

Appendix 1a : Mandibular and maxillary tooth measurements. Measurements of P3-M2 after Davis1987, P2 and M3 after von den Driesch 1976; Measurements are in mm; Approximate measurements indicated by a; / not recorded.

Tooth	Side	Measurement	Value	Tooth	Side	Measurement	Value
Mandible							
P2	Left	L	30.5	P2	Right	L	33.2
		B	17.4			B	17.8
P3	Left	L1	27.1	P3	Right	L1	28
		L2	16.7			L2	17.3
		L3	/			L3	/
		Wa	16.3			Wa	16.0
		Wb	16.4			Wb	16.7
		Wc	16.0			Wc	16.6
		Wd	/			Wd	/
P4	Left	L1	26.8	P4	Right	L1	26.6
		L2	16.4			L2	16.2
		L3	/			L3	/
		Wa	16.5			Wa	16.1
		Wb	16.9			Wb	16.8
		Wc	15.5			Wc	14.7
		Wd	4.2			Wd	4.8
M1	Left	L1	25.3	M1	Right	L1	24.5
		L2	12.4			L2	/
		L3	/			L3	/
		Wa	16.0			Wa	16.2
		Wb	14.2			Wb	16.2
		Wc	13.4			Wc	14.0
		Wd	5.3			Wd	4.7
M2	Left	L1	25.4	M2	Right	L1	25.5
		L2	13.4			L2	13.8
		L3	9.0			L3	/
		Wa	15.3			Wa	15.0
		Wb	14.2			Wb	14.0
		Wc	12.7			Wc	13.3
		Wd	4.0			Wd	4.7
M3	Left	L	31.6	M3	Right	L	/
		B	15.5			B	/
Maxilla							
P2	Left	L	38.8	P2	Right	L	38.8
		B	28.4			B	28.2
P3	Left	L	29.2	P3	Right	L	29.4
		W	29.7			W	30.5
		Lp	12.5			Lp	12.4
P4	Left	L	28.2	P4	Right	L	28.2
		W	30.7			W	30.5
		Lp	14.2			Lp	14.4
M1	Left	L	24.9	M1	Right	L	24.4
		W	28.6			W	28.5
		Lp	12.8			Lp	12.9
M2	Left	L	26.1	M2	Right	L	26.8
		W	27.5			W	27.0
		Lp	14.5			Lp	14.7
M3	Left	L	30.9	M3	Right	L	31.5
		B	24.3			B	24.8

Appendix 1b : Postcranial Measurements (after von den Driesch 1976).

The use of the osteometric board is indicated where this is not a procedure suggested in von den Driesch 1976.

Measurements are in mm. Approximate measurements are indicated by a.

Element	Side	Measurement	Approx.	Value	Comments	Element	Side	Measurement	Approx.	Value	Comments
Fore legs											
Scapula	Left	GLP	a	/	Bone broken	Scapula	Right	GLP		124.6	
		BG	a	/	Bone broken			BG	a	/	Glenoid cavity chipped around edge
		LG	a	/	Bone broken			LG	a	/	Glenoid cavity chipped around edge
		SLC		85.3				SLC	a	84.8	Exostoses on posterior border/edge
Humerus	Left	GLI	a	365.3	Slight chipping on lateral condyle	Humerus	Right	GLI		/	
		GLC		343.8				GLC		/	
		Bp		122.6	Bp			a	124.4	Abrasion	
		SD		52.1	SD				51.6		
		Bd		110.0	Bd				109.5		
		BT	a	94.3	Chipping of bone			BT		100.2	
		HTC		51.0				HTC	a	50.7	Exfoliation
Ulna	Left	GL	a	510	Osteometric board	Ulna	Right	GL	a	/	Top of ulna missing
		GLI	a	499	Osteometric board			GLI	a	/	Top of ulna missing
		LO	a	105.6	Chipped			LO	a	111.3	Abraded
		SDO		60.0				SDO		61.0	
		DPA	a	81.0	Chipped			DPA	a	90.7	Very approximate
Radius	Left	GL	a	415.7	Projection of extra bone	Radius	Right	GL		/	
		LI		388.4				LI		/	
		Bp		111.0				Bp		110.1	
		BFp	a	99.1	Exostoses			BFp	a	98.6	
		SD		53.7				SD		51.4	
		Bd		104.1				Bd		103.1	
		BFd	a	92.3	Abrasion			BFd		89.1	
Hind legs											
Femur	Left	GL		499		Femur	Right	GL		497	
		GLC		449				GLC		449	
		Bp	a	161	Osteometric board, exostoses			Bp	a	156	Osteometric board
		DC		76.8				DC		76.6	
		SD		59.7				SD		59.2	
Tibia	Left	Bd	a	129	Osteometric board	Tibia	Right	Bd	a	130	Osteometric board
		GL	a	444				GL	a	/	Top of bone broken off
		LI	a	411				LI		399	
		Bp	a	131.5				Bp	a	31.8	Approximate due to abrasion
		SD	a	57.2				SD		55.4	
Foot bones	Left	Bd	a	103.3		Calcaneum	Right	Bd	a	105.1	
		Dd	a	63	Osteometric board			Dd	a	62	Osteometric board
Calcaneum	Left	GL	a	152.4		Calcaneum	Right	GL		151.2	
		GB	a	7.0				GB		7.1	

