18.7	6.6
Y	A241	OVA	1488	17.3	5.5
Y	A318	OVA	2224	17.2	6.0
Y	D318	CAH	2952	17.5	7.2
Y	D338	OVA	3089	16.8	6.5
Y	D1333	OVA	3152	18.6	5.8
Y	D1333	OVA	3158	17.9	6.6
Y	D1333	OVA	3433	16.6	6.3
Y	D168	CAH	5137	16.8	6.1
Y	A345	OVA	6478	15.7	6.2
Y	A345	OVA	6482	14.4	6.0
Y	A318	OVA	6538	17.4	
Y	D219	OVA	6800	15.2	6.4
Y	D1332	CAH	7195	16.2	6.0
Y	D1231	OVA	7239	17.0	6.0
Y	B120	CAH	7936	16.3	5.7
Y	A253	OVA	8289		5.9
Y	D352	OVA	8673	17.5	5.9
Y	D151	CAH	8758	17.6	6.3
Y	D704	OVA	9477	19.0	6.2
Y	A318	OVA	10347		5.8
Y	D338	OVA	11530		5.7
Y	D338	OVA	11531		5.7
Y	D338	OVA	11770		5.1

Appendix 34. Sheep/goat: Biometry: Fourth deciduous premolar measurements

Phase	Context	Bone ID	Taxa	L	B
Y	D216	OVA	13367		5.9
Y	C184	OVA	13459	16.5	6.1
Y	D219	CAH	13667	16.8	5.9
Y	C307	OVA	13821	17.5	5.7
Y	D318	OVA	16163	18.4	6.1
Y	D312	CAH	17637	16.9	6.4
Y	D318	OVA	17701	15.0	6.1
Y	D329	OVA	17713		6.1
Y	D168	OVA	17801	16.9	6.6
Y	D1335	OVA	20830	18.9	
Y	D1335	OVA	20831	19.0	
Y	D151	OVA	23505	18.1	6.2
Y-Z	C187	OVA	5614	18.8	6.8
Y-Z	E74	OVA	7563	17.3	6.0
Y-Z	E74	OVA	7571	16.0	5.6
Y-Z	D116	OVA	8930	15.6	6.3
Y-Z	D116	OVA	8970	15.4	6.0
Y-Z	D116	OVA	8971	18.5	6.3
Y-Z	D116	OVA	9022	17.9	5.9
Y-Z	E74	CAH	10696		6.5
Y-Z	B277	OVA	14079	17.8	6.1
Y-Z	C267	OVA	17305	16.4	6.1
Y-Z	C267	OVA	17307		6.7
Y-Z	D116	OVA	18043	20.0	6.6
Y-Z	D116	OVA	18754	18.6	6.6
Y-Z	B277	CAH	20712	16.7	6.2
Y-Z	C187	OVA	21031		6.3
Y-Z	C187	OVA	21032	19.2	6.6
Y-Z	C187	CAH	21034	19.3	6.3
Y-Z	C231	CAH	22205	16.8	6.1
Z	D332	OVA	514	16.0	7.1
Z	D100	OVA	559	15.3	6.1
Z	B150	OVA	2161	17.7	5.7
Z	B168	OVA	2194	16.5	6.5
Z	E185	OVA	2805	18.3	6.0
Z	D332	OVA	3034	17.0	6.8
Z	D306	OVA	3308	19.0	6.3
Z	D473	CAH	3525	16.5	6.3
Z	E100	OVA	4931	17.0	5.9
Z	D100	OVA	5117	16.3	6.4
Z	C78	OVA	5332	16.4	6.0
Z	C78	OVA	5499	14.7	6.3
Z	D100	CAH	6853	16.5	6.4
Z	C78	OVA	7358	19.1	6.5
Z	B172	OVA	7403	17.8	5.7
Z	D372	OVA	7493	18.1	5.9
Z	E85	OVA	7585	16.9	5.9
Z	C188	OVA	7719	17.8	6.2
Z	C188	CAH	7720	16.5	5.9
Z	C78	OVA	8063	16.2	6.7
Z	C76	OVA	8077	16.4	6.0
Z	C78	OVA	8151		6.3
Z	B172	OVA	8196	16.2	6.3
Z	B172	OVA	8197		5.9
Z	B172	OVA	8198	16.7	5.7
Z	D100	OVA	9384		6.1
Z	D108	CAH	9787	18.1	6.8
Z	B147	OVA	9981	18.0	6.1
Z	B147	OVA	10001	17.6	5.7
Z	D100	OVA	10070		6.1
Z	D283	OVA	12428		6.0
Z	D100	OVA	12775	18.3	6.0
Z	D100	CAH	12776	17.4	6.3
Z	D100	OVA	13184	17.9	6.3
Z	D100	OVA	15341	18.4	6.5
Z	D283	OVA	16705		5.7
Z	D108	CAH	16884	16.9	6.6
Z	D108	OVA	17172	16.4	6.5
Z	D283	CAH	17824	18.0	6.9
Z	D100	OVA	18086		6.3
Z	D100	OVA	19614		6.4
Z	D100	OVA	19829		6.0
Z	D100	O	21739	18.5	6.0
Z	D100	OVA	22701	17.2	5.8
Z	B147	OVA	23526	18.2	6.2
Z	B152	OVA	23691		5.8

Appendix 34 cont. Sheep/goat: Biometry: Fourth deciduous premolar measurements

Phase	Context	Bone ID	Taxa	L	B
T-V	B621	O	6997	19.7	7.7
T-V	D1005	O	10202	22.2	8.3
T-V	D1005	O	10836	20.4	7.6
T-V	D1234	O	11601	21.1	8.1
W	C546	O	235	19.9	7.9
W	C440	O	996	22.0	8.3
W	D933	O	1573	20.2	7.8
W	D774	O	1932	19.7	7.4
W	D840	O	2441	22.3	8.1
W	D1132	O	3182	22.8	8.7
W	B448	O	6462	20.8	7.6
W	C527	O	8016	22.5	8.0
W	E96	O	8886	19.6	7.8
W	E96	O	9275	20.5	7.2
W	E270	O	9510	20.7	7.7
W	D767	O	9876	21.4	8.1
W	D983	O	11218	21.5	7.6
W	D983	O	11219	21.2	7.9
W	D2378	O	12296	18.8	7.3
W	D334	O	12699	21.5	7.9
W	D1858	O	13575	22.4	8.2
W	C476	O	14741	20.4	7.7
W	D335	O	14781	20.5	8.1
W	E96	O	15959	20.5	7.9
W	E96	O	16133	18.5	7.2
W	E96	O	16194	20.4	7.3
W	E96	O	16237	20.6	7.6
W	E96	O	16351	21.1	7.9
W	E96	O	19961	22.1	8.5
W	D342	O	20604	20.9	8.2
W	C468	O	21297	19.0	7.6
W	C468	O	22142	23.3	8.7
X	D446	O	3948	19.7	7.6
X	B86	O	21451	19.6	7.4

Appendix 35. Sheep/goat: Biometry: Third molar measurements

Phase	Context	Bone ID	Taxa	L	B
X	B86	O	21935	23.1	8.3
X	B86	O	21936		7.7
X-Y	D81	O	708	22.0	8.2
X-Y	D735	O	887	22.1	8.1
X-Y	D81	O	1251	19.4	7.7
X-Y	D728	O	1421	20.4	7.5
X-Y	D81	O	2291	19.5	7.1
X-Y	D81	O	3912	19.6	7.7
X-Y	D81	O	6661	21.2	8.0
X-Y	D81	O	12052	22.8	8.6
X-Y	D81	O	12089	19.3	7.5
X-Y	D81	O	12090		7.5
X-Y	D81	O	12704	21.8	8.3
X-Y	D81	O	13289	19.6	8.0
X-Y	D81	O	15838	19.2	7.1
X-Y	D81	O	16551	20.7	8.4
X-Y	D210	O	18057	21.9	8.0
X-Y	D81	O	18981	21.3	8.0
X-Y	D81	O	19700	20.6	8.4
X-Y	D81	O	21165	18.7	7.4
X-Y	D81	O	22640	19.8	7.6
Y	D338	O	429	22.7	7.9
Y	D703	O	4081	19.5	7.5
Y	A345	O	6498	22.5	8.2
Y	A318	O	6751	20.6	7.9
Y	D349	O	8618	20.4	7.5
Y	A318	O	10332	19.0	7.5
Y	D1333	O	10735	22.6	8.6
Y	D1333	O	10736	22.4	8.5
Y	D318	O	12009	22.9	9.0
Y	D338	O	14219	22.2	7.9
Y	D320	O	17979	21.1	8.1
Y	C409	O	18928	22.3	8.5
Y	D216	O	21396	22.5	8.3
Y	D216	O	21423	22.2	8.2
Y	B120	O	21447		7.8
Y-Z	E74	O	562	20.6	7.4
Y-Z	E74	O	572	21.8	8.2
Y-Z	D116	O	8987	23.0	8.5
Y-Z	E74	O	9219	22.3	8.4
Y-Z	E74	O	11968	21.1	8.2
Y-Z	E74	O	11971	20.7	7.3
Y-Z	E74	O	11973	21.6	8.4
Y-Z	E74	O	11978	18.9	7.4
Y-Z	B277	O	12233	19.1	7.3
Y-Z	E74	O	13094	20.2	7.6
Y-Z	D116	O	15089	24.0	8.3
Y-Z	D116	O	15469	20.8	7.7
Y-Z	E74	O	18605	20.5	8.0
Y-Z	B277	O	18629	23.7	8.8
Y-Z	D116	O	19924	20.8	7.9
Y-Z	B277	O	20554		8.1
Y-Z	B277	O	20561	22.3	8.9
Y-Z	E74	O	22104	19.3	7.6
Z	D331	O	461		8.3
Z	E85	O	1279	20.9	7.7
Z	E85	O	1280	20.6	7.3
Z	E85	O	1334	21.0	7.8
Z	B98	O	2116	21.5	8.0
Z	B150	O	2164	20.7	8.0
Z	D310	O	2297	19.8	7.8
Z	D283	O	2490	21.6	8.3
Z	E85	O	2633		7.7
Z	B136	O	3619	20.7	7.6
Z	D283	O	3639	20.0	7.9
Z	D283	O	3756	22.2	8.6
Z	E85	O	4924	21.5	8.0
Z	C112	O	4949	22.0	8.3
Z	E85	O	4970	19.7	7.6
Z	E85	O	4971	22.3	8.0
Z	E85	O	4977	20.3	7.4
Z	B172	O	5007	20.8	7.9
Z	B172	O	5064	20.1	7.5
Z	C80	O	5174	23.5	8.8
Z	C78	O	5208	21.4	8.5
Z	E172	O	5255	20.3	7.6
Z	E85	O	6129	22.1	8.2
Z	E85	O	6188	20.4	7.4
Z	C76	O	7376	21.5	7.8
Z	C78	O	8064	23.1	8.7
Z	C76	O	8088	20.0	7.1
Z	B172	O	8201	21.0	8.2
Z	D100	O	9385	20.3	7.8
Z	E221	O	9852	21.2	8.1
Z	B149	O	10022	21.1	8.3
Z	B149	O	10023	21.7	7.7
Z	D100	O	10096	21.9	8.1
Z	C78	O	11838	21.0	7.7
Z	D283	O	12429	20.5	
Z	D310	O	13426	22.2	8.6
Z	D283	O	14313	21.6	8.0
Z	D283	O	14370	21.7	
Z	E85	O	14888	21.1	
Z	D100	O	15343	21.5	7.8
Z	D100	O	18079		8.1
Z	C78	O	18737	20.8	8.2
Z	E172	O	20347	20.5	7.5
Z	B172	O	20434	19.1	7.4
Z	B136	O	21433		7.8
Z	D283	O	22869	20.8	8.1
Z	E85	O	23518	21.8	8.3

Appendix 35 cont. Sheep/goat: Biometry: Third molar measurements

Phase	Context	Bone ID	Taxa	41	42
W	C417	OVA	3368	34.3	21.7
W	C404	CAH	7504	29.0	20.6
W	E270	CAH	9509	28.3	21.4
X-Y	D81	OVA	709		17.3
X-Y	D210	CAH	21632	30.4	
Y	A318	OVA	2214	43.7	31.8
Y	D312	CAH	4614	33.4	18.7
Y	D352	CAH	5300	33.5	21.8
Y	B120	CAH	17321		18.0
Z	D466	CAH	1044	33.1	23.7
Z	D100	CAH	9344	31.6	18.7
Z	B147	CAH	10016	27.0	17.4
Z	D100	CAH	22423	34.3	

