

Catalogue A: Dataset and Dating

Abbreviation	Site
<i>BG</i>	Brough of Gurness
<i>BR</i>	Brough Road
<i>BUC</i>	Bu of Cairston
<i>Buck</i>	Buckquoy
<i>DS</i>	Deerness
<i>NB</i>	Newark Bay
<i>PIERO</i>	Pierowall
<i>SCAR</i>	Scar
<i>SKCIST</i>	Skaill Cist
<i>SKHOUSE</i>	Skaill House
<i>SB</i>	Skara Brae
<i>WEST</i>	Westness

Age Categories		
<i>I</i>	Infant	Foetus- 1 year
<i>C</i>	Child	1-5 years
<i>J</i>	Juvenile	5-11 years
<i>A</i>	Adolescent	12-17 years
<i>YA</i>	Young Adult	18-34 years
<i>MA</i>	Middle Adult	35-49 years
<i>OA</i>	Older Adult	50+ years
<i>Ad</i>	Adult	18+ years
<i>U</i>	Unknown	

Sex Categories	
<i>F</i>	Female
<i>U</i>	Unknown
<i>M</i>	Male

Phases

<i>Pre-Viking Phase (PVP)</i>	Prior to AD 750
<i>Viking Age (VA)</i>	AD 750- 1100
<i>Late Norse Phase (LNP)</i>	AD 1100-1299

Housed

<i>OM</i>	Orkney Museum, Tankerness
<i>NHM</i>	Natural History Museum, London
<i>NMS</i>	National Museums Scotland, Edinburgh
<i>UH</i>	University of Highlands and Islands

'Osteo' category refers to the source of the osteological analysis.

<i>1</i>	Analysed in this study
<i>2</i>	Analysed in both this study and previous study(s)
<i>3</i>	Analysed in previous study(s)

Catalogue A-1. Dataset: Full Inventory of Individuals

Site	Burial	Housed	Complete	Lab ID	Uncalib BP	±	Recalib median AD	Phase	Osteo	Sex	Age
BG	39.5	NMS	5%				1101	VA	2	F	OA
BR	AA	OM	5%						2	F	A
BR	AN	OM	20%	GU-1550	1640	70	528	PVP	2	U	J
BR	AS	OM	20%	TO-7047, GU-1551	1600	70	536	PVP	2	M	MA
BR	BJ	OM	10%	GU-1555	1140	65	897	VA	2	F	MA
BR	CD	OM	3%						2	U	YA
BR	CU	OM	35%	GU-1552	1040	60	1005	VA	2	F	YA
BR	DJ	OM	1%		1215	80		VA	2	U	YA
BR	DT	OM	55%	GU-1553	1240	85	845	VA	2	M	OA
BR	IO	OM	70%	TO-6696	1705	80	528	PVP	2	M	MA
BUC	Sk005	OM	10%					LNP	2	F	Ad
BUC	Sk009	OM	30%	GU-11500	895	35	1221	LNP	2	F	YA
BUC	Sk012	OM	5%					LNP	2	U	Ad
BUC	Sk015	OM	25%					LNP	2	M	Ad
BUC	Sk018	OM	15%					LNP	2	F	YA
BUC	Sk021	OM	0-5%					LNP	2	U	Ad
BUC	Sk026	OM	10%					LNP	2	F	YA
BUC	Sk031	OM	0-5%					LNP	2	F	YA
BUC	Sk034	OM	5%					LNP	2	U	Ad
BUC	Sk037	OM	30%					LNP	2	F	Ad
BUC	Sk040	OM	10%					LNP	2	U	U
BUC	Sk045	OM	10%					LNP	2	U	U
BUC	Sk050	OM	10%					LNP	2	U	Ad
BUC	Sk053	OM	1%					LNP	2	U	U
BUC	Sk056	OM	1%					LNP	2	U	Ad

BUC	Sk058	OM	1%					LNP	2	U	U
BUC	Sk059	OM	45%					LNP	2	U	J
BUC	Sk064	OM	25%					LNP	2	M	MA
BUC	Sk071	OM	40%					LNP	2	M	Ad
BUC	Sk074	OM	50%					LNP	2	M	YA
BUC	Sk081	OM	40%					LNP	2	M	OA
BUC	Sk084	OM	1%					LNP	2	U	U
BUC	Sk087	OM	5%					LNP	2	F	Ad
BUC	Sk091	OM	Shattered					LNP	2	U	Ad
BUC	Sk095	OM						LNP	1		
BUC	Sk098	OM	10%					LNP	2	F	YA
BUC	Sk104	OM	Shattered					LNP	2	F	Ad
BUC	Sk107	OM	10%	GU-11501	900	35	1201	LNP	2	F	YA
BUC	Sk110	OM	95%					LNP	2	F	YA
BUC	Sk115	OM	35%					LNP	2	F	OA
BUC	Sk117	OM						LNP	1	U	Ad
BUC	Sk118	OM	45%					LNP	2	F	OA
BUC	Sk121	OM	35%					LNP	2	M	OA
BUC	Sk122	OM						LNP			
BUC	Sk126	OM	Shattered					LNP	2	U	Ad
BUC	Sk129	OM	2%					LNP	2	U	Ad
BUC	Sk134	OM	20%					LNP	2	F	OA
BUC	Sk137	OM	25%					LNP	2	M	MA
BUC	Sk138	OM	95%					LNP	2	U	I
BUC	Sk141	OM	10%					LNP	2	U	J
BUC	Sk146	OM	30%					LNP	2	M	Ad
BUC	Sk149	OM	45%					LNP	2	U	Ad
BUC	Sk152	OM	1%					LNP	2	U	I
BUC	Sk154	OM	45%					LNP	2	F	MA
BUC	Sk157	OM	70%					LNP	2	F	YA
BUC	Sk160	OM	15%					LNP	2	M	OA
BUC	Sk164	OM	25%					LNP	2	F	MA

BUC	Sk166	OM	10%	LNP	2	U	Ad
BUC	Sk169	OM	5%	LNP	2	U	I
BUC	Sk172	OM	15%	LNP	2	U	J
BUC	Sk177	OM	10%	LNP	2	U	U
BUC	Sk183	OM	15%	LNP	2	U	U
BUC	Sk186	OM	40%	LNP	2	M	OA
BUC	Sk189	OM	25%	LNP	2	F	MA
BUC	Sk192	OM	30%	LNP	2	U	Ad
BUC	Sk195	OM	5%	LNP	2	U	J
BUC	Sk198	OM	5%	LNP	2	U	U
BUC	Sk202	OM	15%	LNP	2	F	OA
BUC	Sk205	OM	30%	LNP	2	F	OA
BUC	Sk210	OM	<1	LNP	2	U	U
BUC	Sk214	OM	45%	LNP	2	F	MA
BUC	Sk217	OM	25%	LNP	2	F	Ad
BUC	Sk220	OM	25%	LNP	2	F	MA
BUC	Sk223	OM	40%	LNP	2	M	OA
BUC	Sk231	OM	1%	LNP	2	U	U
BUC	Sk237	OM	30%	LNP	2	M	OA
BUC	Sk240	OM	35%	LNP	2	F	MA
BUC	Sk243	OM	10%	LNP	2	F	OA
BUC	Sk246	OM	20%	LNP	2	M	Ad
BUC	Sk250	OM	35%	LNP	2	M	OA
BUC	Sk253	OM	25%	LNP	2	M	OA
BUC	Sk257	OM	40%	LNP	2	U	J
BUC	Sk260	OM	1%	LNP	2	U	J
BUC	Sk263	OM	50%	LNP	2	U	J
BUC	Sk266	OM	5%	LNP	2	U	MA
BUC	Sk269	OM	40%	LNP	2	M	OA
BUC	Sk272	OM	10%	LNP	2	U	C
BUC	Sk275	OM	10%	LNP	2	U	I
BUC	Sk279	OM	70%	LNP	2	M	YA

BUC	Sk282	OM	50%	LNP	2	M	Ad
BUC	Sk285	OM	65%	LNP	2	U	J
BUC	Sk290	OM	10%	LNP	2	U	Ad
BUC	Sk294	OM	20%	LNP	2	F	Ad
BUC	Sk296	OM	40%	LNP	2	U	C
BUC	Sk300	OM	5%	LNP	2	U	U
BUC	Sk303	OM	85%	LNP	2	U	I
BUC	Sk306	OM	25%	LNP	2	F	Ad
BUC	Sk309	OM	40%	LNP	2	M	MA
BUC	Sk326	OM	50%	LNP	2	M	YA
BUC	Sk330	OM	15%	LNP	2	F	MA
BUC	Sk340	OM	45%	LNP	2	M	Ad
BUC	Sk345	OM	45%	LNP	2	M	MA
BUC	Sk347	OM	85%	LNP	2	U	J
BUC	Sk350	OM	5%	LNP	2	U	Ad
BUC	Sk353	OM	5%	LNP	2	U	J
BUC	Sk355	OM	10%	LNP	2	U	C
BUC	Sk360	OM	75%	LNP	2	U	C
BUC	Sk362	OM	40%	LNP	2	U	J
BUC	Sk365	OM	1%	LNP	2	U	U
BUC	Sk366	OM	10%	LNP	2	U	YA
BUC	Sk367	OM	5%	LNP	2	U	I
BUC	Sk370	OM	98%	LNP	2	M	YA
BUC	Sk371	OM	5%	LNP	2	U	I
BUC	Sk374	OM	25%	LNP	2	F	Ad
BUC	Sk378	OM	1%	LNP	2	U	Ad
BUC	Sk386	OM	5%	LNP	2	U	U
BUC	Sk388	OM	NR	LNP	2	U	I
BUC	Sk400	OM	1%	LNP	2	U	C
BUC	Sk408	OM	<1	LNP	2	U	U
BUC	Sk412	OM	1%	LNP	2	U	C
BUC	Sk420	OM	45%	LNP	2	F	OA

BUC	Sk433	OM	5%					LNP	2	U	OA
BUC	Sk433b	OM	<1					LNP	2	U	C
BUC	Sk434	OM						LNP	1	U	C
Buck	B(7)	OM	75%	TO-6695	1740	40		VA	2	M	MA
Buck	M12	OM	90%	TO-6693	1580	40	542	PVP	2	M	YA
DS	DS76BS	OM	80%	GU-1574/ TO-6697	920	65	1167	LNP	2	M	YA
DS	DS76BY	OM	1%	disartic			969	VA	2	U	MA
DS	DS76DQ	OM	1%	disartic				VA	2	U	I
DS	DS76GD	OM	1%	disartic	920	65		LNP	2	U	J
DS	DS76GP	OM	Cremated	disartic	920	65		LNP	2	U	I
DS	DS76GQ	OM	1%	disartic				VA	2	U	U
DS	DS77GC	OM	1%	disartic	920	65		LNP	2	U	U
NB	2015/1	OM							3	F	MA
NB	2015/2	UHI	1%						3	F	YA
NB	2015/3	UHI	5%						3	F	YA
NB	62/026	NHM							1		U
NB	68/002	NHM	20%	TO-6940	550	40	1438		1	F	YA
NB	68/004	OM/UHI	1%						3	U	Ad
NB	68/005	NHM	5%	AA-54930	590	40	1432		1	M	MA
NB	68/006	NHM	5%						1	F	MA
NB	68/008	NHM	35%						1	M	A
NB	68/009	NHM	20%						1	U	J
NB	68/012	OM/NHM	80%	TO-7173	930	40	1221	LNP	2	M	YA
NB	68/013	NHM	50%						1	M	A
NB	68/013a	NHM	20%						1	F	OA
NB	68/014	NHM	95%	GU-10955	630	50	1404		1	M	MA
NB	68/015	NHM	60%						1	U	I
NB	68/016	NHM	40%						1	F	OA
NB	68/016A	NHM	80%	TO-7174	1190	40	867	VA	2	M	OA
NB	68/016B	NHM	3%						1	U	I
NB	68/017	OM	5%						3	U	Ad

NB	68/018	NHM	10%						1	U	C
NB	68/019	NHM	30%						1	U	I
NB	68/020	NHM	75%	AA-54931	1055	40	1014	VA	1	F	YA
NB	68/021	NHM	45%						1	U	I
NB	68/021B	NHM	1%						1	U	I
NB	68/022	NHM	5%						1	U	C
NB	68/023	NHM	1%						1	U	I
NB	68/024	OM	10%					VA	3	U	J
NB	68/024b	OM									
NB	68/025	NHM	75%						1	U	I
NB	68/026	NHM	1%						1	M	MA
NB	68/027	NHM	2%						1	F	OA
NB	68/027A	NHM	3%						1	U	I
NB	68/028	OM/NHM	15%						2	M	YA
NB	68/030	NHM	15%						1	U	I
NB	68/031a	OM	35%						2	F	OA
NB	68/031b	OM	5%						2	F	MA
NB	68/031c	OM	10%						2	F	MA
NB	68/032	OM/NHM	20%						2	F	YA
NB	68/033A and B	NHM	85%	TO-7176	1460	40	571	PVP	1	F	OA
NB	68/033C	NHM	10%	TO-7176	1460	40	571	PVP	1	M	MA
NB	68/034	NHM	5%						1	F	A
NB	68/036	NHM	85%						1	U	J
NB	68/052	NHM							1	F	MA
NB	68/107	NHM		TO-7191	1340	60	725	PVP	1	F	A
NB	69/001	NHM	75%						1	M	A
NB	69/002	NHM	50%						1	M	YA
NB	69/004A-C	NHM	75%	TO-7177	1010	30	1048	VA	1	M	MA
NB	69/005	NHM	60%						1	U	I
NB	69/006	NHM	3%						1	U	I

NB	69/007A	OM	20%						3	M	MA
NB	69/007B	NHM	70%						1	M	OA
NB	69/008	OM/NHM	20%	TO-7178	830	30	1254	LNP	2	F	MA
NB	69/009	NHM	75%	TO-7179	1030	30	1156	LNP	1	M	MA
NB	69/010	NHM	20%						1	M	MA
NB	69/010A	NHM	80%						1	U	I
NB	69/011	NHM	40%	TO-7180	1380	30	680	PVP	1	F	MA
NB	69/012	NHM	20%						1	M	MA
NB	69/013	NHM	70%						1	U	I
NB	69/014	NHM	10%						1	M	MA
NB	69/015A	NHM	3%						1	U	I
NB	69/015B and C	NHM	5%						1	U	I
NB	69/016	NHM	20%						1	M	A
NB	69/017	NHM	80%						1	U	J
NB	69/018	NHM	5%						1	U	J
NB	69/019	NHM	85%						1	U	I
NB	69/020	NHM	30%						1	F	MA
NB	69/021	NHM	5%						1	M	OA
NB	69/022	NHM	1%						1	F	OA
NB	69/022B	NHM	5%						1	M	A
NB	69/023	NHM	80%						1	U	Ad
NB	69/024	NHM	25%						1	M	MA
NB	69/025	NHM	25%						1	U	A
NB	69/026	OM/NHM	50%						2	F	OA
NB	69/026A	OM/NHM	75%						1	U	J
NB	69/028	OM/NHM	40%						2	M	MA
NB	69/029	OM	10%						3	U	J
NB	69/030	NHM	40%						1	U	I
NB	69/031	NHM	20%						1	U	I
NB	69/032	OM/NHM	80%						1	U	J
NB	69/033	NHM	95%						1	M	MA

NB	69/034	NHM	20%	TO-7181	930	40	1164	LNP	2	U	J
NB	69/035	NHM	90%						2	U	I
NB	69/036	NHM	50%	TO-7182	1090	40	994	VA	1	F	YA
NB	69/037	OM/NHM	50%	TO-6944	910	50	1207	LNP	2	U	I
NB	69/038	NHM	1%						1	U	I
NB	69/039	NHM	1%						1	U	I
NB	69/040	NHM	95%						1	U	I
NB	69/041	NHM	10%						1	U	I
NB	69/042	NHM	90%						1	U	I
NB	69/043	NHM	30%						1	U	I
NB	69/044	NHM	75%						1	U	I
NB	69/045	NHM	70%						1	F	OA
NB	69/046	NHM	45%						1	M	A
NB	69/048	NHM	5%						1	U	J
NB	69/049	NHM	3%						1	U	I
NB	69/051	NHM	20%						1	U	I
NB	69/052	NHM	70%						1	U	I
NB	69/052A	NHM	25%						1	U	I
NB	69/053	NHM	15%						1	U	I
NB	69/054	NHM	50%						1	U	I
NB	69/055	NHM	7%						1	U	J
NB	69/056	NHM	40%						1	U	I
NB	69/057	NHM	95%						1	U	I
NB	69/060	NHM	95%						1	U	I
NB	69/061	NHM	35%						1	U	I
NB	69/062	NHM	75%						1	M	OA
NB	69/063	NHM	95%						1	U	I
NB	69/064	NHM	40%						1	U	C
NB	69/066	NHM	25%						1	U	I
NB	69/067	NHM	95%	TO-7183	990	40	1157	LNP	1	M	OA
NB	69/067x	NHM	25%						1	U	I
NB	69/068	NHM	20%						1	U	I

NB	69/069	NHM	70%	TO-7184	910	40	1222	LNP	2	M	OA
NB	69/070	NHM	60%						1	U	J
NB	69/071	NHM	95%						1	U	I
NB	69/073	NHM	25%						1	U	C
NB	69/074	NHM	5%						1	U	I
NB	69/075	NHM	35%						1	U	J
NB	69/076	NHM	3%						1	U	I
NB	69/077	NHM	15%						1	U	I
NB	69/078	NHM	80%						1	U	I
NB	69/079	NHM	85%						1	U	I
NB	69/080or 69/027	NHM	80%						1	U	I
NB	69/081	NHM	<1%						1	U	I
NB	69/082	NHM	95%						1	U	C
NB	69/083 combined	NHM	75%	TO-7185 and AA- 54932	1064	30	1049	VA	1	M	MA
NB	69/084	NHM	90%						1	F	OA
NB	69/085	NHM	85%	TO-7186	1000	40	1047	VA	1	F	MA
NB	69/086	NHM	10%						1	U	J
NB	69/087	NHM	10%		1123	36	1048	VA	1	M	MA
NB	69/088	NHM	95%	Ox-A10410					1	U	I
NB	69/089	NHM	55%						1	U	J
NB	69/091	NHM	99%						1	F	A
NB	69/092	NHM	95%						1	U	I
NB	69/093	NHM	10%						1	U	I
NB	69/094	NHM	90%						1	U	I
NB	69/095	NHM	10%						1	U	I
NB	69/096	NHM	55%						1	U	I
NB	69/097	NHM	10%						1	U	I
NB	69/098	NHM	70%						1	M	OA

NB	69/099	NHM	95%	TO-7187	1060	40	1032	VA	1	F	MA
NB	69/100	NHM	35%						1	U	I
NB	69/101	NHM	95%						1	U	J
NB	69/102	NHM	15%						1	F	OA
NB	69/103	NHM	3%						1	U	I
NB	69/104	NHM	5%						1	F	OA
NB	69/104A	NHM	40%	TO-7188	1030	40	1159	LNP	1	F	MA
NB	69/104B	NHM	45%	TO-7189	1130	50	952	VA	1	F	MA
NB	69/105	NHM	35%	TO-7190	990	50	1144	LNP	1	M	YA
NB	69/106	NHM	25%						1	M	MA
NB	69/107	NHM	40%	TO-7191	1340	60			1	F	OA
NB	69/108	NHM	45%						1	U	I
NB	69/109	NHM	20%						1	U	I
NB	69/CC1	NHM	10%						1	U	J
NB	69/CC2	NHM	10%						1	F	Ad
NB	69/CC3A and B	OM/NHM	90%						3	F	MA
NB	69/CC3X	NHM	70%						1	M	Ad
NB	69/CC4	NHM	70%	TO-6941	920	40	1225	LNP	1	M	A
NB	69/NonoB	NHM	50%				786	VA	1	F	OA
NB	69/x	NHM	90%	TO-6942	1180	30	889	VA	1	F	YA
NB	69/y/NoNo	NHM	20%						1	M	MA
NB	69/z	NHM	65%						1	U	I
NB	70(f)	OM/NHM	25%					VA	2	M	OA
NB	70/001	NHM	85%	TO-7192	1010	60	1048	VA	1	F	OA
NB	70/002	NHM	60%	TO-6935	1060	50	1048	VA	1	F	A
NB	70/003	NHM	85%						1	U	I
NB	70/004	NHM	70%						1	U	I
NB	70/005	NHM	95%	TO-6939	520	30	1440		1	M	A
NB	70/006	OM/NHM	95%	TO-6937	700	40	1351		2	F	OA

NB	70/007	OM/NHM	20%						2	U	Ad
NB	70/007A	NHM	95%						1	U	I
NB	70/008A	NHM	15%						1	M	MA
NB	70/008B	NHM	5%						1	M	YA
NB	70/009A	NHM	5%						1	U	A
NB	70/009B	NHM	65%						1	F	MA
NB	70/010	NHM	35%						1	U	I
NB	70/011	NHM	85%						1	U	I
NB	70/012A	NHM	95%						1	U	I
NB	70/012B	NHM	35%						1	M	MA
NB	70/013	NHM	60%						1	U	I
NB	70/014	NHM	40%						1	U	I
NB	70/015	NHM	50%	AA-54933	1060	35	1132	LNP	1	F	MA
NB	70/016	NHM	95%						1	U	I
NB	70/017	NHM	85%						1	U	I
NB	70/018	NHM	95%						1	U	I
NB	70/019	NHM	20%						1	U	I
NB	70/020	NHM	95%						1	U	C
NB	70/021	NHM	95%						1	U	I
NB	70/024	NHM	95%						1	U	C
NB	70/025	NHM	95%						1	U	C
NB	70/026	NHM	95%						1	U	I
NB	70/027	NHM	90%						1	U	I
NB	70/028	NHM	30%						1	U	J
NB	70/029	OM	85%						2	F	MA
NB	70/030	NHM	90%						1	F	MA
NB	70/031	NHM	15%						1	M	MA
NB	70/032	NHM	65%						1	U	I
NB	70/033	NHM	35%						1	U	I
NB	70/035	NHM	95%						1	F	MA
NB	70/036	NHM	1%						1	U	C
NB	70/037	OM/NHM	95%	AA-54934	1130	40	1002	VA	3	M	A

NB	70/038	NHM	30%						1	F	MA
NB	70/039	NHM	15%	AA-54935	965	40	1188	LNP	1	M	MA
NB	70/070	OM							3	U	U
NB	70/h	NHM	10%						1	U	J
NB	70/NoNo	NHM	15%						1	F	MA
NB	70/NoNoA	NHM	5%						1	M	OA
NB	70/NoNoB	NHM	15%						1	F	MA
NB	70/NoNoC	NHM	10%						1	F	MA
NB	70/NoNoD	NHM	25%						1	M	OA
NB	70a	OM	20%						3	M	Ad
NB	70b	OM	35%						3	M	Ad
NB	70d	OM/NHM	10%						2	U	MA
NB	71/001 and 71/008	NHM	80%		1075	35	1144	LNP	1	M	MA
NB	71/002	NHM	90%	AA-54936 AA-54937	1075	35	1048	VA	1	F	MA
NB	71/003	NHM	70%	TO-7193	1200	40	895	VA	1	F	OA
NB	71/004	NHM	75%						1	U	I
NB	71/005	NHM	15%	TO-6933	1170	50	910	VA	1	U	I
NB	71/006 and A	NHM	3%						1	U	I
NB	71/007	NHM	45%						1	F	OA
NB	71/008	NHM			1070	36		VA	1		
NB	71/009	NHM	30%						1	F	OA
NB	71/010	NHM	35%						1	U	I
NB	71/011	OM	20%						2	M	OA
NB	71/012	OM	5%						2	M	Ad
NB	71/012b?	OM	10%						3	U	Ad

NB	71/013b	UHI	70%						3	F	Ad
NB	71/013B	OM	5%						3	F	YA
NB	71/014	OM	10%						3	U	J
NB	71/015	NHM	20%						1	F	MA
NB	84/003	NHM							1	U	U
NB	86/006	OM	20%						3	U	Ad
NB	99/001	NHM	15%						1	M	MA
NB	99/006	NHM							1	M	Ad
				OxA-10409	1015	37	1145	LNP			
NB	D1	OM	5%						3	U	J
NB	D2	OM	1%						3	F	OA
NB	D3	OM	10%						3	M	MA
NB	D3a	OM	5%						2	U	MA
NB	D3b	OM	10%						3	F	A
NB	D3c	OM	10%						3	U	YA
NB	D4	OM	15%						3	U	Ad
NB	D5	OM	10%						3	F	A
NB	D6	OM	5%						3	F	Ad
NB	D7	OM	5%						3	F	Ad
NB	MJ	OM							3	U	U
NB	NB1	OM	35%						3	M	OA
NB	NB2	OM	55%						3	U	J
NB	NB3	OM	20%						3	U	C
NB	NB4	OM	1%						3	U	I
NB	RA1	OM	1%						2	U	J
NB	RA2	OM	1%						2	M	Ad
NB	Sk ?? ST12	OM							3	M	Ad
NB	Sk?? ST14	OM							3	M	OA
NB	Sk?? ST17	OM							3	U	U
NB	Sk001	OM/NHM	20%	OXA-10407	1070	36	1053	VA	2	F	MA

NB	Sk002	OM	50%						3	M	YA
NB	Sk003	OM	20%						3	M	Ad
NB	Sk004	OM/NHM	5%	OxA-10408	890	43	1197	VA	2	U	J
NB	Sk005a	OM	10%						3	U	A
NB	Sk005b	OM	5%						3	U	U
NB	SK005c	OM	1%						3	U	Ad
NB	Sk005e	OM	10%						3	M	YA
NB	Sk006	OM	20%						3	U	U
NB	Sk007	OM	20%						3	F	MA
NB	Sk008(1)	OM	1%						3	U	U
NB	Sk008(2)	OM	10%						3	F	MA
NB	Sk008(3)	OM	1%						3	U	U
NB	SK009	OM/NHM	5%				786	VA	2	F	MA
NB	SK009A	OM	0.01						3	U	I
NB	Sk010f	OM	5%						3	F	YA
NB	Sk011	OM	35%						3	M	MA
NB	SK012	NHM		TO-6943	960	50	1199	LNP	1	U	
NB	Sk013	OM	10%						3	F	MA
NB	Sk013a	OM	10%						3	U	I
NB	Sk026	OM	15%						3	M	Ad
NB	SK1-2	OM	20%						3	M	Ad
NB	Sk24-25	OM	1%						3	U	I
NB	Sk24b	OM	1%						3	U	U
NB	Sk87	OM	20%						3	M	OA
NB	Sk98	OM	50%						3	M	MA
NB	Skull1	UHI	5%						3	F	MA
NB	TM8	OM	20%						3	F	YA
NB	Unknown Sk	OM							3	U	Ad
PIERO	ET62	NMS	5%					VA	2	M	YA
PIERO	ET63	NMS	5%					VA	2	M	MA

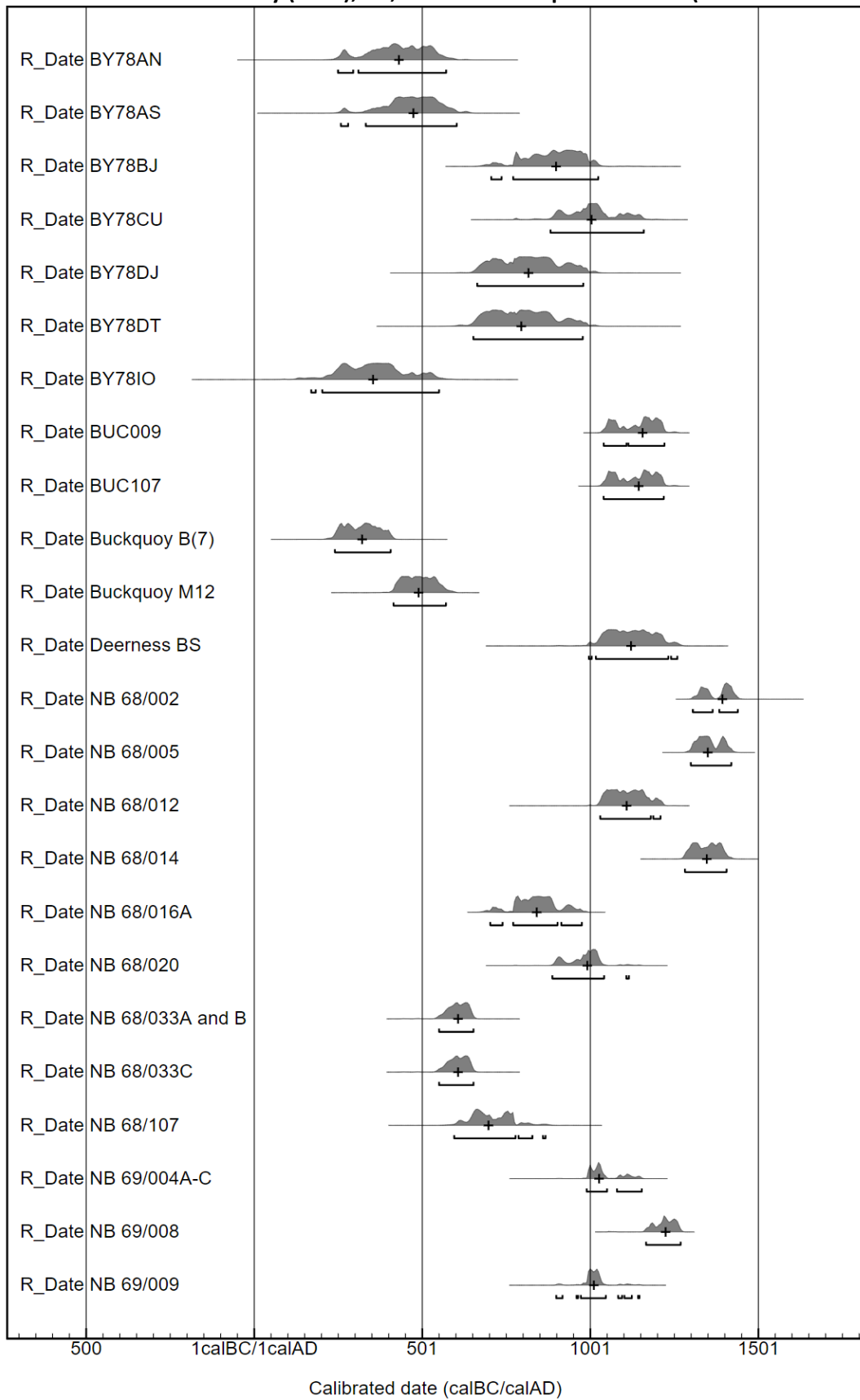
PIERO	Grave 001							VA	1	M	Ad
PIERO	Grave 002							VA	1	F	Ad
PIERO	Grave 003							VA	1	F	MA
PIERO	Grave 004							VA	1	F	OA
PIERO	Grave 006							VA	1	M	Ad
PIERO	Grave 007							VA	1	M	Ad
PIERO	Grave 008							VA	1	M	Ad
PIERO	Grave 009							VA	1	U	U
PIERO	Grave 010							VA	1	M	Ad
PIERO	Grave 011							VA	1	F	A
PIERO	Grave 012							VA	1	F	A
PIERO	Grave 013							VA	1	U	U
PIERO	Grave 014							VA	1	F	A
PIERO	Grave 015							VA	1	M	Ad
PIERO	Grave 016							VA	1	M	Ad
PIERO	Grave 017							VA	1	M	Ad
SCAR	SK133	OM	25%	AA-12597	1155	60	882	VA	2	F	MA
SCAR	Sk134	OM	50%	AA-12596	1040	60	1009	VA	2	M	Ad
SCAR	SK135	OM	5%	AA-12595	940	75	1159	VA	2	U	J
SKCIST	1	OM	60%	GU-7245	1410	50	647	PVP	2	M	YA
SKHOUSE	1	OM	75%	GU-7244	790	70	1326	LNP	2	F	MA
SKHOUSE	10		5%	GU-7243	710	60	1329		1	M	Ad
SKHOUSE	11		100%					LNP	1	U	C
SKHOUSE	12		1%					LNP	1	U	Ad
SKHOUSE	13		100%					LNP	1	U	I
SKHOUSE	19							LNP	1	U	C
SKHOUSE	3a	OM	5%					LNP	2	F	MA
SKHOUSE	3b	OM	25%					LNP	2	M	Ad
SKHOUSE	5		1%	GU-7241	700	70	1332		1	F	Ad
SKHOUSE	7		100%	GU-7242	820	60	1224	LNP	1	M	MA
SKHOUSE	8			GU-7240	750	70	1232	LNP	1	F	OA
SKHOUSE	9							LNP	1	F	YA