Element	Side	Measurement	Approx.	Value	Comments	Element	Side	Measurement	Approx.	Value	Comments
Astragalus	Left	GH	a	75.4		Astragalus	Right	GH		75.2	
		GB	a	80.3				GB		80.4	
		BFd	a	67.1				BFd	a	67.1	Articular edge not well defined
		LmT	a	79.7	Exostoses			LmT		79.5	
Metacarpal	Left	GL		272.1		Metacarpal	Right	GI		274.8	
		LI		262.8				LI		264.3	
		Bp		84.4				Bp	a	/	Fusion of accessory metacarpal
		SD		42.8				SD		42.7	
		Bd	a	65	Osteometric board			Bd	a	65	Osteometric table
Metatarsal	Left	GL		319		Metatarsal	Right	GI		320.5	
		LI		308.1				LI		310.8	
		Bp		67.2				Bp	a	/	Fusion of accessory metacarpal
		SD		43.2				SD		/	
		Bd		71.4				Bd	a	70	Exostoses at distal fusion area
1 st phalanx	Left hind	GL		101.0		1 st phalanx	Right hind	GL		103	
		Bp		73.2				Bp		72.8	
		BFp	a	66.8	Approx. measurement.			BFp	a	65.5	Approx. measurement
		Dp	a	54.3	Exostoses			Dp	a	/	Spur of bone
		SD	a	49.2	Exostoses			SD	a	51.2	Exostoses
		Bd	a	/	Exostoses			Bd	a	/	Exostoses
		BFd	a	57.6	Abrasion			BFd		56.6	
1 st phalanx	Left fore	GL		102		1 st phalanx	Right fore	GI	a	/	Exostoses
		Bp		72.2				Bp		71.6	
		BFp		63.6				BFp		63.3	
		Dp		47.1				Dp		46.5	
		SD		48.5				SD	a	/	Abrasion of bone on both sides.
		Bd	a	/	Exostoses			Bd	a	/	Exostoses
BFd		56.8		BFd	a	/	Exostoses				
2 nd phalanx	Left hind	GL	a	/	Exostoses and abrasion.	2 nd phalanx	Right hind	GL	a	66	Exostoses on posterior articulation
		Bp	a	69.4	Abraded			Bp	a	71.4	Exostoses
		BFp	a	63.9	Abraded			BFp		61.6	
		Dp	a	44	Exostoses and abrasion.			Dp	a	45.5	Abrasion and exostoses
		SD	a	69.4	Abrasion			SD		57.2	
		Bd	a	/	Abraded surface			Bd	a	62	Abrasion
2 nd phalanx	Left fore	GL	a	/	Abrasion	2 nd phalanx	Right fore	GL	a	63	Abrasion
		Bp	a	/	Abrasion			Bp	a	69.3	Abrasion
		BFp	a	/	Abrasion			BFp	a	/	Abrasion
		Dp	a	/	Abrasion			Dp	a	42.2	Abrasion
		SD	a	/	Abrasion			SD		56.1	
		Bd	a	/	Abrasion			Bd		59.1	