Appendix 36. Sheep/goat: Biometry: Horncore measurements

Phase	Context	Bone ID	Taxa	BT	HTC
T-V	D941	OVA	1184	24.5	11.9
T-V	B632	OVA	6936	26.6	13.0
T-V	B618	OVA	6948	26.3	12.5
T-V	B602	OVA	6957	27.3	14.2
T-V	B639	O	7042	26.8	11.8
W	D163	OVA	797	25.2	11.7
W	C417	OVA	3389	24.6	12.1
W	D343	OVA	3583	22.9	12.1
W	D343	OVA	4571	24.0	
W	C471	OVA	4684	27.3	13.2
W	D343	OVA	5838	28.3	13.7
W	E278	O	7107		13.4
W	B448	O	9657	26.2	12.7
W	D252	O	9801		11.1
W	D484	OVA	9816	25.7	12.0
W	D484	OVA	9817	26.2	12.7
W	D798	OVA	10297	26.8	12.7
W	D406	OVA	11324	27.1	13.5
W	D1578	O	13133	26.3	12.5
W	C476	OVA	14739	25.6	12.2
W	E96	OVA	14818	24.7	12.0
W	E96	OVA	14832	24.5	11.7
W	E96	OVA	15482	25.7	12.8
W	B521	OVA	15681	25.8	12.3
W	B521	OVA	15705	24.9	11.7
W	D1369	OVA	16008	25.0	12.6
W	E96	OVA	16353	26.2	12.7
W	D1369	OVA	17616	26.8	13.0
W	C527	OVA	17775	26.8	13.1
W	C527	OVA	17776	24.1	10.4
W	C501	OVA	18837	24.9	11.7
W	C527	O	19546		13.7
W	C527	OVA	19571	24.3	11.7
W	D163	OVA	19979		11.9
W	D163	OVA	19998	28.1	13.6
W	E96	OVA	21232	25.8	12.3
W	C527	OVA	22041	30.0	13.0
W	C495	OVA	22249	28.8	12.6
X	B86	OVA	13966	21.5	10.6
X	B86	O	14014		13.5
X-Y	D728	O	848	25.6	13.0
X-Y	D81	OVA	932		15.6
X-Y	D81	OVA	3084	28.4	14.5
X-Y	D81	OVA	3824	27.2	13.4
X-Y	D81	OVA	7140	24.8	10.6
X-Y	D81	OVA	7391	26.3	13.0
X-Y	D81	O	8669	28.7	13.8
X-Y	D210	OVA	10382	25.0	13.1
X-Y	D210	OVA	12106	28.7	14.3
X-Y	D81	OVA	14926	24.9	12.1
X-Y	D81	O	21184		12.4
X-Y	D81	O	21626		10.6
X-Y	D81	OVA	22556		13.0
Y	D1282	OVA	913	28.1	14.2
Y	D1332	OVA	1095	29.4	
Y	A332	OVA	1452		12.6
Y	B317	OVA	1611	24.7	12.7
Y	D1231	OVA	1991	29.0	14.4
Y	D1333	OVA	3434	26.4	12.8
Y	D746	OVA	3466	25.5	13.2
Y	D78	OVA	4983	29.1	14.3
Y	A345	OVA	6479	26.3	12.1
Y	A151	OVA	6508	25.5	13.1
Y	D1332	OVA	7196	29.0	14.3
Y	D1332	O	7197	27.8	13.9
Y	D352	OVA	7640	26.7	13.5
Y	D1158	O	7670	28.7	13.2
Y	A241	OVA	8314	24.7	11.3
Y	D338	O	8902	23.4	11.6
Y	D702	OVA	9512	26.2	13.3
Y	A318	O	10338	25.0	11.9
Y	A318	OVA	10349	25.0	11.4
Y	A318	OVA	10350	25.2	12.9
Y	A318	OVA	10351	26.4	12.4
Y	D329	OVA	12668	27.2	13.5
Y	D216	OVA	14942		14.7
Y	D214	OVA	16044		13.7
Y	D329	OVA	17492	25.1	11.4
Y	D329	O	17582		13.0
Y	B321	O	17740	25.6	12.1
Y	D168	O	17802	29.0	13.5
Y	D168	O	17803	26.8	13.0
Y	D329	OVA	18273	27.9	13.8
Y	C203	OVA	20096	28.2	13.3
Y-Z	C132	OVA	66	27.1	13.0
Y-Z	D116	OVA	805	26.9	13.1
Y-Z	B277	OVA	1768	28.1	12.8
Y-Z	B277	OVA	1783	29.6	14.8
Y-Z	D116	OVA	5908	27.3	12.7
Y-Z	D116	O	6298	30.8	15.1
Y-Z	E74	O	7548	24.7	12.2
Y-Z	E74	O	9193		14.6
Y-Z	E74	OVA	9234	27.8	13.4
Y-Z	E74	O	10697	24.8	
Y-Z	C268	OVA	13022	28.1	13.5
Y-Z	B277	OVA	13053	24.8	12.4

Appendix 37. Sheep/goat: Biometry: Humerus measurements

Phase	Context	Bone ID	Taxa	BT	HTC
Y-Z	B277	OVA	15599	25.9	12.3
Y-Z	D116	O	18770	29.5	13.0
Y-Z	C268	O	20141		11.9
Y-Z	C187	OVA	20495	29.8	14.1
Y-Z	E74	O	22322		11.8
Y-Z	D116	OVA	22650	24.7	11.3
Z	D372	OVA	167		12.5
Z	D372	OVA	178	25.7	12.8
Z	E85	OVA	1304	24.0	12.0
Z	E137	OVA	1316	26.1	13.0
Z	E137	CAH	1317		14.0
Z	E172	OVA	1854	25.1	12.9
Z	D108	OVA	1999	28.5	14.3
Z	E185	OVA	2848	28.8	15.0
Z	E170	OVA	3124	25.3	11.9
Z	B172	OVA	5004	25.0	12.4
Z	C78	OVA	5479	30.4	12.5
Z	C76	O	5507		11.9
Z	D100	O	5571	27.8	13.0
Z	D332	OVA	6118	27.9	13.4
Z	E85	OVA	6161	25.3	11.4
Z	D283	O	6308	28.1	14.1
Z	D100	OVA	6612	28.5	
Z	D100	OVA	6861	29.8	14.9
Z	C76	O	7329	24.0	12.3
Z	C78	OVA	7359		12.2
Z	B172	OVA	7404	24.9	12.2
Z	D283	OVA	8535	27.4	13.1
Z	D108	OVA	8541	29.7	15.2
Z	D100	O	9386	29.8	15.0
Z	B80	OVA	9970	25.2	11.8
Z	B172	OVA	10030	26.7	12.9
Z	B97	OVA	10033	24.7	11.8
Z	D108	CAH	10171	30.4	13.2
Z	D372	O	10980	27.3	13.1
Z	C78	OVA	11833	27.4	13.3
Z	D100	OVA	12524	26.2	13.5
Z	D100	OVA	12768	26.4	12.7
Z	D283	OVA	13237	30.3	15.5
Z	D100	OVA	15344	26.6	13.3
Z	B172	O	15471	24.5	12.7
Z	D100	OVA	16059	27.7	12.6
Z	E172	OVA	16304	27.6	13.6
Z	E172	O	16305	31.2	16.9
Z	D317	O	16795		12.2
Z	D100	OVA	17192	27.1	13.0
Z	D100	OVA	17211	28.1	13.7
Z	E85	OVA	18368	26.2	12.3
Z	D100	OVA	18500	27.3	13.6
Z	D100	OVA	18712		13.4
Z	C188	OVA	19719	29.0	13.6
Z	B172	O	20444	26.3	12.6
Z	C113	OVA	22379	26.6	13.0
Z	D100	OVA	22910	29.3	14.9
Z	E85	OVA	23214		12.9
Z	D100	OVA	23244	25.4	13.1
Z	D100	OVA	23385	24.3	12.0
Z	D100	OVA	23493	29.4	14.1
Z	C78	OVA	23570		12.9
Z	D100	OVA	23705	22.9	10.8

Appendix 37 cont. Sheep/goat: Biometry: Humerus measurements

Phase	Context	Taxa	Bone ID	GL	SD	Bp	BFp
T-V	B618	O	6949			28.9	27.2
T-V	D1215	O	10776			26.6	25.2
T-V	D2153	O	17556			30.0	26.5
W	C537	OVA	199	138.6	14.3	26.3	24.3
W	C440	O	997			29.1	26.3
W	C440	O	998			26.0	24.7
W	C417	O	3415			24.3	23.5
W	D163	O	5965			27.4	24.8
W	D1265	O	6688			25.6	23.4
W	D1011	O	6932			30.8	29.1
W	D343	O	9101			31.7	29.5
W	D188	O	10997			29.5	27.5
W	C278	O	14634			28.8	25.9
W	E96	O	16245			29.5	28.0
W	E96	O	16653			27.8	25.8
W	E96	O	17452			27.3	25.0
W	C527	O	22286			26.2	24.5
X	D552	O	21514			25.3	23.5
X-Y	D81	O	2369			30.0	27.2
X-Y	D81	O	3225			26.0	24.5
X-Y	D81	O	10515			26.6	
X-Y	C308	O	13794			27.3	25.4
X-Y	D210	O	18060			29.2	26.4
X-Y	D81	OVA	20980	134.9	13.6	26.7	25.6
Y	D1332	O	1125			28.3	27.0

Appendix 38. Sheep/goat: Biometry: Radius measurements

Phase	Context	Taxa	Bone ID	GL	SD	Bp	BFp
Y	D762	O	1203			27.6	25.6
Y	D312	O	2015			30.3	28.3
Y	A318	O	2227			28.1	26.0
Y	D464	O	3532			28.7	27.1
Y	D837	O	5403			26.5	24.9
Y	C406	O	7540			29.3	27.2
Y	A318	O	10340			27.7	26.1
Y	A318	O	10341			26.4	24.3
Y	D1333	O	10737			28.1	26.6
Y	D1158	OVA	12545	151.7	18.8	29.4	27.4
Y	C184	CAH	13460	158.4	18.5	29.7	28.9
Y	D329	O	18274			29.1	26.5
Y-Z	D116	O	749			28.2	27.1
Y-Z	D116	O	776			29.0	27.7
Y-Z	D116	O	1272			28.7	27.4
Y-Z	E74	OVA	3717			26.9	25.5
Y-Z	D116	OVA	4886			26.5	22.1
Y-Z	E74	O	7545			26.6	24.3
Y-Z	E74	O	9233				24.1
Y-Z	E74	O	11961			28.7	26.5
Y-Z	B277	O	12236			26.7	25.3
Y-Z	B277	O	13063			30.6	28.6
Y-Z	E74	O	13110			25.3	23.4
Y-Z	D116	O	15091			30.0	27.1
Y-Z	C75	O	17954			27.3	25.2
Y-Z	D116	O	18771			31.6	28.6
Y-Z	C258	O	22182			26.5	24.3
Z	D332	O	618			30.9	27.8
Z	B198	O	2127			26.9	25.6
Z	B150	O	2166			27.7	27.2
Z	B136	O	3623			26.8	24.2
Z	D100	O	4089			27.9	27.2
Z	D100	O	4753			26.9	25.2
Z	C78	O	4765			30.0	28.9
Z	B172	O	5008			26.6	24.0
Z	B136	O	5073			28.7	27.2
Z	B172	O	5229			27.2	24.9
Z	E85	O	6165			28.1	25.2
Z	D283	O	6367			32.7	29.4
Z	D100	O	6401			29.0	27.1
Z	B136	O	7908			26.1	24.7
Z	D100	O	7974			27.4	25.9
Z	D108	O	8256			29.7	27.4
Z	D372	O	9591			29.7	27.4
Z	D393	O	9643			30.0	27.8
Z	D100	O	10061			24.0	22.9
Z	E172	OVA	12810	150.6	16.7	27.9	26.2
Z	B136	O	13994			27.2	23.7
Z	D108	O	14442			30.1	27.7
Z	D100	O	15002			29.3	26.3
Z	B172	O	15472			37.0	33.9
Z	E172	O	16306			27.9	26.0
Z	D100	O	17523			31.5	28.8
Z	D100	O	17816			30.2	27.9
Z	E172	O	19788			27.0	25.4
Z	C188	O	20361			27.5	24.7
Z	B172	O	20445			25.9	23.9
Z	D283	O	21643			31.2	28.2
Z	D100	O	22228			26.4	24.3
Z	D100	O	22764			28.9	26.5