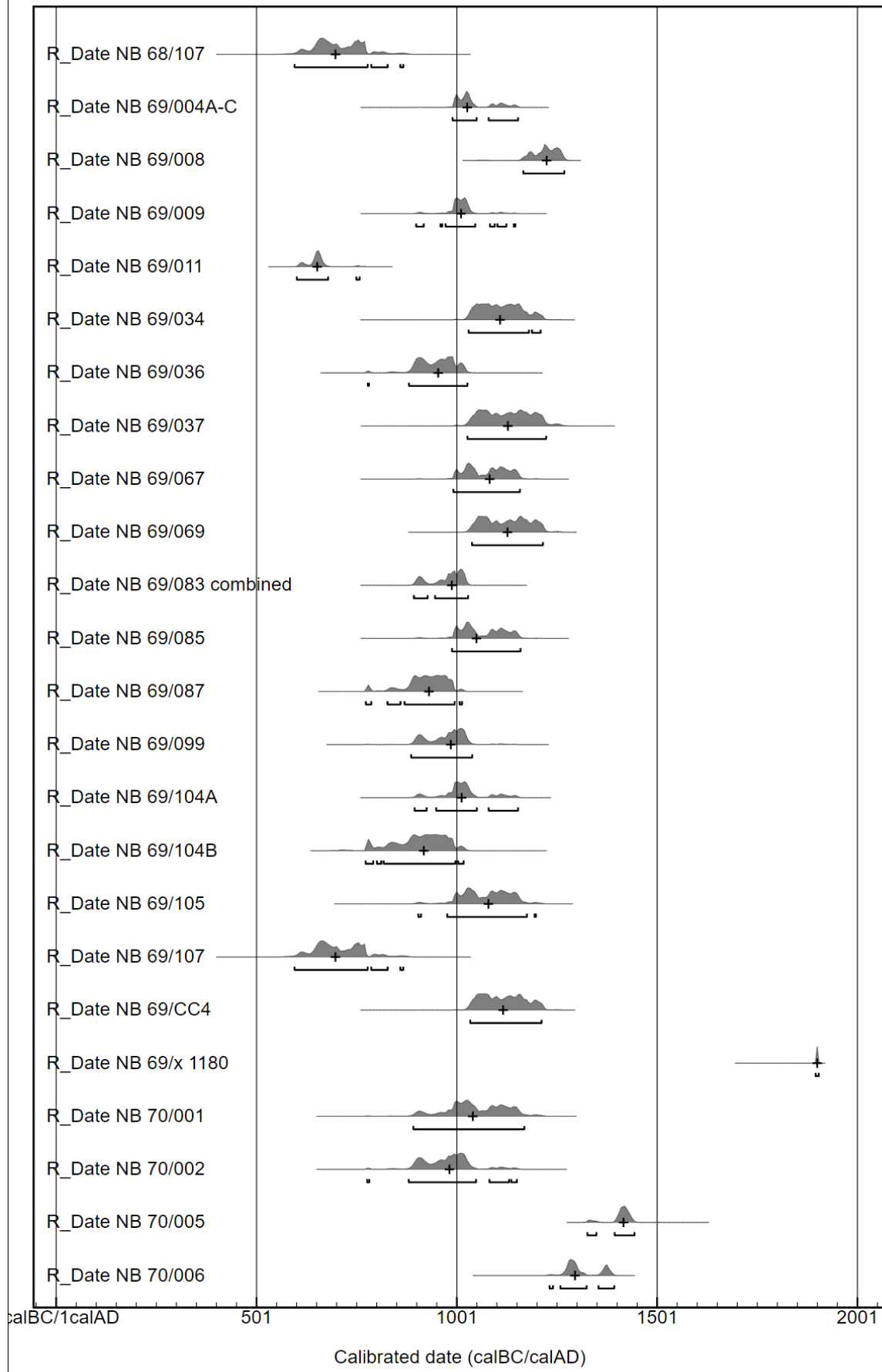
SB	1	NMS	90%	GU-18651, SUERC- 24240				PVP	2	F	YA
SB	2	NMS						PVP	2	M	MA
SB	3	NMS	15%	SUERC- 79482	1139	35		VA	2	U	MA
WEST	003	NMS			110	120	1451		2		
WEST	005	NMS	15%	T-1569	1271	26	729	VA	2	F	Ad
WEST	006	NMS	65%	T-6532, T- 7532	1320	80	693	PVP	2	F	OA
WEST	007	NMS	98%	T-6813	1540	40	571	PVP	2	F	OA
WEST	008	NMS	80%	TO-7196					2	F	OA
WEST	009	NMS	1%		1220	40	862	VA	2	M	MA
WEST	010	NMS	98%	T-7464	1360	70	682	PVP	2	M	YA
WEST	011	NMS	75%	T-6527	1270	60	857	VA	2	M	MA
WEST	012	NMS	35%	T-6814	1240	70	881	VA	2	M	MA
WEST	013	NMS	90%	T-6815	1430	40	655	PVP	1	U	I
WEST	014	NMS	35%	T-7465					2	M	Ad
WEST	015	NMS	1%		1200	40	877	VA	2	M	Ad
WEST	017	NMS	35%	TO-7198	1160	50	979	VA	2	U	I
WEST	018	NMS	1%	T-7467	1180	70	881	VA	2	F	YA
WEST	019	NMS	90%	T-6816	1330	70	965	VA	2	U	I
WEST	020	NMS	99%	T-7469	1400	60	655	PVP	2	M	MA
WEST	021	NMS	95%	T-6528	1410	30	646	PVP	2	M	MA
WEST	023	NMS	1%	T-7468					2	U	U
WEST	024	NMS	97%		1420	40	640	PVP	2	F	MA
WEST	025	NMS	99%	T-7466	1530	60	578	PVP	2	U	J
WEST	026	NMS	98%	T-6529	1330	120	686	PVP	2	M	A
WEST	028a	NMS	98%	T-6817	1480	40	617	PVP	2	F	YA
WEST	028b	NMS	99%	T-7471	1480	40	617	PVP	2	U	I
WEST	030	NMS	99%	T-7471					2	F	OA
WEST	032	NMS	5%		1410	60	627	PVP	2	F	OA

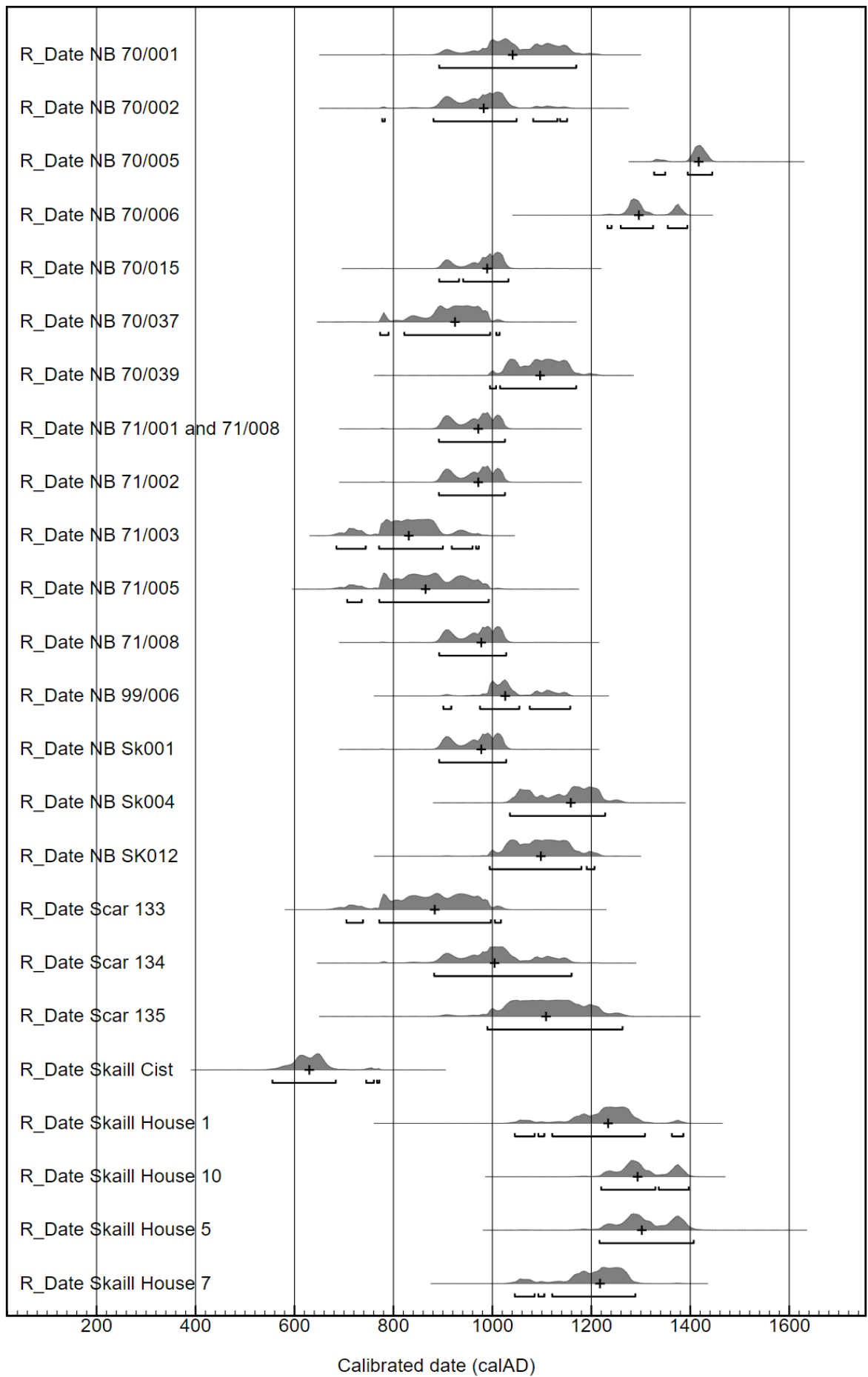
WEST	034	NMS	70%	T-7470				VA	2	M	OA
WEST	036	NMS	5%		920	50	1160	VA	2	F	MA
WEST	1963A	NMS	70%	T-6530	1200	40	837	VA	2	F	YA
WEST	1963B	NMS	40%	T-7194	1600	70	536	PVP	2	F	Ad
WEST	1963C	NMS	5%	TO-7195					2	U	Ad
WEST	1968 1A [2(1)]	NMS	5%					VA	2	M	MA
WEST	1968 1B [2(2)]	NMS	5%						2	M	YA
WEST	1968 1C	NMS	1%						2	U	Ad
WEST	Dispersed	NMS	5%						2	F	YA
WEST	Noust	NMS	30%	AA-50703, AA-53127			1566		2	M	Ad

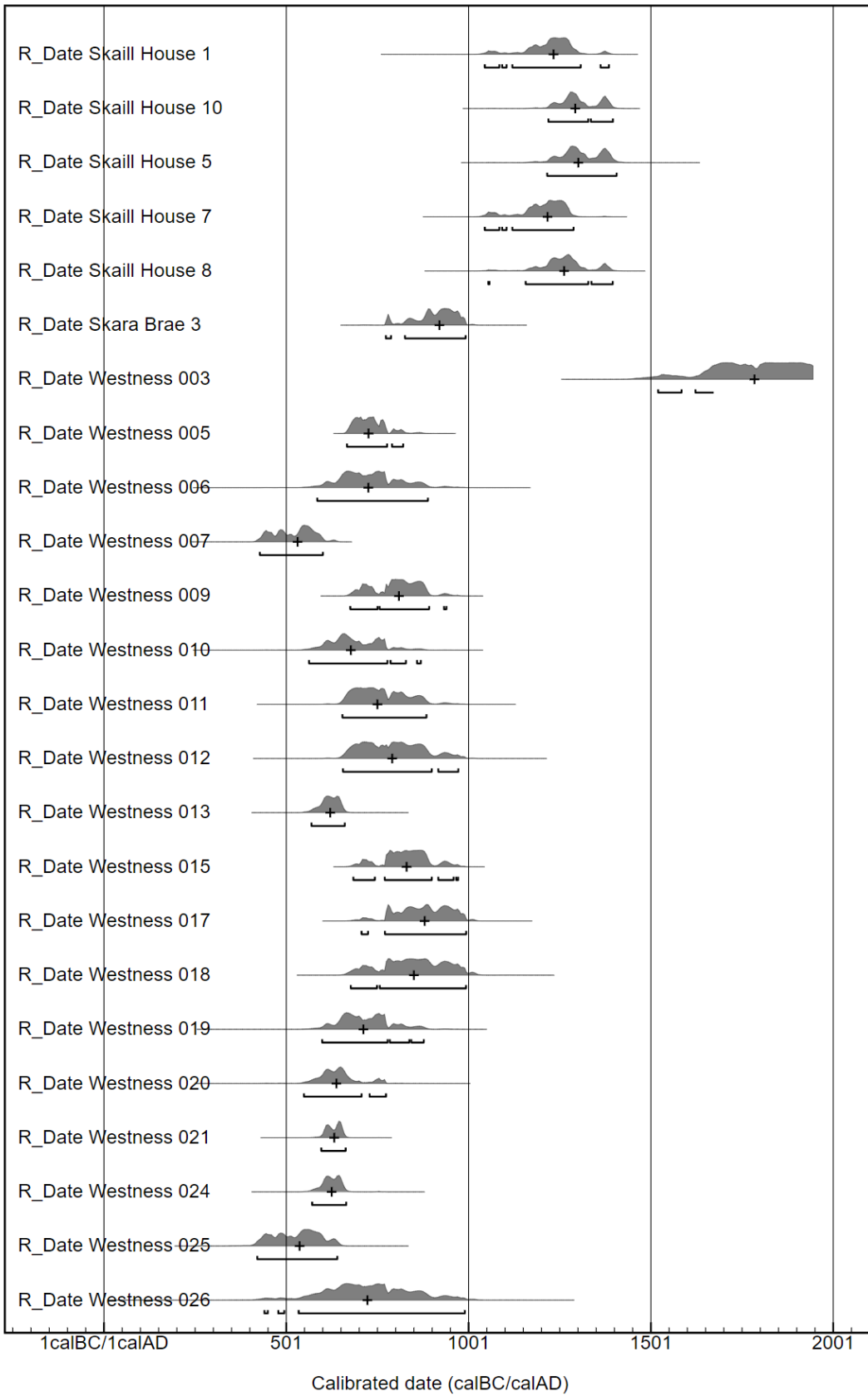
Catalogue A-2. Modelled Radiocarbon Dates

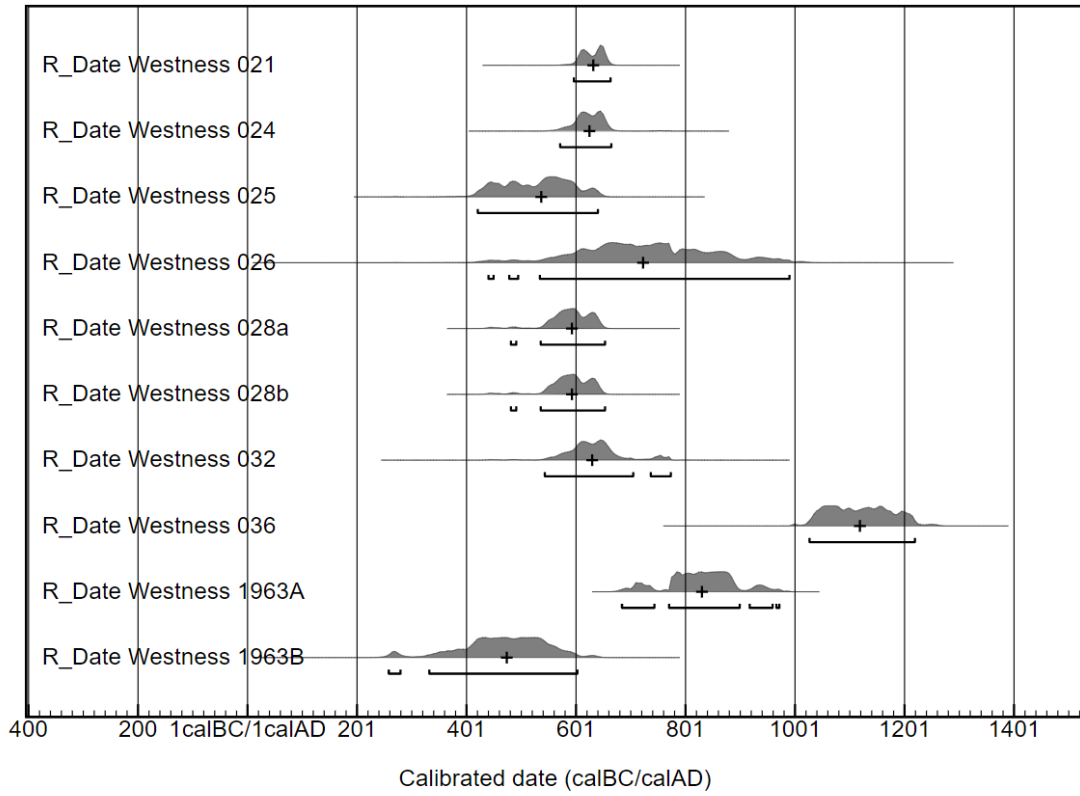
OxCal v4.3.2. Bronk Ramsey (2017); r.5; IntCal13 atmospheric curve (Reimer et al. 2013).











Recalibrated C14 dates

Site	Burial	Lab_id	Uncalib. Dates (BP)	±	% Marine Protein	Probability	Unmodelled (AD)		Modelled (AD)	
							From	To	From	To
Brough Road	AN	GU-1550	1640	70	10.1	68.3%	403	567	411	566
						99.7%	220	660	237	658
Brough Road	AS	TO-7047, GU-1551	1600	70	16.6	68.3%	436	600	437	601
						99.7%	247	771	251	772
Brough Road	BJ	GU-1555	1140	65	0.0	68.3%	777	991		
						99.7%	663	1126		
Brough Road	CU	GU-1552	1040	60	3.6	68.3%	900	1152	990	1154
						99.7%	771	1257	775	1262
Brough Road	DJ		1215	80	3.6	68.3%	689	995	773	977
						99.7%	601	1151	642	1155
Brough Road	DT	GU-1553	1240	85	16.0	68.3%	773	986	774	981
						99.7%	605	1162	607	1162
Brough Road	IO	TO-6696	1705	80	5.5	68.3%	250	530	257	535
						99.7%	76	645	124	645
Bu of Cairston	Sk009	GU-11500	895	35	33.3	68.3%	1220	1304	1221	1302
						99.7%	1048	1419	1050	1432
Bu of Cairston	Sk107	GU-11501	900	35	23.3	68.3%	1181	1279	1181	1278
						99.7%	1034	1391	1041	1235
Buckquoy	B(7)	TO-6695	1740	40	6.0	68.3%	255	409	260	411
						99.7%	129	545	216	546
Buckquoy	M12	TO-6693	1580	40	9.8	68.3%	437	589	440	598
						99.7%	361	660	408	658
Deerness	DS76BS	GU-1574/ TO-6697	920	65	6.8	68.3%	1047	1221	1050	1253
						99.7%	894	1306	978	1310
Newark Bay	68/002	TO-6940	550	40	28.4	68.3%	1430	1619	1428	1620
						99.7%	1320	1671	1320	1683
Newark Bay	68/005	AA-54930	590	40	35.3	68.3%	1425	1618	1425	1617

						99.7%	1315	1671	1318	1686
Newark Bay	68/012	TO-7173	930	40	45.6	68.3%	1225	1378	1223	1378
						99.7%	1050	1441	1051	1453
Newark Bay	68/014	GU-10955	630	50	33.0	68.3%	1395	1515	1395	1515
						99.7%	1291	1651	1292	1657
Newark Bay	68/016A	TO-7174	1190	40	11.1	68.3%	778	987	780	989
						99.7%	669	1041	680	1052
Newark Bay	68/020	AA-54931	1055	40	15.2	68.3%	995	1152	998	1150
						99.7%	881	1255	890	1232
Newark Bay	68/033A and B	TO-7176	1460	40		68.3%	585	643		
						99.7%	436	669		
Newark Bay	68/033C	TO-7176	1460	40		68.3%	585	643		
						99.7%	436	669		
Newark Bay	68/107	TO-7191	1340	60	34.8	68.3%	710	951	710	956
						99.7%	638	1054	639	1064
Newark Bay	69/004A-C	TO-7177	1010	30	11.1	68.3%	1028	1156	1030	1155
						99.7%	896	1255	990	1253
Newark Bay	69/008	TO-7178	830	30	38.9	68.3%	1288	1393	1285	1392
						99.7%	1220	1451	1218	1459
Newark Bay	69/009	TO-7179	1030	30		68.3%	994	1026		
						99.7%	892	1156		
Newark Bay	69/011	TO-7180	1380	30	15.6	68.3%	659	772	660	772
						99.7%	600	887	607	895
Newark Bay	69/034	TO-7181	930	40	15.0	68.3%	1052	1260	1055	1258
						99.7%	997	1296	1023	1298
Newark Bay	69/036	TO-7182	1090	40	7.8	68.3%	895	1033	898	1039
						99.7%	771	1180	773	1206
Newark Bay	69/037	TO-6944	910	50	31.9	68.3%	1182	1300	1179	1299
						99.7%	1036	1409	1037	1413
Newark Bay	69/067	TO-7183	990	40	36.2	68.3%	1161	1271	1161	1271
						99.7%	1020	1386	1022	1390
Newark Bay	69/069	TO-7184	910	40	38.9	68.3%	1221	1376	1220	1314
						99.7%	1048	1430	1052	1440

<i>Newark Bay</i>	69/083 combined	TO-7185 and AA- 54932	1064	30	39.2	68.3%	1054	1216	1055	1211
						99.7%	994	1282	995	1290
<i>Newark Bay</i>	69/085	TO-7186	1000	40	15.2	68.3%	1039	1162	1042	1161
						99.7%	899	1279	990	1273
<i>Newark Bay</i>	69/087	Ox- A10410	1123	36	61.1	68.3%	1121	1265	1120	1263
						99.7%	991	1382	995	1387
<i>Newark Bay</i>	69/099	TO-7187	1060	40	27.7	68.3%	1036	1160	1034	1160
						99.7%	897	1275	901	1278
<i>Newark Bay</i>	69/104A	TO-7188	1030	40	52.4	68.3%	1173	1284	1169	1280
						99.7%	1029	1399	1035	1401
<i>Newark Bay</i>	69/104B	TO-7189	1130	50	18.0	68.3%	894	1037	894	1037
						99.7%	771	1215	772	1216
<i>Newark Bay</i>	69/105	TO-7190	990	50	26.0	68.3%	1050	1227	1051	1225
						99.7%	979	1308	989	1306
<i>Newark Bay</i>	69/107	TO-7191	1340	60	34.4	68.3%	710	950	707	954
						99.7%	637	1053	641	1057
<i>Newark Bay</i>	69/CC4	TO-6941	920	40	44.6	68.3%	1229	1381	1227	1381
						99.7%	1051	1444	1054	1457
<i>Newark Bay</i>	69/x	TO-6942	1180	30		68.3%	775	891		
						99.7%	703	991		
<i>Newark Bay</i>	70/001	TO-7192	1010	60	19.7	68.3%	1036	1200	1035	1198
						99.7%	892	1286	895	1292
<i>Newark Bay</i>	70/002	TO-6935	1060	50	41.2	68.3%	1053	1224	1054	1220
						99.7%	958	1322	976	1329
<i>Newark Bay</i>	70/005	TO-6939	520	30	20.8	68.3%	1429	1615	1428	1615
						99.7%	1326	1657	1396	1664
<i>Newark Bay</i>	70/006	TO-6937	700	40	28.9	68.3%	1318	1430	1318	1427
						99.7%	1265	1528	1269	1620
<i>Newark Bay</i>	70/015	AA-54933	1060	35	45.8	68.3%	1128	1261	1069	1254
						99.7%	995	1311	994	1323
<i>Newark Bay</i>	70/037	AA-54934	1130	40	37.8	68.3%	1025	1154	1022	1151
						99.7%	890	1264	890	1264

<i>Newark Bay</i>	70/039	AA-54935	965	40	41.0	68.3%	1180	1290	1182	1288
						99.7%	1036	1399	1036	1405
<i>Newark Bay</i>	71/001 and 71/008	AA-54936	1075	35	62.1	68.3%	1169	1285	1169	1283
						99.7%	1026	1404	1030	1410
<i>Newark Bay</i>	71/002	AA-54937	1075	35	43.4	68.3%	1054	1220	1055	1217
						99.7%	992	1296	993	1303
<i>Newark Bay</i>	71/003	TO-7193	1200	40	21.4	68.3%	881	1015	881	1014
						99.7%	684	1150	701	1155
<i>Newark Bay</i>	71/005	TO-6933	1170	50	7.8	68.3%	778	991	779	994
						99.7%	663	1129	676	1150
<i>Newark Bay</i>	71/008		1070	36	36.7	68.3%	1050	1178	1046	1177
						99.7%	976	1288	986	1291
<i>Newark Bay</i>	99/006	OxA- 10409	1015	37	40.0	68.3%	1155	1271	1154	1270
						99.7%	1017	1381	1019	1380
<i>Newark Bay</i>	Sk001	OXA- 10407	1070	36	45.6	68.3%	1055	1231	1054	1229
						99.7%	993	1305	993	1315
<i>Newark Bay</i>	Sk004	OxA- 10408	890	43	16.7	68.3%	1176	1273	1178	1271
						99.7%	1025	1389	1032	1390
<i>Newark Bay</i>	SK012	TO-6943	960	50		68.3%	1029	1157		
						99.7%	897	1230		
<i>Scar</i>	SK133	AA-12597	1155	60	4.8	68.3%	777	992	779	1018
						99.7%	661	1154	675	1155
<i>Scar</i>	Sk134	AA-12596	1040	60	7.8	68.3%	987	1156	994	1154
						99.7%	772	1262	776	1268
<i>Scar</i>	SK135	AA-12595	940	75	8.4	68.3%	1046	1216	1045	1221
						99.7%	881	1385	892	1385
<i>Skaill Cist</i>	1	GU-7245	1410	50	4.0	68.3%	591	758	605	762
						99.7%	433	878	546	880
<i>Skaill House</i>	1	GU-7244	790	70	42.5	68.3%	1305	1421	1305	1421
						99.7%	1178	1625	1205	1632
<i>Skaill House</i>	10	GU-7243	710	60		68.3%	1261	1388		

						99.7%	1161	1420		
<i>Skail House</i>	5	GU-7241	700	70		68.3%	1261	1392		
						99.7%	1051	1437		
<i>Skail House</i>	7	GU-7242	820	60		68.3%	1175	1272		
						99.7%	1026	1384		
<i>Skail House</i>	8	GU-7240	750	70		68.3%	1217	1379		
						99.7%	1040	1408		
<i>Skara Brae</i>	3	SUERC-79482	1139	35	10.0	68.3%	890	1014	895	996
						99.7%	706	1152	773	1153
<i>Skara Brae</i>	2	OxA-26685	1487	24	0.0	68.3%	564	605	564	605
						99.7%	536	650	536	650
<i>Westness</i>	003	T-1569	110	120		68.3%	1679	1941		
						99.7%	1458			
<i>Westness</i>	005	T-6532, T-7532	1271	26	3.3	68.3%	676	825	689	874
						99.7%	648	960	665	971
<i>Westness</i>	006	T-6813	1320	80	5.8	68.3%	651	868	660	829
						99.7%	536	1025	559	1024
<i>Westness</i>	007	TO-7196	1540	40		68.3%	438	589		
						99.7%	415	643		
<i>Westness</i>	009	T-7464	1220	40	0.0	68.3%	710	879	710	879
						99.7%	664	976	664	976
<i>Westness</i>	010	T-6527	1360	70	1.8	68.3%	605	773	640	775
						99.7%	433	975	540	984
<i>Westness</i>	011	T-6814	1270	60	32.2	68.3%	829	992	779	991
						99.7%	665	1150	665	1158
<i>Westness</i>	012	T-6815	1240	70	31.1	68.3%	834	1023	835	1021
						99.7%	662	1182	666	1206
<i>Westness</i>	013	T-7465	1430	40		68.3%	602	650		
						99.7%	537	773		
<i>Westness</i>	015	TO-7198	1200	40		68.3%	778	884		
						99.7%	673	987		
<i>Westness</i>	017	T-7467	1160	50		68.3%	776	973		

						99.7%	677	1023		
Westness	018	T-6816	1180	70	6.1	68.3%	776	987	777	992
						99.7%	652	1154	662	1155
Westness	019	T-7469	1330	70		68.3%	647	773		
						99.7%	543	974		
Westness	020	T-6528	1400	60	6.0	68.3%	600	772	608	772
						99.7%	431	892	535	945
Westness	021	T-7468	1410	30	0.8	68.3%	601	662	608	677
						99.7%	537	779	573	802
Westness	024	T-7466	1420	40	5.0	68.3%	595	673	603	680
						99.7%	434	833	548	831
Westness	025	T-6529	1530	60	0.0	68.3%	436	601	436	601
						99.7%	353	661	353	661
Westness	026	T-6817	1330	120	2.7	68.3%	606	877	647	885
						99.7%	352	1152	406	1155
Westness	028a	T-7471	1480	40	0.0	68.3%	563	639	563	639
						99.7%	432	660	432	660
Westness	028b	T-7471	1480	40		68.3%	563	639	563	639
						99.7%	432	660	432	660
Westness	032	T-7470	1410	60	0.0	68.3%	590	666	590	666
						99.7%	431	821	431	821
Westness	036	T-6530	920	50	4.1	68.3%	1047	1216	1048	1224
						99.7%	978	1287	996	1286
Westness	1963A	T-7194	1200	40		68.3%	778	884		
						99.7%	673	987		
Westness	1963B	TO-7195	1600	70	0.0	68.3%	411	553	411	553
						99.7%	245	646	245	646

Table 1. Recalibrated radiocarbon dates from previous studies, using OcCal v4.3.2. Bronk Ramsey (2017); r.5; IntCal13 atmospheric curve (Reimer et al. 2013). Uncalibrated dates (BP) are from Ashmore 2003; Barrett et al. 2000a, 2000b; Barrett and Richards 2004; James 1999; Montgomery et al. 2014; Morris 1989; Owen and Dalland 1999; Sellevold 1999; Stevens et al. 2005).

Catalogue B. Sample Inventory and Bone and Dentine Carbon and Nitrogen Isotope Results

Abbreviation Site

<i>BR</i>	Brough Road
<i>BUC</i>	Bu of Cairston
<i>Buck</i>	Buckquoy
<i>DS</i>	Deerness
<i>NB</i>	Newark Bay
<i>SCAR</i>	Scar
<i>SKCIST</i>	Skaill Cist
<i>SKHOUSE</i>	Skaill House
<i>SB</i>	Skara Brae
<i>WEST</i>	Westness

Housed

<i>OM</i>	Orkney Museum, Tankerness
<i>NHM</i>	Natural History Museum, London
<i>NMS</i>	National Museums Scotland, Edinburgh
<i>UHI</i>	University of Highlands and Islands

Phases

<i>Pre-Viking Phase (PVP)</i>	Prior to AD 750
<i>Viking Age (VA)</i>	AD 750- 1100
<i>Late Norse Phase (LNP)</i>	AD 1100-1299

Tissue Sampled

<i>B</i>	Bone
<i>D</i>	Dentine
<i>E</i>	Enamel

Tooth Sampled

<i>M1</i>	First molar
<i>M2</i>	Second molar
<i>M3</i>	Third molar
<i>I</i>	Incisor
<i>P2</i>	Second premolar
<i>dM1</i>	Deciduous first molar

SI (C and N) and SI (Sr and O)

1	Analysed in this study
2	Analysed in both this study and previous study(s)
3	Analysed in previous study(s)*

*Where stable isotope results from previous studies were used, references are provided. For the full references, please see References section.