Appendix 2: Measurements of the Shire horse skeletons Blaisdon Conqueror and Prince William (after von den Driesch 1976)
 Blaisdon Conqueror: Shire Stallion; 10 years old; 1894-1904; presented by P. Stubs, Blaisdon Hall, Longhope, England.
 Prince William: Shire stallion; 22 years old; 1883-1905; Breeder Mr. W.H. Potter, Studbook #3956; presented by Lady Wantage 1905; Measurements are in mm; * a = approximate measurement,

Blaisdon Conquer fore leg

Element	Side	Measurements						
Scapula	Left	GLP	BG	LG	SCL	HS	DHA	Ld
		140.6	83.8	90.4	85.8	456	454	253
Humerus	Left	GLI	GLC	Bp	SD	Bd	BT	HTC
		368.1	a 350	134	53.4	112.7	104.4	
Radius	Left	GL	LI	Bp	BFp	SD	Bd	Bfd
		-	a 377	113.2	103.4	59.1	112	95.0
Ulna	Left	GL	GLI	LO	SDO	DPA		
		506	a 496	-	66.8	a 90.5		
Metacarpal	Left	GL	LI	Bp	SD	Bd	Bfd	
		-	a 268.7	a 74.5	47.4	71.0	44.4	
1 st phalanx	Left	GL	Bp	BFp	Dp	SD	Bd	Bfd
		-	82.0	73.3	54.8	47.9	65.9	61.9
2 nd phalanx	Left	GL	Bp	BFp	Dp	SD	Bd	
		a 110	76.7	65.4	46.6	63.7	70.6	
3 rd phalanx	Left	GL	GB	BF	LF	Ld	Hp	
		a 97	124.3	68.0	-	79.5	-	

Blaisdon Conqueror hind leg

Element	Side	Measurements						
Femur	Left	GL	GLC	Bp	DC	SD	Bd	
		a 500	a 450	167.1	85.3	62.0	136.7	
Tibia	Left	GL	LI	Bp	SD	Bd	Dd	
		a 448.1	403.7	140.1	60.4	112.3	70.0	
Calcaneum	Left	GL	GB					
		151.8	-					
Astragalus	Left	GH	GB	BFd	LHT			
		86.3	a 90.0	74.2	92.9			
Metatarsal	Left	GL	LI	Bp	SD	Bd		
		a 318.7	315.9	73.0	46.8	71.5		
1 st phalanx	Left	GL	Bp	BFp	Dp	SD	Bd	Bfd
		115	78.3	71.6	50.4	48.3	70.6	64.0
2 nd phalanx	Left	GL	Bp	BFp	Dp	SD	Bd	
		-	75.5	68.3	43.9	66.9	73.9	
3 rd phalanx	Left	GL	GB	BF	LF	Ld	Hp	
		103	128.8	69.6	-	76.9	-	

Blaisdon Conqueror tooth measurements

Side / Position	Tooth	Measurements			
Left, mandible		L	B		
	P2	38.9	21.7		
	M3	35.6	7.7		
		LI	Wa	Lp	B
	P3	33.7	17.7	33.8	24.6
	P4	32	18.3	a 31.9	24.4
Left, maxilla	M1	a 28.3	16.9	28.3	21.7
	M2	29.0	17	a 28.9	a 19.8
		L	B		
	P2	a 44.0	a 32		
	M3	33.7	26.3		
		LI	Wa	Lp	
	P3	32.8	31.6	13.2	
	P4	31.6	31.5	14.7	
	M1	26.5	29.6	15.5	
	M2	28.0	28.5	16.2	
Left, mandible	P2 - M3	193.9			
Left, mandible	M1 - M3	99.8			
Left, mandible	P2- P4	104.8			