Appendix 38 cont. Sheep/goat: Biometry: Radius measurements

Phase	Context	Taxa	Bone ID	GL	SD	Bp	BFp
Z	D100	OVA	22828	135.4	13.3	28.1	24.9
Z	D100	O	22829			27.1	24.0
Z	C78	O	23743			28.8	26.0

Appendix 38 cont. Sheep/goat: Biometry: Radius measurements

Phase	Context	Taxa	Bone ID	GL	SD	Bp	Bd	BatF	1	2	3	4	5	6	a	b
T-V	B665	OVA	7057	119.1	12.1	20.3	22.7	22.7	9.5	14.4	12.4	9.4	14.2	12.3	10.4	10.1
T-V	C433	O	11724			20.8										
T-V	C433	OVA	11743			20.7										
T-V	D2188	O	12273			20.8										
T-V	D1005	OVA	12542	127.5	14.1	21.3	23.9	24.6	10.4	15.2	12.9	9.6	14.7	13.0	11.5	11.0
W	C440	OVA	986			21.7										
W	C445	O	1021			19.4										
W	D254	OVA	2987				20.8	21.3				9.8			9.6	1.0
W	C417	OVA	3370	117.6	11.5	19.8	22.0	22.4	9.5	14.3	12.0	9.1	13.7	12.4	10.2	9.7
W	C417	O	3376			19.7										
W	C529	OVA	4668			18.4										
W	C486	OVA	4702			20.7										
W	B648	O	6954			21.0										
W	C404	OVA	7506				21.6	22.3	9.8	14.3	12.4	8.9	13.6	12.0	10.3	9.8
W	C404	OVA	7507	121.8	13.0				9.9	13.9	12.0			12.1	10.3	
W	B521	OVA	8769	124.0	11.5	20.2	23.2	22.7	9.7	14.3	12.5	9.2	13.9	12.5	10.5	9.8
W	D343	OVA	9081			23.3										
W	B448	OVA	9651				21.9	21.6	9.5	13.4	12.3	10.3	14.1	12.7	9.8	10.5
W	B448	OVA	9658			21.2										
W	D743	OVA	9913			20.8										
W	D840	OVA	10290			22.2										
W	D1329	OVA	11588			19.3	20.2	20.2	9.4		11.9	9.0		12.1	9.5	9.3
W	C423	OVA	11708			23.1										
W	D936	OVA	12537	113.5	11.0	19.6	22.2	21.2	9.3	13.7	12.2	8.8	13.5	11.9	10.6	10.4
W	D743	O	12538	114.4	11.5	18.5	21.0	21.1	9.3	14.0	12.2	9.3	13.5	11.9		9.8
W	B521	OVA	14085	122.4	11.2	19.1	22.4	22.4	9.3	14.3	12.4	8.9	13.7	12.5	10.4	10.1
W	B521	OVA	14086				22.9	22.9	9.3		12.3	9.0		12.6	10.9	10.4
W	B521	OVA	14102			20.8										
W	B521	O	14112			21.1										
W	E96	O	14248			20.2										
W	E96	O	14808			19.3										
W	E96	OVA	14819			22.3										
W	E96	OVA	15176			18.6										
W	E96	OVA	15268	124.7	13.1	20.4	23.2	23.2	10.0	14.7	12.9	9.9	14.5	13.0	10.7	10.5
W	E96	O	16117			18.8										
W	E96	OVA	16227			21.2										
W	E96	OVA	16338	118.2	12.9	21.1	23.4	22.2	10.0	14.7	13.1	9.7	14.2	13.0	11.7	11.3
W	D2391	OVA	16412			21.1										
W	E96	OVA	16741	116.8	10.9	19.5	21.2	21.2	9.2	13.6	12.4	9.1	13.3	12.4	10.0	9.5
W	E96	OVA	17448			22.2										
W	C527	OVA	17764				24.4	24.0	10.2		13.2	10.0	14.7	13.0	13.1	11.0
W	C527	O	19548			18.4										
W	E96	O	20054			21.6										
W	E96	O	21221			19.8										
W	D254	OVA	21656	123.7			22.6	22.6	10.0		12.9	9.2		13.3	10.6	10.2
W	D163	OVA	21681				24.1	22.8	9.8		12.8	9.6		12.5	11.4	10.9
W	C495	OVA	22119	107.3	10.6	18.8	21.9	21.9	9.3		11.8	8.7		12.0	10.3	9.7
X	D1171	OVA	11098			21.3										
X	D553	OVA	12535	138.0	13.5	23.3	25.5	25.2	11.4	17.0	15.3	10.8	16.2	14.9	12.0	11.5
X	B86	O	13967			20.9										
X	B86	O	21452			20.8										
X-Y	D735	OVA	888			20.0										

Appendix 39. Sheep/goat: Biometry: Metacarpal measurements

Phase	Context	Taxa	Bone ID	GL	SD	Bp	Bd	BatF	1	2	3	4	5	6	a	b
X-Y	D81	OVA	2283	132.2	13.0	20.8	23.6	24.2	10.5		13.2	10.8		13.3	11.0	10.7
X-Y	D81	OVA	2524			21.2										
X-Y	D81	OVA	3913			19.8										
X-Y	D81	O	6767			21.3										
X-Y	D81	O	7392				21.0	20.8								
X-Y	D81	OVA	9624			19.4										
X-Y	D81	OVA	11880			22.4										
X-Y	D81	OVA	12030			19.6										
X-Y	D81	OVA	14962	112.3	11.3	18.6	20.9	20.8	9.9	13.9	12.2	9.3		12.2	9.8	9.4
X-Y	D81	O	16587			20.4										
X-Y	D81	OVA	17923	121.9	13.5	20.6	23.8	23.6	10.4	15.3	13.1	9.7	14.7	13.0	11.3	11.0
X-Y	D210	O	18059			23.5										
X-Y	D81	O	18484			20.9										
X-Y	D81	OVA	21166				22.5	22.1	10.3	14.9	13.5	9.6	14.3	13.3	10.8	10.2
Y	D1332	OVA	1126			20.6										
Y	A332	O	1463			20.0										
Y	D1231	OVA	1516			23.3										
Y	D762	O	1555			20.7										
Y	D318	OVA	2026			21.3										
Y	D464	OVA	3533				24.8	24.4	10.9			10.5			11.6	11.9
Y	D168	OVA	6426	124.6	13.9	22.9	24.5	24.9	10.3	15.4	13.3	1.0	15.0	13.5	11.0	10.8
Y	A318	OVA	6520				23.3	22.1	9.9		13.1	10.4	15.0	13.3	10.6	
Y	A318	CAH	6521			22.2										
Y	D1158	OVA	6885			22.4										
Y	D1333	OVA	7181			23.6										
Y	D346	OVA	7440	118.4	11.8	20.2	22.7	22.7	10.0	15.3	13.5	10.1	14.6	13.3	10.5	10.4
Y	D151	OVA	7879			20.3										
Y	A196	OVA	8305	115.3	11.8	19.7	20.7	21.1	9.4	13.8	11.9	9.1	13.4	12.2	9.9	9.4
Y	D352	OVA	8674			21.3										
Y	D151	OVA	8727				21.3	22.6	9.3	14.3	12.0	8.9	13.9	12.0	10.1	9.7
Y	D762	OVA	9284			21.8										
Y	A318	OVA	10353	123.3	11.6	19.2	21.9	21.9	9.6	14.4	12.5	9.4	13.9	12.2	10.3	10.1
Y	D712	OVA	12533	122.9	12.5	20.1	22.7	22.8	9.7	14.6	12.8	10.0			10.2	10.4
Y	D1333	OVA	12539	123.5	12.2	20.6	23.3	22.6	9.4	14.4	12.5	9.2	14.0	12.4	11.0	10.6
Y	D214	O	12872			21.8										
Y	D312	OVA	13746			21.6										
Y	D320	O	17505			19.5										
Y	D329	O	17968			20.4										
Y	D216	OVA	18150			21.1										
Y	C409	O	18915			23.7										
Y	D224	O	19421			22.2										
Y	D1231	O	20484			21.1										
Y	D216	O	21389			21.6										
Y	B120	O	21927			22.5										
Y-Z	D116	O	402			23.2										
Y-Z	E74	O	588			20.8										
Y-Z	E74	OVA	610			21.1										
Y-Z	D116	OVA	765			22.9										
Y-Z	D116	O	787			21.3										
Y-Z	B277	OVA	1769			23.0										
Y-Z	D116	OVA	5886				22.8	23.0	9.8	14.7	12.5	9.4	14.3	12.4	10.7	11.1
Y-Z	E250	OVA	9864			20.7										
Y-Z	E74	OVA	10682				22.6	22.0	9.6		11.8	8.9		11.8	10.7	10.3
Y-Z	E74	OVA	11974			22.8										
Y-Z	E74	O	13106				21.8	21.8							10.6	10.0
Y-Z	E74	O	13109			20.1										
Y-Z	D116	OVA	15384	125.8	12.4	22.1	24.4	23.6	11.3	16.6	14.3	10.7	15.9	14.0	11.5	11.1
Y-Z	D116	OVA	15538			21.3										
Y-Z	C240	OVA	18196			23.1										
Y-Z	E74	O	18623			20.0										

Appendix 39 cont. Sheep/goat: Biometry: Metacarpal measurements

Phase	Context	Taxa	Bone ID	GL	SD	Bp	Bd	BatF	1	2	3	4	5	6	a	b
Y-Z	D116	CAH	19651				28.0	28.0	9.5		13.4	9.3	16.4	13.9	12.7	12.6
Y-Z	D116	O	19985			19.6										
Y-Z	C240	O	21054			19.8										
Y-Z	C231	O	22192			18.9										
Y-Z	D116	O	23415			20.7										
Z	D306	OVA	4035			23.1										
Z	D306	OVA	4036			22.7										
Z	C191	OVA	4410			21.2										
Z	D100	OVA	4906			19.1										
Z	E100	OVA	4933				24.0	22.5	10.4	15.3	13.5	11.2	15.4	13.9	11.2	11.1
Z	C112	OVA	4950			21.6										
Z	E85	OVA	4973	132.0	13.2	22.4	24.2	23.7	10.2	15.5	13.1	10.2	15.0	13.2	11.5	11.2
Z	E85	OVA	4974			20.5										
Z	B172	OVA	5018			19.7										
Z	B172	OVA	5049	116.0	12.1	19.6	21.6	21.1	9.5	14.2	12.3	9.3	13.7	12.2	10.3	9.8
Z	C76	OVA	5059			22.5										
Z	B172	OVA	5068	118.8	11.3	19.1	21.8	22.2	9.1	13.9	11.9	8.6		11.7	10.2	10.2
Z	C78	OVA	5219			23.5										
Z	B172	CAH	5230			22.4										
Z	D100	OVA	5679			21.3										
Z	E85	OVA	6168			23.1										
Z	D100	OVA	6621	116.8	11.9	20.3	22.3	22.3	10.3	15.1	13.0	9.5		12.6	10.5	10.3
Z	E85	O	7587			20.3										
Z	B136	OVA	7968			20.3										
Z	B172	OVA	8115	123.7	12.4	21.0	22.7	22.3	9.8	14.4	12.4	9.7	14.1	12.4	10.6	10.5
Z	B152	O	8224			20.8										
Z	B80	OVA	9964			19.4										
Z	B80	O	9965				22.3	21.0								
Z	D100	OVA	10081			20.8										
Z	D473	O	11201			20.5										
Z	D466	OVA	11350				25.1	23.7	10.1	15.0	13.6	10.6		13.5	11.8	11.8
Z	D310	OVA	11555			20.5										
Z	E172	OVA	13867	127.9	14.5	21.8	25.3	25.4	9.8	14.7	12.4	9.4	14.4	12.5	11.9	11.6
Z	B136	O	13995			20.4										
Z	D283	OVA	14314			22.3										
Z	D283	OVA	14554			22.2										
Z	D100	OVA	14576			23.7										
Z	D100	O	14608			21.1										
Z	D283	OVA	14675			21.5										
Z	E85	OVA	14897	116.9	11.3	21.2	21.9	21.7	9.8	15.0	12.5	9.0	14.3	12.4	10.7	10.0
Z	B172	OVA	15473	133.0	13.1	21.9	24.0	23.2	10.3	15.0	13.1	9.8	14.7	12.8	11.3	11.2
Z	B172	OVA	15474	123.7	12.3	21.4	23.0	22.6	10.1	14.6	12.7	9.8	14.3	12.5	10.8	10.5
Z	D100	OVA	16058			23.0										
Z	D283	OVA	16603				24.9	24.7	11.2	16.0	14.3	9.9	15.4	13.9	11.8	11.5
Z	D100	OVA	19414	122.5	12.2	20.7		23.0	9.7		12.0			11.9	10.6	
Z	B172	O	20438			20.8										
Z	B172	OVA	20439				22.5	22.4	9.7	14.3	12.6	9.4	13.9	12.4	10.4	9.9
Z	B172	CAH	20455	115.7	12.2	20.0	23.7	23.4	9.1	15.4	12.8	8.5	15.1	12.8	11.2	10.1
Z	B172	O	20478			20.1										
Z	D100	O	21532			20.6										
Z	E85	OVA	21731				22.4	21.2	9.6		12.2	9.2		12.4	10.4	9.9
Z	D283	OVA	21991	127.9	13.8		25.3	25.0	11.4	17.4	15.1	11.0	16.8	15.2	11.9	11.7
Z	D283	OVA	22009	128.4	14.0	22.3	24.7	24.7	10.9	16.2	14.6	10.1	15.6	14.4	11.9	11.5
Z	E85	O	23499			19.3										
Z	C78	OVA	23625	115.3	11.3		23.2	22.1				9.3	14.2	12.5		10.8