Catalogue B-1. Sample Inventory

Site	Burial	Housed	Phase	Uncalib. date (AD)	±	Recalib. Median (AD)	Tissue Sampled	SI (C and N)	SI (Sr and O)	Tooth Sampled
BR	AA	OM					B	1		
BR	AN	OM	PVP	310	70	528	B	1		
BR	AS	OM	PVP	350	70	536	B, E	1	1	M2, M3
BR	BJ	OM	VA	810	65	897	B	1		
BR	CD	OM					B, E	1	1	M2
BR	CU	OM	VA	910	60	1005	B, D, E	1	1	M3
BR	DJ	OM	VA	735	80		B, D, E	1	1	M1
BR	DT	OM	VA	710	85	845	B, D, E	1	1	M2
BR	IO	OM	PVP	245	80	528	B, D, E	1	1	M2, M3
BUC	Sk005	OM	LNP				B	1		
BUC	Sk009	OM	LNP	1055	35	1221	B, E	3	1	M2, M3
BUC	Sk012	OM	LNP				B	1		
BUC	Sk015	OM	LNP				B, E	1	1	M1, M2, M3
BUC	Sk018	OM	LNP				B, E	1	1	M3
BUC	Sk026	OM	LNP				B, E	1	1	M3
BUC	Sk031	OM	LNP				B	1		
BUC	Sk037	OM	LNP				B, E	1	1	M3
BUC	Sk050	OM	LNP				B, E	1	1	M3
BUC	Sk059	OM	LNP				B, D, E	1	1	M1, M3
BUC	SK064	OM	LNP				B	1		
BUC	SK071	OM	LNP				B	1		
BUC	Sk074	OM	LNP				B	1		
BUC	Sk081	OM	LNP				B, D, E	1	1	M3
BUC	Sk087	OM	LNP				B, E	1	1	M3
BUC	Sk098	OM	LNP				B, E	1	1	M3
BUC	Sk107	OM	LNP	1050	35	1201	B	3		
BUC	Sk110	OM	LNP				B	1		
BUC	Sk115	OM	LNP				B	1		
BUC	Sk118	OM	LNP				B	1		
BUC	Sk121	OM	LNP				B	1		
BUC	Sk122	OM	LNP				B	1		
BUC	Sk134	OM	LNP				B	1		
BUC	Sk137	OM	LNP				B	1		
BUC	Sk146	OM	LNP				B	1		
BUC	Sk149	OM	LNP				B	1		
BUC	Sk154	OM	LNP				B	1		
BUC	Sk157	OM	LNP				B	1		
BUC	Sk164	OM	LNP				B	1		
BUC	Sk177	OM	LNP				B	1		
BUC	Sk186	OM	LNP				B	1		
BUC	Sk189	OM	LNP				B, D, E	1	1	M3
BUC	Sk192	OM	LNP				B	1		

BUC	Sk195	OM	LNP				B	1		
BUC	Sk202	OM	LNP				B	1		
BUC	Sk205	OM	LNP				B	1		
BUC	Sk210	OM	LNP				B	1		
BUC	Sk214	OM	LNP				B, D, E	1	1	M3
BUC	Sk217	OM	LNP				B	1		
BUC	Sk220	OM	LNP				B	1		
BUC	Sk223	OM	LNP				B	1		
BUC	Sk237	OM	LNP				B, E	1	1	M3
BUC	Sk240	OM	LNP				B	1		
BUC	Sk243	OM	LNP				B	1		
BUC	Sk246	OM	LNP				B	1		
BUC	Sk250	OM	LNP				B	1		
BUC	Sk253	OM	LNP				B	1		
BUC	Sk257	OM	LNP				B, E	1	1	M1
BUC	Sk263	OM	LNP				B	1		
BUC	Sk266	OM	LNP				B	1		
BUC	Sk279	OM	LNP				B	1		
BUC	Sk282	OM	LNP				B	1		
BUC	Sk285	OM	LNP				B	1		
BUC	Sk290	OM	LNP				B	1		
BUC	Sk294	OM	LNP				B	1		
BUC	Sk296	OM	LNP				B	1		
BUC	Sk303	OM	LNP				B	1		
BUC	Sk306	OM	LNP				B	1		
BUC	Sk309	OM	LNP				B	1		
BUC	Sk326	OM	LNP				B, E	1	1	M2
BUC	Sk330	OM	LNP				B	1		
BUC	Sk340	OM	LNP				B	1		
BUC	Sk345	OM	LNP				B, E	1	1	M3
BUC	Sk347	OM	LNP				B	1		
BUC	Sk355	OM	LNP				B	1		
BUC	Sk362	OM	LNP				B	1		
BUC	Sk365	OM	LNP				B	1		
BUC	Sk366	OM	LNP				B	1		
BUC	Sk370	OM	LNP				B, D, E	1	1	M3
BUC	Sk374	OM	LNP				B	1		
BUC	Sk420	OM	LNP				B	1		
BUC	Sk433	OM	LNP				E		1	M3
Buck	B(7)	OM	VA	210	40		B	1		
Buck	M12	OM	PVP	370	40	542	B, D, E	1	1	M1
DS	DS76BS	OM	LNP	1030	65	1167	B	1		
NB	68/002	NHM		1400	40	1438		2		
NB	68/005	NHM		1360	40	1432		2		
		OM/NH								
NB	68/012	M	LNP	1020	40	1221		2	1	
NB	68/013	NHM						2		
NB	68/014	NHM		1320	50	1404		2		
NB	68/016	NHM						2		

NB	69/041	NHM					2
NB	69/042	NHM					2
NB	69/043	NHM					2
NB	69/044	NHM					2
NB	69/046	NHM					2
NB	69/051	NHM					2
	69/052						
NB	A	NHM					2
NB	69/053	NHM					2
NB	69/054	NHM					2
NB	69/055	NHM					2
NB	69/056	NHM					2
NB	69/057	NHM					2
NB	69/060	NHM					2
NB	69/063	NHM					2
NB	69/064	NHM					2
NB	69/067	NHM	LNP	960	40	1157	2
	69/067						
NB	x	NHM					2
NB	69/068	NHM					2
NB	69/069	NHM	LNP	1040	40	1222	2
NB	69/070	NHM					2
NB	69/071	NHM					2
NB	69/073	NHM					2
NB	69/075	NHM					2
NB	69/076	NHM					2
NB	69/077	NHM					2
NB	69/078	NHM					2
NB	69/079	NHM					2
	69/080						
	or						
NB	69/027	NHM					2
NB	69/082	NHM					2
	69/083						
	combin						
NB	ed	NHM	VA	886	30	1049	2
NB	69/084	NHM					2
NB	69/085	NHM	VA	950	40	1047	2
NB	69/087	NHM	VA	827	36	1048	2
NB	69/088	NHM					2
NB	69/089	NHM					2
NB	69/091	NHM					2
NB	69/092	NHM					2
NB	69/093	NHM					2
NB	69/094	NHM					2
NB	69/095	NHM					2
NB	69/096	NHM					2
NB	69/097	NHM					2
NB	69/099	NHM	VA	890	40	1032	2
NB	69/100	NHM					2

NB	69/101	NHM							2		
NB	69/103	NHM							2		
NB	69/104	NHM							2		
	69/104										
NB	A	NHM	LNP	920	40	1159			2		
	69/104										
NB	B	NHM	VA	820	50	952			2		
NB	69/105	NHM	LNP	960	50	1144			2		
NB	69/107	NHM							2		
NB	69/108	NHM							2		
NB	69/109	NHM							2		
	69/CC3	OM/NH									
NB	A and B	M					B, E		1	1	M2
NB	69/CC4	NHM	LNP	1030	40	1225			2		
	69/Non										
NB	oB	NHM	VA			786			2		
		OM/NH									
NB	70(f)	M	VA				B		1		
NB	70/001	NHM	VA	940	60	1048			2		
NB	70/002	NHM	VA	890	50	1048			2		
NB	70/003	NHM							2		
NB	70/004	NHM							2		
NB	70/005	NHM		1430	30	1440			2		
		OM/NH									
NB	70/006	M		1250	40	1351			2		
		OM/NH									
NB	70/007	M							2		
NB	70/010	NHM							2		
NB	70/011	NHM							2		
NB	70/013	NHM							2		
NB	70/014	NHM							2		
NB	70/015	NHM	LNP	890	35	1132			2		
NB	70/016	NHM							2		
NB	70/017	NHM							2		
NB	70/018	NHM							2		
NB	70/020	NHM							2		
NB	70/021	NHM							2		
NB	70/025	NHM							2		
NB	70/026	NHM							2		
NB	70/027	NHM							2		
NB	70/028	NHM							2		
NB	70/029	OM					B, E		1	1	M3
NB	70/030	NHM							2		
NB	70/032	NHM							2		
NB	70/033	NHM							2		
NB	70/035	NHM							2		
		OM/NH									
NB	70/037	M	VA	820	40	1002	B, E		3	1	P2
NB	70/038	NHM							2		
NB	70/039	NHM	LNP	985	40	1188			2		

NB	70/070	OM					B	1		
NB	70a	OM					B	1		
NB	70b	OM					B	1		
		OM/NH								
NB	70d	M					B	1		
	71/001									
	and									
NB	71/008	NHM	LNP	875	35	1144		2		
NB	71/002	NHM	VA	875	35	1048		2		
NB	71/003	NHM	VA	750	40	895		2		
NB	71/004	NHM						2		
NB	71/005	NHM	VA	780	50	910		2		
NB	71/007	NHM						2		
NB	71/008	NHM	VA					2		
NB	71/009	NHM						2		
NB	71/010	NHM						2		
NB	71/011	OM					B	1		
										M1, M2, M3
NB	71/012	OM					B, E	1	1	
	71/013									
NB	B	OM					B, D, E	1	1	M2
NB	71/014	OM					B	1		
NB	99/006	NHM	LNP	935	37	1145		2		
NB	D1	OM					B	1		
NB	D3	OM					B, E	1	1	M3
NB	D3b	OM					B	1		
NB	D3c	OM					B	1		
NB	D4	OM					B	1		
NB	D6	OM					B	1		
NB	D7	OM					B	1		
NB	MJ	OM					E		1	M3
NB	NB1	OM					B, E	1	1	M3
NB	NB2	OM					B, E	1	1	dM1
NB	NB3	OM					B	1		
NB	RA1	OM					B	1		
NB	RA2	OM					B	1		
	Sk ??									
NB	ST12	OM					B, D, E	1	1	M2
	Sk??									
NB	ST14	OM					B, E	1	1	M2, M3
	Sk??									
NB	ST17	OM					B, E	1	1	M1
		OM/NH								
NB	Sk001	M	VA	1168	34	1053	B	3		
NB	Sk002	OM					B	1		
NB	Sk003	OM					B	1		
		OM/NH								
NB	Sk004	M	VA	1060	34	1197	B, D, E	3	1	M1
NB	Sk005a	OM					B	1		
NB	Sk005b	OM					B	1		
NB	SK005c	OM					B	1		

NB	Sk005e	OM					B	1			
NB	Sk006	OM					B	1			
NB	Sk007	OM					B, D, E	1	1		M2
		OM/NH									
NB	SK009	M	VA		786		B	1			
NB	Sk010f	OM					B, D, E	1	1		M3
NB	Sk011	OM					B, E	1	1		M1
NB	Sk013	OM					B	1			
NB	SK1-2	OM					B	1			
	Sk24-										
NB	25	OM					B	1			
NB	Sk87	OM					B	1			
NB	Sk98	OM					B	1			
SCAR	SK133	OM	VA	795	60	882	B	1			
SCAR	Sk134	OM	VA	910	60	1009		2			
SCAR	SK135	OM	VA	1010	75	1159	B, D, E	1	1		M1
											M1, M2,
SKCIST	1	OM	PVP	540	50	647	B, D, E	1	1		M3
SKHOUS	1	OM	LNP	1130	60	1326	B, D, E	1	1		M2
SKHOUS	3a	OM	LNP				B, D, E	1	1		M3
SB	1	NMS	PVP				B	1			
SB	2	NMS	PVP				B, D, E		1		M1
SB	3	NMS	VA					2			
WEST	005	NMS	VA	760	50	729		3	3		
WEST	006	NMS	PVP	630	80	693	B	1			
WEST	007	NMS	PVP	410	40	571	B, E		1		M3
WEST	008	NMS					B	1			
WEST	009	NMS	VA	730	40	862	B	1			
WEST	010	NMS	PVP	590	70	682	B, D, E	3	1		M3
WEST	011	NMS	VA	680	60	857		3	3		
WEST	012	NMS	VA	710	70	881	B, D, E	3	1		M3
WEST	014	NMS					B	1			
WEST	018	NMS	VA	770	70	881	B	1			
WEST	020	NMS	PVP	550	60	655		3			
WEST	021	NMS	PVP	540	30	646		3			
WEST	024	NMS	PVP	550	40	640	B, D, E	3	1		M3
WEST	025	NMS	PVP	420	60	578	B, D, E	3	1		dM1
					12						
WEST	026	NMS	PVP	620	0	686		3			
WEST	028a	NMS	PVP	470	40	617	B, D, E	3	1		I
WEST	030	NMS					B	1			
WEST	032	NMS	PVP	540	60	627		3	3		
WEST	034	NMS	VA				B, E		1		M2
WEST	036	NMS	VA	1030	50	1160		3			
WEST	1963B	NMS	PVP	350	70	536		3			

Catalogue B-2. Bone Collagen Stable Isotope Results and Compiled Data

Site	Burial	Housed	Phase	Sex	Age	This Study			Previous Studies				Combined Data			
						$\delta^{13}\text{C}$	$\delta^{15}\text{N}$	C:N	$\delta^{13}\text{C}$	$\delta^{15}\text{N}$	C:N	Refs.*	$\delta^{13}\text{C}$	$\delta^{15}\text{N}$	C:N	
BR	AA	OM		F	Adol	-20.2	11.1	3.4						-20.2	11.1	3.4
BR	AN	OM	PVP	U	J	-20.1	9.8	3.4						-20.1	9.8	3.4
BR	AS	OM	PVP	M	MA	-19.5	12.3	3.4						-19.5	12.3	3.4
BR	BJ	OM	VA	F	MA	-21.1	10.6	3.5						-21.1	10.6	3.5
BR	CD	OM		U	YA	-20.0	10.4	3.5						-20.0	10.4	3.5
BR	CU	OM	VA	F	YA	-20.7	10.7	3.2						-20.7	10.7	3.2
BR	DJ	OM	VA	U	YA	-20.7	10.7	3.4						-20.7	10.7	3.4
BR	DT	OM	VA	M	OA	-19.6	11.9	3.4						-19.6	11.9	3.4
BR	IO	OM	PVP	M	MA	-20.5	10.7	3.4						-20.5	10.7	3.4
BUC	Sk005	OM	LNP	F	Adult	-18.3	14.4	3.3						-18.3	14.4	3.3
BUC	Sk009	OM	LNP	F	YA	-18.2	13.6	3.5	-17.8	15.1	3.3	1, 7		-18.0	14.4	3.4
BUC	Sk012	OM	LNP	U	Adult	-19.1	13.5	3.4						-19.1	13.5	3.4
BUC	Sk015	OM	LNP	M	Adult	-17.8	14.4	3.2						-17.8	14.4	3.2
BUC	Sk018	OM	LNP	F	YA	-19.2	12.8	3.6						-19.2	12.8	3.6
BUC	Sk026	OM	LNP	F	YA	-18.1	13.7	3.3						-18.1	13.7	3.3
BUC	Sk031	OM	LNP	F	YA	-18.3	13.3	3.3						-18.3	13.3	3.3
BUC	Sk037	OM	LNP	F	Adult	-19.6	10.9	3.3						-19.6	10.9	3.3
BUC	Sk050	OM	LNP	U	Adult	-18.8	13.0	3.5						-18.8	13.0	3.5
BUC	Sk059	OM	LNP	U	J	-18.4	14.5	3.4						-18.4	14.5	3.4
BUC	SK064	OM	LNP	M	MA	-18.7	12.7	3.3						-18.7	12.7	3.3
BUC	SK071	OM	LNP	M	Adult	-19.2	12.5	3.3						-19.2	12.5	3.3
BUC	Sk074	OM	LNP	M	YA	-20.5	11.1	3.2						-20.5	11.1	3.2
BUC	Sk081	OM	LNP	M	OA	-17.6	15.3	3.3						-17.6	15.3	3.3
BUC	Sk087	OM	LNP	F	Adult	-18.7	13.6	3.5						-18.7	13.6	3.5
BUC	Sk098	OM	LNP	F	YA	-20.1	9.2	3.3						-20.1	9.2	3.3
BUC	Sk107	OM	LNP	F	YA	-18.7	12.6	3.2	-19.0	11.5		7		-18.9	12.1	3.2

BUC	Sk110	OM	LNP	F	YA	-19.2	12.6	3.3	-19.2	12.6	3.3
BUC	Sk115	OM	LNP	F	OA	-19.2	14.1	3.5	-19.2	14.1	3.5
BUC	Sk118	OM	LNP	F	OA	-16.3	14.9	3.2	-16.3	14.9	3.2
BUC	Sk121	OM	LNP	M	OA	-18.7	13.4	3.5	-18.7	13.4	3.5
BUC	Sk122	OM	LNP			-18.0	13.9	3.5	-18.0	13.9	3.5
BUC	Sk134	OM	LNP	F	OA	-19.7	13.0	3.5	-19.7	13.0	3.5
BUC	Sk137	OM	LNP	M	MA	-18.1	12.7	3.2	-18.1	12.7	3.2
BUC	Sk146	OM	LNP	M	Adult	-18.5	13.4	3.3	-18.5	13.4	3.3
BUC	Sk149	OM	LNP	U	Adult	-17.7	13.9	3.4	-17.7	13.9	3.4
BUC	Sk154	OM	LNP	F	MA	-18.9	13.5	3.2	-18.9	13.5	3.2
BUC	Sk157	OM	LNP	F	YA	-18.9	13.5	3.4	-18.9	13.5	3.4
BUC	Sk164	OM	LNP	F	MA	-18.9	12.5	3.5	-18.9	12.5	3.5
BUC	Sk177	OM	LNP	U	U	-18.0	14.1	3.4	-18.0	14.1	3.4
BUC	Sk186	OM	LNP	M	OA	-17.9	14.0	3.3	-17.9	14.0	3.3
BUC	Sk189	OM	LNP	F	MA	-20.3	11.7	3.5	-20.3	11.7	3.5
BUC	Sk192	OM	LNP	U	Adult	-17.8	14.9	3.4	-17.8	14.9	3.4
BUC	Sk195	OM	LNP	U	J	-18.9	13.5	3.6	-18.9	13.5	3.6
BUC	Sk202	OM	LNP	F	OA	-20.4	12.2	3.5	-20.4	12.2	3.5
BUC	Sk205	OM	LNP	F	OA	-20.1	11.8	3.3	-20.1	11.8	3.3
BUC	Sk210	OM	LNP	U	U	-20.2	9.0	3.2	-20.2	9.0	3.2
BUC	Sk214	OM	LNP	F	MA	-19.0	13.2	3.3	-19.0	13.2	3.3
BUC	Sk217	OM	LNP	F	Adult	-18.6	13.7	3.3	-18.6	13.7	3.3
BUC	Sk220	OM	LNP	F	MA	-19.7	10.6	3.3	-19.7	10.6	3.3
BUC	Sk223	OM	LNP	M	OA	-18.5	13.1	3.3	-18.5	13.1	3.3
BUC	Sk237	OM	LNP	M	OA	-18.6	12.4	3.2	-18.6	12.4	3.2
BUC	Sk240	OM	LNP	F	MA	-19.4	12.6	3.3	-19.4	12.6	3.3
BUC	Sk243	OM	LNP	F	OA	-17.6	14.4	3.3	-17.6	14.4	3.3
BUC	Sk246	OM	LNP	M	Adult	-19.9	12.6	3.4	-19.9	12.6	3.4
BUC	Sk250	OM	LNP	M	OA	-18.8	13.3	3.5	-18.8	13.3	3.5
BUC	Sk253	OM	LNP	M	OA	-19.5	11.8	3.5	-19.5	11.8	3.5
BUC	Sk257	OM	LNP	U	J	-19.7	10.9	3.3	-19.7	10.9	3.3
BUC	Sk263	OM	LNP	U	J	-18.4	13.0	3.3	-18.4	13.0	3.3

BUC	Sk266	OM	LNP	U	MA	-20.0	12.6	3.5						-20.0	12.6	3.5
BUC	Sk279	OM	LNP	M	YA	-18.4	12.8	3.3						-18.4	12.8	3.3
BUC	Sk282	OM	LNP	M	adult	-17.0	15.6	3.5						-17.0	15.6	3.5
BUC	Sk285	OM	LNP	U	J	-19.6	12.6	3.5						-19.6	12.6	3.5
BUC	Sk290	OM	LNP	U	Adult	-20.2	9.2	3.3						-20.2	9.2	3.3
BUC	Sk294	OM	LNP	F	Adult	-19.7	13.7	3.6						-19.7	13.7	3.6
BUC	Sk296	OM	LNP	U	Child	-19.0	12.0	3.2						-19.0	12.0	3.2
BUC	Sk303	OM	LNP	U	I	-18.3	16.1	3.3						-18.3	16.1	3.3
BUC	Sk306	OM	LNP	F	Adult	-18.2	13.5	3.3						-18.2	13.5	3.3
BUC	Sk309	OM	LNP	M	MA	-19.7	11.9	3.4						-19.7	11.9	3.4
BUC	Sk326	OM	LNP	M	YA	-19.8	12.3	3.5						-19.8	12.3	3.5
BUC	Sk330	OM	LNP	F	MA	-19.5	12.3	3.5						-19.5	12.3	3.5
BUC	Sk340	OM	LNP	M	Adult	-19.4	12.3	3.3						-19.4	12.3	3.3
BUC	Sk345	OM	LNP	M	MA	-18.6	12.7	3.4						-18.6	12.7	3.4
BUC	Sk347	OM	LNP	U	J	-20.3	11.3	3.3						-20.3	11.3	3.3
BUC	Sk355	OM	LNP	U	Child	-19.9	12.1	3.3						-19.9	12.1	3.3
BUC	Sk362	OM	LNP	U	J	-18.2	12.5	3.3						-18.2	12.5	3.3
BUC	Sk365	OM	LNP	U	U	-19.1	13.2	3.3						-19.1	13.2	3.3
BUC	Sk366	OM	LNP	U	YA	-19.2	12.2	3.3						-19.2	12.2	3.3
BUC	Sk370	OM	LNP	M	YA	-18.0	13.9	3.4						-18.0	13.9	3.4
BUC	Sk374	OM	LNP	F	Adult	-18.6	13.2	3.3						-18.6	13.2	3.3
BUC	Sk420	OM	LNP	F	OA	-19.3	11.2	3.3						-19.3	11.2	3.3
Buck	B(7)	OM	VA	M	MA	-20.5	10.9	3.4						-20.5	10.9	3.4
Buck	M12	OM	PVP	M	YA	-20.1	10.8	3.2						-20.1	10.8	3.2
DS	DS76BS	OM	LNP	M	YA	-20.4	10.7	3.3						-20.4	10.7	3.3
NB	68/002	NHM		F	YA				-18.4	13.0	3.3	1, 5	-18.4	13.0	3.3	
NB	68/005	NHM		M	MA				-17.8	13.4	3.3	1, 5	-17.8	13.4	3.3	
NB	68/012	OM/NHM	LNP	M	YA				-16.9	14.4	3.3	1, 5	-16.9	14.4	3.3	
NB	68/013	NHM		M	Adol				-19.9	10.3	3.3	1, 5	-19.9	10.3	3.3	
NB	68/014	NHM		M	MA				-18.0	13.4	3.3	1, 5	-18.0	13.4	3.3	
NB	68/016	NHM		F	OA				-20.2	10.1	3.3	1, 5	-20.2	10.1	3.3	
NB	68/016A	NHM	VA	M	OA				-20.0	10.9	3.4	1, 5	-20.0	10.9	3.4	

NB	68/017	OM		U	Adult	-19.2	13.4	3.4						-19.2	13.4	3.4
NB	68/019	NHM		U	I				-20.0	11.6	3.4	5		-20.0	11.6	3.4
NB	68/020	NHM	VA	F	YA				-19.6	10.4	3.3	1, 5		-19.6	10.4	3.3
NB	68/021	NHM		U	I				-19.9	12.3	3.4	5		-19.9	12.3	3.4
NB	68/024	OM	VA	U	J	-19.1	11.4	3.3						-19.1	11.4	3.3
NB	68/024b	OM				-19.8	11.5	3.4						-19.8	11.5	3.4
NB	68/025	NHM		U	I				-20.2	11.6	3.4	5		-20.2	11.6	3.4
NB	68/028	OM/NHM		M	YA	-17.0	15.6	3.2						-17.0	15.6	3.2
NB	68/031a	OM		F	OA	-20.7	11.0	3.4						-20.7	11.0	3.4
NB	68/031b	OM		F	MA	-18.7	13.4	3.3						-18.7	13.4	3.3
NB	68/032	OM/NHM		F	YA	-18.1	14.5	3.3						-18.1	14.5	3.3
NB	68/036	NHM		U	J				-20.2	10.7	3.4	5		-20.2	10.7	3.4
NB	68/107	NHM	PVP	F	Adol				-17.9	12.1	3.3	1, 5		-17.9	12.1	3.3
NB	69/001	NHM		M	Adol				-17.8	13.8	3.3	5		-17.8	13.8	3.3
NB	69/002	NHM		M	YA				-19.5	10.1	3.3	1		-19.5	10.1	3.3
NB	69/004A-C	NHM	VA	M	MA				-20.0	10.5	3.3	1, 5		-20.0	10.5	3.3
NB	69/005	NHM		U	I				-19.2	13.2	3.4	5		-19.2	13.2	3.4
NB	69/007A	OM		M	MA	-20.1	11.7	3.3						-20.1	11.7	3.3
NB	69/008	OM/NHM	LNP	F	MA	-17.2	15.3	3.3	-17.8	13.7	3.3	1, 5		-17.5	14.5	3.3
NB	69/011	NHM	PVP	F	MA				-19.6	9.9	3.3	1, 5		-19.6	9.9	3.3
NB	69/013	NHM		U	I				-20.5	10.5	3.5	5		-20.5	10.5	3.5
NB	69/015A	NHM		U	I				-18.8	17.2	3.3	5		-18.8	17.2	3.3
NB	69/016	NHM		M	Adol				-19.9	10.5	3.4	5		-19.9	10.5	3.4
NB	69/017	NHM		U	J				-20.3	10.2	3.4	5		-20.3	10.2	3.4
NB	69/019	NHM		U	I				-16.9	15.6	3.4	5		-16.9	15.6	3.4
NB	69/026	OM/NHM		F	OA				-17.9	11.5	3.3	1		-17.9	11.5	3.3
NB	69/028	OM/NHM		M	MA	-20.0	10.8	3.2						-20.0	10.8	3.2
NB	69/029	OM		U	J	-20.5	10.5	3.3						-20.5	10.5	3.3
NB	69/030	NHM		U	I				-19.7	12.2	3.3	5		-19.7	12.2	3.3
NB	69/031	NHM		U	I				-18.2	16.3	3.3	5		-18.2	16.3	3.3
NB	69/032	OM/NHM		U	J	-18.9	13.4	3.2	-19.6	10.3	3.3	5		-19.3	11.9	3.3

NB	69/033	NHM		M	MA	-19.3	10.8	3.3	1, 5	-19.3	10.8	3.3
NB	69/034	NHM	LNP	U	J	-19.7	10.9	3.4	1, 5	-19.7	10.9	3.4
NB	69/036	NHM	VA	F	YA	-20.3	8.6	3.3	1, 5	-20.3	8.6	3.3
NB	69/037	OM/NHM	LNP	U	I	-18.1	14.7	3.3	5	-18.1	14.7	3.3
NB	69/038	NHM		U	I	-19.6	14.5	3.4	5	-19.6	14.5	3.4
NB	69/040	NHM		U	I	-17.7	15.8	3.3	5	-17.7	15.8	3.3
NB	69/041	NHM		U	I	-19.5	13.4	3.4	5	-19.5	13.4	3.4
NB	69/042	NHM		U	I	-17.6	17.1	3.2	5	-17.6	17.1	3.2
NB	69/043	NHM		U	I	-17.9	13.5	3.4	5	-17.9	13.5	3.4
NB	69/044	NHM		U	I	-20.5	10.7	3.3	5	-20.5	10.7	3.3
NB	69/046	NHM		M	Adol	-18.1	13.1	3.4	5	-18.1	13.1	3.4
NB	69/051	NHM		U	I	-18.3	16.5	3.3	5	-18.3	16.5	3.3
NB	69/052A	NHM		U	I	-16.4	16.4	3.3	5	-16.4	16.4	3.3
NB	69/053	NHM		U	I	-17.4	15.8	3.3	5	-17.4	15.8	3.3
NB	69/054	NHM		U	I	-18.5	14.6	3.3	5	-18.5	14.6	3.3
NB	69/055	NHM		U	J	-19.0	10.3	3.3	5	-19.0	10.3	3.3
NB	69/056	NHM		U	I	-17.5	15.3	3.4	5	-17.5	15.3	3.4
NB	69/057	NHM		U	I	-18.2	16.1	3.3	5	-18.2	16.1	3.3
NB	69/060	NHM		U	I	-17.7	14.8	3.3	5	-17.7	14.8	3.3
NB	69/063	NHM		U	I	-19.4	15.1	3.4	5	-19.4	15.1	3.4
NB	69/064	NHM		U	Child	-20.9	10.1	3.4	5	-20.9	10.1	3.4
NB	69/067	NHM	LNP	M	OA	-17.7	13.7	3.3	1, 5	-17.7	13.7	3.3
NB	69/067x	NHM		U	I	-20.0	10.5	3.3	5	-20.0	10.5	3.3
NB	69/068	NHM		U	I	-20.2	10.5	3.3	5	-20.2	10.5	3.3
NB	69/069	NHM	LNP	M	OA	-17.5	14.4	3.3	1, 5	-17.5	14.4	3.3
NB	69/070	NHM		U	J	-19.7	11.8	3.3	5	-19.7	11.8	3.3
NB	69/071	NHM		U	I	-18.7	14.3	3.4	5	-18.7	14.3	3.4
NB	69/073	NHM		U	Child	-19.5	14.7	3.4	5	-19.5	14.7	3.4
NB	69/075	NHM		U	J	-19.7	10.0	3.3	5	-19.7	10.0	3.3
NB	69/076	NHM		U	I	-19.8	10.2	3.3	5	-19.8	10.2	3.3
NB	69/077	NHM		U	I	-20.7	11.7	3.4	5	-20.7	11.7	3.4
NB	69/078	NHM		U	I	-20.2	12.0	3.3	5	-20.2	12.0	3.3

NB	69/079	NHM		U	I				-18.9	13.7	3.3	5	-18.9	13.7	3.3
	69/080or														
NB	69/027	NHM		U	I				-19.7	11.0	3.3	5	-19.7	11.0	3.3
NB	69/082	NHM		U	Child				-20.5	11.6	3.3	5	-20.5	11.6	3.3
	69/083														
NB	combined	NHM	VA	M	MA				-17.5	13.8	3.3	1, 5	-17.5	13.8	3.3
NB	69/084	NHM		F	OA				-19.6	10.6	3.3	1, 5	-19.6	10.6	3.3
NB	69/085	NHM	VA	F	MA				-19.6	10.8	3.3	1, 5	-19.6	10.8	3.3
NB	69/087	NHM	VA	M	MA				-15.5	16.8	3.2	1	-15.5	16.8	3.2
NB	69/088	NHM		U	I				-18.8	13.2	3.4	5	-18.8	13.2	3.4
NB	69/089	NHM		U	J				-18.9	12.3	3.3	5	-18.9	12.3	3.3
NB	69/091	NHM		F	Adol				-19.4	10.8	3.3	5	-19.4	10.8	3.3
NB	69/092	NHM		U	I				-18.8	13.2	3.3	5	-18.8	13.2	3.3
NB	69/093	NHM		U	I				-20.7	10.1	3.3	5	-20.7	10.1	3.3
NB	69/094	NHM		U	I				-18.4	15.1	3.3	5	-18.4	15.1	3.3
NB	69/095	NHM		U	I				-18.4	13.7	3.1	5	-18.4	13.7	3.1
NB	69/096	NHM		U	I				-19.5	13.0	3.4	5	-19.5	13.0	3.4
NB	69/097	NHM		U	I				-19.5	13.4	3.3	5	-19.5	13.4	3.3
NB	69/099	NHM	VA	F	MA				-18.5	12.0	3.2	1, 5	-18.5	12.0	3.2
NB	69/100	NHM		U	I				-19.8	11.5	3.5	5	-19.8	11.5	3.5
NB	69/101	NHM		U	J				-16.9	14.5	3.3	5	-16.9	14.5	3.3
NB	69/103	NHM		U	I				-20.2	11.0	3.3	5	-20.2	11.0	3.3
NB	69/104	NHM		F	OA				-19.5	11.5	3.3	1, 5	-19.5	11.5	3.3
NB	69/104A	NHM	LNP	F	MA				-16.3	15.6	3.3	1, 5	-16.3	15.6	3.3
NB	69/104B	NHM	VA	F	MA				-19.4	11.0	3.3	1, 5	-19.4	11.0	3.3
NB	69/105	NHM	LNP	M	YA				-18.7	11.6	3.3	1, 5	-18.7	11.6	3.3
NB	69/107	NHM		F	OA				-17.9	12.1	3.3	1, 5	-17.9	12.1	3.3
NB	69/108	NHM		U	I				-19.6	11.3	3.3	5	-19.6	11.3	3.3
NB	69/109	NHM		U	I				-19.9	12.4	3.4	5	-19.9	12.4	3.4
	69/CC3A														
NB	and B	OM/NHM		F	MA	-17.7	14.8	3.3					-17.7	14.8	3.3
NB	69/CC4	NHM	LNP	M	Adol				-17.0	14.1	3.3	1	-17.0	14.1	3.3