Prince William fore leg

Element	Side	Measurements						
Scapula	Left	GLP	BG	LG	SCL	HS	DHA	Ld
Humerus	Left	GLI	GLC	Bp	SD	Bd	BT	HTC
		376	348.0	133.8	54.3	116.3	105.4	54.9
Radius	Left	GL	LI	Bp	BFp	SD	Bd	Bfd
		397	366.3	111.6	113.0	60.0	110.8	93.6
Ulna	Left	GL	GLI	LO	SDO	DPA		
		488	481	a 105	70.2	90.0		
Metacarpal	Left	GL	LI	Bp	SD	Bd	Bfd	
		264.2	254.7	70.3	48.4	68.4		
1 st phalanx	Left	GL	Bp	BFp	Dp	SD	Bd	Bfd
		104	73.4	67.8	46.7	52.4	64.4	64.8
2 nd phalanx	Left	GL	Bp	BFp	Dp	SD	Bd	Bfd
		61.7	70.0	67.5	46.5	63.3	74.3	-
3 rd phalanx	Left	GL	GB	BF	LF	Ld	Hp	
		100	114.0	68.0	43.7	70.4	-	

Prince William hind leg

Element	Side	Measurements						
Femur	Left	GL	GLC	Bp	SD		Bd	Dd
		488	437	171	67.0		136	81.7
Tibia	Left	GL	LI	Bp	SD		Bd	Dd
		436	401.8	141.9	62.0		109.6	68.4
Calcaneum	Left	GL	GB					
		148.6	61					
Astrag	Left	GH	LHT	GB	BFd			
		74	88.6	80	70.3			
Metatarsal	Left	GL	LI	Bp	SD	Bd		
		305	291	a 70.8	46.8	71.1		
1 st phalanx	Left	GL	Bp	BFp	Dp	SD	Bd	Bfd
		102.4	78.6	71.1	53.7	52.2	64.3	62.4
2 nd phalanx	Left	GL	Bp	BFp	Dp	SD	Bd	
		65.2	72.7	67.6	49.7	61.4	-	
3 rd phalanx	Left	GL	GB	BF	LF	Ld	Hp	
		97	114.9	63.3	45.1	79.8	-	

Appendix 3: Other animal bones associated with the horse skeleton (context 21496)
 Measurements are in mm after von den Driesch 1976.

Taxon	Element	Part	Side	Fusion	Observations	Measurements
Cattle (<i>Bos taurus</i>)	upper M1/2		left		roots chipped	
Cattle (<i>Bos taurus</i>)	proximal phalanx		?	proximal fused	broken longitudinally	
Cattle (<i>Bos taurus</i>)	astragalus		right		abraded, battered and broken	GLI 58.4; Bd c. 37.7
Cattle (<i>Bos taurus</i>)	tibia	distal shaft, c. 25%	right	distal fused	distal end chipped	similar size to CfA 2410, Kerry female
Cattle (<i>Bos taurus</i>)	radius	fragment proximal end and shaft, anterior and lateral aspect	left	proximal fused	abnormal bone formation on lateral side; battered	
Cattle (<i>Bos taurus</i>)	carpal c23	complete	right		root etching	GB 32.0
Cattle (<i>Bos taurus</i>)	carpal meso-ectocuneiform	complete	left			
Cattle (<i>Bos taurus</i>)	calcaneum	fragment with part sustentaculum talus	right	indeterminate	appearance is rounded as if water rolled	
Cattle (<i>Bos taurus</i>)	mandible	condyle	left		abnormal formation of articular surface	
Pig (<i>Sus scrofa</i>)	fibula	shaft fragment	?			
Pig (<i>Sus scrofa</i>)	lower M1/2				wear stage b, after Grant 1982	L c. 17.1, Wa 14.6, Wp 14.6
Sheep (<i>Ovis aries</i>)	lower dP4	almost complete			identification after Payne 1985; wear stage 14A, after Payne 1987	L 14.5, Wa 4.9, Wp 6.2
cf. Dog (<i>Canis familiaris</i>)	femur	shaft	right	proximal and distal indeterminate	deep cut below minor trochanter; fine parallel scratches or cuts on lateral aspect	sd 11.4; size fox terrier CfA 13
Fallow deer (<i>Dama dama</i>)	tibia	distal shaft and end	left	distal fused	identification after Lister 1996, criteria 3 and 5; fine parallel scratches or cuts on anterior surface	Bd c. 32.2, Dd 25.7
Domestic fowl (<i>Gallus gallus</i>)	coracoid	complete	right	adult	identification after MacDonald 1993	GLI 61.5
Large mammal	fragments (6)					
Medium size mammal	fragments (3)					
Medium-large mammal	fragments (4)					