Appendix 39 cont. Sheep/goat: Biometry: Metacarpal measurements

Phase	Context	Bone ID	Taxa	Bd	Dd
T-V	B602	OVA	7034	25.5	19.6
T-V	D1005	OVA	10203	25.4	19.7
T-V	D1215	OVA	10777	22.5	16.4
T-V	D1075	OVA	10874	21.2	16.7
W	C440	OVA	987	24.1	18.4
W	C440	OVA	1004	24.3	19.3
W	D227	OVA	1078	21.9	16.6
W	D343	OVA	1633	21.8	16.4
W	C417	OVA	3409	23.7	18.8
W	D1265	OVA	3446	24.4	18.7
W	D1265	OVA	3447	25.4	18.3
W	D906	OVA	3857	26.2	19.9
W	D163	OVA	5969	22.7	18.1
W	B455	OVA	6460	23.9	18.6
W	B434	OVA	6468	22.2	17.5
W	E96	OVA	8874	23.2	17.7
W	D343	OVA	9524	23.3	
W	B448	OVA	9667	25.7	20.4
W	D163	OVA	9804	22.4	18.4
W	D484	O	9818	21.7	16.6
W	D343	OVA	9842	22.4	
W	D767	O	9877	26.4	21.1
W	D743	OVA	10221	24.1	20.0
W	D936	O	10852	22.3	17.6
W	D743	OVA	11192	28.3	20.3
W	C468	OVA	12829	23.8	18.8
W	D1663	OVA	13132	25.3	19.2
W	E96	OVA	14460	21.1	16.8
W	E96	OVA	15507	23.7	18.1
W	E96	OVA	15665	21.0	17.6
W	D254	OVA	15840	23.1	18.1
W	D335	OVA	15870	25.7	19.4
W	E96	OVA	15920	24.2	18.4
W	E96	OVA	16217	21.5	16.7
W	E96	OVA	16239	26.2	19.3
W	D2378	OVA	16427	23.2	17.5
W	E96	OVA	16748	25.6	18.9
W	D188	OVA	17369	24.0	17.3
W	E96	OVA	17449	24.4	
W	C527	OVA	17778	24.0	18.6
W	C474	OVA	18233	27.5	
W	E96	OVA	18892	25.6	19.3
W	D2081	OVA	19004	24.4	18.7
W	D244	OVA	19866	24.0	18.2
W	D244	OVA	19867	24.1	18.3
W	C468	OVA	21288	23.7	18.2
W	C468	OVA	21324	24.0	
W	C468	OVA	22143	24.2	19.1
W	C527	OVA	22269	21.3	
W	C527	OVA	22288	22.7	18.2
X	B204	OVA	9989	23.7	18.6
X	B304	OVA	21863	24.2	19.0
X	B304	OVA	21864	22.8	
X-Y	D81	OVA	933	23.7	17.0
X-Y	D728	OVA	1074	25.2	17.2
X-Y	D81	OVA	1266	25.0	20.0
X-Y	D81	OVA	2292	24.1	19.0
X-Y	D81	OVA	3056	25.1	19.2
X-Y	D728	OVA	4060	23.6	18.6
X-Y	D81	OVA	6788	23.4	17.1
X-Y	D81	OVA	6789	27.3	21.4
X-Y	D81	OVA	7141	24.5	19.6
X-Y	D81	OVA	9635	22.7	17.1
X-Y	D81	OVA	10145	23.5	17.6
X-Y	D81	OVA	10373	22.6	17.5
X-Y	D81	OVA	13666	24.6	19.1
X-Y	D81	OVA	15833	23.4	17.9
X-Y	D81	OVA	16454	25.8	19.8
X-Y	D81	OVA	22559	25.4	20.1
Y	D1231	OVA	944	23.6	17.6
Y	D1332	OVA	1114	23.8	17.5
Y	D705	OVA	1434	24.7	18.4
Y	A332	OVA	1453	21.6	
Y	D340	OVA	1809	22.9	
Y	D464	OVA	1920	26.2	18.6
Y	D746	OVA	1929	26.8	20.4
Y	A318	OVA	2203	20.9	17.5
Y	A318	OVA	2225	23.2	17.7
Y	D318	OVA	2356	24.4	20.0
Y	D352	O	5314	28.1	21.4
Y	D762	OVA	5431	24.3	17.6
Y	D762	OVA	5783	24.6	19.3
Y	A318	CAH	6522	24.9	18.8
Y	A230	OVA	6724	23.6	18.5
Y	D340	OVA	7164	25.5	19.7
Y	D346	OVA	7441	25.3	19.8
Y	D150	OVA	7948	25.1	18.7
Y	D703	OVA	9471	22.7	
Y	D1231	OVA	10770	24.9	19.5
Y	D746	OVA	10905	25.4	
Y	D762	OVA	11282	23.8	17.9
Y	C270	OVA	14625	26.1	20.9
Y	C270	OVA	14626	22.1	17.6
Y	D320	OVA	15285	23.9	
Y	D312	OVA	17473	26.0	20.2
Y	D318	OVA	17593	24.8	19.2
Y	B321	OVA	21840	24.8	18.9
Y-Z	E74	OVA	606	22.8	17.7
Y-Z	B277	OVA	1770	24.7	19.2
Y-Z	D116	OVA	4551	24.3	19.4
Y-Z	D116	OVA	5896	25.4	20.2
Y-Z	D116	OVA	5917	24.8	18.6
Y-Z	E74	OVA	7773	22.1	16.4
Y-Z	D116	OVA	9015	21.5	16.9
Y-Z	D116	OVA	9108	25.4	19.8
Y-Z	C267	OVA	16972	23.4	18.3
Y-Z	C75	O	17962	27.2	25.2
Y-Z	D116	CAH	19653	23.8	19.7
Y-Z	D116	OVA	19987	26.1	19.6
Y-Z	D116	OVA	20065	24.6	19.0
Y-Z	E249	OVA	20079	23.2	18.4
Y-Z	C268	OVA	20143	26.0	20.7
Y-Z	B277	OVA	20531	27.5	21.8
Y-Z	B277	OVA	20532	26.3	20.7
Y-Z	B277	OVA	20713	22.9	18.0
Y-Z	C240	OVA	20736	25.4	19.5
Y-Z	C267	OVA	20913	26.0	18.8
Y-Z	C267	OVA	20914	26.7	21.2
Y-Z	E74	OVA	22310	23.3	
Y-Z	D116	OVA	22651	23.7	

Appendix 40. Sheep/goat: Biometry: Tibia measurements

Phase	Context	Bone ID	Taxa	Bd	Dd
Y-Z	E74	OVA	23218	22.6	
Z	D100	OVA	534	26.2	19.4
Z	D310	OVA	724	23.2	17.6
Z	D100	OVA	1658	22.2	17.1
Z	D100	OVA	1659	24.0	19.2
Z	D103	OVA	1669	24.7	19.3
Z	B150	OVA	2162	24.0	17.5
Z	D310	OVA	2270	28.8	23.0
Z	D283	OVA	2976	27.1	20.5
Z	D283	OVA	2977	24.5	
Z	D332	OVA	3235	23.1	18.6
Z	B136	OVA	3607	24.0	18.6
Z	D283	OVA	4383	25.7	19.9
Z	D100	O	4754	25.9	21.1
Z	C76	OVA	5060	22.4	17.4
Z	D100	OVA	5118	24.5	19.3
Z	B172	O	5232	25.4	18.6
Z	E172	OVA	5256	25.1	19.1
Z	D100	OVA	5371	23.4	18.9
Z	C76	OVA	5452	23.1	18.1
Z	B153	OVA	5543	22.1	15.8
Z	E85	OVA	6162		17.7
Z	E85	OVA	6163		17.9
Z	D331	OVA	7471	26.0	20.2
Z	E85	OVA	7608	21.1	16.9
Z	B155	OVA	8226	26.2	19.6
Z	B155	OVA	8227	23.3	18.5
Z	D466	OVA	9502	25.4	20.8
Z	B147	OVA	10015	22.8	18.4
Z	B172	OVA	10027	22.2	
Z	D372	OVA	11002	23.9	17.8
Z	D323	OVA	11544		26.6
Z	D310	OVA	13427	24.1	18.9
Z	B136	OVA	14001	26.9	20.3
Z	B136	OVA	14002	22.2	18.1
Z	B136	OVA	14019	23.5	18.1
Z	D100	OVA	15004	23.5	18.8
Z	D148	OVA	15453	25.8	20.4
Z	D372	OVA	17385	22.4	17.2
Z	D100	OVA	17531	26.5	20.3
Z	C78	OVA	17915	24.0	18.8
Z	D283	OVA	18310	27.6	23.2
Z	B172	CAH	20441	23.9	19.0
Z	B172	OVA	20442	23.4	18.5
Z	D100	OVA	21534	25.2	19.3
Z	D100	OVA	22777	23.9	18.4
Z	D100	OVA	22813	22.8	17.6
Z	D100	OVA	22830	26.8	21.3
Z	E100	OVA	22898	25.6	
Z	D100	OVA	22932	24.5	19.0
Z	E85	OVA	23184	24.7	17.9
Z	D100	OVA	23370	24.4	