NB	69/NonoB	NHM	VA	F	OA				-19.4	11.5	3.3	1	-19.4	11.5	3.3
NB	70(f)	OM/NHM	VA	M	OA	-18.1	14.1	3.2					-18.1	14.1	3.2
NB	70/001	NHM	VA	F	OA				-19.2	12.0	3.3	1, 5	-19.2	12.0	3.3
NB	70/002	NHM	VA	F	Adol				-17.3	13.9	3.3	1	-17.3	13.9	3.3
NB	70/003	NHM		U	I				-19.2	15.0	3.3	5	-19.2	15.0	3.3
NB	70/004	NHM		U	I				-19.2	13.0	3.3	5	-19.2	13.0	3.3
NB	70/005	NHM		M	Adol				-19.1	12.2	3.3	5	-19.1	12.2	3.3
NB	70/006	OM/NHM		F	OA				-18.4	14.4	3.4	1, 5	-18.4	14.4	3.4
NB	70/007	OM/NHM		U	Adult				-18.1	13.7	3.3	1	-18.1	13.7	3.3
NB	70/010	NHM		U	I				-19.9	13.7	3.3	5	-19.9	13.7	3.3
NB	70/011	NHM		U	I				-19.8	12.7	3.3	5	-19.8	12.7	3.3
NB	70/013	NHM		U	I				-20.7	10.6	3.4	5	-20.7	10.6	3.4
NB	70/014	NHM		U	I				-19.4	13.7	3.4	5	-19.4	13.7	3.4
NB	70/015	NHM	LNP	F	MA				-16.9	13.5	3.3	1, 5	-16.9	13.5	3.3
NB	70/016	NHM		U	I				-17.0	17.2	3.3	5	-17.0	17.2	3.3
NB	70/017	NHM		U	I				-18.0	15.5	3.3	5	-18.0	15.5	3.3
NB	70/018	NHM		U	I				-18.1	14.3	3.4	5	-18.1	14.3	3.4
NB	70/020	NHM		U	Child				-18.4	13.8	3.3	5	-18.4	13.8	3.3
NB	70/021	NHM		U	I				-19.0	14.8	3.4	5	-19.0	14.8	3.4
NB	70/025	NHM		U	Child				-17.3	17.0	3.4	5	-17.3	17.0	3.4
NB	70/026	NHM		U	I				-16.3	15.6	3.4	5	-16.3	15.6	3.4
NB	70/027	NHM		U	I				-18.6	13.9	3.5	5	-18.6	13.9	3.5
NB	70/028	NHM		U	J				-18.7	13.0	3.3	5	-18.7	13.0	3.3
NB	70/029	OM		F	MA	-17.1	15.3	3.2					-17.1	15.3	3.2
NB	70/030	NHM		F	MA				-18.6	12.7	3.3	1, 5	-18.6	12.7	3.3
NB	70/032	NHM		U	I				-19.1	12.5	3.5	5	-19.1	12.5	3.5
NB	70/033	NHM		U	I				-19.6	12.0	3.3	5	-19.6	12.0	3.3
NB	70/035	NHM		F	MA				-17.3	13.9	3.3	1	-17.3	13.9	3.3
NB	70/037	OM/NHM	VA	M	Adol	-17.6	14.7	3.3	-17.5	13.7	3.3	1, 5	-17.6	14.2	3.3
NB	70/038	NHM		F	MA				-18.9	12.8	3.3	1, 5	-18.9	12.8	3.3
NB	70/039	NHM	LNP	M	MA				-17.3	14.4	3.3	1, 5	-17.3	14.4	3.3
NB	70/070	OM		U	U	-18.3	13.5	3.2					-18.3	13.5	3.2

NB	70a	OM		M	Adult	-18.6	13.6	3.3						-18.6	13.6	3.3
NB	70b	OM		M	Adult	-18.8	13.0	3.3						-18.8	13.0	3.3
NB	70d	OM/NHM		U	MA	-18.6	13.1	3.3						-18.6	13.1	3.3
	71/001															
	and															
NB	71/008	NHM	LNP	M	MA				-15.4	15.6	3.2	1, 5		-15.4	15.6	3.2
NB	71/002	NHM	VA	F	MA				-17.1	14.6	3.3	1, 5		-17.1	14.6	3.3
NB	71/003	NHM	VA	F	OA				-19.1	10.4	3.3	1, 5		-19.1	10.4	3.3
NB	71/004	NHM		U	I				-20.0	10.5	3.3	5		-20.0	10.5	3.3
NB	71/005	NHM	VA	U	I				-20.3	10.3	3.3	5		-20.3	10.3	3.3
NB	71/007	NHM		F	OA				-17.7	12.9	3.3	1, 5		-17.7	12.9	3.3
NB	71/008	NHM	VA						-17.7	13.8	3.3	1, 5		-17.7	13.8	3.3
NB	71/009	NHM		F	OA				-19.8	10.5	3.3	1, 5		-19.8	10.5	3.3
NB	71/010	NHM		U	I				-20.1	10.9	3.3	5		-20.1	10.9	3.3
NB	71/011	OM		M	OA	-18.5	14.1	3.3						-18.5	14.1	3.3
NB	71/012	OM		M	Adult	-17.9	14.7	3.3						-17.9	14.7	3.3
NB	71/013B	OM		F	YA	-18.7	14.8	3.5						-18.7	14.8	3.5
NB	71/014	OM		U	J	-18.3	14.0	3.3						-18.3	14.0	3.3
NB	99/006	NHM	LNP	M	Adult				-17.4	13.9	3.4	1		-17.4	13.9	3.4
NB	D1	OM		U	J	-19.9	10.8	3.3						-19.9	10.8	3.3
NB	D3	OM		M	MA	-20.0	10.8	3.3						-20.0	10.8	3.3
NB	D3b	OM		F	Adol	-17.7	14.8	3.2						-17.7	14.8	3.2
NB	D3c	OM		U	YA	-20.2	11.1	3.3						-20.2	11.1	3.3
NB	D4	OM		U	Adult	-18.1	14.1	3.3						-18.1	14.1	3.3
NB	D6	OM		F	Adult	-19.6	12.4	3.4						-19.6	12.4	3.4
NB	D7	OM		F	Adult	-18.7	12.5	3.2						-18.7	12.5	3.2
NB	NB1	OM		M	OA	-18.3	13.6	3.2						-18.3	13.6	3.2
NB	NB2	OM		U	J	-18.9	12.1	3.5						-18.9	12.1	3.5
NB	NB3	OM		U	Child	-20.2	12.6	3.2						-20.2	12.6	3.2
NB	RA1	OM		U	J	-19.2	11.4	3.3						-19.2	11.4	3.3
NB	RA2	OM		M	Adult	-16.6	15.9	3.2						-16.6	15.9	3.2

Sk ??															
NB	ST12	OM		M	Adult	-19.3	11.2	3.3					-19.3	11.2	3.3
NB	Sk?? ST14	OM		M	OA	-18.9	13.7	3.3					-18.9	13.7	3.3
NB	Sk?? ST17	OM		U	U	-18.7	13.5	3.3					-18.7	13.5	3.3
NB	Sk001	OM/NHM	VA	F	MA	-17.2	14.9	3.3	-16.6	14.1	3.4	1	-16.9	14.5	3.4
NB	Sk002	OM		M	YA	-18.9	13.6	3.3					-18.9	13.6	3.3
NB	Sk003	OM		M	Adult	-19.3	11.1	3.3					-19.3	11.1	3.3
NB	Sk004	OM/NHM	VA	U	J	-19.5	13.4	3.3	-19.5	13.7	3.3	1	-19.5	13.6	3.3
NB	Sk005a	OM		U	Adol	-18.0	14.4	3.3					-18.0	14.4	3.3
NB	Sk005b	OM		U	U	-18.4	14.2	3.3					-18.4	14.2	3.3
NB	SK005c	OM		U	Adult	-19.4	12.6	3.3					-19.4	12.6	3.3
NB	Sk005e	OM		M	YA	-19.2	12.2	3.4					-19.2	12.2	3.4
NB	Sk006	OM		U	U	-20.1	12.1	3.3					-20.1	12.1	3.3
NB	Sk007	OM		F	MA	-20.0	11.3	3.3					-20.0	11.3	3.3
NB	SK009	OM/NHM	VA	F	MA	-19.7	11.6	3.3					-19.7	11.6	3.3
NB	Sk010f	OM		F	YA	-19.4	11.5	3.3					-19.4	11.5	3.3
NB	Sk011	OM		M	MA	-16.6	15.1	3.2					-16.6	15.1	3.2
NB	Sk013	OM		F	MA	-19.8	11.6	3.3					-19.8	11.6	3.3
NB	SK1-2	OM		M	Adult	-19.4	13.5	3.3					-19.4	13.5	3.3
NB	Sk24-25	OM		U	I	-20.5	10.4	3.4					-20.5	10.4	3.4
NB	Sk87	OM		M	OA	-15.6	16.7	3.2					-15.6	16.7	3.2
NB	Sk98	OM		M	MA	-16.9	16.0	3.2					-16.9	16.0	3.2
SCAR	SK133	OM	VA	F	MA	-20.6	10.0	3.2					-20.6	10.0	3.2
SCAR	Sk134	OM	VA	M	Adult				-20.3	10.6	3.5	1, 4	-20.3	10.6	3.5
SCAR	SK135	OM	VA	U	J	-20.2	11.5	3.4					-20.2	11.5	3.4
SKCIST	1	OM	PVP	M	YA	-20.6	11.1	3.3				2	-20.6	11.1	3.3
SKHOUSE	1	OM	LNP	F	MA	-17.2	15.7	3.3				2	-17.2	15.7	3.3
SKHOUSE	3a	OM	LNP	F	MA	-17.7	15.3	3.3				2	-17.7	15.3	3.3
SB	1	NMS	PVP	F	YA	-20.2	10.8	3.2				8	-20.2	10.8	3.2
SB	3	NMS	VA	U	MA				-20.1	11.2		8	-20.1	11.2	
WEST	005	NMS	VA	F	Adult				-20.7	11.8	3.7	1, 6	-20.7	11.8	3.7
WEST	006	NMS	PVP	F	OA	-20.5	10.6	3.3					-20.5	10.6	3.3

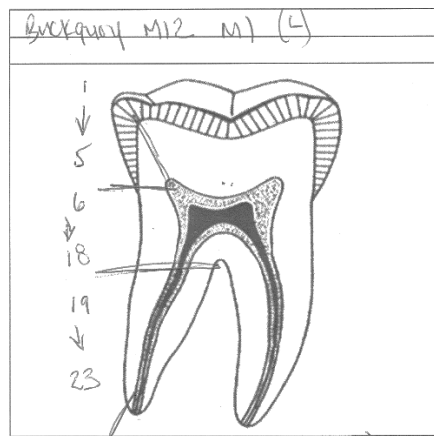
WEST	007	NMS	PVP	F	OA													
WEST	008	NMS		F	OA	-20.9	11.3	3.2						-20.9	11.3	3.2		
WEST	009	NMS	VA	M	MA	-21.4	11.0	3.4						-21.4	11.0	3.4		
WEST	010	NMS	PVP	M	YA				-20.8	11.0	3.3	1, 6		-20.8	11.0	3.3		
WEST	011	NMS	VA	M	MA				-18.1	13.7	3.3	1, 6		-18.1	13.7	3.3		
WEST	012	NMS	VA	M	MA				-18.2	14.8	3.4	1, 6		-18.2	14.8	3.4		
WEST	014	NMS		M	Adult	-20.4	10.8	3.2						-20.4	10.8	3.2		
WEST	018	NMS	VA	F	YA	-20.4	10.2	3.2						-20.4	10.2	3.2		
WEST	020	NMS	PVP	M	MA				-20.5	11.0	3.3	1, 6		-20.5	11.0	3.3		
WEST	021	NMS	PVP	M	MA				-20.9	11.5	3.3	1, 6		-20.9	11.5	3.3		
WEST	024	NMS	PVP	F	MA				-20.6	10.9	3.2	1, 6		-20.6	10.9	3.2		
WEST	025	NMS	PVP	U	J				-21.0	10.4	3.5	1, 6		-21.0	10.4	3.5		
WEST	026	NMS	PVP	M	Adol				-20.8	10.4	3.5	1, 6		-20.8	10.4	3.5		
WEST	028a	NMS	PVP	F	YA				-21.0	11.3	3.5	1, 6		-21.0	11.3	3.5		
WEST	030	NMS		F	OA	-20.6	10.7	3.3						-20.6	10.7	3.3		
WEST	032	NMS	PVP	F	OA				-21.1	10.8	3.4	1, 6		-21.1	10.8	3.4		
WEST	036	NMS	VA	F	MA				-20.6	11.7	3.4	1, 6		-20.6	11.7	3.4		
WEST	1963B	NMS	PVP	F	Adult				-21.0	11.0	3.3	1, 6		-21.0	11.0	3.3		

*References

- 1 Barrett and Richards 2004
- 2 James 1999
- 3 Molleson 2005
- 4 Owen and Dalland 1999
- 5 Richards 2006
- 6 Sellevold 1999
- 7 Stevens et al. 1999
- 8 Historic Environment Scotland n.d.

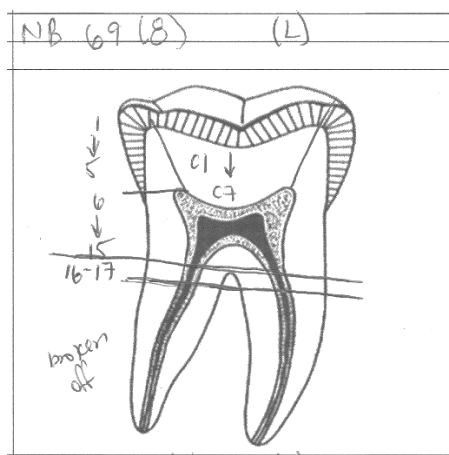
Catalogue B-3. Sequential Dentine Micro-Sampling Maps alongside Dentine Carbon and Nitrogen Stable Isotope Results

Buckquoy M12 (M1)				
Tooth Section	Weight	d15N corrected	d13C corrected	C:N
1	0.41	10.6	-21.1	3.3
2	0.673	10.4	-21.1	3.2
3	0.633	9.7	-20.9	3.2
4	0.414	9.6	-20.7	3.3
5	0.367	9.7	-20.6	3.3
6	0.631	10.0	-20.6	3.2
7	0.252	10.2	-20.6	3.3
8	0.363	10.0	-20.5	3.3
9	0.433	9.8	-20.6	3.3
10	1.1	10.5	-20.8	3.2
11	0.283	10.4	-20.5	3.3
15	0.441	10.3	-20.2	3.3
17	0.755	10.8	-20.1	3.2
18	0.724	10.4	-20.3	3.2
19	0.881	10.4	-20.4	3.3
21	0.869	10.5	-20.4	3.3
23	0.471	11.3	-20.2	3.3



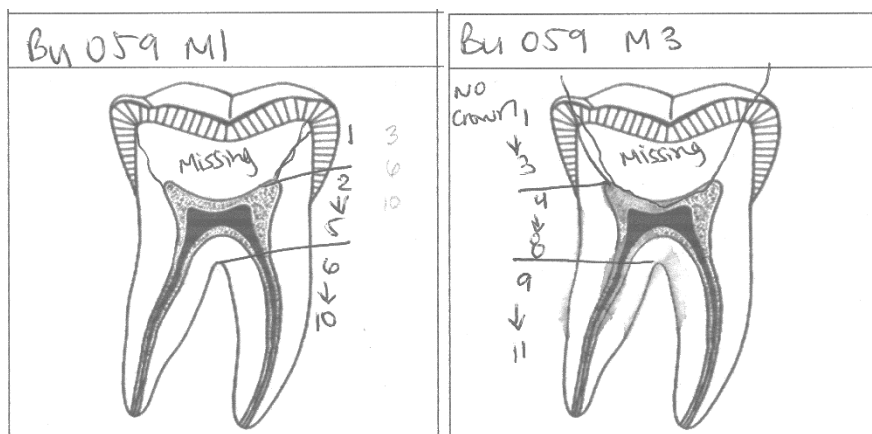
NB 69(8) (M3)

Tooth Section	Weight	d15N corrected	d13C corrected	C:N
1	0.515	18.8	-15.4	3.3
2	0.416	18.4	-15.2	3.3
3	0.481	18.5	-15.1	3.3
4	0.326	18.4	-14.7	3.2
5	0.31	18.0	-15.2	3.3
9	0.274	17.4	-15.1	3.4
12	0.465	17.9	-15.6	3.3
15	0.96	17.1	-15.1	3.3
17	0.419	16.8	-17.7	3.6

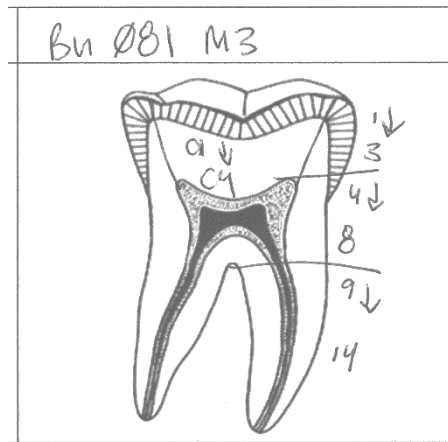


BU069 (M1 and M3)

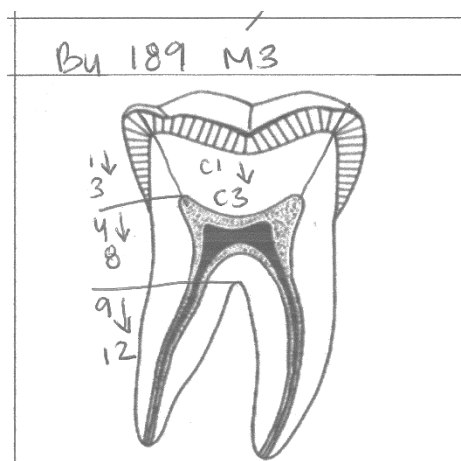
Tooth	Tooth Section	Weight	d15N corrected	d13C corrected	C:N
M1	3	1.481	12.0	-20.5	3.3
M1	4	0.87	11.8	-20.7	3.4
M1	6	0.95	12.3	-20.5	3.5
M1	9	0.926	13.2	-20.4	3.4
M3	1	0.576	13.8	-20.6	3.4
M3	2-3	0.57	12.2	-20.4	3.4
M3	8	1.03	12.4	-20.2	3.4
M3	10	0.98	13.7	-19.4	3.4



BU081 (M3)				
Tooth Section	Weight	d15N corrected	d13C corrected	C:N
1	0.994	12.0	-18.4	3.2
3	1.1	15.0	-19.1	3.2
5	1.226	11.6	-19.7	3.1
10	0.636	11.6	-21.1	3.3
10	1.128	10.5	-19.7	3.3
14	1.07	11.2	-20.1	3.4

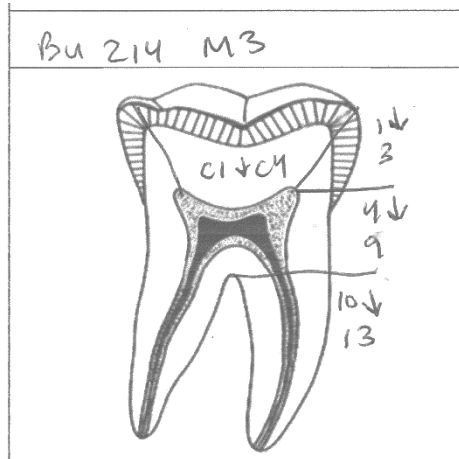


BU189 (M3)				
Tooth Section	Weight	d15N corrected	d13C corrected	C:N
3	1.078	11.9	-18.6	3.2
9	1.072	12.8	-18.2	3.3
11	0.951	14.3	-18.2	3.3



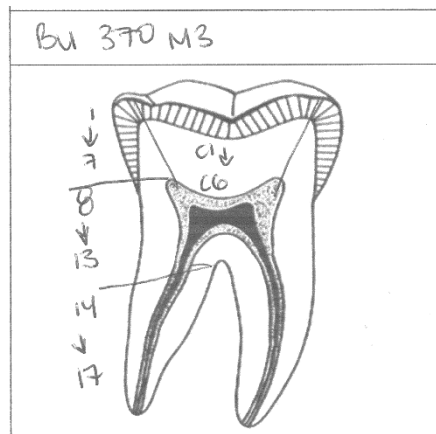
BU214 (M3)

Tooth Section	Weight	d15N corrected	d13C corrected	C:N
1	1.154	9.3	-19.7	3.1
4	1.208	13.6	-18.6	3.2
7	1.252	13.3	-18.6	3.2
10	1.155	7.9	-20.4	3.1
13	1.352	13.4	-19.2	3.3



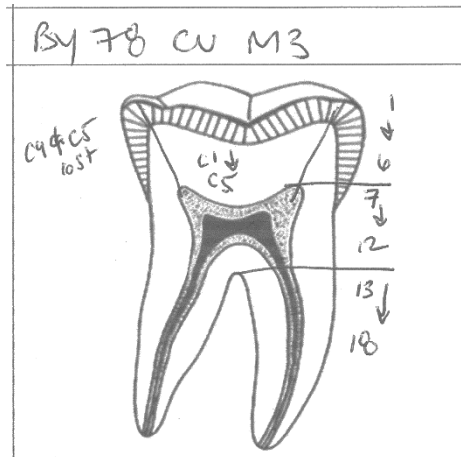
BU370 (M3)

Tooth Section	Weight	d15N corrected	d13C corrected	C:N
1-2	1.193	13.5	-19.5	3.2
4	0.942	14.1	-19.1	3.2
8	1.207	13.9	-19.0	3.2
13	1.09	13.7	-18.8	3.2
17	0.357	14.1	-18.9	3.3
17	1.014	14.1	-18.1	3.2
17	0.943	14.7	-18.9	3.2
17	1.338	14.7	-18.7	3.2



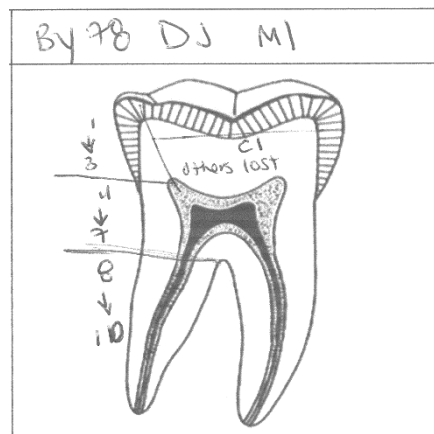
BY78CU (M3)

Tooth Section	Weight	d15N corrected	d13C corrected	C:N
1	0.478	9.6	-20.8	3.2
4	0.826	10.4	-20.8	3.2
9	0.964	10.2	-19.8	3.2
12	0.997	9.9	-19.6	3.2
17	0.898	11.1	-20.0	3.3
12	1.12	9.7	-20.8	3.2
17	1.029	11.8	-20.9	3.3



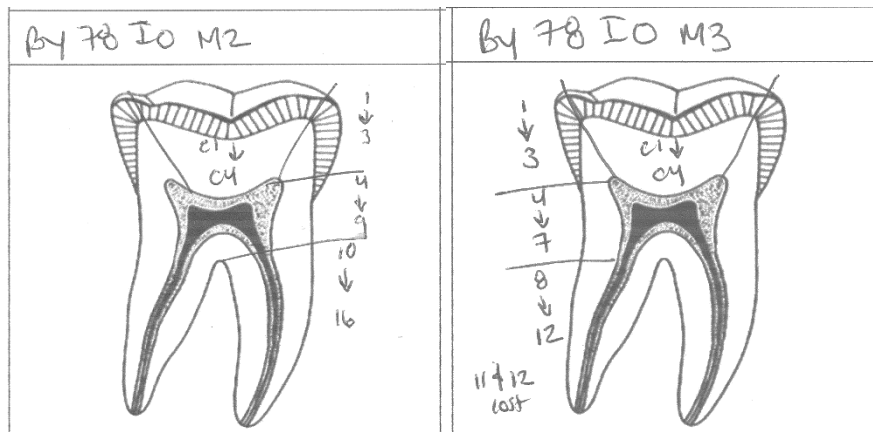
BY78DJ (M1)

Tooth Section	Weight	d15N corrected	d13C corrected	C:N
1	0.909	11.0	-19.1	3.2
3	1.005	11.2	-18.9	3.2
3	1.166	6.6	-21.3	3.1
6	1.11	10.8	-18.7	3.2
6	0.541	11.2	-19.9	3.2
8	0.992	10.9	-18.8	3.2
10	0.95	11.1	-20.1	3.3



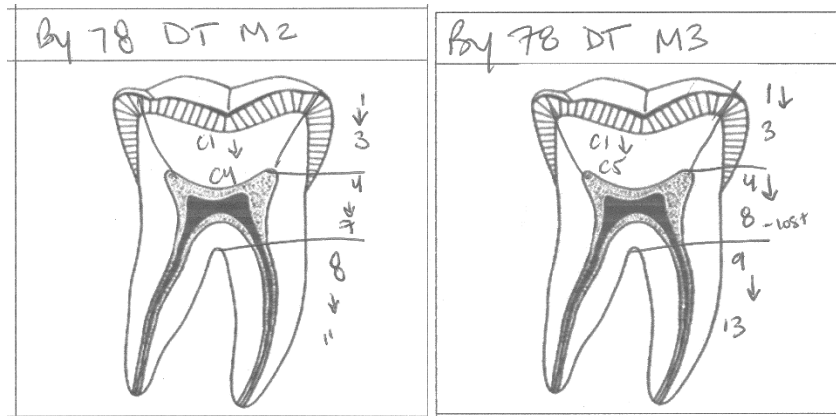
BY78IO (M2 and M3)

Tooth	Tooth Section	Weight	d15N corrected	d13C corrected	C:N
M2	2	1.08	9.9	-20.8	3.1
M2	4	0.978	10.6	-19.3	3.2
M2	8	0.933	9.8	-20.2	3.2
M2	8	1.038	10.8	-19.1	3.2
M2	16	1.005	11.5	-19.0	3.3
M3	1	1.447	11.3	-19.5	3.2
M3	3	1.362	10.6	-20.2	3.2
M3	5	1.07	11.1	-19.9	3.2
M3	5	0.903	10.7	-19.2	3.3
M3	7	0.37	10.8	-19.7	3.3
M3	7	1.276	11.0	-19.8	3.2
M3	7	1.12	10.7	-19.9	3.2
M3	10	1.052	11.5	-18.4	3.2
M3	10	0.534	11.4	-19.5	3.2



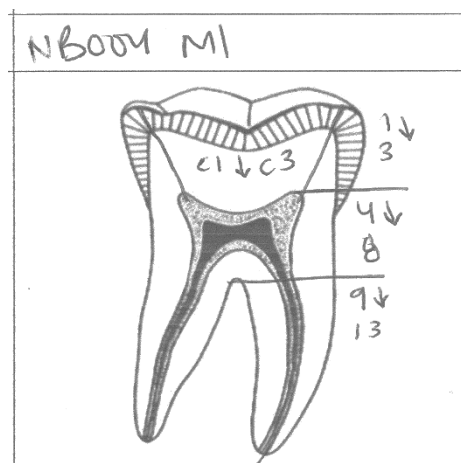
BY78DT (M2 and M3)

Tooth	Tooth Section	Weight	d15N corrected	d13C corrected	C:N
M2	1	0.56	12.7	-20.5	3.2
M2	3	1.344	11.6	-20.1	3.2
M2	3	1.241	11.4	-20.1	3.2
M2	9	0.301	10.5	-20.0	3.4
M2	11	0.501	13.7	-19.1	3.3
M2	11	1.12	12.4	-19.7	3.3
M3	1	1.281	11.3	-20.7	3.2
M3	7	0.98	11.6	-19.8	3.2
M3	7	1.12	11.1	-20.0	3.2
M3	10	1.185	11.8	-20.0	3.2
M3	10	0.493	11.8	-20.0	3.3
M3	14	1.386	12.9	-19.1	3.3



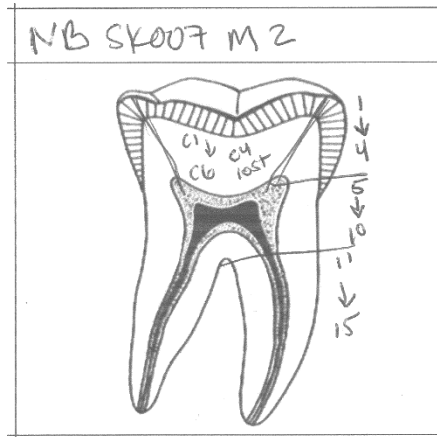
NB004 (M1)

Tooth Section	Weight	d15N corrected	d13C corrected	C:N
2	1.08	11.9	-20.6	3.1
5	0.86	13.6	-19.4	3.2
10	0.521	13.9	-19.5	3.4
12	0.445	13.8	-19.4	3.5



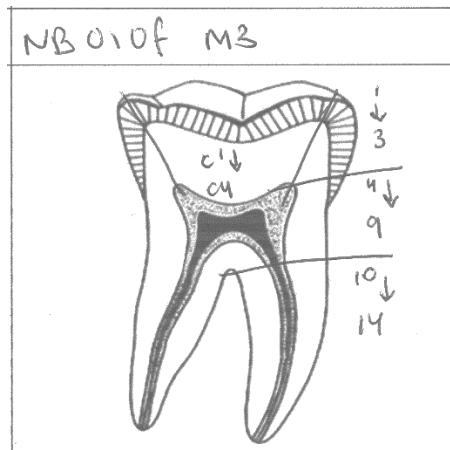
NB007 (M2)

Tooth Section	Weight	d15N corrected	d13C corrected	C:N
1	0.946	10.7	-19.2	3.2
4	0.889	10.2	-20.3	3.2
8	0.862	10.5	-20.3	3.3
8	1.306	10.4	-20.4	3.2
12	0.975	11.8	-19.8	3.2
12	1.24	11.0	-20.3	3.2
16	1.227	11.9	-19.9	3.3



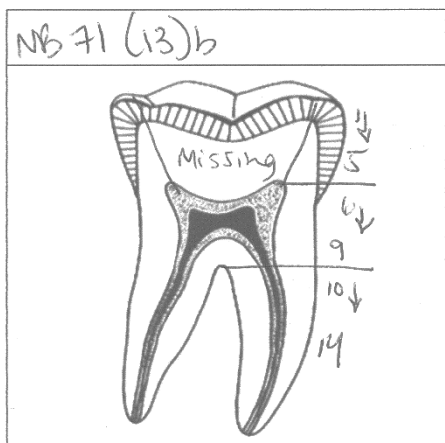
NB010f (M3)

Tooth Section	Weight	d15N corrected	d13C corrected	C:N
1	0.504	14.3	-18.2	3.1
4	0.843	12.2	-18.8	3.1
8	1.244	13.1	-18.5	3.2
11	1.294	12.8	-18.8	3.2
11	0.905	12.4	-19.3	3.2
14	1.107	12.1	-18.6	3.3



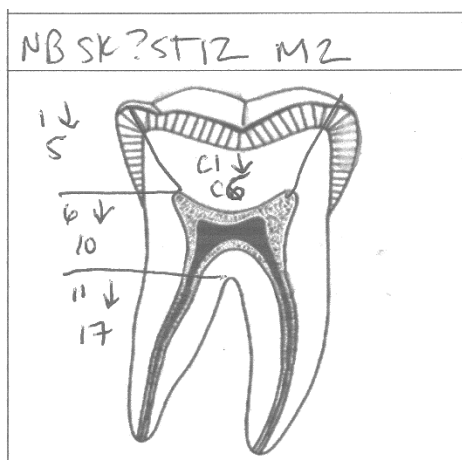
NB71(13)B (M3)

Tooth Section	Weight	d15N corrected	d13C corrected	C:N
1	0.426	10.8	-19.9	3.2
5	0.901	13.9	-18.3	3.2
12	0.93	12.5	-18.9	3.2



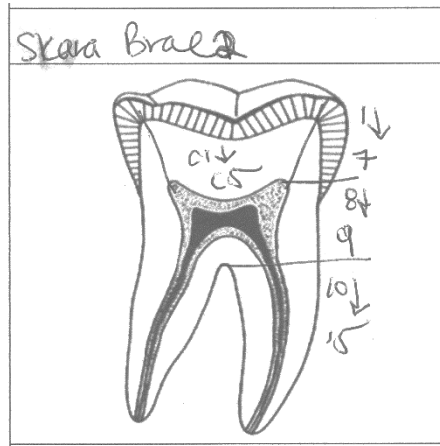
NBSK?ST12 (M2)

Tooth Section	Weight	d15N corrected	d13C corrected	C:N
1	0.85	11.1	-20.2	3.2
4	1.2	10.5	-20.2	3.2
8	1.362	10.3	-19.9	3.2
12	0.574	12.1	-20.6	3.2
12	1.114	11.0	-19.8	3.2
17	1.482	12.1	-19.6	3.2



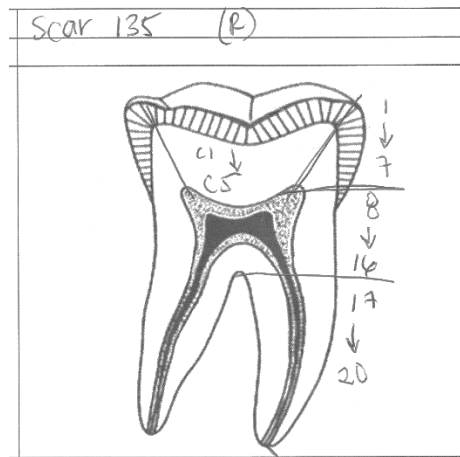
Skara Brae 2 (M1)