Appendix 40 cont. Sheep/goat: Biometry: Tibia measurements

Phase	Context	Bone ID	Taxa	GLl	Bd	Dl
T-V	D1164	OVA	6715		17.1	14.3
T-V	B602	OVA	6958	25.5	17.2	14.3
W	D743	OVA	1052	24.6	17.0	14.0
W	D840	OVA	2442	27.5	18.5	15.7
W	D906	OVA	3860	29.4	18.3	16.3
W	D343	OVA	3897	32.3	20.5	18.0
W	C473	OVA	4699	25.9	17.3	15.1
W	D163	OVA	5982	24.6	16.6	13.8
W	D343	O	5985	24.5		
W	B448	OVA	6461	25.7	16.5	14.5
W	B448	OVA	6469	23.7	14.9	13.6
W	D188	OVA	7299	25.6	16.5	14.2
W	B520	OVA	8774	28.4	17.6	15.3
W	D343	OVA	9084	28.6	19.0	15.8
W	B448	OVA	9663	25.3	16.9	14.3
W	D933	CAH	10295	29.0	18.2	15.4
W	D1165	OVA	11097	23.0	16.0	13.8
W	C423	OVA	11709	24.1	15.3	12.9
W	D1569	OVA	13153	28.1	18.1	15.3
W	B521	OVA	14107	25.0	16.9	14.6
W	D335	OVA	14216	27.5	17.5	15.0
W	D163	OVA	15623	26.3	17.1	14.9
W	B521	O	15699	23.5	15.8	13.3
W	D335	O	16156	28.9		17.1
W	D1744	OVA	16714	25.4		14.1
W	C501	OVA	18843	25.5	17.9	14.2
W	C527	OVA	19550	25.4	17.4	14.9
W	D163	OVA	20078	23.0	15.1	12.9
W	D102	OVA	21827	27.5	18.5	14.9
W	C527	OVA	22043	25.0	15.5	14.0
W	C495	OVA	22131	28.0	18.2	15.2
X	B304	OVA	21865	26.3	16.6	14.6
X-Y	D81	OVA	184	25.2	16.1	13.7
X-Y	D81	OVA	3268	27.5	18.1	14.2
X-Y	D81	OVA	7142	24.8	16.8	14.2
X-Y	D81	OVA	12300	26.8	16.7	14.1
X-Y	D81	O	12725	24.4	16.3	13.8
X-Y	D210	OVA	14917	29.0	18.7	16.2
X-Y	D81	CAH	17927	29.6	18.7	15.3
X-Y	D81	OVA	19409	27.8	17.3	15.7
X-Y	D210	OVA	21693	25.4	16.8	14.7
Y	D419	OVA	152	29.0	18.4	15.6
Y	A332	OVA	1456	25.1	16.9	13.8
Y	B317	OVA	1610	26.9	17.1	14.3
Y	D318	OVA	2466	26.0	17.5	14.7
Y	D340	OVA	2820	26.7	17.0	14.9
Y	D318	OVA	2963	25.3	17.2	14.4
Y	D318	OVA	3113	26.7	17.0	15.3
Y	D312	OVA	4615	28.3	19.2	15.8
Y	D151	O	5086	26.4	17.1	14.3
Y	B120	OVA	5548	29.9	18.8	15.6
Y	D885	OVA	5864	25.8	16.5	13.9
Y	D1158	OVA	7225	27.5	17.6	15.7
Y	D1231	OVA	7247	25.4		14.5
Y	D340	OVA	7461	26.6	17.2	15.4
Y	D312	OVA	7803	27.3	17.8	15.0
Y	D349	OVA	8629	26.7	17.1	14.5
Y	D329	OVA	10521	28.0	16.6	15.2

Appendix 41. Sheep/goat: Biometry: Astragalus measurements

Phase	Context	Bone ID	Taxa	GLl	Bd	Dl
Y	D312	OVA	10604	24.2	16.1	13.7
Y	D1332	OVA	10756	25.9	16.6	14.4
Y	D705	OVA	11258		16.5	
Y	D78	OVA	13261	29.0	17.7	15.5
Y	D312	OVA	13606	27.1	17.5	15.0
Y	C270	OVA	14648	25.0	16.4	14.3
Y	D329	OVA	15324	28.5	19.2	16.0
Y	B120	O	15721	26.7	17.5	
Y	D329	OVA	16816	26.6	17.0	15.1
Y	D312	OVA	17474	26.6	17.4	15.0
Y	C409	OVA	18930	25.9		
Y	B299	O	19767	26.3		14.2
Y	C207	OVA	20104	27.3	17.6	
Y	C207	OVA	20115	24.5	16.0	13.5
Y	D151	OVA	23268	30.8	19.7	15.5
Y-Z	C132	OVA	79	28.7	18.4	15.9
Y-Z	E74	O	3365	25.1	16.1	13.8
Y-Z	E74	OVA	9220	28.2	17.6	15.8
Y-Z	E250	OVA	9859	24.7	16.1	13.2
Y-Z	B277	OVA	12812	26.5	17.8	15.0
Y-Z	B277	OVA	14032	27.4	17.6	14.8
Y-Z	B277	O	15569	27.8	18.7	15.3
Y-Z	B277	OVA	15600	22.9	14.6	13.1
Y-Z	B277	OVA	18632	24.0	16.0	13.7
Y-Z	C268	OVA	20144	26.3	16.5	14.5
Y-Z	E74	OVA	20310	34.7	16.6	14.4
Y-Z	B277	OVA	20714	25.5	16.9	14.2
Y-Z	D116	OVA	21412	23.9	16.3	13.3
Y-Z	B277	O	21857	27.6	18.2	14.6
Y-Z	E81	OVA	22699	24.8	15.4	13.4
Y-Z	E81	O	22700	24.5		
Z	D331	OVA	499	26.9	16.4	14.6
Z	E85	OVA	1299	26.7	17.4	14.5
Z	B198	OVA	2128	27.8	18.6	
Z	B150	OVA	2163	23.3	16.4	13.0
Z	D283	OVA	3256	26.7	17.2	14.8
Z	D332	OVA	3774	25.0	16.3	14.0
Z	D306	OVA	4024	30.2	20.1	16.7
Z	D100	OVA	4788	27.1	18.0	15.3
Z	C76	OVA	4810	25.6	16.1	14.1
Z	E85	OVA	4925	23.3	15.4	12.7
Z	C76	OVA	5038	27.9	17.3	15.5
Z	D100	OVA	5601	24.1	15.5	13.3
Z	C76	OVA	5642	27.5	18.4	16.1
Z	E85	OVA	6179	27.5	18.1	15.3
Z	D108	O	6331	27.2	17.8	14.5
Z	E85	OVA	7578	25.5	17.2	14.4
Z	E85	OVA	7607	26.1	16.5	15.2
Z	D100	OVA	7926	30.0	19.6	16.6
Z	D148	OVA	8709	28.2	18.1	16.2
Z	D372	OVA	9592	29.5	20.2	16.8
Z	D104	OVA	9711	26.8	17.1	14.7
Z	D100	OVA	10086	24.7	16.6	13.7
Z	D108	OVA	10172	28.2	18.5	15.9
Z	E172	OVA	11959	27.9	18.1	15.7
Z	D283	OVA	14367	25.2	16.0	14.5
Z	D100	OVA	15003	27.0	17.5	
Z	B188	OVA	15728	26.3	16.8	14.5
Z	D108	OVA	16885	25.5	16.5	13.8
Z	D100	OVA	17817	27.6	18.2	15.0
Z	D108	OVA	18389	31.2	19.9	16.3
Z	C78	OVA	20469	25.7	16.8	14.2
Z	D283	OVA	22001	27.3	17.6	14.5
Z	D100	OVA	22814	25.1	16.6	14.0
Z	D100	OVA	23348	27.3	18.3	15.2
Z	C76	OVA	23605		18.5	15.6
Z	B97	OVA	23754			16.1

Appendix 41 cont. Sheep/goat: Biometry: Astragalus measurements

Phase	Context	Taxa	Bone ID	GL	DS	C	C+D
T-V	B602	OVA	6959	48.5	16.2	10.9	18.9
T-V	C433	OVA	11732		15.3	10.9	18.5
T-V	D2284	OVA	14475	51.3	18.5	14.1	23.0
W	E96	OVA	8868	48.4	17.4	11.9	20.7
W	D343	OVA	9426		17.1	12.6	21.5
W	D840	OVA	11145	48.4	16.2	11.5	19.7
W	D743	O	11184		18.3		
W	D1903	OVA	13227			11.9	20.6
W	D1784	OVA	13569		18.4	12.1	21.6
W	B521	OVA	14091		16.4	12.4	20.7
W	E96	OVA	15132		17.4	12.3	19.8
W	E96	O	15188		15.6	11.0	20.0
W	E96	O	15273			11.2	21.3
W	E96	O	16337			10.9	18.8
W	D1746	OVA	16723	44.8		10.3	18.4
W	E96	OVA	16759	48.6		11.1	20.0
W	D1557	O	17268		19.4		22.5
W	D335	OVA	17610			10.8	19.2
W	C527	OVA	17620			11.8	20.1
W	C474	OVA	18234			11.9	20.4
W	C501	OVA	18822		16.5	10.9	19.3

Appendix 42. Sheep/goat: Biometry: Calcaneum measurements

Phase	Context	Taxa	Bone ID	GL	DS	C	C+D
W	C546	OVA	19487			12.6	21.6
W	C527	OVA	19582	48.0	16.4	11.7	19.8
W	C468	OVA	21289	52.4	16.6	12.0	20.8
W	C468	OVA	21290	51.1	16.5	11.6	19.6
W	E292	OVA	21480	50.9	17.3	11.4	20.2
W	D254	O	21657		17.1		
W	C495	OVA	22259	48.0		11.2	19.3
X	B204	OVA	10010	50.4	16.9	10.8	19.2
X-Y	D81	OVA	9612	47.6	15.5	10.1	17.4
X-Y	D81	OVA	13290	49.5		9.6	18.3
X-Y	D81	OVA	14403		18.1	12.0	21.1
X-Y	D210	OVA	17412		17.4	11.9	20.2
X-Y	D210	OVA	17941		18.3	12.3	21.0
X-Y	D81	OVA	18431	51.2	17.5	12.0	21.0
X-Y	D81	OVA	19916		16.5	12.4	19.7
X-Y	D81	OVA	21192	46.6	16.6	11.2	19.9
Y	D168	OVA	5138	52.6		12.3	21.6
Y	D168	OVA	7338	63.2	22.0	13.9	24.2
Y	D1332	OVA	7994	58.8	17.1	11.2	21.8
Y	A253	OVA	8290		17.6	13.9	22.3
Y	D704	OVA	10259	52.7	18.5	12.6	21.3
Y	A318	OVA	10354	55.4	19.8	13.4	22.7
Y	D898	OVA	10821	48.7		11.8	19.1
Y	D168	OVA	13507	52.2	17.7	12.6	21.7
Y	D312	OVA	14422	52.2	17.4	12.6	21.7
Y	D320	O	15286		17.2	12.1	
Y	D214	OVA	17421			11.0	18.9
Y	D224	OVA	20961	56.9	17.2	10.7	19.8
Y	A131	OVA	23685	52.8	17.9	13.4	22.5
Y-Z	E74	OVA	563	56.3	17.1	11.8	21.7
Y-Z	E74	OVA	8271			10.7	18.7
Y-Z	E74	O	9240		17.0	11.5	19.2
Y-Z	C268	OVA	13026		17.4	12.6	21.1
Y-Z	B277	OVA	13064	47.7	16.1	10.7	19.1
Y-Z	B277	OVA	15568	54.4	18.4	12.2	21.0
Y-Z	E74	OVA	17011	48.7	15.8	11.2	19.4
Y-Z	E74	OVA	22332	47.6	16.2	11.3	18.7
Z	B152	OVA	2182	48.7	17.6	11.6	19.5
Z	D372	CAH	2631	56.0		11.2	21.1
Z	B136	OVA	3621	50.5	16.3	12.0	20.0
Z	B172	OVA	5050		16.3	11.9	19.7
Z	B172	OVA	5233	53.6		11.7	21.4
Z	B172	O	5234			11.4	20.4
Z	C76	OVA	5453		16.1	12.2	19.9
Z	E85	OVA	7598	48.8	17.1	11.2	18.7
Z	E85	O	7615	56.1			
Z	B147	CAH	9985			9.3	19.9
Z	B147	OVA	10004		16.4	12.0	19.7
Z	D100	OVA	10062	49.2	16.6	11.5	20.6
Z	D466	O	11304		17.5	12.0	21.7
Z	E185	OVA	11475		16.1	13.6	20.6
Z	D310	OVA	11562	49.1	16.5	11.9	19.6
Z	D283	OVA	12377	48.7	16.8	12.6	20.2
Z	E172	OVA	13928	51.2	16.0	12.3	21.6
Z	D307	OVA	14361	53.3	19.1	13.1	22.4
Z	C192	OVA	15719	52.1	17.0	11.8	21.0
Z	B184	OVA	15726		15.3	11.8	19.8
Z	D283	OVA	16687		18.1	11.8	21.4
Z	D100	OVA	17209			11.4	19.7
Z	D372	OVA	18175			11.7	21.0

Appendix 42 cont. Sheep/goat: Biometry: Calcaneum measurements

Phase	Context	Taxa	Bone ID	GL	DS	C	C+D
Z	D100	OVA	18559	55.6		13.1	22.8
Z	D100	OVA	22415		14.7	11.0	18.6
Z	D100	OVA	22708		17.3	12.1	21.7