Tooth Section	Weight	d15N corrected	d13C corrected	C:N
1	0.408	11.5	-19.6	3.2
3	0.99	11.6	-21.2	3.3
5	0.86	11.5	-21.0	3.2
8	1.01	14.6	-19.0	3.1
10	0.914	11.6	-20.6	3.2
12	1.11	11.3	-20.5	3.0
14	1.3	9.0	-21.8	3.2



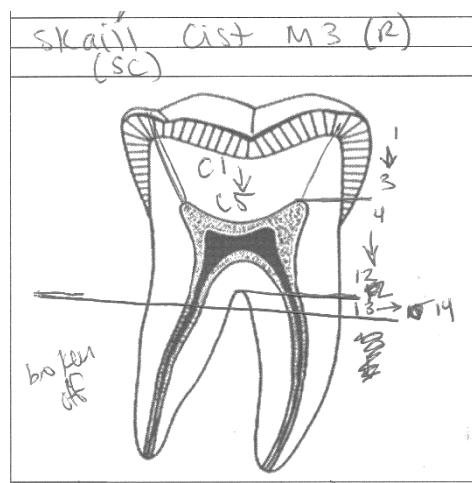
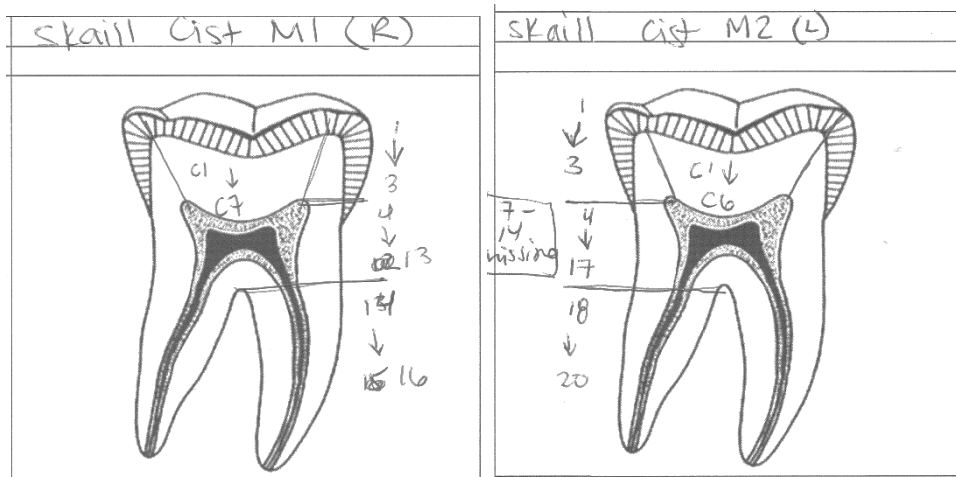
Scar 135 (M1)

Tooth Section	Weight	d15N corrected	d13C corrected	C:N
1	0.35	10.0	-21.2	3.2
2	0.357	9.2	-21.5	3.2
3	0.401	9.7	-21.3	3.3
4	0.482	9.7	-21.3	3.3
5	0.35	10.0	-21.5	3.2
7	0.648	9.7	-21.2	3.2
8	0.643	10.0	-21.1	3.2
10	0.477	10.4	-20.9	3.3
11	0.656	10.1	-20.8	3.2
12	0.679	10.8	-20.6	3.2
14	0.74	10.8	-20.7	3.2
16	0.646	10.8	-20.5	3.2
17	0.379	10.3	-21.0	3.3
18	0.92	11.8	-20.5	3.2
20	0.698	12.4	-19.8	3.2
C1	0.643	9.8	-21.2	3.2
C3	0.667	9.1	-21.5	3.2
C5	0.695	10.3	-21.2	3.2



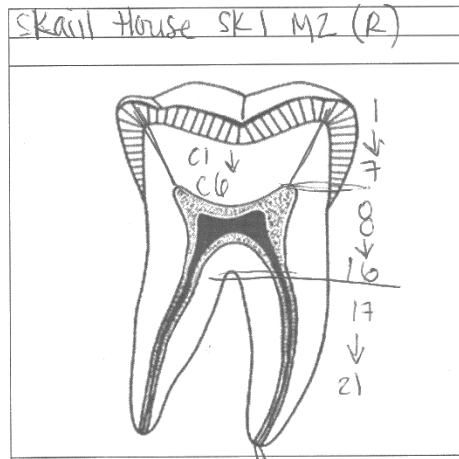
Skail Cist (M1, M2 and M3)

Tooth	Tooth Section	Weight	d15N corrected	d13C corrected	C:N
M1	1-3	0.87	15.6	-20.1	3.3
M1	8-9	1.07	10.4	-21.1	3.2
M1	12	0.96	10.4	-21.1	3.2
M1	16	1.08	12.6	-20.7	3.4
M2	6	0.89	10.1	-21.3	3.2
M3	1-2	0.324	12.8	-20.9	3.3
M3	5	0.311	13.0	-20.2	3.3
M3	10-11	0.318	0.4	-26.7	2.9
M3	C2	0.266	12.2	-20.8	3.3
M3	C3	0.321	11.6	-20.9	3.3
M3	C4	0.682	12.2	-20.3	3.2



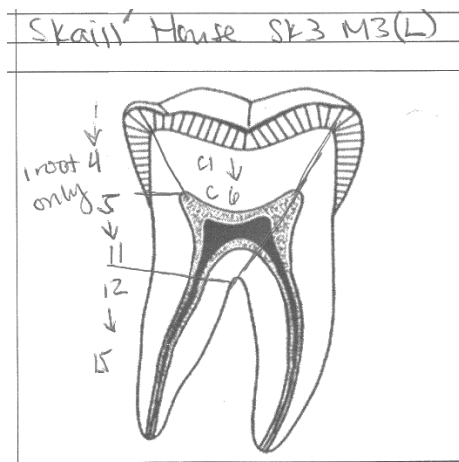
Skaill House 1 (M2)

Tooth Section	Weight	d15N corrected	d13C corrected	C:N
1-2	0.604	18.6	-15.6	3.2
3	0.602	18.9	-14.7	3.2
4	0.368	18.5	-15.0	3.3
5	1.024	17.0	-15.1	3.2
7	0.388	17.8	-15.3	3.3
8	1.1	17.4	-15.7	3.2
9	0.675	17.6	-15.3	3.2
10	0.408	17.7	-15.0	3.3
11	0.503	17.8	-15.6	3.3
12	0.475	17.9	-15.7	3.2
15	0.315	16.8	-15.4	3.3
16	0.699	17.6	-15.1	3.2
17	1.02	17.5	-14.6	3.2
21	0.415	17.2	-16.5	3.3



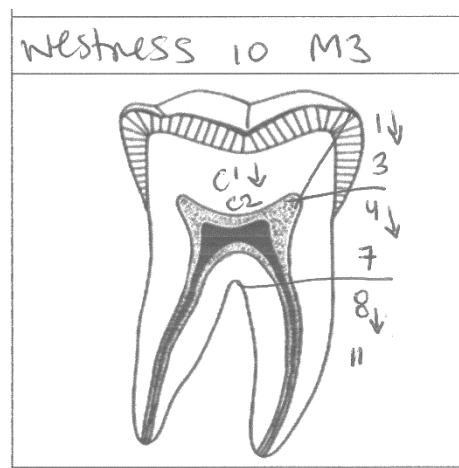
Skail House 3 (M3)

Tooth Section	Weight	d15N corrected	d13C corrected	C:N
3	1.267	12.0	-20.2	3.2
4	0.853	11.4	-20.2	3.2
5	0.927	11.4	-20.1	3.2
6	1.4	11.1	-20.4	3.2
7	0.933	11.6	-19.9	3.2
8	1.23	12.4	-19.2	3.2
9	0.325	11.2	-19.7	3.5
12	0.325	10.8	-19.6	3.6



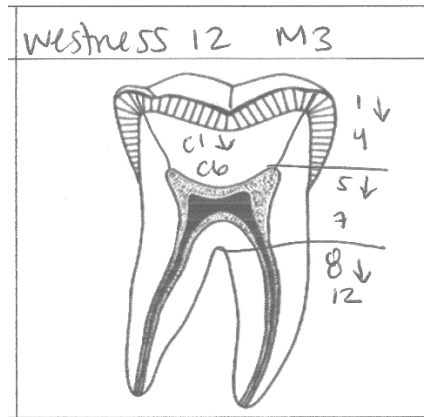
Westness 10 (M3)

Tooth Section	Weight	d15N corrected	d13C corrected	C:N
1	1.163	10.6	-20.3	3.2
3	0.974	10.3	-21.2	3.4



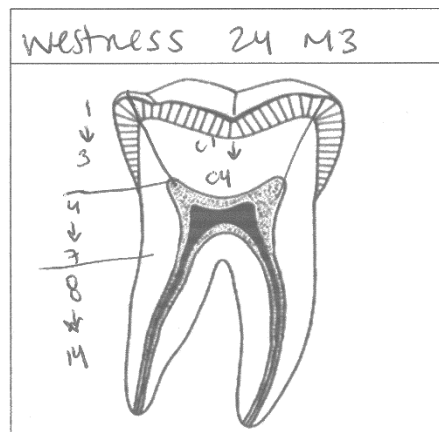
Westness 12 (M3)

Tooth Section	Weight	d15N corrected	d13C corrected	C:N
1	0.904	11.6	-20.0	3.3
3	1.009	11.0	-18.9	3.2
6	0.968	10.6	-18.8	3.2
6	0.971	10.7	-20.0	3.2
9	0.965	10.2	-19.2	3.3
9	1.005	10.1	-19.5	3.3
12	1.358	15.0	-18.1	3.3



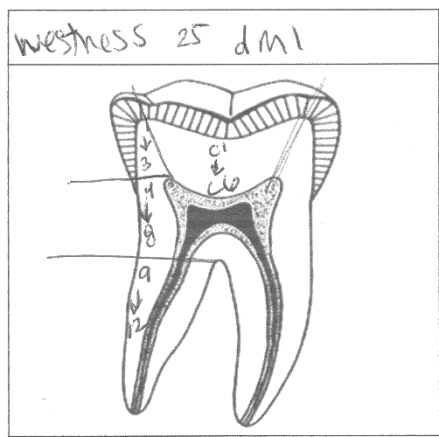
Westness 24 (M3)

Tooth Section	Weight	d15N corrected	d13C corrected	C:N
4	0.919	11.4	-19.6	3.2
4	1.24	11.6	-20.7	3.2
7	1.036	10.7	-19.2	3.2
7	0.589	11.4	-20.4	3.2
11	1.182	11.2	-20.4	3.2
11	0.897	11.0	-20.7	3.2
11	0.465	11.6	-20.5	3.2
11	1.164	6.2	-22.0	3.1
14	0.864	11.4	-20.1	3.2
15	1.253	11.0	-20.5	3.2



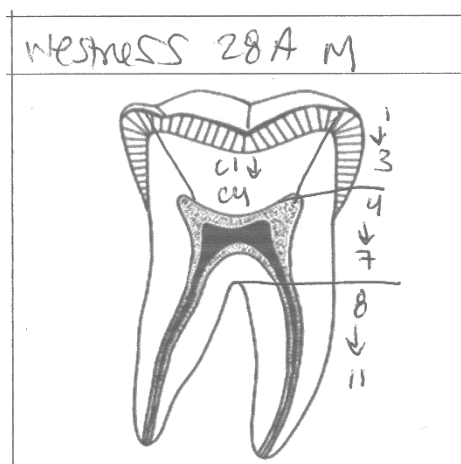
Westness 25 (dM1)

Tooth Section	Weight	d15N corrected	d13C corrected	C:N
1-2	0.482	11.8	-21.3	3.3
3	0.432	11.3	-21.3	3.3
6	0.92	11.2	-20.6	3.3
9	0.975	11.2	-19.3	3.2



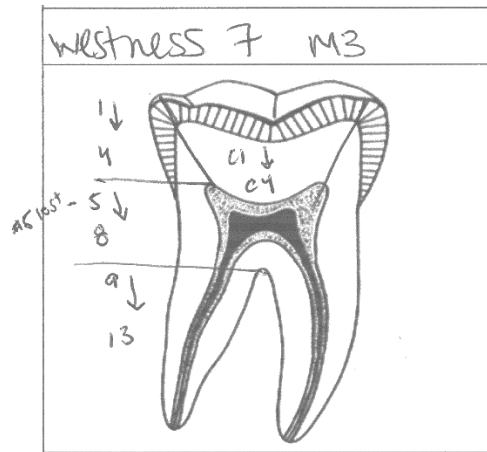
Westness 28a (M3)

Tooth Section	Weight	d15N corrected	d13C corrected	C:N
2	1.02	11.5	-20.6	3.2
3	0.435	10.7	-20.4	3.3
5	0.89	10.9	-20.5	3.2
6	0.893	11.1	-20.7	3.2
7	0.91	11.2	-21.1	3.2
8	0.9	11.4	-21.0	3.2
10	1.16	10.9	-21.0	3.2
11	1.262	12.2	-20.7	3.3



Westness 7 (M3)

Tooth Section	Weight	d15N corrected	d13C corrected	C:N
2	1.08	11.6	-19.0	3.2
4	1.485	11.2	-20.8	3.2
7	1.184	11.2	-21.0	3.2
10	1.07	11.3	-20.7	3.2
10	0.513	17.2	-13.3	3.2
13	1.222	9.7	-21.4	3.2
15	1.192	10.4	-21.2	3.2



Catalogue C. Osteology Additional Tables and Statistical Results

Phases

<i>Pre-Viking Phase (PVP)</i>	Prior to AD 750
<i>Viking Age (VA)</i>	AD 750- 1100
<i>Late Norse Phase (LNP)</i>	AD 1100-1299

Category	Age Range
<i>Foetus, neonate or infant</i>	Foetus until 1 year old
<i>Child</i>	1-5 years
<i>Juvenile</i>	5-11 years
<i>Adolescent</i>	13-17 years
<i>Young Adult</i>	18-34 years
<i>Middle Adult</i>	35-49 years
<i>Older Adult</i>	50+ years

Pathology

<i>CO</i>	Cribra orbitalia
<i>PH</i>	Porotic hyperostosis
<i>CF</i>	Cribra femora
<i>Calc</i>	Calculus
<i>AMTL</i>	Antemortem tooth loss
<i>LEH</i>	Linear enamel hypoplasia
<i>OD</i>	Osteochondritis dissecans
<i>OA</i>	Osteoarthritis

5.2. Life Tables

Pre-Viking Age (PVP)

Age group	Dx	dx	lx	qx	Lx	Tx	ex
Infant	2	0.083	1.000	0.083	0.958	33.042	33.042
Child	0	0.000	0.917	0.000	3.667	32.083	35.000
Juvenile	2	0.083	0.917	0.091	7.000	28.417	31.000
Adolescent	2	0.083	0.833	0.100	4.750	21.417	25.700
Young Adult	5	0.208	0.750	0.278	9.688	16.667	22.222
Middle Adult	9	0.375	0.542	0.692	5.313	6.979	12.885
Older Adult 50-70	4	0.167	0.167	1.000	1.667	1.667	10.000

Table 1. PVP Life table

Viking Age (VA)

Age group	Dx	dx	lx	qx	Lx	Tx	ex
Infant	4	0.063	1.000	0.063	0.969	31.195	31.195
Child	0	0.000	0.938	0.000	3.750	30.227	32.242
Juvenile	2	0.031	0.938	0.033	3.875	26.477	28.242
Adolescent	5	0.078	0.906	0.086	2.953	22.602	24.940
Young Adult	8	0.125	0.828	0.151	7.148	19.648	23.726
Middle Adult	35	0.547	0.703	0.778	9.375	12.500	17.778
Older Adult	10	0.156	0.156	1.000	3.125	3.125	20.000

Table 2. VA Life table

Late Norse Phase (LNP)

Age group	Dx	dx	lx	qx	Lx	Tx	ex
Infant	11	0.086	1.000	0.086	0.957	27.512	27.512
Child	10	0.078	0.914	0.085	3.500	26.555	29.051
Juvenile	14	0.109	0.836	0.131	3.781	23.055	27.579
Adolescent	1	0.008	0.727	0.011	2.203	19.273	26.527
Young Adult	18	0.141	0.719	0.196	6.445	17.070	23.750
Middle Adult	54	0.422	0.578	0.730	7.500	10.625	18.378
Older Adult	20	0.156	0.156	1.000	3.125	3.125	20.000

Table 3. LNP Life table

All phases

Age group	Dx	dx	lx	qx	Lx	Tx	ex
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Infant	101	0.224	1.000	0.224	0.888	23.569	23.569
Child	20	0.044	0.776	0.057	3.013	22.681	29.245
Juvenile	39	0.087	0.731	0.119	3.271	19.668	26.901
Adolescent	22	0.049	0.644	0.076	2.080	16.397	25.443
Young Adult	45	0.100	0.596	0.168	5.217	14.317	24.039
Middle Adult	163	0.362	0.496	0.731	6.433	9.100	18.363
Older Adult	60	0.133	0.133	1.000	2.667	2.667	20.000

Table 4. All Phases Life table

5.3. Stature

Site	Burial	Housed	Osteo	Phase	Element	Length (cm)	Stature Estimate (cm)
Brough Road	AN	OM	2	PVP	L Radius	21.6	179.00 ¹
Brough Road	AS	OM	2	PVP	L Femur	45.0	171.00
Brough Road	BJ	OM	2	VA	NA	NA	160.45 ¹
Brough Road	CU	OM	2	VA	NA	NA	165.00 ¹
Brough Road	DT	OM	2	VA	NA	NA	167.00 ¹
Brough Road	IO	OM	2	PVP	R Femur	41.2	166.00
Bu of Cairston	Sk009	OM	2	LNP	R Femur	40.7	154.50
Bu of Cairston	Sk015	OM	2	LNP	Femur	NA	167.00 ²
Bu of Cairston	SK064	OM	2	LNP	Femur	NA	176.00 ²
Bu of Cairston	Sk074	OM	2	LNP	L Tibia	NA	173.00 ²
Bu of Cairston	Sk110	OM	2	LNP	L Tibia	NA	167.00 ²
Bu of Cairston	Sk154	OM	2	LNP	Radius	NA	154.00 ²
Bu of Cairston	Sk157	OM	2	LNP	Radius	NA	156.00 ²
Bu of Cairston	Sk164	OM	2	LNP	Femur	NA	158.00 ²
Bu of Cairston	Sk189	OM	2	LNP	Radius	NA	156.00 ²
Bu of Cairston	Sk243	OM	2	LNP	Femur	NA	156.00 ²
Bu of Cairston	Sk250	OM	2	LNP	R Femur	43.0	164.00
Bu of Cairston	Sk263	OM	2	LNP	Femur	NA	162.00 ²
Bu of Cairston	Sk294	OM	2	LNP	NA	NA	159.00 ²
Bu of Cairston	Sk326	OM	2	LNP	R Femur	NA	174.00 ²
Bu of Cairston	Sk370	OM	2	LNP	L Tibia	33.9	164.00
Buckquoy	B(7)	OM	2	VA	R Humerus	33.7	179.50 ³

Buckquoy	M12	OM	2	PVP	L Femur	44.5	168.00
Newark Bay	68/002	NHM	1	NA	L Humerus	29.4	156.70 ⁴
Newark Bay	68/005	NHM	1	NA	L Humerus	37.5	171.20 ⁴
Newark Bay	68/012	OM/NHM	2	LNP	L Femur	44.5	168.80 ⁴
Newark Bay	68/013	NHM	1	NA	NA	NA	175.00 ⁴
Newark Bay	68/014	NHM	1	NA	L Femur	47.7	175.00 ⁴
Newark Bay	68/016A	NHM	2	VA	L Femur	43.0	163.75 ⁴
Newark Bay	68/020	NHM	1	VA	L Femur	41.5	156.60
Newark Bay	68/024	OM	3	VA	L Radius	25.5	175.40
Newark Bay	68/028	OM/NHM	2	NA	L Humerus	30.2	169.10 ⁴
Newark Bay	68/031a	OM	2	NA	R Humerus	31.0	162.00
Newark Bay	68/033A and B	NHM	1	PVP	L Femur	39.6	153.10 ⁴
Newark Bay	69/107	NHM	1	PVP	L Femur	42.7	159.60 ⁴
Newark Bay	69/002	NHM	1	NA	R Femur	44.4	177.40 ⁴
Newark Bay	69/004A-C	NHM	1	VA	L Femur	44.0	163.00 ⁴
Newark Bay	69/007A	OM	3	NA	L Humerus	34.3	176.00
Newark Bay	69/007B	NHM	1	NA	L Femur	46.2	172.20 ⁴
Newark Bay	69/008	OM/NHM	2	LNP	R Femur	45.0	158.30
Newark Bay	69/009	NHM	1	LNP	L Femur	48.6	178.30 ⁴
Newark Bay	69/010	NHM	1	NA	NA	NA	166.00 ⁴
Newark Bay	69/020	NHM	1	NA	L Humerus	NA	150.00 ⁴
Newark Bay	69/024	NHM	1	NA	L Femur	47.9	176.70 ⁴
Newark Bay	69/028	OM/NHM	2	NA	R Humerus	33.6	174.0
Newark Bay	69/032	OM/NHM	1	NA	L Femur	40.0	153.0
Newark Bay	69/033	NHM	1	NA	L Femur	45.6	170.0 ⁴
Newark Bay	69/034	NHM	2	LNP	L Femur	45.2	169.0 ⁴
Newark Bay	69/036	NHM	1	VA	L Ulna	28.4	171.9 ⁴
Newark Bay	69/045	NHM	1	NA	L Humerus	28.7	154.4 ⁴
Newark Bay	69/062	NHM	1	NA	L Femur	47.6	174.7 ⁴
Newark Bay	69/067	NHM	1	LNP	L Femur	45.5	171.1 ⁴
Newark Bay	69/069	NHM	2	LNP	L Femur	46.4	168.7 ⁴

Newark Bay	69/083 combined	NHM	1	VA	L Femur	45.4	170.9 ⁴
Newark Bay	69/084	NHM	1	NA	L Tibia	33.1	156.2 ⁴
Newark Bay	69/085	NHM	1	VA	L Femur	44.1	163.0 ⁴
Newark Bay	69/098	NHM	1	NA	L Tibia	36.1	169.3 ⁴
Newark Bay	69/099	NHM	1	VA	L Femur	41.9	157.6 ⁴
Newark Bay	69/102	NHM	1	NA	R Radius	NA	163.9 ⁴
Newark Bay	69/104A	NHM	1	LNP	L Femur	42.3	158.6 ⁴
Newark Bay	69/104B	NHM	1	VA	L Humerus	31.9	165.2 ⁴
Newark Bay	69/105	NHM	1	LNP	L Humerus	32.6	172.3 ⁴
Newark Bay	69/106	NHM	1	NA	L Femur	43.6	166.7 ⁴
Newark Bay	69/107	NHM	1	NA	L Femur	42.7	159.6 ⁴
Newark Bay	69/CC1	NHM	1	NA	NA	NA	137.0 ⁴
Newark Bay	69/CC3A and B	OM/NHM	3	NA	L Femur	38.6	149.4 ⁴
Newark Bay	69/CC3X	NHM	1	NA	L Femur	40.2	158.8 ⁴
Newark Bay	69/CC4	NHM	1	LNP	NA	NA	166.2 ⁴
Newark Bay	69/NonoB	NHM	1	VA	L Femur	43.2	160.8 ⁴
Newark Bay	69/x	NHM	1	VA	L Femur	45.4	166.2 ⁴
Newark Bay	70(f)	OM/NHM	2	VA	R Tibia	37.0	169.8
Newark Bay	70/001	NHM	1	VA	L Femur	43.6	161.8 ⁴
Newark Bay	70/005	NHM	1	NA	NA	NA	155.5 ⁴
Newark Bay	70/006	OM/NHM	2	NA	L Tibia	37.0	168.3 ⁴
Newark Bay	70/009B	NHM	1	NA	L Femur	44.2	163.3 ⁴
Newark Bay	70/015	NHM	1	LNP	L Ulna	27.5	175.2 ⁴
Newark Bay	70/029	OM	2	NA	L Radius	23.7	161.8
Newark Bay	70/030	NHM	1	NA	L Femur	42.1	158.0 ⁴
Newark Bay	70/035	NHM	1	NA	L Femur	38.7	149.7 ⁴
Newark Bay	70/038	NHM	1	NA	L Humerus	28.0	152.0 ⁴
Newark Bay	70/NoNoD	NHM	1	NA	R Femur	NA	166.7 ⁴
Newark Bay	70a	OM	3	NA	L Radius	27.8	184.1
Newark Bay	70b	OM	3	NA	R Femur	46.9	173.0
Newark Bay	71/001 and 71/008	NHM	1	LNP	L Femur	50.8	182.3 ⁴

Newark Bay	71/002	NHM	1	VA	L Femur	38.8	149.9 ⁴
Newark Bay	71/007	NHM	1	NA	L Humerus	27.9	151.7 ⁴
Newark Bay	71/011	OM	2	NA	R Tibia	34.1	160.0
Newark Bay	71/013b	UHI	3	NA	L Tibia	32.6	156.0
Newark Bay	71/015	NHM	1	NA	R Humerus	29.5	156.1 ⁴
Newark Bay	Sk001	OM/NHM	2	VA	R Femur	41.5	157.0
Newark Bay	Sk002	OM	3	NA	L Ulna	24.8	164.0
Newark Bay	Sk003	OM	3	NA	L Humerus	31.8	168.0
Newark Bay	Sk005e	OM	3	NA	L Tibia	35.7	168.6
Newark Bay	Sk008(2)	OM	3	NA	R Tibia	35.6	164.8
Newark Bay	Sk011	OM	3	NA	L Humerus	31.6	167.8
Newark Bay	Sk026	OM	3	NA	L Humerus	34.5	177.0
Newark Bay	SK1-2	OM	3	NA	R Femur	41.9	161.1
Newark Bay	Sk87	OM	3	NA	L Femur	48.0	175.7
Newark Bay	TM8	OM	3	NA	L Femur	42.0	157.8
Pierowall	Grave 001		1	VA	in situ	NA	167.6 ⁵
Pierowall	Grave 015		1	VA	in situ	NA	182.9 ⁵
Scar	Sk134	OM	2	VA	R Tibia	40.0	174.4
Skaill Cist	1	OM	2	PVP	NA	NA	165.0 ⁶
Skaill House	1	OM	2	LNP	L Humerus	28.5	152.0
Skaill House	10		1	LNP	In situ	NA	174.0 ⁶
Skaill House	3b	OM	2	LNP	L Tibia	39.2	173.0
Skaill House	5		1	LNP	Tibia	NA	157.0 ⁶
Skaill House	7	Unknown	1	LNP	Tibia	NA	165.5 ⁶
Skaill House	9	Unknown	1	LNP	Femur	NA	160.0 ⁶
Skara Brae	3	NMS	2	VA	L Tibia		166.9
Westness	005	NMS	2	VA	Humeri	NA	152.0 ⁷
Westness	006	NMS	2	PVP	Femora	NA	153.8 ⁷
Westness	007	NMS	2	PVP	Femora	NA	164.5 ⁷
Westness	008	NMS	2	NA	Humeri	NA	164.8 ⁷
Westness	010	NMS	2	PVP	Femora	NA	163.0 ⁷
Westness	011	NMS	2	VA	R Femur	NA	180.6 ⁷

Westness	014	NMS	2	NA	Femora	NA	171.1 ⁷
Westness	020	NMS	2	PVP	Femora	NA	171.6 ⁷
Westness	021	NMS	2	PVP	Femora	NA	171.7 ⁷
Westness	024	NMS	2	PVP	Femora	NA	161.6 ⁷
Westness	026	NMS	2	PVP	Femur	NA	171.1 ⁷
Westness	028a	NMS	2	PVP	Femur	NA	161.0 ⁷
Westness	030	NMS	2	NA	Femur	NA	162.8 ⁷
Westness	034	NMS	2	VA	Femur	NA	180.1 ⁷
Westness	1968 1A [2(1)]	NMS	2	VA	R Humerus	NA	161.3 ⁷

¹ Morris 1989, 273-276

² Stevens et al. 2002, 87

³ Lorimer 1920, 12

⁴ Molleson, n.d.; 2005

⁵ Thorsteinsson 1965

⁶ James 1999, 773

⁷ Sellevold 1999.

Table 5. Long bone measurements and estimates.

Sex	Phase	LCCODE		Site Name		Predom. Mammal		Predom. Cereal		Predom. Fish		Animal Use		Plaggen		East/West	
		ANOVA (p)	N	ANOVA (p)	N	ANOVA (p)	N	ANOVA (p)	N	ANOVA (p)	N	ANOVA (p)	N	ANOVA (p)	N	ANOVA (p)	N
Ma	PVP	0.795	8	0.820	8	NA	NA	0.799	7	0.927	3	NA	NA				
	VA	0.717	12	0.669	7	0.628	9	0.732	12	0.313	11	0.220	9	0.156	12	0.208	12
	LNP	0.648	15	0.927	8	NA	NA	0.497	9	NA	6	0.497	9	0.648	15	0.302	15
Fe	PVP	NA		NA		NA	NA	0.382	6	NA		NA		NA		0.382	6
	VA	0.604	13	0.224	3	NA	NA	NA		0.714	12	0.714	12	0.660	13	0.660	13
	LNP	0.921	12	0.597	9	NA	NA	0.753	4	NA		0.753	4	0.921	12	0.127	12

Table 6. Statistical analysis (ANOVA) results of stature by sex, phase and subsistence variable. Significant results (≤ 0.050) are provided in bold.

5.4. Pathology

5.4.1. Nutritional Deficiency and Indicators of Diet

Pathology	Males	CPR	Females	PVP		All	CPR	p value	Test
				CPR	All				
Ind with CO	3/8	37.5%	4/6	66.7%	8/16	50%	0.280	Chi2	
Avg stage CO	1.5 (n=2)	NA	1.3 (n=4)	NA	1.4 (n=7)	NA	0.313	KW	
PH	0/8	0%	2/6	33.3%	2/17	11.8%	0.078	Chi2	
CF	2/7	28.6%	1/8	12.5%	4/18	22.2%	0.438	Chi2	
Nutritional def	5/10	50.0%	5/10	50%	11/24	45.8%	1.000	Chi2	
Rickets	0/10	0.0%	0/10	0.0%	1/24	4.2%	0.157	Chi2	
Scurvy	0/10	0.0%	0/10	0.0%	0/24	0%	NA	Chi2	

Table 7. CPRs of indicators of nutritional deficiency by sex in the PVP, along with results of statistical tests (*p* values). Significant results (≤ 0.050) are provided in bold.

Pathology	Males		Females		All		<i>p</i> value	Test
	Ind with CO	CPR	Ind with CO	CPR	Ind with CO	CPR		
Ind with CO	4/8	50.0%	3/11	27%	10/22	45.5%	0.387	Chi2
Avg stage CO	1.3 (n=4)	NA	1.5 (n=2)	NA	1.4 (n=9)	NA	0.313	KW
PH	6/11	78.7%	3/12	25.0%	11/27	40.7%	0.193	Chi2
CF	3/9	33.3%	5/15	33.3%	9/26	34.6%	1.000	Chi2
Nutritional def	9/14	64.0%	10/20	50.0%	25/40	62.5%	0.503	Chi2
Rickets	1/14	7.1%	3/20	15.0%	4/40	10.0%	NA	Chi2
Scurvy	6/14	42.9%	2/20	10.0%	11/40	27.5%	NA	Chi2

Table 8. CPRs of indicators of nutritional deficiency by sex in the VA, along with results of statistical tests (*p* values). Significant results (≤ 0.050) are provided in bold.

Pathology	Males		Females		All		<i>p</i> value	Test
	Ind with CO	CPR	Ind with CO	CPR	Ind with CO	CPR		
Ind with CO	15/17	88.2%	12/18	66.7%	35/45	77.8%	0.067	Chi2
Avg stage CO	1.2 (n=14)	NA	1.2 (n=14)	NA	1.4 (n=37)	NA	0.239	KW
PH	8/24	33%	6/23	26.1%	16/73	21.9%	0.587	Chi2
CF	4/20	20%	4/24	16.7%	9/54	16.7%	0.826	Chi2
Nutritional def	19/33	57.6%	15/34	44.1%	45/106	42.5%	0.179	Chi2
Rickets	1/33	3.0%	0/34	0%	2/106	1.9%	NA	Chi2
Scurvy	6/33	18.2%	5/34	14.7%	13/106	12.3%	NA	Chi2

Table 9. CPRs of indicators of nutritional deficiency by sex in the LNP, along with results of statistical tests (*p* values). Significant results (≤ 0.050) are provided in bold.