Appendix 42 cont. Sheep/goat: Biometry: Calcaneum measurements

Phase	Context	Taxa	Bone ID	GL	SD	Bp	Bd	BatF	1	2	3	4	5	6	a	b
T-V	B632	OVA	6938			19.2										
T-V	D791	OVA	10864			17.9										
T-V	D1324	CAH	11580			20.9										
T-V	D2188	OVA	12280			18.9										
W	C440	CAH	990	116.5	11.6	18.6	24.1	22.9	8.4		12.6	8.6	14.3	12.6	11.6	10.8
W	C440	OVA	1005				23.6	23.3	10.3		13.3	9.8		13.0	10.7	10.3
W	D983	OVA	1151			18.0										
W	D933	OVA	1381			17.3										
W	C417	OVA	3371	128.7	9.9	18.0	21.6	20.5	9.0	14.6	12.4	8.4	14.1	12.3	10.2	9.3
W	C417	OVA	3372	128.1	9.9	18.2	21.6	20.7	9.1	13.8	12.2	9.0	13.8	12.2	10.3	8.9
W	D755	OVA	5818			18.3										
W	D163	OVA	5970			17.9						8.6	13.6	12.0		8.7
W	D485	O	9006			18.6										
W	E96	OVA	9276				21.5	20.4	9.8			10.1		12.6	9.4	10.2
W	D933	OVA	10785			17.5										
W	D406	OVA	11325			18.6										
W	D1132	OVA	12546	127.3	10.0	17.6	20.1	19.3	9.1	14.6	12.5	8.5	13.6	12.3	9.5	8.7
W	C527	CAH	12809			18.6										
W	B521	OVA	14113			18.6										
W	B521	OVA	14126			17.1										
W	D1569	OVA	14280	141.7	11.6	19.8	23.6	23.6	9.5	15.5	12.8	9.4	14.8	13.3	11.1	9.6
W	E96	CAH	14843	130.2	10.1	18.5	22.2	21.8	9.3	14.5	13.0	9.5	14.5	12.8	10.5	9.8
W	E96	OVA	15133			19.2										
W	E96	OVA	15231			18.6										
W	B521	OVA	15685			17.3										
W	B521	OVA	15686				22.5	21.3	9.3	15.0	12.7	9.0	14.4	13.0	10.3	9.7
W	E96	O	16180				20.3									
W	E96	OVA	16228			18.0										
W	E96	OVA	16248			18.0										
W	E96	OVA	16354			17.5										
W	D2391	OVA	16413			19.0										
W	D1557	OVA	17266	124.7	10.0	18.7	21.3	20.4	9.5		12.8	9.5		13.0	10.3	9.4
W	C481	OVA	18221			18.3										
W	C501	OVA	18811			18.7										
W	C501	OVA	18844				24.1	23.0								
W	C527	OVA	19595			18.9										
W	D484	OVA	20074			19.8										
W	E96	OVA	21222			18.2										
W	C495	OVA	22132			16.5										
W	C495	OVA	22260			17.4										
W	C495	OVA	22261				22.0	21.3	9.7	14.9	12.8	9.2	14.0	12.8	10.4	9.4
X	B86	OVA	13968			18.2										
X-Y	D728	OVA	849			17.1										
X-Y	D81	OVA	1356			19.2										
X-Y	D81	OVA	3288				21.2	20.9	9.2	13.6	11.9	8.6	13.1	11.6	9.8	9.3
X-Y	D81	OVA	3649			20.2										
X-Y	D81	OVA	3827				23.4	22.5	10.2		13.0	9.8		13.4	11.0	10.2
X-Y	D81	OVA	6356				21.7	20.9	9.8	15.1	13.0	8.9		12.6	10.5	9.8
X-Y	D81	OVA	7143			16.8		19.2	8.7		11.0	8.3				
X-Y	D210	OVA	8467				24.3	24.0	9.6	15.9	14.3	10.0	16.6	13.9	10.7	11.9
X-Y	D81	OVA	10184			17.1										
X-Y	D728	OVA	11237			19.6										

Appendix 43. Sheep/goat: Biometry: Metatarsal measurements

Phase	Context	Taxa	Bone ID	GL	SD	Bp	Bd	BatF	1	2	3	4	5	6	a	b
X-Y	D81	O	12053			20.4										
X-Y	D81	CAH	16609			17.8										
X-Y	D81	OVA	17053				22.4	22.1	9.7	15.2	12.7	8.8	14.2	12.6	10.4	9.3
X-Y	D81	CAH	17069	111.6	12.6		22.2	22.2	8.0	14.4	11.7	7.7	14.0	11.9	10.2	9.4
X-Y	D81	OVA	19929	129.6	9.6	18.7	22.0	20.6	9.5		12.3	9.3		12.1	10.2	9.6
X-Y	D81	CAH	23405			20.4										
Y	A332	OVA	1454			18.2										
Y	A332	OVA	1455			18.1										
Y	A318	OVA	2204				22.7	22.2	9.8	15.2	12.8	9.2	14.2	12.6	10.6	10.0
Y	D352	OVA	2540			19.4										
Y	D346	OVA	2889			18.7										
Y	D762	OVA	3852			20.1										
Y	B120	OVA	5549			17.5										
Y	D338	OVA	5709			17.2										
Y	D338	OVA	6021				20.0	19.5	8.7	13.9	11.6	8.4	12.9	11.5	9.7	8.5
Y	A345	OVA	6496				22.6	22.9	9.6	15.4	13.0	9.5	14.7	13.0	10.9	10.3
Y	A318	OVA	6537			18.1										
Y	D1333	OVA	7182			21.5										
Y	D352	OVA	7622	139.5	12.3	19.5	22.6	21.7	10.4		13.1	9.5		13.1	10.6	9.7
Y	D150	OVA	7949	133.5	10.2	19.0	22.1	22.0	9.5	14.6	12.7	9.8	14.2	12.5	10.6	9.4
Y	A253	OVA	8292			16.7										
Y	A318	OVA	8311			18.1										
Y	D714	OVA	10275	114.3	9.3	17.5	19.8	19.3	8.4	13.5	11.5	8.1	12.7	11.2	9.5	8.6
Y	A318	OVA	10355			18.7										
Y	D338	OVA	10574			17.2										
Y	D1335	OVA	11623			20.1										
Y	D318	OVA	12010	133.7	9.9	17.9	21.2	20.6	9.3	15.2	12.7	9.1	14.4	12.3	9.9	9.3
Y	D214	OVA	12509			17.3										
Y	D1332	OVA	12536	139.4	11.3	19.6	23.4	22.6	9.8	16.1	13.6	9.4	15.2	13.5	11.1	10.1
Y	D1332	OVA	12540	150.0	12.8	21.4	26.2	25.1	11.9	17.5	15.3	11.1	17.0	14.9	11.8	10.8
Y	C307	OVA	13822			19.0										
Y	D318	OVA	14206			19.8										
Y	D320	OVA	16810			19.5										
Y	B321	OVA	17729	135.6	11.4	18.0	20.5	19.9	9.6	14.9	12.6	9.5	14.2	12.8	9.8	8.5
Y	C409	OVA	18918			21.3										
Y	B321	OVA	21841				20.4	19.3	9.0		12.1	8.5		11.9	9.7	8.9
Y	D168	CAH	23442			18.8										
Y-Z	B277	OVA	1771			19.3										
Y-Z	E74	O	7551			17.6										
Y-Z	D116	OVA	9016				21.3	20.5	9.5	14.4	12.5	9.3	13.9	12.6	10.1	9.3
Y-Z	E74	OVA	10681			17.9										
Y-Z	E74	OVA	11540			16.5										
Y-Z	E74	OVA	11975			16.9										
Y-Z	E74	OVA	11989			18.9										
Y-Z	C268	OVA	13027			18.9										
Y-Z	B277	OVA	13078			18.7										
Y-Z	C267	OVA	13687			19.8										
Y-Z	B277	OVA	14034			18.6										
Y-Z	B277	OVA	14068				23.1	23.1	9.8	15.6	13.4	9.3	14.7	13.3	10.7	9.5
Y-Z	C267	OVA	16973				21.2	20.9	9.3	13.7	11.9	9.4	13.6	12.0	9.8	9.6
Y-Z	C267	OVA	17309			18.9										
Y-Z	D116	OVA	22100			22.1										
Z	E85	OVA	1314				19.7	19.5	8.7			8.4			9.2	8.5
Z	E172	OVA	1865				19.8	19.4	9.0		11.6	8.9		11.6	9.4	8.6
Z	D283	CAH	2341				23.5	23.6	8.6	15.5	12.8	8.5		12.7	11.2	10.4
Z	D283	OVA	2491			17.5										
Z	D283	OVA	2706	140.6	12.1	20.0	23.1	22.9	10.0	15.3	13.2	9.6	14.5	13.1	11.2	9.9
Z	D283	OVA	2707			19.7										
Z	D283	OVA	2733	127.8	9.6	18.0	21.9	21.1	9.2	14.2	12.0	9.0	13.8	12.1	9.9	9.0
Z	D283	OVA	3641				23.1	22.4	10.4	15.5	13.1	9.6	14.7	13.0	10.7	9.5

Appendix 43 cont. Sheep/goat: Biometry: Metatarsal measurements

Phase	Context	Taxa	Bone ID	GL	SD	Bp	Bd	BatF	1	2	3	4	5	6	a	b
Z	D332	OVA	4627			19.2										
Z	C76	OVA	4834			20.8										
Z	C76	OVA	4835			17.4										
Z	E85	O	4926			18.2										
Z	E100	OVA	4932			18.1										
Z	C76	OVA	4943				22.1	21.7								
Z	C76	OVA	4965			20.4										
Z	B172	OVA	5051			18.3										
Z	B172	OVA	5052			17.4										
Z	C76	OVA	5061			17.9										
Z	D100	OVA	5680			20.7										
Z	D283	OVA	6272				24.5	23.7	10.4	17.1	14.5	10.5	16.2	14.2	11.6	10.6
Z	C78	OVA	7362				22.2	21.4	10.0	15.5	13.1	9.7	14.4	12.9	10.5	10.1
Z	B172	OVA	7405			19.2										
Z	E85	OVA	7599			19.8										
Z	C188	O	7714			20.9										
Z	C188	OVA	7736				23.2	22.4			12.7	9.5	14.7	13.1	10.9	9.8
Z	C78	OVA	8132				25.9	24.7	11.7	17.5	14.8	11.7	16.3	14.6	12.1	11.4
Z	B172	OVA	8200			19.7										
Z	B147	OVA	8215				21.1	20.4	9.0		11.7	8.1		11.8	10.3	9.1
Z	B152	OVA	8225			17.5										
Z	D100	OVA	12406			20.5										
Z	D100	OVA	12798			20.6										
Z	D283	CAH	14369			19.6										
Z	D100	OVA	15005			19.3										
Z	D100	OVA	15014			19.3										
Z	D100	OVA	15025			21.5										
Z	D100	OVA	15027			19.4										
Z	D100	OVA	15427			18.3										
Z	D100	OVA	15444			21.1										
Z	B172	OVA	15477			18.6										
Z	B172	OVA	15478				21.4	21.1	9.3		12.4	9.3		12.2	10.2	10.1
Z	B172	OVA	15479				22.3	21.4	9.3	15.0	12.7	8.7	14.0	12.4	10.3	9.3
Z	D283	CAH	15798			20.5										
Z	D100	OVA	16080			21.1										
Z	D283	OVA	17825	139.5	12.6	21.9	24.2	23.6	10.6	17.3	14.4	9.7	16.1	14.5	11.8	10.5
Z	D306	OVA	17830			19.3										
Z	D100	OVA	18549				23.2	23.2	9.3	15.4	12.8				10.9	9.4
Z	D100	OVA	19838			18.0										
Z	D283	OVA	20231			20.0										
Z	B172	OVA	20447	137.5	11.5	18.9	23.6	23.2	10.1	15.7	13.1	9.5	15.1	12.9	10.9	10.2
Z	B172	OVA	20448			16.9										
Z	C225	OVA	21268			17.0										
Z	B136	CAH	21950			18.2										
Z	D100	OVA	22831			18.5										
Z	B147	OVA	23453			19.5										
Z	B147	OVA	23454			20.0										
Z	E85	OVA	23521				22.0	21.6	9.8	15.3	13.2	9.2		12.9	10.3	9.6
Z	C76	OVA	23711			21.0										
Z	C78	OVA	23745			19.2			9.5		12.7	9.4				9.8

Appendix 43 cont. Sheep/goat: Biometry: Metatarsal measurements

Phase	Context	Taxa	Element	Bone ID	L1	Wa	Wd
Y	D762	EQC	P3	9939		14.6	
Y	D762	EQC	P4	9939	26.7	14.8	
Y	D762	EQC	M1	9939	25.3	14.6	3.3
Y	D762	EQC	M2	9939	24.9	13.5	3.9
Y	D762	EQC	M3	9939	30.5	11.7	1.4