Pathology	Males		Females		All		<i>p</i> value	Test
	Ind with CO	CPR	Ind with CO	CPR	Ind with CO	CPR		
Ind with CO	31/53	58.5%	38/65	58.5%	134/208	64.4%	0.252	Chi2
Avg stage CO	1.3 (n=28)	NA	1.4 (n=33)	NA	1.5 (n=123)	NA	0.340	KW
PH	24/66	36.4%	27/74	36.5%	87/266	38.5%	0.616	Chi2
CF	16/65	24.6%	15/67	22.4%	42/220	19.1%	0.728	Chi2
Nutritional def	49/103	47.6%	57/113	50.4%	196/388	50.5%	0.194	Chi2
Rickets	5/103	4.9%	6/113	5.3%	44/388	11.3%	0.350	Chi2
Scurvy	17/103	16.5%	18/113	16.5%	54/388	14%	0.209	Chi2

Table 10. CPRs of indicators of nutritional deficiency by sex in all phases, along with results of statistical tests (*p* values). Significant results (≤ 0.050) are provided in bold.

PVP

<i>Age cat</i>	<i>CO</i>	<i>CPR</i>	<i>95%CI Range</i>	<i>Affected Orbits</i>	<i>TPR</i>	<i>95%CI Range</i>	<i>Avg CO Stage</i>	<i>PH</i>	<i>CPR</i>	<i>95%CI Range</i>	<i>CF</i>	<i>CPR</i>	<i>95%CI Range</i>	<i>TPR</i>	<i>95%CI Range</i>	<i>Rickets</i>	<i>95%CI Range</i>	<i>Scurvy</i>	<i>95%CI Range</i>	<i>nutritional deficiency</i>	<i>CPR</i>
Infants	0/1	0%	0-79.4	0/1	0%	0-79.4	NA	0/2	0%	0-65.8	0/2	0%	0-65.8	0/4 (0%)	0-49	0/2	0-65.8	0/2	0-65.8	0/2	0%
Juveniles	1/1	100%	20.7-100	1/1	100%	20.7-100	2.0	0/1	0%	0-79.4	1/1	100%	20.7-100	2/2 (100%)	34.2-100	0/2	0-65.8	0/2	0-65.8	1/2	50%
Adol	1/1	100%	20.7-100	1/1	100%	0-79.4	1.0	0/1	0%	0-79.4	1/1	100%	20.7-100	2/2 (100%)	34.2-100	0/2	0-65.8	0/2	0-65.8	1/2	50%
YA	2/5	40%	11.8-76.9	3/10	30%	10.8-60.3	1.0	2/5	40%	11.8-76.9	2/4	50%	15-85	4/8 (50%)	21.5-78.5	0/5	0-43.5	0/5	0-43.5	4/5	80%
MA	2/5	40%	11.8-76.9	3/9	33.3%	12.1-33.3	1.5	0/5	0%	0-43.5	0/7	0%	0-35.4	0/12 (0%)	0-24.3%	1/9	2-43.5	0/9	0-29.9	3/9	33.3%
OA	2/3	66.7%	20.8-93.9	4/6	66.7%	30-90.3	1.5	0/3	0%	0-56.2	0/3	0%	0-56.2	0/5 (0%)	0-43.5	0/4	0-49	0/4	0-49	2/4	50%
Total	8/16	50.0%	28-72	16/22	66.7%	51.9-86.9	1.4	2/17	11.8%	3.3-34.3	4/18	22.2%	9-45.2	18/33 (54.5%)	38-70.2%	1/24	0.7-20.3	0/24	0-13.8	11/24	45.8%

Table 11. Crude prevalence rates (CPRs) of each osteological indicator of nutritional deficiency by age group in the PVP.

VA

<i>Age cat</i>	<i>CO</i>	<i>CPR</i>	<i>95%CI Range</i>	<i>Affected Orbits</i>	<i>TPR</i>	<i>95%CI Range</i>	<i>Avg CO Stage</i>	<i>PH</i>	<i>CPR</i>	<i>95%CI Range</i>	<i>CF</i>	<i>CPR</i>	<i>95%CI Range</i>	<i>TPR</i>	<i>95%CI Range</i>	<i>Rickets</i>	<i>95%CI Range</i>	<i>Scurvy</i>	<i>95%CI Range</i>	<i>Nutri. deficiency</i>	<i>CPR</i>
Infants	2/2	100%	34.2-100	3/3	100%	43.9-100	1.5	1/2	50%	9.5-90.6	0/1	0%	0-79.4	0/2 (0%)	0-65.8	0/3	0-56.2	2/3	20.8-93.9	3/3	100%
Juveniles	1/1	100%	20.7-100	2/2	100%	34.2-100	1.5	1/1	100%	20.7-100	1/1	100%	20.7-100	2/2 (100%)	34.2-100	0/2	0-65.8	0/2	0-65.8	2/2	100%
Adol	2/2	100%	34.2-100	4/4	100%	51.0-100	1.5	1/2	50%	9.5-90.6	0/1	0%	0-79.4	0/1 (0%)	0-79.4	0/2	0-65.8	0/2	0-65.8	2/2	100%
YA	0/5	0%	0-43.5	0/10	0%	0-27.8	0.0	4/7	57.1%	25-84.2	2/6	33.3%	9.7-70	3/10 (33.3%)	10.8-60.3	1/8	2.2-47.1	4/8	21.5-78.5	5/8	62.5%
MA	3/8	38%	13.7-69.4	5/15	33.3%	15.2-58.3	1.5	4/11	36.4%	15.2-64.6	3/12	25%	8.9-53.2	3/19 (15.8%)	5.5-37.6%	3/18	5.8-39.2	4/18	9-45.2	10/18	55.6%

OA	2/4	50%	15-85	4/7	57.1%	25-84.2	1.0	1/4	25%	4.6-69.9	3/5	60%	23.1-88.2	4/10 (40%)	16.8-68.7%	0/7	0-35.4	1/7	2.6-51.3	3/7	42.9%
Total	10/22	45.5%	26.9-65.3	18/41	43.9%	29.9-59	1.4	11/27	40.7%	24.5-59.3	9/26	35%	19.4-53.8	12/44 (27.3%)	16.3-41.9%	4/40	3.9-23.1	11/40	16.1-42.8	25/40	62.5%

Table 12. Crude prevalence rates (CPRs) of each osteological indicator of nutritional deficiency by age group in the VA.

LNP

Age cat	CO	CPR	95%CI Range	Affected Orbits	TPR	95%CI Range	Avg CO Stage	PH	CPR	95%CI Range	CF	CPR	95%CI Range	TPR	95%CI Range	Rickets	95%CI Range	Scurvy	95%CI Range	nutritional deficiency	CPR
Infants	2/3	67%	20.8-93.9	2/4	50%	15-85	2.0	1/6	16.7%	3-56.4%	0/3	0%	0-56.2	0/6 (0%)	0-39	1/6	3-56.4	1/6	3-56.4	3/6	50%
Children	2/2	100%	34.2-100	3/3	100%	43.9-100	3.0	1/4	25.0%	4.6-69.9	0/2	0%	0-65.8	0/4 (0%)	0-49	0/4	0-49	1/4	4.6-69.9	3/4	75%
Juveniles	4/5	80.0%	37.6-96.4	8/9	88.9%	56.5-98	2.3	0/4	0.0%	0-49	1/2	50%	9.5-90.6	1/2 (50%)	9.5-90.6%	0/7	0-35.4	0/7	0-35.4	5/7	71.4%
Adol	1/1	100%	20.7-100	2/2	100%	34.2-100	NA	0/1	0.0%	0-79.4	1/1	100%	20.7-100	1/1 (100%)	20.7-100	0/1	0-79.4	0/1	0-79.4	1/1	100%
YA	9/11	82%	52.3-96.8	13/18	72.2%	49.1-87.5	1.4	5/11	45.5%	21.3-72%	3/12	25%	8.9-53.2%	4/21 (19%)	7.7-40%	1/17	1.1-27	4/17	9.6-47.3	11/17	64.7%
MA	7/12	58.3%	32-80.7	11/20	55%	34.2-74.2	1.3	5/30	16.7%	7.3-33.6%	3/22	13.6%	4.8-33.3%	3/32 (9.4%)	3.2-24.2%	0/43	0-8.2	4/43	3.7-21.6	12/43	27.9%
OA	10/11	90.9%	62.3-98.4	15/16	93.8%	71.7-98.9	1.4	4/13	30.8%	12.7-57.6%	1/11	9.1%	1.6-37.7%	1/18 (5.6%)	1-25.8%	0/17	0-18.4	3/17	6.2-41	10/17	58.8%
Total	35/45	78%	63.7-87.5	54/72	75%	63.9-83.6	1.6	16/73	21.9%	14-32.7%	6/45	13.3%	6.3-26.2%	9/54 (16.7%)	9-28.7%	2/106	0.5-6.6	13/106	7.3-19.9	45/106	42.5%

Table 13. Crude prevalence rates (CPRs) of each osteological indicator of nutritional deficiency by age group in the LNP.

PVP

Site	CO				PH				CF									
	Males	%	Females	%	All	%	Males	%	Females	%	All	%	Males	%	Females	%	All	%
Newark Bay	0/1	0	0/1	0	0/2	0	0/1	0	0/1	0	0/2	0	0/0	0	0/2	0	0/2	0

P value	0.721		0.284		0.514		0.051		0.261		0.051		0.308		0.392		0.207	
	<i>Scurvy</i>				<i>Rickets</i>				<i>Nutritional deficiency</i>									
Site	Males	%	Females	%	All	%	Males	%	Females	%	All	%	Males	%	Females	%	All	%
Brough of Gurness	0/0	0	0/1	0	0/1	0	0/0	0	0/1	0	0/1	0	0/0	0	1/1	100	1/1	100
Scar	1/1	100	0/1	0	1/3	33.3	0/1	0	0/1	0	0/3	0	1/1	100	1/1	100	3/3	100
Buckquoy	0/1	0	0/0	0	0/1	0	0/1	0	0/0	0	0/1	0	0/1	0	0/0	0	0/1	0
Brough Road	1/1	100	1/2	50	3/4	75	0/1	0	0/2	0	0/4	0	1/1	100	1/2	50	3/4	75
Westness	2/3	66.7	0/4	0	4/9	44.4	0/3	0	1/4	25	1/9	11.1	2/3	66.7	1/4	25	5/9	55.6
Newark Bay	0/6	0	1/12	8.3	1/21	4.8	1/6	16.7	2/12	16.7	3/21	14.3	3/6	50	6/12	50	11/21	52.4
Pierowall	2/2	100	0/0	0	2/2	100	0/2	0	0/0	0	0/2	0	2/2	100	0/0	0	2/2	100
Deerness	0/0	0	0/0	0	0/0	0	0/0	0	0/0	0	0/0	0	0/0	0	0/0	0	0/0	0
Skara Brae	0/0	0	0/0	0	0/0	0	0/0	0	0/0	0	0/0	0	0/0	0	0/0	0	0/0	0
P value	0.055		0.372		0.008		0.900		0.903		0.944		0.469		0.558		0.343	

Table 15. Crude prevalence rates (CPRs) and results of Chi2 statistical tests (p values) for comparing indicators of nutritional deficiency between VA sites, by sex. Statistically significant results (≤ 0.050) are provided in bold.

LNP																		
	<i>CO</i>						<i>PH</i>						<i>CF</i>					
Site	Males	%	Females	%	All	%	Males	%	Females	%	All	%	Males	%	Females	%	All	%
Skaill House	0/0	0	2/2	100	2/2	100	0/1	0	1/2	50	1/3	33.3	0/1	0	0/2	0	0/5	0
Bu of Cairston	9/10	90	9/13	69.2	25/31	80.6	5/16	31.3	4/18	22.2	11/57	19.3	3/13	23.1	3/20	15	6/40	15
Westness	0/0	0	0/1	0	0/1	0	0/0	0	0/1	0	0/1	0	0/0	0	0/0	0	0/0	0
Newark Bay	6/6	100	1/3	33.3	7/10	70	3/6	50	1/3	33.3	4/10	40	1/6	16.7	1/2	50	3/9	33.3
Deerness	0/1	0	0/0	0	1/2	50	0/1	0	0/0	0	0/2	0	0/0	0	0/0	0	0/0	0
P value	0.016		0.376		0.769		0.619		0.228		0.289		0.832		0.413		0.392	

	<i>Scurvy</i>				<i>Rickets</i>				<i>Nutritional deficiency</i>									
Site	Males	%	Females	%	All	%	Males	%	Females	%	All	%	Males	%	Females	%	All	%
Skaill House	0/2	0	1/2	50	1/4	25	0/2	0	0/2	0	0/4	0	0/2	0	2/2	100	2/4	50

Bu of Cairston	4/22	18.2	4/29	13.8	10/84	11.9	0/22	0	0/29	0	1/84	1.2	13/22	59.1	12/29	41.4	34/84	40.5
Westness	0/0	0	0/1	0	0/1	0	0/0	0	0/1	0	0/1	0	0/0	0	0/1	0	0/1	0
Newark Bay	2/9	22.2	0/3	0	2/15	13.3	1/9	11.1	0/3	0	1/15	6.7	6/9	66.7	1/3	33.3	8/15	53.3
Deerness	0/1	0	0/0	0	0/3	0	0/1	0	0/0	0	0/3	0	0/1	0	0/0	0	1/3	33.3
P value	0.909		0.046		0.401		0.432		NA		0.128		0.386		0.479		0.571	

Table 16. Crude prevalence rates (CPRs) and results of Chi2 statistical tests (p values) for comparing indicators of nutritional deficiency between LNP sites, by sex. Statistically significant results (≤ 0.050) are provided in bold.

Site	All phases																	
	CO						PH						CF					
	Males	%	Females	%	All	%	Males	%	Females	%	All	%	Males	%	Females	%	All	%
Brough of Gurness	0/0	0	1/1	100	1/1	100	0/0	0	0/1	0	0/1	0	0/0	0	0/0	0	0/0	0
Scar	1/1	100	1/1	100	2/2	100	1/1	100	0/0	0	1/2	50	1/1	100	1/1	100	2/2	100
Buckquoy	0/1	0	0/0	0	0/1	0	0/2	0	0/0	0	0/2	0	1/2	50	0/0	0	1/2	50
Brough Road	1/2	50	0/1	0	1/3	33.3	1/2	50	1/1	100	3/4	75	0/2	0	0/2	0	0/4	0
Westness	2/6	33.3	6/9	66.7	11/19	57.9	2/6	33.6	2/8	25	5/19	26.3	1/9	11.1	1/8	12.5	3/21	14.3
Newark Bay	19/32	59.4	20/38	52.6	92/146	63	15/37	40.5	18/44	40.9	65/175	37.1	11/41	26.8	10/35	28.6	31/150	20.7
Pierowall	1/2	50	0/0	0	1/2	50	2/2	100	0/0	0	2/2	100	0/0	0	0/0	0	0/0	0
Deerness	0/1	0	0/0	0	1/2	50	0/1	0	0/0	0	0/2	0	0/0	0	0/0	0	0/0	0
Skara Brae	0/0	0	0/1	0	0/1	0	0/0	0	1/1	100	1/1	100	0/0	0	0/1	0	0/1	0
Skail House	0/0	0	2/2	100	2/2	100	0/1	0	1/2	50	1/3	33.3	0/1	0	0/2	0	0/3	0
Bu of Cairston	9/10	90	9/13	69.2	25/31	80.6	5/16	31.3	4/18	22.2	11/57	19.3	3/13	23.1	3/20	15	6/40	15
Skail Cist	1/1	100	0/0	0	1/1	100	0/1	0	0/0	0	0/1	0	0/0	0	0/0	0	0/0	0
P value	0.227		0.385		0.445		0.472		0.341		0.104		0.452		0.388		0.093	

Site	Scurvy				Rickets				Nutritional deficiency									
	Males	%	Females	%	All	%	Males	%	Females	%	All	%	Males	%	Females	%	All	%
Brough of Gurness	0/0	0	0/1	0	0/1	0	0/0	0	0/1	0	0/1	0	0/0	0	1/1	100	1/1	100
Scar	1/1	100	0/1	0	1/3	33.3	0/1	0	0/1	0	0/3	0	1/1	100	1/1	100	3/3	100
Buckquoy	0/2	0	0/0	0	0/2	0	0/2	0	0/0	0	0/2	0	1/2	50	0/0	0	1/2	50

Brough Road	1/3	33.3	1/3	33.3	3/8	37.5	0/3	0	0/3	0	0/8	0	2/3	66.7	1/3	33.3	4/8	50
Westness	2/10	20	0/11	0	4/28	14.3	1/10	10	1/11	9.1	2/28	7.1	3/10	30	6/11	54.5	12/28	42.9
Newark Bay	7/64	10.9	12/66	18.2	33/256	12.9	3/64	4.7	6/66	10	41/256	16	27/64	42.2	34/66	51.5	136/256	53.1
Pierowall	2/2	100	0/0	0	2/2	100	0/2	0	0/0	0	0/2	0	2/2	100	0/0	0	2/2	100
Deerness	0/1	0	0/0	0	0/3	0	0/1	0	0/0	0	0/3	0	0/1	0	0/0	0	1/3	33.3
Skara Brae	0/1	0	0/1	0	0/2	0	1/1	100	0/1	0	1/2	50	1/1	100	1/1	100	2/2	100
Skaill House	0/2	0	1/2	50	1/4	25	0/2	0	0/2	0	0/4	0	0/2	0	2/2	100	2/4	50
Bu of Cairston	4/22	18.2	4/29	13.8	10/84	11.9	0/22	0	0/29	0	1/84	1.2	13/22	59.1	12/29	41.4	34/84	40.5
Skaill Cist	0/1	0	0/0	0	0/1	0	0/1	0	0/0	0	0/1	0	1/1	100	0/0	0	1/1	100
P value	0.036		0.548		0.029		0.011		0.827		0.185		0.309		0.501		0.394	

Table 17. Crude prevalence rates (CPRs) and results of Chi2 statistical tests (p values) for comparing indicators of nutritional deficiency between site of all phases, by sex. Statistically significant results (≤ 0.050) are provided in bold.

PVP																
Males																
Pathology	Site Name		Pred Animal		Animal use		Pred Cereal		Fish		LCCODE		Plaggen		East/West	
	Chi ²	N	Chi ²	N	Chi ²	N	Chi ²	N	Chi ²	N	Chi ²	N	Chi ²	N	Chi ²	N
	(p)		(p)		(p)		(p)		(p)		(p)		(p)		(p)	
CO	0.268	7	NA	3	0.223	3	NA	7	0.571	7	0.101	8	NA	4	0.495	7
CO Stage	NA	6	NA		0.317	6	NA		NA	6	0.083	6	NA	4	0.488	6
PH	NA	2	NA	3	NA	3	NA	7	NA	7	NA	8	NA	4	NA	7
CF	0.190	7	NA	3	0.083	3	NA	7	0.088	7	0.190	7	NA	4	NA	7
Scurvy	NA	10	NA	10	NA	8	NA	4	NA	8	NA	10	NA	4	NA	8
Rickets	0.825	9	NA	4	NA	4	NA	8	NA	8	0.435	10	NA	4	NA	8
Nutri. deficiency	0.549	9	NA	4	0.368	4	NA	8	0.315	8	0.150	10	NA	4	0.408	8
Females																
Pathology	Site Type		Pred Animal		Animal use		Pred Cereal		Fish		LCCODE		Plaggen		East/West	
	Chi ²	N	Chi ²	N	Chi ²	N	Chi ²	N	Chi ²	N	Chi ²	N	Chi ²	N	Chi ²	N
	(p)		(p)		(p)		(p)		(p)		(p)		(p)		(p)	
CO	NA	5	NA	1	NA	1	NA	5	0.025	5	0.121	6	NA	1	0.025	5
CO Stage	NA		NA		NA		NA		NA	5	0.114	5	NA	1	NA	
PH	NA	5	NA	1	NA	1	NA	5	0.576	5	0.121	6	NA	1	0.576	5

CF	NA	6	NA	2	NA	2	NA	7	0.495	7	0.686	8	NA	1	0.495	7
Scurvy	NA	7	NA	3	NA	3	NA	9	NA	9	NA	10	NA	1	NA	9
Rickets	NA	7	NA	3	NA	3	NA	9	NA	9	NA	10	NA	1	NA	9
Nutri. deficiency	NA	7	NA	3	NA	3	NA	9	0.058	9	0.292	10	NA	1	0.058	9

Table 18. Statistical results of Chi2 tests (p values) comparing the prevalence of nutritional deficiency indicators between PVP sites with different subsistence profiles, by sex. Statistically significant results (≤ 0.050) are provided in bold.

		VA															
		Males															
Pathology	Site Name	Pred Animal		Animal use		Pred Cereal		Fish		LCCODE		Plaggen		East/West			
	Chi ²	N	Chi ²	N	Chi ²	N	Chi ²	N	Chi ²	N	Chi ²	N	Chi ²	N	Chi ²	N	
	(p)		(p)		(p)		(p)		(p)		(p)		(p)		(p)		
CO	0.361	5	NA	6	0.513	6	NA	8	NA	8	0.285	8	0.414	6	0.465	8	
CO Stage	NA		NA	7	0.761	5	NA	7	NA		NA	7	0.761	7	1.000	7	
PH	0.050	6	0.236	9	0.217	9	0.338	11	0.292	10	0.402	11	0.028	8	0.036	11	
CF	NA	3	0.212	7	0.35	7	0.134	9	0.537	8	0.276	9	0.439	6	0.134	9	
Scurvy	0.315	8	0.165	11	0.11	11	0.205	15	0.439	14	0.274	15	0.011	10	0.057	15	
Rickets	NA	8	0.740	11	0.73	11	0.782	15	0.773	14	0.966	15	0.389	10	0.268	15	
Nutri. deficiency	0.315	8	0.428	11	0.701	11	0.398	15	0.231	14	0.416	15	0.429	10	0.833	15	
		Females															
Pathology	Site Type	Pred Animal		Animal use		Pred Cereal		Fish		LCCODE		Plaggen		East/West			
	Chi ²	N	Chi ²	N	Chi ²	N	Chi ²	N	Chi ²	N	Chi ²	N	Chi ²	N	Chi ²	N	
	(p)		(p)		(p)		(p)		(p)		(p)		(p)		(p)		
CO	0.505	4	NA	8	0.537	8	NA	10	NA	10	0.206	11	0.453	9	0.898	11	
CO Stage	NA	8	NA	8	NA		NA	8	NA		NA	8	NA	8	0.845	8	
PH	0.046	4	NA	9	0.134	9	NA	11	NA	11	0.177	12	0.107	10	1.000	12	
CF	0.361	5	0.140	12	0.338	11	0.143	15	NA	14	0.223	15	0.338	11	0.439	15	
Scurvy	0.088	7	0.685	15	0.119	14	0.725	19	NA	18	0.133	20	0.101	15	0.639	20	
Rickets	0.495	7	0.685	15	0.533	14	0.656	19	NA	18	0.643	20	0.551	15	0.948	20	

Nutri. deficiency 0.809 7 0.333 15 1.000 14 0.279 19 NA 18 0.325 20 0.919 15 0.639 20

Table 19. Statistical results of Chi2 tests (p values) comparing the prevalence of nutritional deficiency indicators between VA sites with different subsistence profiles, by sex. Statistically significant results (≤ 0.050) are provided in bold.

LNP																
Males																
Pathology	Site Name		Pred Animal		Animal use		Pred Cereal		Fish		LCCODE		Plaggen		East/West	
	Chi ²	N	Chi ²	N	Chi ²	N	Chi ²	N	Chi ²	N	Chi ²	N	Chi ²	N	Chi ²	N
	(p)		(p)	(p)		(p)		(p)		(p)		(p)		(p)		(p)
CO	0.026	11	NA	7	NA	7	NA	7	NA	7	0.005	17	NA	17	0.787	17
CO Stage	NA				NA	13	NA	13			NA		NA	13	1.000	13
PH	NA	24	NA	8	0.408	8	0.408	8	NA	7	0.649	18	0.470	24	0.525	24
CF	0.588	14	NA	7	0.659	7	0.659	7	NA	6	0.608	20	0.608	20	0.807	20
Scurvy	0.804	24	NA	11	0.621	11	0.621	11	NA	10	0.789	33	0.632	33	0.858	33
Rickets	NA	24	NA	11	0.74	11	0.740	11	NA	10	0.967	33	0.858	33	0.124	33
Nutri. deficiency	0.275	24	NA	11	0.251	11	0.251	11	NA	10	0.236	33	0.237	33	0.853	33
Females																
Pathology	Site Name		Pred Animal		Animal use		Pred Cereal		Fish		LCCODE		Plaggen		East/West	
	Chi ²	N	Chi ²	N	Chi ²	N	Chi ²	N	Chi ²	N	Chi ²	N	Chi ²	N	Chi ²	N
	(p)		(p)	(p)		(p)		(p)		(p)		(p)		(p)		(p)
CO	0.512	14	NA	4	0.248	4	0.248	4	NA	3	0.446	17	0.446	17	0.210	17
CO Stage	NA	13			0.157	13	0.157	13			0.208	13	0.208	13	0.021	13
PH	0.086	19	NA	4	0.248	4	0.248	4	NA	3	0.095	22	0.095	22	0.800	22
CF	0.676	21	NA	3	0.386	3	0.386	3	NA	2	0.639	23	0.639	23	0.203	23
Scurvy	0.023	30	NA	4	0.046	4	0.046	4	NA	3	0.016	33	0.016	33	0.443	33
Rickets	NA	30	NA	4	NA	4	NA	4	NA	3	NA	33	NA	33	NA	33
Nutri. deficiency	0.245	30	NA	4	0.248	4	0.248	4	NA	3	0.237	33	0.237	33	0.738	33

Table 20. Statistical results of Chi2 tests (p values) comparing the prevalence of nutritional deficiency indicators between LNP sites with different subsistence profiles, by sex. Statistically significant results (≤ 0.050) are provided in bold.

Males												
<i>Pathology</i>	<i>Weapons</i>		<i>Combs</i>		<i>Daggers</i>		<i>Agricultural Tools</i>		<i>Gaming pieces</i>		<i>Any</i>	
	Chi ²	N	Chi ²	N	Chi ²	N	Chi ²	N	Chi ²	N	Chi ²	N
	(p)		(p)		(p)		(p)		(p)		(p)	
CO	0.414	6	0.273	6	0.273	6	0.361	5	NA	6	0.414	6
CO Stage	0.739	7	NA	7	NA	7	0.414	12	NA	7	0.739	7
PH	0.016	9	0.073	9	0.858	9	0.168	8	0.236	9	0.016	9
CF	0.635	9	0.134	9	0.453	9	0.453	9	0.134	9	0.635	9
Scurvy	0.004	12	0.021	13	0.913	13	0.371	12	0.522	13	0.004	12
Rickets	0.377	12	0.657	13	0.569	13	0.640	12	0.657	13	0.377	12
Nutri. deficiency	0.198	12	0.155	13	0.416	13	1.000	12	0.906	13	0.198	12

Females														
<i>Pathology</i>	<i>Textile tools</i>		<i>Combs</i>		<i>Daggers</i>		<i>Agricultural Tools</i>		<i>Gaming pieces</i>		<i>Jewellery</i>		<i>Any</i>	
	Chi ²	N	Chi ²	N	Chi ²	N	Chi ²	N	Chi ²	N	Chi ²	N	Chi ²	N
	(p)		(p)		(p)		(p)		(p)		(p)		(p)	
CO	0.521	11	0.521	11	0.087	11	0.425	11	0.521	11	0.782	11	0.782	11
CO Stage	NA		0.568	9	0.153	8	0.513	8	0.568	8	NA		0.845	8
PH	0.546	12	0.546	NA	0.546	12	0.371	12	0.546	12	0.248	12	0.248	12
CF	0.171	15	0.171	15	NA	15	0.171	15	NA	15	0.171	15	0.171	15
Scurvy	0.531	20	0.531	20	0.732	20	0.456	20	0.732	20	0.389	20	0.389	20
Rickets	0.335	20	0.335	20	0.666	20	0.531	20	0.666	20	0.718	20	0.718	20
Nutri. deficiency	0.531	20	0.531	20	0.305	20	0.264	10	0.305	20	0.606	20	0.606	20

Table 21. Statistical results of Chi2 tests (p values) comparing the prevalence of nutritional deficiency indicators between VA individuals with grave goods, by sex. Statistically significant results (≤0.050) are provided in bold.

5.4.2. Dental Pathology

Site	PVP													
	Average Attrition Stage							Average Calculus Stage						
	Males	N	Females	N	All	N	Males	N	Females	N	All	N		
Newark Bay	3	1	3	1	3	2	2	1	2	1	2	2		
Westness	2	4	2	5	1.8	11	1.75	3	1.4	5	1	10		
Skaill Cist	1	1	NA	0	1	1	1	1		0	1	1		
Skara Brae	3	1	1	1	2	2	3	1	1	1	2	2		
Buckquoy	1	1	NA	0	1	1	0	1		0	0	1		
Brough Road	3	1	NA	0	3	1	1	1		0	1	1		
P value	0.623		0.313		0.504		0.317		0.790		0.610			

Table 22. Average attrition and calculus stages for males and females from the various PVP sites, along with the results of statistical tests (p values). Statistically significant results (≤ 0.050) are provided in bold.

Site	Caries										Periodontal Disease							
	Males	%	TPR	%	Females	%	TPR	%	All	%	TPR	%	Males	%	Females	%	All	%
Newark Bay	1/1	100	1/11	9.1	0/1	0	0/6	0	1/2	50	1/17	5.9	1/1	100	1/1	100	2/2	100
Westness	1/4	25	1/125	0.7	2/5	40	5/115	4.3	3/11	27.3	6/269	2.2	4/4	100	5/6	83.3	11/13	84.6
Skaill Cist	0/1	0	0/31	0	0/0		NA		0/1	0	0/31	0	0/1	0	0/0		0/1	0
Skara Brae	0/1	0	0/7	0	0/1	0	0/32	0	0/2	0	0/39	0	0/1	0	0/1	0	0/2	0
Buckquoy	0/1	0	0/16	0	0/0		0/0	0	0/1	0	0/16	0	0/1	0	0/0		0/1	0
Brough Road	0/1	0	0/10	0	0/0		0/0		0/1	0	0/10	0	2/2	100	0/0		2/2	100
P value	0.924		0.964		0.350		1.000		0.769		0.938		0.230		0.571		0.278	

Site	AMTL									Abscesses								
	Males	%	Total No.	Females	%	Total No.	All	%	Total No.	Males	%	Total No.	Females	%	Total No.	All	%	Total No.
Newark Bay	0/1	0	0	1/1	100	100	1/2	50	6	1/1	100	2	1/1	100	2	2/2	100	4

Westness	1/4	25	2	3/5	60	11	4/11	36.4	13	0/4	0	0	2/5	40	3	2/11	18.2	3
Skaill Cist	0/1	0	0	0/0		0	0/1	0	0	0/1	0	0	0/0		0	0/1	0	0
Skara Brae	1/1	100	7	0/1	0	0	1/2	50	7	0/1	0	0	0/1	0	0	0/2	0	0
Buckquoy	1/1	100	1	0/0		0	1/1	100	1	0/1	0	0	0/0		0	0/1	0	0
Brough Road	1/2	50	15	0/0		0	1/2	50	15	0/2	0	0	0/0		0	0/2	0	0
P value	0.416		NA	0.350		0.750	0.820		0.540	0.075		NA	0.350		0.347	0.120		0.032

Table 23. Crude prevalence rates (CPRs) and true prevalence rates (TPRs) of dental pathologies among individuals from the various PVP sites, along with the results of statistical tests (p values). Statistically significant results (≤ 0.050) are provided in bold.

		VA											
		Average Attrition Stage						Average Calculus Stage					
Site	Males	N	Females	N	All	N	Males	N	Females	N	All	N	
Brough of Gurness	0	0	3	1	3	1	0	0	2	1	2	1	
Scar	1	1	0	0	1	3	0	1		0	0	1	
Buckquoy	NA	0	NA	0	NA	0		0		0		0	
Brough Road	3	1	2.5	2	3	4	3	1	1.5	2	3	4	
Westness	2.5	4	3	3	2	7	2	4	1	3	2	7	
Newark Bay	2	4	3	10	1	15	1	4	1	10	1	15	
Pierowall	3	2		0	3	2	0.5	2		0	0.5	2	
Deerness		0		0				0		0		0	
Skara Brae		0		0				0		0		0	
P value	0.351		0.903		0.220		0.436		0.826		0.609		

Table 24. Average attrition and calculus stages for males and females from the various VA sites, along with the results of statistical tests (p values). Statistically significant results (≤ 0.050) are provided in bold.