Appendix 44. Equid: Biometry: Mandibular tooth measurements

Phase	Context	Taxa	Element	Bone ID	L1	Wa	Wd
Z	D473	EQC	P3	11168		14.8	
Z	D473	EQC	P4	11168		14.7	
Z	D473	EQC	M1	11168	24.7	13.1	2.9

Appendix 44 cont. Equid: Biometry: Mandibular tooth measurements

Phase	Context	Taxa	Bone ID	BT	HTC
W	E96	EQ	16644		28.6
X-Y	D81	EQ	16572		33.4
Y	D224	EQ	21385	75.7	36.4
Y	B120	EQ	23469	71.2	35.9

Phase	Context	Taxa	Bone ID	BT	HTC
Z	D106	EQ	2243	78.9	41.2
Z	C78	EQ	5665		36.6
Z	C188	EQ	6196	74.0	38.9
Z	D283	EQ	21988	81.7	38.7

Appendix 45. Equid: Biometry: Humerus measurements

Phase	Context	Taxa	Bone ID	GL	SD	Bp	BFp	Bd	BFd
Y-Z	C267	EQ	16992					68.4	59.2
Z	B155	EQ	15717					59.4	
Z	C80	EQ	11820					80.9	72.6
Z	C89	EQ	8	333.5	40.0				
Z	C188	EQ	6197			82.3	75.1		
Z	C188	EQ	6198					70.6	61.6
Z	D100	EQ	4440			88.6	79.0		
Z	D106	EQ	2245					79.2	67.0
Z	D106	EQ	6000			83.6	75.7		
Z	D106	EQ	11759					80.9	74.3
Z	D108	EQ	17153			81.6	74.1		

Appendix 46. Equid: Biometry: Radius measurements

Phase	Context	Taxa	Bone ID	GL	SD	Bp	Dp	BFd	Dd
Y	D1282	EQ	12541	216.0	33.9	48.7	33.6	47.5	34.0
Z	C188	EQ	12661					52.1	37.3
Z	D106	EQ	12543	211.5		48.0	32.0	48.6	34.3
Z	D306	EQ	12532	216.5	32.1	53.4	32.6	47.4	35.8

Appendix 47. Equid: Biometry: Metacarpal measurements

Phase	Context	Taxa	Bone ID	Bd	Dd
X-Y	D81	EQ	21679	71.8	46.0
Z	D106	EQ	2246	70.8	42.4
Z	D306	EQ	2314	79.2	48.5

Appendix 48. Equid: Biometry: Tibia measurements

Phase	Context	Taxa	Bone ID	GH	GB	BFd	LmT
Y-Z	E74	EQ	7544	59.6	57.9	65.2	55.2
Y-Z	B277	EQ	13703	61.8	64.2	68.3	59.1
Z	D283	EQ	14679	49.4	48.9		

Appendix 49. Equid: Biometry: Astragalus measurements

Phase	Context	Taxa	Bone ID	GL
Z	C0078	EQ	5223	109.0

Appendix 50. Equid: Biometry: Calcaneum measurements

Phase	Context	Taxa	Bone ID	GL	SD	Bp	Dp	BFd	Dd
Y	D1326	EQ	12544	261.5	29.5			44.2	34.3
Y-Z	D116	EQ	12531	265.0	30.4	50.1	49.3	49.4	37.2
Z	D100	EQ	16075					50.5	37.8
Z	D100	EQ	22447			48.5	46.7		
Z	D100	EQ	22473					47.5	35.5
Z	C89	EQ	22718	250.5	30.1	45.9	43.3	45.3	33.1

Appendix 51. Equid: Biometry: Metatarsal measurements

Phase	Context	Bone ID	GL	SD	Bp	Dp	Bd
W	D335	15297					42.8
Y	D338	6032	92.5	36.7	62.3	44.0	50.2
Z	C89	20	78.5	30.1	49.5	32.4	43.1
Z	D106	6001	80.3	35.5	55.5	39.0	46.0
Z	C89	16385			54.6	40.3	
Z	D100	18511	80.5	34.3	55.5	38.2	45.9
Z	D283	22094					44.9

Appendix 52. Equid: Biometry: First phalange measurements

Phase	Context	Taxa	Bone ID	L	B
T-V	D2381	CAF	16556	20.7	7.8
T-V	D2381	CAF	16557	17.1	7.1
W	D1418	CAF	13404	20.1	7.7
W	D335	CAF	13741	18.2	6.9
W	D335	CAF?	15856	23.2	8.7
W	E96	CAF	16112	15.8	5.7
W	E96	CAF	18856	17.6	7.1
X-Y	D81	CAF	6663	16.4	6.4
X-Y	D81	CAF	10516	21.5	8.5
X-Y	D81	CAF	12586	18.0	7.8
X-Y	D81	CAF	16456	17.8	7.5
Y	D1231	CAF	1970	15.9	6.2
Y	D1231	CAF	1985	21.9	8.8
Y	D318	CAF	2028	21.6	9.0
Y	D318	CAF	2029	21.0	9.3
Y	D703	CAF	2397	22.0	9.2
Y	D312	CAF	8523	20.9	8.7
Y	D312	CAF	8524	21.1	8.6
Y	D762	CAF	10193	23.5	10.1
Y	A318	CAF?	10357	15.7	5.7

Phase	Context	Taxa	Bone ID	L	B
Y	D329	CAF	10421	22.4	9.0
Y	D329	CAF	10422	22.5	9.2
Y	D216	CAF	14936	15.4	5.5
Y	D216	CAL?	19469	31.6	12.2
Y-Z	C131	CAF	8186	17.5	6.5
Y-Z	E74	CAF	9235	24.0	9.0
Z	D332	CAF	337	19.3	8.0
Z	E185	CAF	2850	21.4	8.4
Z	D332	CAF	3808	21.4	8.3
Z	D283	CAL?	5735	24.8	10.0
Z	D108	CAF	6560	20.2	8.2
Z	D332	CAF	7484	16.6	6.5
Z	D100	CAF	8730	17.3	6.8
Z	D100	CAF	13187	22.5	9.2
Z	D108	CAF	15369	17.2	6.8
Z	D100	CAF	16062	23.7	9.4
Z	D108	CAF	17152	16.3	6.4
Z	D100	CAF	17183	18.9	7.5
Z	D283	CAF	22095	19.0	7.4
Z	D100	CAF	22782	18.6	7.1

Appendix 53. Dog: Biometry: First molar measurements

Phase	Context	Taxa	Bone ID	8	9	10	11	12
T-V	D2381	CAF	16556	72.3	67.7	35.4	37.4	33.2
T-V	D2381	CAF	16557	61.7	57.7	28.0	34.2	30.1
W	D1265	CAF	928	72.8	68.9	36.0	37.6	33.7
W	D743	CAF	10292	69.5	64.1	34.0	34.8	29.7
W	D335	CAF	13741	67.8	63.6	32.8	36.2	31.4
W	D335	CAF?	15856	80.2	75.6	37.5	43.1	38.5
W	E96	CAF	16112					31.1
W	D1732	CAF	17252			36.4		
W	E96	CAF	18856			28.4		24.3
X-Y	D81	CAF	6663	54.0	50.6	26.2	28.7	24.8
X-Y	D81	CAF	10516				38.0	33.5

Appendix 54. Dog: Biometry: Mandibles measurements

Phase	Context	Taxa	Bone ID	8	9	10	11	12
X-Y	D81	CAF	12586	62.1		30.4	32.2	
X-Y	D81	CAF	14399					18.3
X-Y	D81	CAF	16456			27.5		
Y	D340	CAF	1821					33.0
Y	D340	CAF	1822			35.2		
Y	D1231	CAF	1970			25.1		
Y	D318	CAF	2028	78.4	72.4	36.4	42.6	36.0
Y	D318	CAF	2029	77.6	71.9	36.5	42.0	35.7
Y	D312	CAF	8523	76.4	70.3	36.7	41.0	29.0
Y	D312	CAF	8524	74.9	69.4	37.6	39.1	28.3
Y	D762	CAF	10193		68.9	36.6		34.7
Y	A318	CAF?	10357				23.2	20.4
Y	D329	CAF	10421	79.3	74.2	37.2	43.7	38.5
Y	D329	CAF	10422	79.6	74.2	37.3	43.2	37.7
Y-Z	D116	CAF	405	56.8	52.7	24.9	30.9	20.3
Y-Z	E81	CAF	22695			36.5		
Z	D372	CAF	641				24.3	
Z	E185	CAF	2850	70.2	64.5	34.9	37.0	31.4
Z	D332	CAF	3808				35.8	31.1
Z	E172	CAF	5260	55.7	52.2	29.1	28.2	24.3
Z	D283	CAL?	5735	81.7	76.4	40.9	42.0	35.6
Z	D108	CAF	6560	69.8	65.8	32.7	37.4	32.7
Z	C78	CAF	8138				36.5	32.1
Z	D100	CAF?	9347			23.7		
Z	D100	CAF	13187	73.0	68.4	36.6	39.0	33.7
Z	D108	CAF	17152				32.2	27.7
Z	D283	CAF	22095	60.8	57.5	30.2		
Z	D100	CAF	22448	65.8	61.3	32.8	34.1	23.0
Z	D100	CAF	22782	56.9	54.2	29.2	27.9	24.9
Z	C78	CAF	23746				40.7	28.4

Appendix 54 cont. Dog: Biometry: Mandible measurements

Phase	Context	Taxa	Bone ID	GL	SD	GLl	Bd
W	C417	CAF	3416				34.2
W	D1129	CAF	9685				35.8
W	D1834	CAF	13558				20.3
Y	D312	CAF	4623				28.5
Y	D318	CAF	10510	188.1	12.9		34.5
Y	D312	CAF	17668	107.1	7.6		20.3
Y	D329	CAF	18409				38.2
Y-Z	D116	CAF	754	85.1	7.5	83.8	19.5
Y-Z	B277	CAF	1749				27.0
Y-Z	C132	CAF	5349				34.0
Y-Z	C267	CAF	19459				40.4
Z	D229	CAF	2334				26.4
Z	D100	CAF	5096				32.8
Z	D283	CAF	9768	107.4			24.3
Z	D283	CAF	12372	190.1	16.5		38.5
Z	D283	CAF	16834	179.1	12.9	175.0	35.8
Z	D100	CAF	22449	133.3	9.9		26.7
Z	D108	CAF	22487	109.6	10.8		26.3

Appendix 55. Dog: Biometry: Humerus measurements

Phase	Context	Taxa	Bone ID	GL	SD
W	D335	CAF	13173	180.7	13.1
Y	D318	CAF	14209	121.8	9.3
Y-Z	C267	CAF	19460	180.1	14.9

Appendix 56. Dog: Biometry: Radius measurements

Phase	Context	Taxa	Bone ID	GL	SD	Bd
W	D933	CAF	1380			21.9
W	D1132	CAF	11089	98.7	8.9	15.6
X-Y	D210	CAF?	16767	83.8	7.5	13.0
Y	D340	CAF	11783			16.7

Phase	Context	Taxa	Bone ID	GL	SD	Bd
Z	E185	CAF	2795			27.0
Z	E172	CAF	19463			19.5
Z	D283	CAF	21638			20.0

Appendix 57. Dog: Biometry: Tibia measurements

Phase	Context	Bone ID	GL
W	D1132	8837	32.9
W	D755	11303	34.0
Y	A332	1490	37.7

Phase	Context	Bone ID	GL
Y	D318	2931	53.0
Y	D1158	6890	50.3
Z	D283	14320	48.1

Appendix 58. Dog: Biometry: Calcaneum measurements

Phase	Context	Taxa	Bone ID	GL	SC	Bd
W	D1834	GNP	13568	74.5	6.9	15.5
W	D335	GNP	15857	72.3	7.1	15.8
W	E96	GNP	17139	61.0	6.2	12.8
W	E96	GNP	21753			15.8
W	E96	GNP	21776	73.4	7.4	15.4
W	E96	GNP	21782			15.5
W	C495	GNP	23122			16.0
W	C404	GNP	23123			13.3
X	B86	GNP	20657			13.8
X-Y	D81	GNP	4628			15.7
X-Y	D728	GNP	9420			13.6
Y	A253	GNP	2239			15.2
Y	A230	GNP	6727	70.4	6.7	18.8
Y	A230	GNP	6741	70.5	6.7	19.0
Y	A443	GNP	17878			14.8
Y	D320	GNP	18000			16.8
Y	A253	GNP	20646			14.0
Y	A230	GNP	20670			16.1
Y-Z	D116	GNP	755			16.4
Y-Z	D116	GNP	7294	73.0	6.9	19.9
Y-Z	D116	GNP	7305	64.9	6.9	17.5
Y-Z	D116	GNP	9027			15.6
Y-Z	D116	GNP	12192	66.8	6.5	13.7

Phase	Context	Taxa	Bone ID	GL	SC	Bd
Y-Z	D116	GNP	15096			13.7
Y-Z	D116	GNP	17358			16.1
Y-Z	B277	GNP	20703	69.6	7.4	15.4
Y-Z	B277	GNP	20705			13.6
Y-Z	E74	GNP	21764			14.6
Y-Z	E74	GNP	22106			15.1
Y-Z	E74	GNP	22107			15.6
Y-Z	C144	GNP	23103			15.9
Y-Z	C267	GNP	23107			15.6
Y-Z	C268	GNP	23157	71.3	6.7	15.0
Z	D332	GNP	516	62.3	6.1	13.2
Z	D100	GNP	4468	77.3	7.2	16.6
Z	D100	GNP	9348	72.1	7.1	15.6
Z	B136	GNP	9993	65.0	6.1	13.9
Z	D100	GNP	12411			12.7
Z	D330	GNP	12679			14.3
Z	D108	GNP	15881			14.4
Z	D108	GNP	16891	61.8	6.3	12.9
Z	D100	GNP	18075			14.7
Z	D100	GNP	19417	64.1	6.8	13.8
Z	D107	GNP	19728			15.7
Z	D100	GNP	20644	61.3	6.0	12.8

Appendix 59. Domestic fowl: Biometry: Humerus measurements

Phase	Context	Taxa	Bone ID	GL	L	Bp	Did
T-V	D2371	GNP	12298	38.8	36.3		7.0
W	D743	GNP	9521	39.6	36.8	11.3	7.3
Y	B321	GNP	20674				6.5
Y	C207	GNP	23099	39.6	37.2	11.1	6.7
Y-Z	D116	GNP	12493	39.4	36.3		7.4
Y-Z	C267	GNP	22988	34.6	32.3	9.4	6.6
Z	D283	GNP	11909	34.3	31.9	9.9	6.6

Appendix 60. Domestic fowl: Biometry: Carpometacarpus measurements

Phase	Context	Taxa	Bone ID	GL	SC	Bp	Bd	Dd
T-V	B602	GNP	7040				12.9	12.1
T-V	D2369	GNP	12286				12.7	10.6
W	D767	GNP	2407				15.5	13.0
W	D859	GNP	8425				15.3	12.3
W	D343	GNP	9527				16.1	12.8
W	D484	GN	11027	79.0	6.9	15.9	15.7	12.8
W	D1814	GNP	13542				14.9	12.2
W	E96	GNP	14271				13.4	11.7
W	D335	GNP	14785					16.9
W	B302	GNP	20704				12.5	11.0
W	E96	GNP	21769				12.0	10.3
W	E96	GNP	22996				14.9	11.9
W	C417	GNP	23164				13.4	11.3
W	C440	GNP	23166				13.6	11.6
X-Y	D210	GNP	14877				15.3	12.3
Y	D340	GNP	11517				16.0	12.8
Y	D329	GNP	17036				15.2	12.4
Y	D320	GN	17871	81.0	7.3	16.1	16.1	12.8
Y	D216	GNP	20634				15.7	13.3
Y	A230	GN	20672	79.0	6.5	15.1		12.7
Y-Z	E74	GNP	21771				14.8	13.0
Y-Z	C75	GNP	23097				12.2	
Y-Z	C267	GNP	23111				15.8	12.6
Y-Z	C75	GNP	23139				13.0	11.5
Z	D100	GNP	543				16.2	13.4
Z	D310	GNP	2298				15.4	
Z	D283	GN	3761	72.8	6.1	14.3	13.7	11.2
Z	D108	GNP	9786				16.2	
Z	D310	GNP	11567				14.3	12.2
Z	D100	GN	12405	82.6	7.1	16.2	16.5	14.7
Z	D283	GN	16524	82.9	7.2	16.9	16.2	13.6
Z	B172	GNP	20665					12.3
Z	C188	GNP	23168				16.2	13.4

Appendix 61. Domestic fowl: Biometry: Femur measurements

Phase	Context	Taxa	Bone ID	GL	SC	La	Bd	Dd
T-V	B632	GNP	6943	122.0	6.9	11.7	11.3	12.3
T-V	B639	GNP	7043	102.2	5.4		10.6	10.5
W	D859	GNP	2438	109.5		5.5	10.6	11.4
W	D244	GNP	5951				12.0	10.7
W	D163	GNP	5979				11.8	12.0
W	D808	GNP	8402				12.5	12.7
W	D188	GNP	12178				11.5	12.0
W	D1569	GNP	13405				16.6	13.4
W	D2378	GNP	16425				11.0	10.6

Appendix 62. Domestic fowl: Biometry: Tibiotarsus measurements

Phase	Context	Taxa	Bone ID	GL	SC	La	Bd	Dd
W	E96	GNP	17143				9.5	9.8
W	D335	GNP	17660				11.6	11.1
W	E96	GNP	19943				11.4	12.2
W	C501	GNP	23128			94.9	9.8	
W	C495	GNP	23132				10.0	10.4
X	B344	GNP	20686	105.2	5.5		10.1	10.4
X-Y	D210	GNP	4388				12.5	12.2
X-Y	D81	GNP	13662				11.2	12.0
X-Y	D81	GNP	15221				12.1	11.6
X-Y	D81	GNP	18724				12.5	11.4
X-Y	C308	GNP	23050				11.1	
X-Y	C308	GNP	23120				12.1	12.2
Y	A318	GNP	2237			11.4	10.7	
Y	D1231	GNP	4009				12.4	12.2
Y	D705	GNP	4055				10.0	10.3
Y	A230	GNP	6743				11.4	12.2
Y	D312	GNP	7817				9.5	10.1
Y	D352	GNP	8677				11.7	12.7
Y	D78	GNP	8741				11.5	12.7
Y	D762	GNP	10893			11.1	11.2	
Y	D224	GNP	20645				10.0	9.8
Y	A253	GNP	20647				11.2	11.8
Y	A332	GNP	23118				11.9	
Y	A332	GNP	23119				10.3	10.0
Y	A318	GNP	23142				11.7	12.3
Y	A318	GNP	23143				10.1	11.0
Y-Z	D116	GNP	8993				11.6	
Y-Z	D116	GNP	12898				11.1	10.7
Y-Z	E250	GNP	21755				10.1	10.2
Y-Z	E74	GNP	21758				11.1	11.7
Y-Z	E74	GNP	21760				10.6	
Y-Z	E74	GNP	21766				11.0	11.5
Y-Z	E74	GNP	21785				10.9	11.3
Y-Z	E74	GNP	22986				9.8	9.4
Y-Z	C187	GNP	22990				11.3	11.4
Y-Z	C131	GNP	23063	118.4	6.6		11.1	12.1
Y-Z	C267	GNP	23112	118.5	6.8		11.6	12.0
Y-Z	C267	GNP	23113				11.0	11.8
Y-Z	C267	GNP	23114				11.6	11.9
Y-Z	C268	GNP	23158				11.1	12.9
Z	D283	GNP	3662				13.0	12.1
Z	D100	GNP	8752				10.2	10.1
Z	D393	GNP	9647			94.7	10.3	10.7
Z	D100	GNP	14602				10.4	11.0
Z	D317	GNP	16804				10.5	10.9
Z	D283	GNP	17867				11.2	11.3
Z	D100	GNP	18091				12.7	10.9
Z	D107	GNP	19730	120.8	6.8		12.0	13.0
Z	B172	GNP	20663				11.3	12.0
Z	E85	GNP	21780				11.1	
Z	D283	GNP	22858				11.6	12.6
Z	C76	GNP	23098			11.5	12.1	

Appendix 62 cont. Domestic fowl: Biometry: Tibiotarsus measurements

Phase	Context	Taxa	Bone ID	Spur	GL	SC	Bp	Bd
T-V	B603	GN	6996	Unspurred	68.6	5.5	11.5	12.6
T-V	D1005	GAG	11128	Spurred	78.7		13.5	12.8
T-V	D2371	GAG	16417	Spurred	73.6		13.1	
W	D789	GAG	1390	Spurred	80.4		14.8	13.9
W	B448	GN	8771					12.6
W	D1591	GNP	13151					10.1
W	D1591	GNP	13379					13.8
W	D1418	GAG	13386	Scar	86.1	6.2	13.6	
W	B521	GAG	14093					13.2
W	B521	GNP	15695					12.2
W	B521	GAG	15712	Scar	79.1		13.4	13.2
W	E96	GNP	16219					13.3
W	B306	GAG	20685					12.7
W	C440	GNP	23150					13.4
W	C417	GN	23153					12.9
X	C419	GN	23169	Unspurred	67.1	5.1	11.4	11.4
X-Y	D81	GAG	1254	Spurred	81.2	6.3	12.7	
X-Y	D81	GNP	9637	Unspurred	69.4	5.4	10.9	
X-Y	D210	GAG	11892	Scar	77.1	7.3	13.7	13.8
X-Y	D81	GNP	19870					13.7
X-Y	D81	GN	21342					10.7
X-Y	D210	GAG	21373	Spurred	86.3		14.9	14.5
X-Z	D251	GAG	8599		91.3		14.3	14.6
Y	D329	GN	3111	Unspurred	70.1	5.6	12.1	11.9
Y	D340	GAG	4247					14.8
Y	A230	GAG	6744					13.0
Y	A230	GAG	6745	Scar	77.4		13.6	13.0
Y	D762	GAG	9288	Scar	61.9	5.2	11.8	11.5
Y	D762	GAG	9333	Scar	77.1	6.1	14.5	13.5
Y	D763	GAG	9886	Spurred	78.7	6.7	13.2	13.7
Y	D224	GN	10400					13.4
Y	D329	GAG	10526	Scar	81.0		13.0	13.7
Y	D704	GAG	11183					13.2
Y	D329	GN	17715	Unspurred	80.6	6.5	13.6	13.0
Y	D168	GAG	19368	Spurred	77.2			12.8
Y	D216	GNP	20641					14.1
Y	D1158	GAG	20856	Unspurred	85.3			15.1
Y	D216	GNP	21429					12.6
Y	A318	GN	23144					11.8
Y-Z	D116	GAG	768	Spurred	80.5		13.9	14.0
Y-Z	D116	GN	4556	Unspurred	68.4	5.6	12.4	11.9
Y-Z	D116	GAG	5932	Spurred	67.1		12.4	11.6
Y-Z	D116	GN	5977	Unspurred	69.8	5.2	11.5	11.7
Y-Z	D116	GNP	9043					13.6
Y-Z	D116	GN	18032	Unspurred	69.4	5.3	11.3	11.6
Y-Z	D116	GN	20072	Unspurred	80.5	6.3	13.3	13.5
Y-Z	B277	GNP	20698					11.5
Y-Z	E74	GNP	21757					12.0
Y-Z	E74	GNP	21777					11.3
Y-Z	E74	GAG	21788					13.1
Y-Z	E74	GAG	21789					12.0
Y-Z	C267	GAG	23071	Spurred	79.9		13.9	13.2
Z	D330	GNP	826					13.5
Z	D108	GAG	2947	Spurred	79.5		13.0	13.6
Z	D108	GAG	4146					13.5
Z	D331	GNP	7628					11.8
Z	D283	GN	12390	Unspurred	64.4	5.5	11.0	11.4
Z	D283	GAG	17862	Scar	81.8		12.8	13.1
Z	B136	GAG	20659					11.4
Z	B147	GN	20662	Unspurred	74.1	5.8	12.6	12.6

Appendix 63. Domestic fowl: Biometry: Tarsometatarsus measurements

Phase	Context	Taxa	Bone ID	Spur	GL	SC	Bp	Bd
Z	B136	GNP	20681					12.0
Z	E85	GNP	21759					12.5
Z	E100	GNP	21778					11.4
Z	D283	GNP	22111					11.2

Appendix 63 cont. Domestic fowl: Biometry: Tarsometatarsus measurements