Site	Caries										Periodontal Disease							
	Males	%	TPR	%	Females	%	TPR	%	All	%	TPR	%	Males	%	Females	%	All	%
Brough of Gurness	0/0		NA		0/1	0	0/21	0	0/1	0	0/21	0	0/0		1/1	100	1/1	100

Scar	0/1	0	0/5	0	0/0		0/0		1/2	50	1/9	11.1	0/1	0	0/0		0/2	0
Buckquoy	0/0		NA		0/0		0/0		NA		NA		0/1	0	0/0		0/1	0
Brough Road	0/1	0	0/17	0	0/2	0	0/50	0	0/4	0	0/84	0	1/1	100	2/2	100	3/3	100
Westness	1/4	25	2/66	3	1/3	33.3	3/58	5.2	2/8	25	5/124	4	0/3	0	1/2	50	1/5	20
Newark Bay	1/4	25	1/81	1.2	4/10	40	9/212	4.2	5/15	33.3	10/293	3.4	2/4	50	9/10	90	11/15	73.3
Pierowall	0/2	0	0/6	0	0/0		0/0		0/2	0	0/6	0	0/1	0	0/0		0/1	0
Deerness	0/0		0/0		0/0		0/0		0/0		0/0		0/0		0/0		0/0	NA
Skara Brae	0/0		0/0		0/0		0/0		0/0		0/0		0/0		0/0		0/0	NA
P value	0.878		0.911		0.609		0.843		0.682		0.927		0.310		0.126		0.032	

Abscesses

Site	AMTL						Abscesses											
	Males	%	Total No.	Females	%	Total No.	All	%	Total No.	Males	%	Total No.	Females	%	Total No.	All	%	Total No.
Brough of Gurness	0/0			1/1	100	5	1/1	100	5	0/0	0	0	1/1	100	1	1/1	100	1
Scar	0/1	0	0	0/0		NA	0/2	0	0	0/1	0	0	0/0		0	0/2	0	0
Buckquoy	1/1	100	1	0/0		NA	1/1	100	12	0/1	0	0	0/0		NA	0/1	0	0
Brough Road	1/1	100	5	1/2	50	3	2/3	66.7	8	0/1	0	0	2/2	100	6	2/3	66.7	6
Westness	0/3	0	0	0/2	0	0	0/5	0	0	0/2	0	0	0/2	0	0	0/4	0	0
Newark Bay	2/4	50	6	3/9	33.3	5	5/14	35.7	11	3/4	75	5	3/10	30	10	6/15	40	15
Pierowall	0/1	0	0	0/0		0	0/1	0	0	0/1	0	0	0/0	NA	0	0/1	0	0
Deerness	0/0		0	0/0		0	0/0	NA	0	0/1	0	0	0/0	NA	0	0/1	0	0
Skara Brae	0/0		0	0/0		0	0/0	NA	0	0/0		0	0/0	NA	0	0/0	NA	0
P value	0.246		0.008	0.290		0.006	0.116		0.000	0.230		0.348	0.071		0.389	0.055		0.637

Table 25. Crude prevalence rates (CPRs) and true prevalence rates (TPRs) of dental pathologies among individuals from the various VA sites, along with the results of statistical tests (p values). Statistically significant results (≤ 0.050) are provided in bold.

LNP

Site	Males	Average Attrition Stage					Average Calculus Stage					
		N	Females	N	All	N	Males	N	Females	N	All	N
Skail House	3	1	3	3	3	4	2	1	3	3	2.5	4
Bu of Cairston	3	21	3	27	2	70	1	21	1	28	1	71
Westness	NA	0	3	1	3	1		0	0	1	0	1

Newark Bay	3	5	3	3	3	9	2	5	2	3	2	9
Deerness	1	1		0	2	2	2	1	NA	0	2	1
P value	0.210		0.279		0.554		0.800		0.293		0.114	

Table 26. Average attrition and calculus stages for males and females from the various LNP sites, along with the results of statistical tests (p values). Statistically significant results (≤ 0.050) are provided in bold.

Site	Caries								Periodontal Disease									
	Males	%	TPR	%	Females	%	TPR	%	All	%	TPR	%	Males	%	Females	%	All	%
Skaill House	0/1	0	0/0	0	2/3	66.7	4/35	11.4	2/4	50	4/51	7.8	0/0		1/2	50	1/2	50
Bu of Cairston	2/20	10	4/370	1.1	5/28	17.9	10/419	2.4	12/70	17.1	27/1080	2.5	4/16	25	2/24	8.3	6/51	11.8
Westness	0/0		0/0	0	0/1	0	0/16	0	0/1	0	0/16	0	0/0		0/1	0	0/1	0
Newark Bay	2/5	40	5/94	5.3	2/3	66.7	5/63	7.9	4/9	44.4	10/173	5.8	3/3	100	4/5	80	7/8	87.5
Deerness	0/1	0	0	0	0/0		0/0		0/2	0	0/32	0	0/1	0	0/0		0/1	0
P value	0.492		0.395		0.011		0.007		0.081		0.094		0.032		0.000		0.000	

Site	AMTL						Abscesses														
	Males	%	Total No.	Females	%	Total No.	All	%	Total No.	Males	%	Total No.	Females	%	Total No.	All	%	Total No.			
Skaill House	1/1	100	16	2/2	100	29	3/3	100	45	0/2	0	0	2/2	100	3	2/4	50	3			
Bu of Cairston	4/16	25	9	7/24	29.2	32	12/50	24	43	5/20	25	8	6/27	22.2	12	12/69	17.4	21			
Westness	0/0	NA	0	0/1	0	0	0/1	0	0	0/0		0	0/1	0	0	0/1	0	0			
Newark Bay	3/5	60	22	2/3	66.7	8	5/8	62.5	30	3/5	60	8	3/3	100	7	6/8	75	15			
Deerness	0/1	0	0	0/0		0	0/1	0	0	0/1	0	0	0/0		0	0/1	0	0			
P value	0.142		0.018		0.174		0.006		0.027		0.437		0.213		0.008		0.007		0.013		0.001

Table 27. Crude prevalence rates (CPRs) and true prevalence rates (TPRs) of dental pathologies among individuals from the various LNP sites, along with the results of statistical tests (p values). Statistically significant results (≤ 0.050) are provided in bold.

	PVP															
	Males															
	<i>Site Name</i>		<i>Pred. Animal</i>		<i>Animal use</i>		<i>Pred. Cereal</i>		<i>Fish</i>		<i>LCCODE</i>		<i>Plaggen</i>		<i>East/West</i>	
Pathology	Chi ²	N	Chi ²	N	Chi ²	N	Chi ²	N	Chi ²	N	Chi ²	N	Chi ²	N	Chi ²	N
	(p)		(p)		(p)		(p)		(p)		(p)		(p)		(p)	
Calc scale	0.368	8	NA		1.000	8	NA		0.136	8	0.261	8	NA	4	0.343	8
Caries	0.877	8	NA	3	NA	3	NA	7	0.792	7	0.638	9	NA	4	0.659	7
No. caries	0.928	7	NA		NA	3	NA		0.871	7	0.799	8	NA	4	0.721	7
AMTL	0.549	9	NA	4	0.513	4	NA	8	0.264	8	0.549	10	NA	4	0.285	8
No. AMTL	0.605	9	NA		0.893	4	NA		0.839	8	0.506	10	NA	4	0.583	8
Periodontal disease	0.145	9	NA	4	0.135	4	NA	8	0.368	8	0.659	10	NA	4	0.285	8
Abscesses	NA	9	NA	4	0.135	4	NA	8	0.018	8	0.574	10	NA	4	0.005	8
No. Abscess	NA	9	NA		0.423	4	NA		NA	8	0.662	10	NA	4	NA	8
Avg Wear	0.368	9	NA		0.480	9	NA		0.527	9	0.641	9	NA	4	0.403	9

	Females															
	<i>Site Name</i>		<i>Pred Animal</i>		<i>Animal use</i>		<i>Pred Cereal</i>		<i>Fish</i>		<i>LCCODE</i>		<i>Plaggen</i>		<i>East/West</i>	
Pathology	Chi ²	N	Chi ²	N	Chi ²	N	Chi ²	N	Chi ²	N	Chi ²	N	Chi ²	N	Chi ²	N
	(p)		(p)		(p)		(p)		(p)		(p)		(p)		(p)	
Calc scale	NA		NA		NA		NA		NA	7	0.6	7	NA	1		
Caries	NA	6	NA	1	NA	1	NA	6	0.273	6	0.35	7	NA	1	0.273	6
No. caries	NA		NA		NA		NA		1.000	6	NA	0	NA	1	1.000	6
AMTL	NA	6	NA	1	NA	1	NA	6	0.273	6	0.35	7	NA	1	0.273	6
No. AMTL	NA		NA		NA		NA		0.581	6	0.61	7	NA	1	0.581	6
Periodontal disease	NA	6	NA	1	NA	1	NA	6	0.439	6	0.495	7	NA	1	0.439	6
Abscesses	NA	6	NA	1	NA	1	NA	6	0.273	6	0.35	7	NA	1	0.273	6
No. Abscess	NA		NA		NA		NA		0.226	6	0.468	7	NA	1	0.226	6
Avg Wear	NA		NA		NA		NA		NA	7	0.163	7	NA	1		

Table 28. Statistical results of Chi2 tests (p values) comparing the prevalence of dental pathologies between PVP individuals from sites with different subsistence practices, by sex. Statistically significant results (≤ 0.050) are provided in bold.

Pathology	VA															
	Males															
	Site Name		Pred. Animal		Animal use		Pred. Cereal		Fish		LCCODE		Plaggen		East/West	
	Chi ²	N	Chi ²	N	Chi ²	N	Chi ²	N	Chi ²	N	Chi ²	N	Chi ²	N	Chi ²	N
	(p)		(p)		(p)		(p)		(p)		(p)		(p)		(p)	
Calc scale	0.264	12	0.248	12	0.676	7	0.221	12	NA	12	0.221	12	1.000	12	0.482	12
Caries	0.659	7	0.686	8	0.710	8	0.640	12	NA	11	0.787	12	0.350	7	0.793	12
No. caries	0.721	7	0.736	8	0.799	7	0.695	12	NA	NA	0.851	12	0.437	7	0.826	12
AMTL	0.050	6	0.285	8	0.549	8	0.428	11	0.197	10	0.211	11	0.659	7	0.819	11
No. AMTL	0.001	6	0.506	8	0.396	7	0.587	11	0.001	10	0.001	11	NA	7	0.502	11
Periodontal disease	0.050	6	0.408	8	0.237	8	0.521	11	0.490	10	0.329	11	0.659	7	0.387	11
Abscesses	0.082	5	0.285	8	0.202	8	0.389	10	0.343	9	0.414	10	0.270	7	0.197	10
No. Abscess	0.137	6	0.509	8	0.382	7	0.589	11	0.567	10	0.798	11	NA	7	0.035	11
Avg Wear	0.429	12	0.131	12	0.195	7	0.102	12	NA	12	0.414	12	0.186	12	0.170	12
	Females															
	Site Name		Pred. Animal		Animal use		Pred. Cereal		Fish		LCCODE		Plaggen		East/West	
	Chi ²	N	Chi ²	N	Chi ²	N	Chi ²	N	Chi ²	N	Chi ²	N	Chi ²	N	Chi ²	N
	(p)		(p)		(p)		(p)		(p)		(p)		(p)		(p)	
Calc scale	NA	17	NA	17	NA	17	NA	17	NA	17	1.000	17	0.917	17	0.720	17
Caries	0.495	7	NA	12	0.273	12	NA	16	NA	16	0.468	17	0.305	13	0.252	17
No. caries	0.576	7	NA		0.460	12	NA		NA	17	0.660	17	0.483	13	0.513	17
AMTL	0.540	6	NA	11	0.658	11	NA	14	NA	14	0.269	15	0.793	12	1.000	15
No. AMTL	0.910	6	NA		0.297	11	NA		NA	17	0.002	15	0.710	12	0.346	15
Periodontal disease	0.221	6	NA	12	0.640	12	NA	15	NA	15	0.653	16	0.657	13	0.247	16
Abscesses	0.083	6	NA	12	0.067	12	NA	15	NA	15	0.046	16	0.097	13	0.424	16

No. Abscess	0.098	6	NA	0.226	12	NA	NA	17	0.299	16	0.200	13	0.868	16
Avg Wear	NA	17	NA	27	NA	17	NA	17	0.642	17	0.627	17	1.000	17

Table 29. Statistical results of Chi2 tests (p values) comparing the prevalence of dental pathologies between VA individuals from sites with different subsistence practices, by sex. Statistically significant results (≤ 0.050) are provided in bold.

LNP																
Males																
Pathology	Site Name		Pred. Animal		Animal use		Pred. Cereal		Fish		LCCODE		Plaggen		East/West	
	Chi ²	N	Chi ²	N	Chi ²	N	Chi ²	N	Chi ²	N	Chi ²	N	Chi ²	N	Chi ²	N
	(p)		(p)	(p)		(p)		(p)		(p)		(p)		(p)		(p)
Calc scale	NA	22	NA		0.817	29	0.817	29	NA	7	NA		0.492	29	0.749	29
Caries	0.896	22	NA	8	0.537	8	0.537	8	NA	7	0.836	28	0.678	28	0.212	28
No. caries	0.909	22	NA		0.613	8	0.613	8	NA		0.857	28	0.697	28	0.146	28
AMTL	0.567	17	NA	7	NA	7	NA	7	NA	7	0.455	23	NA	23	0.136	23
No. AMTL	0.005	23	NA		0.544	9	0.544	9	NA		0.119	29	0.040	29	0.101	29
Periodontal disease	0.567	17	NA	7	NA	7	NA	7	NA	7	0.412	23	NA	23	0.036	23
Abscesses	0.619	23	NA	9	0.257	9	0.257	9	NA	7	0.529	29	0.366	29	0.299	29
No. Abscess	0.726	23	NA		0.36	9	0.360	9	NA		0.649	29	0.453	29	0.089	29
Avg Wear	NA		NA		0.453	29	0.453	29	NA	7	NA		0.577	29	0.153	29
Females																
Pathology	Site Name		Pred. Animal		Animal use		Pred. Cereal		Fish		LCCODE		Plaggen		East/West	
	Chi ²	N	Chi ²	N	Chi ²	N	Chi ²	N	Chi ²	N	Chi ²	N	Chi ²	N	Chi ²	N
	(p)		(p)	(p)		(p)		(p)		(p)		(p)		(p)		(p)
Calc scale	NA	33	NA		0.543	33	0.543	33	NA	3	0.212	33	0.212	33	0.399	33
Caries	0.008	30	NA	5	0.361	5	0.361	5	NA	3	0.017	33	0.017	33	0.108	33
No. caries	0.010	30	NA		0.822	5	0.822	5	NA		0.036	33	0.036	33	0.046	33
AMTL	0.137	25	NA	4	0.505	4	0.505	4	NA	3	0.172	28	0.172	28	0.236	28
No. AMTL	0.002	28	NA		0.334	5	0.334	5	NA		0.001	31	0.001	31	0.883	31

Periodontal disease	0.006	25	NA	4	NA	4	NA	4	NA	3	0.051	28	0.051	28	0.000	28
Abscesses	0.078	28	NA	4	0.868	4	NA	4	NA	3	0.141	31	0.141	31	0.008	31
No. Abscess	0.018	27	NA		0.334	4	0.868	4	NA		0.244	30	0.244	30	0.005	30
Avg Wear	NA	32	NA		1.000	32	1.000	32	NA	3	0.338	32	0.338	32	0.233	32

Table 30. Statistical results of Chi2 tests (p values) comparing the prevalence of dental pathologies between LNP individuals from sites with different subsistence practices, by sex. Statistically significant results (≤ 0.050) are provided in bold.

Pathology	Males													
	Weapons		Combs		Daggers		Agricultural Tools		Gaming pieces		Any			
	Chi ² (p)	N	Chi ² (p)	N	Chi ² (p)	N	Chi ² (p)	N	Chi ² (p)	N	Chi ² (p)	N	Chi ² (p)	N
Calc scale	0.658	12	0.890	12	0.268	12	0.221	12	0.197	12	0.658	12		
Caries	1.000	10	0.429	10	0.598	10	0.047	9	0.598	10	1.000	10		
No. caries	0.667	10	0.515	10	0.667	10	0.002	9	0.667	10	0.667	10		
AMTL	0.598	10	0.747	10	0.053	10	0.453	9	0.389	10	0.598	10		
No. AMTL	0.625	10	0.941	10	0.002	10	0.629	9	0.565	10	0.625	10		
Periodontal disease	0.260	10	0.490	10	0.490	10	0.571	9	0.490	10	0.260	10		
Abscesses	0.099	9	0.858	9	0.858	9	NA	8	0.343	9	0.099	9		
No. Abscess	0.011	10	0.383	10	0.383	10	0.541	9	0.567	10	0.011	10		
Avg Wear	0.650	12	0.671	12	0.345	12	0.301	12	0.131	12	0.650	12		

Pathology	Females													
	Textile tools		Combs		Daggers		Agricultural Tools		Gaming pieces		Jewellery		Any	
	Chi ² (p)	N	Chi ² (p)	N	Chi ² (p)	N	Chi ² (p)	N	Chi ² (p)	N	Chi ² (p)	N	Chi ² (p)	N
Calc scale	NA		0.390	17	0.520	17	0.261	17	0.199	17	NA		0.766	17
Caries	0.496	17	0.496	17	0.506	17	0.870	17	0.506	17	0.825	17	0.825	17
No. caries	0.412	17	0.412	17	0.620	17	0.706	17	0.620	17	0.945	17	0.945	17
AMTL	0.283	15	0.283	15	0.143	15	1.000	15	0.464	15	0.680	15	0.680	15
No. AMTL	0.402	15	0.402	15	0.001	15	0.321	15	0.571	15	0.572	15	0.572	15
Periodontal disease	0.226	16	0.226	16	0.620	16	0.473	16	0.032	16	0.064	16	0.064	16

Abscesses	0.242	16	0.242	16	0.182	16	0.869	16	0.424	16	0.551	16	0.551	16
No. Abscess	0.402	16	0.402	16	0.973	16	0.466	16	0.570	16	0.325	16	0.325	16
Avg Wear	NA		0.353	17	0.525	17	0.695	17	0.525	17	NA		1.000	17

Table 31. Statistical results of Chi2 tests (p values) comparing the prevalence of dental pathologies between VA individuals with and without grave goods, by sex. Statistically significant results (≤ 0.050) are provided in bold.

5.4.3. Developmental Stress

PVP													
Site	Males	%	TPR		Females	%	TPR	%	All	%	TPR	%	
Newark Bay	0/1	0	0/6	0	0/0		0/0		0/1	0	0/6	0	
Westness	2/3	66.7	4/94	4.3	3/5	60	13/115	27.8	6/10	60	21/238	8.8	
Skaill Cist	1/1	100	7/31	22.6	0/0		0/0		1/1	100	7/31	22.6	
Skara Brae	0/0		0/0		0/1	0	0/32	0	0/1	0	0/32	0	
Buckquoy	1/1	100	2/16	12.5	0/0		0/0		1/1	100	2/16	12.5	
Brough Road	0/1	0	0/10	0	0/0		0/0		0/1	0	0/10	0	
P value	0.370				0.273				0.402				
VA													
Site	Males	%	TPR	%	Females	%	TPR	%	All	%	TPR	%	
Brough of Gurness	0/0		0/0		1/1	100	2/21	9.5	1/1	100	2/21	9.5	
Scar	0/1	0	0/5	0	0/0		0/0		0/2	0	0/9	0	
Buckquoy	0/0		0/0		0/0		0/0		0/0		0/0		
Brough Road	0/1	0	0/17	0	1/2	50	8/50	16	1/4	25	8/84	9.5	
Westness	1/3	33.3	1/66	1.5	2/3	66.7	11/58	19	3/8	37.5	12/168	7.1	
Newark Bay	3/4	75	9/81	11.1	1/10	10	3/212	1.4	4/15	26.7	12/293	4.1	
Pierowall	1/2	50	1/6	16.7	0/0		0/0		1/2	50	1/6	16.7	
Deerness	0/0		0/0		0/0		0/0		0/2	0	0/19	0	
Skara Brae	0/0		0/0		0/0		0/0		0/0		0/0		
P value	0.514				0.142				0.603				
LNP													

Site	Males	%	TPR	%	Females	%	TPR	%	All	%	TPR	%
Skaill House	0/0		0/0		0/1	0	0/18	0	0/1	0	0/18	0
Bu of Cairston	7/21	33.3	11/370	3	4/28	14.3	19/419	4.5	24/79	30.4	87/1156	7.5
Westness	0/0		0/0		0/1	0	0/16	0	0/1	0	0/16	0
Newark Bay	1/4	25	1/83	1.2	0/3	0	0/63	0	2/8	25	2/162	1.2
Deerness	1/1	100	7/32	21.9	0/0		0/0		2/2	100	19/44	43.2
P value	0.356		0.000		0.721				0.179			

Table 32. Crude and true prevalence rates (CPRs and TPRs) of LEHs among individuals from each site within each phase, by sex, along with the results of chi2 statistical tests (p values). Statistically significant results (≤ 0.050) are provided in bold.

Site type/ Subsistence	PVP				VA				LNP			
	Males		Females		Males		Females		Males		Females	
	Chi ² (p)	N	Chi ² (p)	N	Chi ² (p)	N	Chi ² (p)	N	Chi ² (p)	N	Chi ² (p)	N
Site name	0.392	6	NA	6	0.439	6	0.809	7	0.176	22	0.684	29
Pred. animal	NA	3	NA	0	0.285	8	NA	12	NA	5	NA	4
Animal use	0.223	3	NA	0	0.549	8	0.166	12	NA	4	NA	5
Pred. cereal	NA	6	NA	5	0.338	11	NA	16	NA	5	NA	4
Fish	0.368	6	NA	5	NA	10	NA	16	NA	5	NA	3
LC code	0.646	7	0.273	6	0.361	11	0.198	17	0.161	26	0.701	32
Plaggen	NA	4	NA	1	0.270	7	0.326	13	NA	26	0.701	32
East/west	0.273	6	NA	5	0.376	11	0.036	17	0.778	26	0.492	32

Table 33. Statistical results of Chi2 tests (p values) comparing the prevalence of LEHs between individuals from PVP, VA and LNP sites with different subsistence practices, by phase and sex. Statistically significant results (≤ 0.050) are provided in bold.

Sex	Path	Males		Females	
		ANOVA p	N	ANOVA p	N
Textile tools	LEH	NA	0	0.020	17
	No. of LEHs	NA	0	0.024	17
Combs	LEH	0.020	17	0.151	9
	No. of LEHs	0.024	17	0.273	9
Daggers	LEH	0.343	9	0.110	17
	No. of LEHs	0.480	9	0.838	17
Agricultural Tools	LEH	0.285	8	0.003	17

Gaming pieces	No. of LEHs	0.881	8	0.045	17
	LEH	0.343	9	0.506	17
Jewellery	No. of LEHs	0.480	9	0.623	17
	LEH	NA	0	0.022	17
Weapons	No. of LEHs	NA	0	0.142	17
	LEH	0.294	9	NA	0
Any	No. of LEHs	0.141	9	NA	0
	LEH	0.294	9	0.022	17
	No. of LEHs	0.141	9	0.142	17

Table 34. Statistical results of Chi2 and ANOVA tests (p values) comparing the prevalence and numbers of LEHs between VA with different grave goods, by sex. Statistically significant results (≤ 0.050) are provided in bold.

5.4.4. Evidence of Load-bearing and occupational stress

Age cat Subadults (juvs and adol)	OA		Verts		Shoulders		Hands		PVP Knees		Feet		Elbows		Hips		Jaw		Sterno.	
		%		%		%		%		%		%		%		%		%		%
	2/4	50%	1/3	33.3%	0/2	0%	0/3	0%	0/3	0%	0/3	0%	0/2	0%	1/3	33.3%	0/2	0%	0/2	0%
YA	4/5	80%	3/4	75%	3/5	60%	0/4	0%	1/4	25%	1/4	25%	0/5	0%	4/5	80%	0/5	0%	2/5	40%
MA	9/9	100%	9/9	100%	1/6	16.7%	0/6	0%	1/8	12.5%	3/6	50%	1/8	12.5%	2/7	28.6%	0/7	0%	2/5	40%
OA	4/4	100%	4/4	100%	2/4	50%	1/3	33.3%	1/3	33.3%	0/3	0%	1/4	25%	2/3	66.7%	0/4	0%	2/4	50%
Total	19/22	86.4%	17/20	85%	6/17	35.3%	1/16	6.3%	3/18	16.7%	4/16	25%	2/19	10.5%	9/18	50%	0/18	0%	6/16	37.5%

Age cat Subadults (juvs and adol)	OA		Verts		Shoulders		Hands		VA Knees		Feet		Elbows		Hips		Jaw		Sterno.	
		%		%		%		%		%		%		%		%		%		%
	1/5	20%	1/2	50%	0/2	0%	0/3	0%	0/3	0%	0/3	0%	0/2	0%	0/3	0%	0/4	0%	1/2	50%
YA	2/8	25.0%	2/5	40%	1/4	25%	0/6	0%	0/5	0%	0/4	0%	0/5	0%	1/6	16.7%	0/5	0%	1/4	25%
MA	16/20	80.0%	11/15	73.3%	6/14	42.9%	5/15	33.3%	2/12	16.7%	3/12	25%	2/13	15.4%	7/14	50.0%	2/8	25%	4/11	36.4%
OA	7/9	77.8%	5/6	83.3%	3/7	42.9%	3/7	42.9%	2/8	25%	2/6	33.3%	1/6	16.7%	3/7	42.9%	1/5	20%	2/6	33.3%
Total	26/42	61.9%	19/28	67.9%	10/27	37%	8/31	25.8%	4/28	14%	5/25	20%	3/26	11.5%	11/30	36.7%	3/22	14%	8/23	34.8%

		LNP																			
Age cat	OA	%	Verts	%	Shoulders	%	Hands	%	Knees	%	Feet	%	Elbows	%	Hips	%	Jaw	%	Sterno.	%	
Subadults (juvs and adol)	0/12	0%	0/3	0%	0/5	0%	0/4	0%	0/7	0%	0/4	0%	0/7	0%	0/8	0%	0/7	0%	0/5	0%	
YA	10/17	58.8%	6/11	54.5%	2/12	16.7%	2/13	15.4%	0/15	0%	3/8	37.5%	2/13	15.4%	3/14	21%	0/14	0%	3/10	30%	
MA	22/45	48.9%	6/17	35.3%	4/24	16.7%	7/27	25.9%	4/29	13.8%	2/27	7.4%	5/28	17.9%	10/27	37.0%	2/25	8%	4/14	28.6%	
OA	11/20	55%	6/9	66.7%	7/12	58%	4/13	30.8%	2/16	12.5%	3/10	30.0%	3/11	27.3%	6/14	43%	0/16	0%	2/7	29%	
Total	43/92	46.7%	18/40	45.0%	13/53	24.5%	13/57	22.8%	6/67	9.0%	8/49	16.3%	10/59	16.9%	19/63	30.2%	2/62	3.2%	9/36	25.0%	

		All Phases																			
Age cat	OA	%	Verts	%	Shoulders	%	Hands	%	Knees	%	Feet	%	Elbows	%	Hips	%	Jaw	%	Sterno.	%	
Subadults (juvs and adol)	14/54	26%	10/34	29.4%	1/31	3.2%	1/31	3.2%	0/37	0%	3/32	9.4%	1/32	3.1%	2/39	5.1%	0/30	0%	3/32	9%	
YA	21/45	46.7%	14/31	45.2%	8/27	30%	3/30	10.0%	2/32	6.3%	5/21	23.8%	3/30	10.0%	9/31	29.0%	0/30	0%	6/22	27.3%	
MA	84/139	60.4%	49/74	66.2%	24/78	30.8%	23/72	31.9%	13/79	16.5%	18/73	24.7%	15/85	17.6%	34/80	42.5%	7/68	10.3%	22/55	40%	
OA	44/57	77.2%	33/41	80.5%	22/42	52%	16/40	40.0%	14/43	32.6%	12/35	34.3%	14/39	35.9%	19/45	42.2%	4/43	9.3%	11/33	33.3%	
Total	163/295	55%	106/180	58.9%	55/178	30.9%	43/173	24.9%	29/191	15.2%	38/161	23.6%	33/186	17.7%	64/195	32.8%	11/171	6.4%	42/142	29.6%	

Table 35. CPRs of osteoarthritis by age group, by phase.

		PVP																			
		<i>Platymeria</i>								<i>Platycnemias</i>								<i>OD</i>			
Site	Males	%	Females	%	All	%	Males	%	Females	%	All	%	Males	%	Females	%	All	%			
Newark Bay	0/0		1/2	50	1/2	50	0/0		1/2	50	1/2	50	0/0		0/2	0	0/2	0			
Westness	2/4	50	3/4	75	5/8	62.5	0/4	0	0/4	0	0/8	0	0/4	0	1/5	20	1/10	10			
Skaill Cist	0/0		0/0		0/0		0/0		0/0		0/0		0/1	0	0/0		0/1	0			
Skara Brae	0/0		0/0		0/0		0/0		0/0		0/0		0/1	0	0/0		0/1	0			
Buckquoy	1/1	100	0/0		1/1	100	0/1	0	0/0		0/1	0	0/0		0/0		0/0				
Brough Road	0/2	0	0/0		0/3	0	0/2	0	0/0		0/2	0	0/2	0	0/0		0/3	0			
P value	0.233		0.54		0.212		NA		0.121		0.114		NA		0.495		0.946				

		OA				OA_Verts				OA_Shoulder				OA_Hands									
Site	Males	%	Females	%	All	%	Males	%	Females	%	All	%	Males	%	Females	%	All	%					
Newark Bay	1/1	100	3/3	100	4/4	100	1/1	100	3/3	100	4/4	100	0/1	0	2/2	100	2/3	67	0/0	0/2	0	0/2	0

Westness	3/4	75	6/6	100	9/11	81.8	3/4	75	6/6	100	9/11	82	2/4	50	3/5	60	5/10	50	0/4	0	1/4	25	1/9	
Skaill Cist	1/1	100	0/0		1/1	100	0/0		0/0		0/0		0/1	0	0/0		0/1	0	0/0		0/0		0/0	
Skara Brae	1/1	100	0/1	0	1/2	50	1/1	100	0/1	0	1/2	50	0/1	0	0/1	0	0/2	0	0/0		0/1	0	0/1	0
Buckquoy	1/1	100	0/0		1/1	100	1/1	100	0/0		1/1	100	1/1	100	0/0		1/1	100	0/1	0	0/0		0/1	0
Brough Road	2/2	100	0/0		3/3	100	2/2	100	0/0		2/2	100	0/1	0	0/0		0/1	0	0/2	0	0/0		0/3	0
P value	0.893		0.007		0.570		0.843		0.007		0.518		0.443		0.237		0.301		NA		0.646		0.934	

Site	<i>OA_Knees</i>				<i>OA_Feet</i>				<i>OA_Elbows</i>				<i>OA_Hips</i>													
	Males	%	Females	%	All	%	Males	%	Females	%	All	%	Males	%	Females	%	All	%	Males	%	Females	%	All	%		
Newark Bay	0/0		1/2	50	1/2	50	0/0		1/2	50	1/2	50	0/0		0/2	0	0/2	0	0/0		0/2	0	0/2	0	0/2	0
Westness	0/4	0	1/5	20	1/10	10	1/4	25	2/4	50	3/9	33.3	1/4	25	1/6		2/11		2/4	50	4/5	80	6/10	60		
Skaill Cist	0/0		0/0		0/0		0/0		0/0		0/0		0/1	0	0/0		0/1	0	1/1	100	0/0		1/1	100		
Skara Brae	0/1	0	0/1	0	0/2	0	0/0		0/1	0	0/1	0	0/1	0	0/1	0	0/2	0	0/0		0/1	0	0/1	0		
Buckquoy	1/1	100	0/0		1/1	100	0/1	0	0/0		0/1	0	0/1	0	0/0		0/1	0	1/1	100	0/0		1/1	100		
Brough Road	0/2	0	0/0		0/3	0	0/2	0	0/0		0/3	0	0/2	0	0/0		0/2	0	0/2	0	0/0		1/3	33.3		
P value	0.046		0.587		0.095		0.646		0.646		0.615		0.843		0.755		0.898		0.261		0.091		0.333			

Site	<i>OA_Jaw</i>				<i>OA_Sternocostal</i>							
	Males	%	Females	%	All	%	Males	%	Females	%	All	%
Newark Bay	0/1	0	0/1	0	0/2	0	0/0		0/1	0	0/1	0
Westness	0/4	0	0/5	0	0/10	0	2/4	50	2/5	40	4/10	40
Skaill Cist	0/1	0	0/0		0/1	0	0/1	0	0/0		0/1	0
Skara Brae	0/1	0	0/1	0	0/2	0	1/1	100	0/1	50	1/2	50
Buckquoy	0/1	0	0/0		0/1	0	1/1	100	0/0		1/1	100
Brough Road	0/2	0	0/0		0/2	0	0/1	0	0/0		0/1	0
P value	NA		NA		NA		0.406		0.571		0.604	

Site	Squatting facets						Mandibular Torus						Occupational/ Accidental Trauma						Load-bearing					
	Males	%	Females	%	All	%	Males	%	Females	%	All	%	Males	%	Females	%	All	%	Males	%	Females	%	All	%
Newark Bay	0/0		2/2	100	2/2	100	1/1	100	0/1	0	1/2	50	0/1	0	0/2	0	0/3	0	1/1	100	3/3	100	4/4	100
Westness	3/4	75	5/5	100	8/9	88.9	4/4	100	4/4	100	9/9	100	2/4	50	2/6	33.3	4/11	36.4	4/4	100	6/6	100	10/11	91
SkailI Cist	0/0		0/0		0/0		0/1	0	0/0		0/1	0	1/1	100	0/0		1/1	100	1/1	100	0/0		1/1	100
Skara Brae	0/0		0/0		0/0		1/1	100	0/1	0	1/2	50	0/1	0	0/1	0	0/2	0	1/1	100	1/1	100	2/2	100
Buckquoy	1/1	100	0/0		1/1	100	1/1	100	0/0		1/1	100	1/1	100	0/0		1/1	100	1/1	100	0/0		1/1	100
Brough Road	0/2	0	0/0		0/2	0	0/1	0	0/0		0/1	0	0/2	0	0/0	0	0/3	0	2/2	100	0/0		3/3	100
P value	0.576		NA		0.834		0.109		0.050		0.058		0.323		0.526		0.129		NA		NA		0.959	

Table 36. Crude prevalence rates (CPRs) of osteological indicators of load-bearing and occupational stress among individuals from the various PVP sites, along with the results of statistical tests (p values). Statistically significant results (≤ 0.050) are provided in bold.

VA

Site	Platymeria				Platycnemia				OD			
	Males	%	Females	%	Males	%	Females	%	Males	%	Females	%
Brough of Gurness	0/0		0/0		0/0		0/0		0/0		0/0	
Scar	0/0		0/0		0/0		0/0		1/1	100	1/1	100
Buckquoy	0/0		0/0		0/0		0/0		0/0		0/0	
Brough Road	0/1	0	0/1	0	0/2	0	0/0		0/2	0	0/3	0
Westness	2/2	100	1/2	50	3/4	75	0/2	0	0/2	0	0/7	0
Newark Bay	2/4	50	5/8	62.5	8/13	61.5	0/3	0	2/7	28.6	2/10	20
Pierowall	0/0		0/0		0/0		0/0		0/0		0/0	
Deerness	0/0		0/0		0/0		0/0		0/0		0/0	
Skara Brae	0/1	0	0/0		0/1	0	0/1	0	0/1	0	1/1	100
P value	0.233		0.491		0.209		NA		0.391		0.562	

OA

Site	OA				OA_Verts				OA_Shoulder				OA_Hands			
	Males	%	Females	%	Males	%	Females	%	Males	%	Females	%	Males	%	Females	%
Brough of Gurness	0/0		0/1	0	0/1	0	0/0		0/0		0/0		0/0		0/0	
Scar	1/1	100	1/1	100	2/3	66.7	1/1	100	0/0		1/1	100	0/1	0	1/1	100

Buckquoy	0/1	0	0/0		0/1	0	0/1	0	0/0		0/1	0	0/1	0	0/0		0/1	0	0/1	0	0/0		0/1	0
Brough Road	1/1	100	1/2	50	2/4	50	1/1	100	1/2	50	2/3	66.7	1/1	100	1/1	100	2/2	100	0/1	0	0/2	0	0/3	0
Westness Newark Bay	5/5	100	2/3	66.7	7/8	88	3/4	75	2/2	100	5/6	83	3/4	75	0/2	0	3/6	50	0/5	0	0/2	0	0/7	0
Pierowall	0/1	0	0/0		0/1	0	0/0		0/0		0/0		0/0		0/0		0/0		0/0		0/0		0/0	
Deerness	0/0		0/0		0/0		0/0		0/0		0/0		0/0		0/0		0/0		0/0		0/0		0/0	
Skara Brae	0/0		0/0		0/0		0/0		0/0		0/0		0/0		0/0		0/0		0/0		0/0		0/0	
P value	0.114		0.425		0.302		0.487		0.898		0.621		0.161		0.191		0.148		0.182		0.399		0.196	

Site	OA_Knees				OA_Feet				OA_Elbows				OA_Hips											
	Males	%	Females	%	All	%	Males	%	Females	%	All	%	Males	%	Females	%	All	%	Males	%	Females	%	All	%
Brough of Gurness	0/0		0/0		0/0		0/0		0/0		0/0		0/0		0/0		0/0		0/0		0/0		0/0	
Scar	0/1	0	1/1	100	1/3	33.3	0/1	0	0/1	0	0/3	0	0/1	0	0/0		0/1	0	1/1	100	1/1	100	2/2	100
Buckquoy	0/0		0/0		0/0		0/1	0	0/0		0/1	0	0/1	0	0/0		0/1	0	0/1	0	0/0		0/1	0
Brough Road	0/1	0	0/1	0	0/2	0	0/0		1/1	100	1/1	100	1/1	100	1/2	50	2/3	66.7	1/1	100	1/2	50	2/3	66.7
Westness Newark Bay	0/3	0	0/3	0	0/5	0	0/4	0	0/2	0	0/6	0	0/3	0	0/1	0	0/4	0	1/3	33.3	2/3	66.7	3/6	50
Pierowall	1/5	20	2/10	20	3/16	18.8	1/5	20	3/6	50	4/12	33.3	0/4	0	0/11	0	0/15	0	2/5	40	2/12	16.7	4/18	22.2
Deerness	0/0		0/0		0/0		0/0		0/0		0/0		0/0		0/0		0/0		0/0		0/0		0/0	
Skara Brae	0/0		0/0		0/0		0/0		0/0		0/0		0/0		0/0		0/0		0/0		0/0		0/0	
P value	0.774		0.172		0.618		0.724		0.290		0.166		0.202		0.031		0.023		0.482		0.154		0.122	

Site	OA_Jaw				OA_Sternocostal							
	Males	%	Females	%	All	%	Males	%	Females	%	All	%
Brough of Gurness	0/0		0/1	0	0/1	0	0/0		0/0		0/0	
Scar	0/0		0/0		0/1	0	0/0		0/0		0/0	
Buckquoy	0/0		0/0		0/0		0/1	0	0/0		0/1	0

Brough Road	0/1	0	0/1	0	0/2	0	0/1	0	0/1	0	0/1	0	0/2	0
Westness	0/1	0	0/1	0	0/2	0	1/2	50	2/2	50	3/4	75		
Newark Bay	1/4	25	2/10	20	3/15	66.7	0/4	0	5/11	45.5	5/15	33.3		
Pierowall	0/1	0	0/0		0/1	0	0/0		0/0		0/0			
Deerness	0/0		0/0		0/0		0/0		0/0		0/0			
Skara Brae	0/0		0/0		0/0		0/0		0/0		0/0			
P value	0.831		0.871		0.899		0.522		0.213		0.389			

Site	<i>Squatting facets</i>				<i>Mandibular Torus</i>				<i>Occupational/ Accidental Trauma</i>				<i>Load-bearing</i>											
	Males	%	Females	%	All	%	Males	%	Females	%	All	%	Males	%	Females	%	All	%						
Brough of Gurness	0/0		0/0		0/0		0/0		0/1	0	0/1	0	0/0		0/1	0	0/1	0	0/0		0/0			
Scar	1/1	100	1/1	100	2/2	100	0/0		0/0		0/0		0/1	0	0/1	0	0/2	0	1/1	100	1/1	100	2/3	66.7
Buckquoy	1/1	100	0/0		1/1	100	0/1	0	0/0	0	0/1	0	1/1	100	0/0		1/1	100	1/1	100	0/0		1/1	100
Brough Road	0/0		0/0		0/0		1/1	100	1/2	50	2/3	66.7	1/1	100	0/2	0	2/4	50	1/1	100	1/2	50	3/4	75
Westness	3/3	100	0/0		3/3	100	1/3	33.3	0/0		1/4	25	3/5	60	1/3	33.3	4/8	50	5/5	100	3/3	100	8/8	100
Newark Bay	0/3	0	1/7	14.3	1/10	10	0/2	0	2/4	50	2/6	33.3	4/6	66.7	1/13	7.7	6/21	28.6	5/5	100	11/13	84.6	17/20	85
Pierowall	0/0		0/0		0/0		0/0		0/0		0/0		0/0		0/0		0/0		0/0		0/0		0/0	
Deerness	0/0		0/0		0/0		0/0		0/0		0/0		0/0		0/0		0/0		0/0		0/0		0/0	
Skara Brae	0/1	0	0/0		0/1	0	0/0		0/0		0/0		0/1	0	0/0		0/1	0	0/1	0	0/0		0/1	0
P value	0.046		0.064		0.010		0.292		0.659		0.622		0.206		0.812		0.323		NA		0.657		0.311	

Table 37. Crude prevalence rates (CPRs) of osteological indicators of load-bearing and occupational stress among individuals from the various VA sites, along with the results of statistical tests (p values). Statistically significant results (≤ 0.050) are provided in bold.

Site	Platymeria				Platyrcnemia				OD									
	Males	%	Females	%	All	%	Males	%	Females	%	All	%	Males	%	Females	%	All	%
Skaill House	0/1	0	0/0		0/1	0	0/1	0	0/0		0/1	0	0/1	0	0/0		0/1	0
Bu of Cairston	0/5	0	0/3	0	0/9	0	0/3	0	0/2	0	0/6	0	0/19	0	1/23	4.3	1/54	1.9
Westness	0/0		0/0		0/0		0/0		0/0		0/0		0/1	0	0/0		0/1	0
Newark Bay	5/5	100	2/2	100	7/8	87.5	0/3	0	0/0		0/3	0	2/6	33.3	0/3	0	2/10	20
Deerness	0/0		0/0		0/0		0/0		0/0		0/0		0/1	0	0/0		0/1	0
P value	0.004		0.025		0.001		NA		NA		NA		0.091		0.713		0.122	

Site	OA				OA_Verts				OA_Shoulder				OA_Hands											
	Males	%	Females	%	All	%	Males	%	Females	%	All	%	Males	%	Females	%	All	%	Males	%	Females	%	All	%
Skaill House	0/2	0	1/2	50	1/5	20	0/2	0	0/1	0	0/3	0	0/2	0	1/1	100	1/3	33.3	0/2	0	0/1	0	0/3	0
Bu of Cairston	9/23	39.1	15/30	50	31/77	40.3	3/9	33.3	2/8	0.25	7/24	29.2	3/15	20.0	3/14	21.4	6/38	15.8	4/15	26.7	3/19	15.8	8/43	18.6
Westness	0/0		0/1	0	0/1	0	0/0		0/1	0	0/1	0	0/0		0/0		0/0		0/0		0/0		0/0	
Newark Bay	3/3	100	7/7	100	10/11	90.9	3/3	100	7/7	100	10/10	100	5/7	71.4	2/3	66.7	6/10	60	3/6	50	2/3	66.7	5/10	50
Deerness	1/1	100	0/0		1/1	100	1/1	100	0/0		1/1	100	0/1	0	0/0		0/1	0	0/1	0	0/0		0/1	0
P value	0.039		0.251		0.028		0.039		0.054		0.002		0.204		0.111		0.069		0.468		0.120		0.130	

Site	OA_Knees				OA_Feet				OA_Elbows				OA_Hips											
	Males	%	Females	%	All	%	Males	%	Females	%	All	%	Males	%	Females	%	All	%	Males	%	Females	%	All	%
Skaill House	0/2	0	0/2	0	0/4	0	0/2	0	0/1	0	0/4	0	0/1	0	0/1	0	0/2	0	0/2	0	0/2	0	0/4	0
Bu of Cairston	1/19	5.3	2/23	8.7	4/54	7.4	5/15	33.3	1/16	6.3	7/42	16.7	4/13	30.8	4/22	18.2	8/45	17.8	4/14	28.6	9/22	40.9	16/49	32.7
Westness	0/0		0/0		0/0		0/0		0/0		0/0		0/0		0/1	0	0/1	0	0/0		0/0		0/0	

	(p)		(p)		(p)		(p)		(p)		(p)		(p)		(p)	
Platymeria	0.233	7	NA	3	0.083	3	NA	7	0.212	7	0.233	7	NA	4	NA	7
Platycnemia	NA	7	NA	3	NA	3	NA	7	NA	7	NA	7	NA	4	NA	7
OD	NA	8	NA	2	NA	2	NA	6	NA	6	NA	8	NA	4	NA	6
OA	0.825	9	NA	4	NA	4	NA	8	0.827	8	0.574	10	NA	4	0.686	8
OA_Verts	0.710	8	NA	4	NA	4	NA	8	0.827	8	0.638	9	NA	4	0.686	8
OA_Shoulder	0.410	8	NA	2	0.157	2	NA	6	0.273	6	0.155	8	NA	4	NA	6
OA_Hands	NA	7	NA	3	NA	3	NA	7	NA	7	NA	7	NA	4	NA	7
OA_Knees	0.018	8	NA	3	0.083	3	NA	7	0.008	7	0.018	8	NA	4	NA	7
OA_Feet	0.646	7	NA	3	NA	3	NA	7	0.659	7	0.646	7	NA	4	NA	7
OA_Elbows	0.825	9	NA	3	NA	3	NA	7	0.659	7	0.495	9	NA	4	NA	7
OA_Hips	0.261	8	NA	3	0.083	3	NA	7	0.212	7	0.513	8	NA	4	NA	7
OA_Jaw	NA	9	NA	4	NA	4	NA	8	NA	8	NA	10	NA	4	NA	8
OA_Sternocostal	0.362	8	NA	2	0.157	2	NA	6	0.273	6	0.513	8	NA	4	NA	6
Squatting facets	0.576	5	NA	5	0.576	5	NA	1	NA	5	0.576	5	NA	4	NA	5
Mandibular torus	0.046	8	NA	3	0.223	3	NA	7	0.792	7	0.076	9	NA	4	0.659	7
Occupational/Accidental Injuries	0.247	9	NA	4	0.135	4	NA	8	0.315	8	0.392	10	NA	4	0.408	8
Load-bearing	NA	9	NA	4	NA	4	NA	8	NA	8	NA	10	NA	4	NA	8

Females

<i>Pathology</i>	<i>Site Name</i>		<i>Pred. Animal</i>		<i>Animal use</i>		<i>Pred. Cereal</i>		<i>Fish</i>		<i>LCCODE</i>		<i>Plaggen</i>		<i>East/West</i>	
	Chi ²	N	Chi ²	N	Chi ²	N	Chi ²	N	Chi ²	N	Chi ²	N	Chi ²	N	Chi ²	N
	(p)		(p)		(p)		(p)		(p)		(p)		(p)		(p)	
Platymeria	NA	4	NA	2	NA	2	NA	6	0.540	6	NA	6	NA	1	0.540	6
Platycnemia	NA	4	NA	2	NA	2	NA	6	0.121	6	NA	6	NA	1	0.121	6
OD	NA	5	NA	2	NA	2	NA	7	0.495	7	NA	7	NA	1	0.495	7
OA	NA	7	NA	3	NA	3	NA	9	NA	9	0.002	10	NA	1	NA	9
OA_Verts	NA	7	NA	3	NA	3	NA	9	NA	9	0.002	10	NA	1	NA	9
OA_Shoulder	NA	6	NA	2	NA	2	NA	7	0.147	7	0.408	8	NA	1	0.147	7
OA_Hands	NA	5	NA	2	NA	2	NA	6	0.439	6	0.659	7	NA	1	0.439	6
OA_Knees	NA	6	NA	2	NA	2	NA	7	0.427	7	0.537	8	0.386	1	0.427	7
OA_Feet	NA	5	NA	2	NA	2	NA	6	1.000	6	0.35	7	0.386	1	1.000	6
OA_Elbows	NA	7	NA	2	NA	2	NA	8	0.537	8	708	9	NA	1	0.537	8

OA_Hips	NA	6	NA	2	NA	2	NA	7	0.053	7	0.285	8	NA	1	0.053	7
OA_Jaw	NA	6	NA	1	NA	1	NA	6	NA	6	NA	7	NA	1	NA	6
OA_Sternocostal	NA	6	NA	1	NA	1	NA	6	0.439	6	0.495	7	NA	1	0.439	6
Squatting facets	NA	5	NA	2	NA	2	NA	7	NA	7	NA	7	NA	1	NA	7
Mandibular torus	NA	5	NA	1	NA	1	NA	5	0.025	5	0.121	6	NA	1	0.025	5
Occupational/Accidental Injuries	NA	7	NA	2	NA	2	NA	8	0.346	8	0.571	9	NA	3	0.346	8
Load-bearing	NA	7	NA	3	NA	3	NA	9	NA	9	NA	10	NA	1	NA	9

Table 39. Statistical results of Chi2 tests (p values) comparing the prevalence of load-bearing indicators between PVP individuals from sites with different subsistence practices and site types, by sex. Statistically significant results (≤ 0.050) are provided in bold.

Pathology	VA Males															
	Site Name		Pred. Animal		Animal use		Pred. Cereal		Fish		LCCODE		Plaggen		East/West	
	Chi ² (p)	N	Chi ² (p)	N	Chi ² (p)	N	Chi ² (p)	N	Chi ² (p)	N	Chi ² (p)	N	Chi ² (p)	N	Chi ² (p)	N
Platymeria	0.083	3	NA	5	0.361	5	NA	7	NA	7	0.212	7	0.361	5	0.659	7
Platycnemia	NA	2	NA	3	NA	3	NA	5	NA	5	NA	5	NA	3	NA	5
OD	NA	7	NA	6	0.624	6	NA	12	NA	12	0.753	12	0.624	6	0.217	12
OA	0.133	9	0.389	10	0.132	10	0.551	16	0.086	15	0.297	16	0.343	9	0.771	16
OA_Verts	0.269	6	0.495	7	0.214	7	0.521	11	0.107	10	0.329	11	0.540	6	0.621	11
OA_Shoulder	0.214	7	0.537	8	0.169	8	0.335	13	0.296	12	0.401	13	0.427	7	0.048	13
OA_Hands	NA	7	0.168	8	0.449	8	0.057	13	0.640	12	0.263	13	0.290	7	0.033	13
OA_Knees	NA	4	0.659	7	0.659	7	0.725	10	NA	9	0.870	10	0.624	6	0.389	10
OA_Feet	NA	5	0.659	7	0.659	7	0.740	11	0.725	10	0.885	11	0.624	6	0.338	11
OA_Elbows	0.269	6	0.659	7	0.030	7	0.621	11	0.598	10	0.163	11	0.121	6	0.154	11
OA_Hips	0.329	5	0.285	8	0.368	8	0.251	11	0.389	10	0.329	11	0.809	7	0.740	11
OA_Jaw	NA	3	NA	6	0.741	6	NA	7	NA	7	0.659	7	0.439	6	0.350	7
OA_Sternocostal	0.659	5	NA	6	NA	6	NA	9	0.708	9	0.852	9	NA	6	0.343	9
Squatting facets	NA	4	0.171	5	0.171	5	0.408	8	0.350	7	0.449	8	0.046	4	0.028	8
Mandibular torus	0.329	5	NA	4	0.135	4	NA	7	0.495	7	0.214	7	0.248	4	0.290	7
Occupational/Accidental Injuries	0.361	11	0.296	12	0.343	12	0.250	18	0.388	17	0.410	18	0.376	11	0.914	18
Load-bearing	NA	8	NA	8	NA	8	NA	14	NA	13	NA	14	NA	7	NA	14

Pathology	Females															
	Site Name		Pred. Animal		Animal use		Pred. Cereal		Fish		LCCODE		Plaggen		East/West	
	Chi ² (p)	N	Chi ² (p)	N	Chi ² (p)	N	Chi ² (p)	N	Chi ² (p)	N	Chi ² (p)	N	Chi ² (p)	N	Chi ² (p)	N
Platymeria	0.386	3	NA	9	0.236	9	NA	11	NA	11	0.251	11	0.236	9	0.387	11
Platycnemia	NA	2	NA	7	NA	7	NA	9	NA	9	NA	9	NA	7	0.391	9
OD	NA	5	0.008	15	0.672	14	0.004	18	NA	17	0.014	18	0.672	14	0.352	18
OA	0.809	7	0.551	16	0.423	15	0.502	20	NA	19	0.734	21	0.541	16	0.102	21
OA_Verts	0.709	5	NA	14	0.649	14	NA	17	NA	17	0.643	17	0.649	14	0.793	17
OA_Shoulder	0.083	3	NA	12	0.140	12	NA	14	NA	14	0.101	14	0.140	12	0.837	14
OA_Hands	NA	4	0.464	15	0.255	14	0.506	17	NA	16	0.468	17	0.255	14	0.140	17
OA_Knees	NA	4	0.070	12	0.621	11	0.038	15	NA	14	0.110	15	0.621	11	0.243	15
OA_Feet	0.083	3	0.285	8	0.350	7	0.389	10	NA	9	0.335	10	0.350	7	0.778	10
OA_Elbows	0.248	4	NA	13	0.015	13	NA	15	NA	15	0.008	15	0.015	13	0.086	15
OA_Hips	0.709	5	0.086	15	0.287	14	0.146	18	NA	17	0.279	18	0.287	14	0.137	18
OA_Jaw	NA	3	NA	11	0.621	11	NA	12	NA	12	0.807	13	0.640	12	0.400	13
OA_Sternocostal	0.083	3	NA	12	0.377	12	NA	14	NA	14	0.299	14	0.377	12	0.515	14
Squatting facets	NA	8	0.064	8	NA	7	NA	7	NA	7	0.064	8	NA	8	NA	1
Mandibular torus	0.248	4	NA	6	1.000	6	NA	7	NA	7	0.688	8	0.809	7	0.465	8
Occupational/Accidental Injuries	0.495	7	0.790	16	0.685	15	0.732	20	NA	19	0.771	21	0.696	16	0.599	21
Load-bearing	0.540	6	0.620	16	0.255	15	0.608	20	NA	19	0.488	20	0.255	15	0.329	20

Table 40. Statistical results of Chi2 tests (p values) comparing the prevalence of load-bearing indicators between VA individuals from sites with different subsistence practices and site types, by sex. Statistically significant results (≤ 0.050) are provided in bold.

Pathology	LNP Males															
	Site Name		Pred. Animal		Animal use		Pred. Cereal		Fish		LCCODE		Plaggen		East/West	
	Chi ² (p)	N	Chi ² (p)	N	Chi ² (p)	N	Chi ² (p)	N	Chi ² (p)	N	Chi ² (p)	N	Chi ² (p)	N	Chi ² (p)	N
Platymeria	NA	6	NA	6	0.014	6	0.014	6	NA	5	0.338	11	0.338	11	0.001	11
Platycnemia	NA	4	NA	4	NA	4	NA	4	NA	3	NA	7	NA	7	NA	7
OD	NA	21	NA	9	0.571	9	0.571	9	NA	8	0.920	28	0.778	28	0.020	28
OA	0.227	24	NA	9	NA	9	NA	9	NA	9	0.340	32	NA	32	0.011	32
OA_Verts	0.223	12	NA	11	0.011	11	0.011	11	NA	9	0.186	20	0.099	20	0.006	20

OA_Shoulder	0.698	18	NA	10	0.197	10	0.197	10	NA	8	0.515	25	0.358	25	0.093	25
OA_Hands	0.598	18	NA	9	0.257	9	0.257	9	NA	7	0.494	24	0.343	24	0.344	24
OA_Knees	0.921	22	NA	8	0.346	8	0.346	8	NA	6	0.810	27	0.603	27	0.050	27
OA_Feet	0.331	17	NA	5	0.361	5	0.361	5	NA	3	0.329	20	0.329	20	0.891	20
OA_Elbows	0.657	15	NA	9	0.708	9	0.708	9	NA	8	0.724	22	0.579	22	0.387	22
OA_Hips	0.383	16	NA	9	0.391	9	0.391	9	NA	7	0.379	23	0.379	23	0.858	23
OA_Jaw	NA	19	NA	9	0.571	9	0.571	9	NA	7	0.931	25	0.763	25	0.102	25
OA_Sternocostal	0.834	12	NA	10	0.197	10	0.197	10	NA	8	0.529	19	0.372	19	0.046	19
Squatting facets	NA	3	NA	3	NA	3	NA	3	NA	3	NA	3	NA	3	NA	3
Mandibular torus	0.686	8	NA	4	NA	4	NA	4	NA	4	0.621	11	NA	11	0.658	11
Occupational/Accidental Injuries	0.170	25	NA	10	0.197	10	0.197	10	NA	9	0.284	33	0.473	33	0.013	33
Load-bearing	0.564	25	NA	11	0.197	11	0.197	11	NA	9	0.672	33	0.823	33	0.026	33

Females

Pathology	Site Name		Pred. Animal		Animal use		Pred. Cereal		Fish		LCCODE		Plaggen		East/West	
	Chi ² (p)	N	Chi ² (p)	N	Chi ² (p)	N	Chi ² (p)	N	Chi ² (p)	N	Chi ² (p)	N	Chi ² (p)	N	Chi ² (p)	N
Platymeria	NA	3	NA	2	NA	2	NA	2	NA	2	NA	5	NA	5	0.025	5
Platycnemia	NA	2	NA	2	NA	23	NA	2	NA	26	NA	2	NA	26	NA	3
OD	NA	3	NA	3	NA		NA		NA		NA	3	NA	26	0.713	26
OA	1.000	32	NA	5	0.171	5	0.171	5	NA	3	0.900	35	0.900	35	0.096	35
OA_Verts	0.571	9	NA	4	0.046	4	0.046	4	NA	3	0.377	12	0.377	12	0.018	12
OA_Shoulder	0.086	15	NA	4	0.505	4	0.505	4	NA	3	0.146	18	0.146	18	0.180	18
OA_Hands	0.666	20	NA	4	0.248	4	0.248	4	NA	3	0.590	23	0.590	23	0.043	23
OA_Knees	0.664	25	NA	4	NA	4	NA	4	NA	2	0.678	27	0.678	27	0.678	27
OA_Feet	0.797	17	NA	1	NA	1	NA	1	NA	1	0.797	17	0.797	17	NA	17
OA_Elbows	0.639	23	NA	4	0.505	4	0.505	4	NA	3	0.619	26	0.619	26	0.510	26
OA_Hips	0.253	24	NA	4	0.248	4	0.248	4	NA	2	0.245	26	0.245	26	0.727	26
OA_Jaw	NA	21	NA	5	0.361	5	0.361	5	NA	3	0.758	24	0.758	24	0.007	24
OA_Sternocostal	0.495	7	NA	4	0.248	4	0.248	4	NA	3	0.389	10	0.389	10	0.260	10
Squatting facets	NA	1	NA	1	NA	1	NA	1	NA	1	NA	2	NA	2	0.157	2
Mandibular torus	0.686	8	NA	4	0.505	4	0.505	4	NA	3	0.621	11	0.621	11	0.425	11
Occupational/Accidental Injuries	0.167	32	NA	5	0.709	5	0.709	5	NA	3	0.204	35	0.204	35	0.436	35
Load-bearing	0.887	31	NA	5	0.171	5	0.171	5	NA	3	1.000	34	1.000	34	0.070	34

Table 41. Statistical results of Chi2 tests (p values) comparing the prevalence of load-bearing indicators between LNP individuals from sites with different subsistence practices and site types, by sex. Statistically significant results (≤ 0.050) are provided in bold.

Males													
Pathology	Weapons		Combs		Daggers		Agricultural Tools		Gaming pieces		Any		
	Chi ² (p)	N	Chi ² (p)	N	Chi ² (p)	N	Chi ² (p)	N	Chi ² (p)	N	Chi ² (p)	N	
Platymeria	0.659	7	0.212	7	0.212	7	0.439	6	NA	7	0.659	7	
Platycnemia	NA	5	NA	5	NA	5	NA	5	NA	5	NA	5	
OD	0.428	11	0.753	12	0.640	12	0.621	11	0.753	12	0.428	11	
OA	0.277	45	0.448	15	0.519	15	0.425	14	0.448	15	0.605	15	
OA_Verts	0.948	31	0.338	11	0.425	11	0.490	10	0.521	11	0.387	11	
OA_Shoulder	0.015	30	0.906	13	0.416	13	0.067	12	0.906	13	0.048	13	
OA_Hands	0.632	33	0.326	13	0.400	13	0.546	12	0.057	13	0.612	13	
OA_Knees	0.326	29	0.598	10	0.725	10	0.708	9	0.725	10	0.292	10	
OA_Feet	0.225	26	0.740	11	0.740	11	0.740	11	0.740	11	0.338	11	
OA_Elbows	0.038	29	0.197	11	0.011	11	0.002	10	0.197	11	0.154	11	
OA_Hips	0.371	32	0.087	11	0.887	11	0.389	10	0.251	11	0.740	11	
OA_Jaw	0.577	24	0.624	6	0.624	6	0.576	5	NA	6	0.439	6	
OA_Sternocostal	0.562	26	0.708	9	0.453	9	0.537	8	0.708	9	0.343	9	
Squatting facets	0.005	8	0.408	8	0.408	8	0.408	8	0.408	8	0.005	8	
Mandibular torus	0.290	7	0.088	7	0.427	7	0.624	6	NA	7	0.290	7	
Occupational/Accidental Injuries	0.205	15	0.696	16	0.137	16	0.756	15	0.696	16	0.205	15	
Load-bearing	NA	13	NA	14	NA	14	NA	13	NA	14	NA	13	

Females														
Pathology	Textile tools		Combs		Daggers		Agricultural Tools		Gaming pieces		Jewellery		Any	
	Chi ² (p)	N	Chi ² (p)	N	Chi ² (p)	N	Chi ² (p)	N	Chi ² (p)	N	Chi ² (p)	N	Chi ² (p)	N
Platymeria	0.251	11	0.251	11	NA	11	0.251	11	NA	11	0.251	11	0.251	11
Platycnemia	0.571	9	0.571	9	NA	9	0.571	9	NA	9	0.571	9	0.571	9
OD	0.063	18	0.063	18	NA	18	0.063	18	0.716	18	0.180	18	0.180	18
OA	0.135	44	0.186	21	0.147	21	0.694	21	0.147	21	0.717	21	0.717	21

OA_Verts	0.245	31	0.266	17	NA	17	0.266	17	0.163	17	0.938	17	0.938	17
OA_Shoulder	0.301	30	0.334	14	NA	14	0.334	14	NA	14	0.334	14	0.334	14
OA_Hands	0.409	33	0.331	17	NA	17	0.331	17	NA	17	0.331	17	0.331	17
OA_Knees	0.300	29	0.519	15	NA	15	0.519	15	NA	15	0.519	15	0.519	15
OA_Feet	0.461	25	0.197	10	NA	10	0.197	10	NA	10	0.197	10	0.197	10
OA_Elbows	0.730	29	0.782	15	NA	15	0.782	15	0.782	15	0.685	15	0.685	15
OA_Hips	0.012	32	0.007	18	NA	18	0.007	18	NA	18	0.007	18	0.007	18
OA_Jaw	0.699	24	0.657	13	0.657	13	0.512	13	NA	13	0.512	13	0.512	13
OA_Sternocostal	0.027	26	0.127	14	NA	14	0.127	14	NA	14	0.127	14	0.127	14
Squatting facets	0.064	8	0.064	8	NA	8	0.064	8	NA	8	0.064	8	0.064	8
Mandibular torus	0.408	8	0.408	8	0.408	8	0.206	8	NA	8	0.206	8	0.206	8
Occupational/Accidental Injuries	0.129	21	0.129	21	0.740	21	0.241	21	0.740	21	0.361	21	0.361	21
Load-bearing	0.348	20	0.348	20	NA	20	0.348	20	0.040	20	0.780	20	0.780	20

Table 42. Statistical results of Chi2 tests (*p* values) comparing the prevalence of load-bearing indicators between VA individuals with different grave goods, by sex. Statistically significant results (≤ 0.050) are provided in bold.

5.4.5. Specific and Non-specific Infections

Site	PVP																							
	Periostitis						Specific infection						Non-specific Infect						Path					
	Males	%	Females	%	All	%	Males	%	Females	%	All	%	Males	%	Females	%	All	%	Males	%	Females	%	All	%
Newark Bay	0/1	0	1/2	50	1/3	33.3	0/1	0	0/3	0	0/4	0	0/1	0	1/3	33.3	1/4	25	1/1	100	3/3	100	4/4	100
Westness	1/4	25	2/5	40	4/10	40	0/4	0	2/6	33.3	2/11	18.2	2/4	50	3/6	50	6/11	54.5	4/4	100	6/6	100	11/11	100
Skaill Cist	1/1	100	0/0		1/1	100	1/1	100	0/0		1/1	100	1/1	100	0/0		1/1	100	1/1	100	0/0		1/1	100
Skara Brae	0/1	0	0/1	0	0/2	0	0/1	0	0/1	0	0/2	0	1/1	100	0/1	0	1/2	50	1/1	100	1/1	100	2/2	100
Buckquoy	0/1	0	0/0		0/1	0	0/1	0	0/0		0/1	0	1/1	100	0/0		1/1	100	1/1	100	0/0		1/1	100
Brough Road	0/2	0	0/0		1/3	33.3	0/2	0	0/0	0	0/3	0	0/2	0	0/0		1/3	33.3	1/2	50	0/0		2/3	66.7
P value	0.379		0.688		0.61		0.075		0.435		0.151		0.306		0.615		0.635		0.487		NA		0.249	

Table 43. Crude prevalence rates (CPRs) of osteological indicators of specific and non-specific infection among individuals from the various PVP sites, along with the results of statistical tests (p values). Statistically significant results (≤ 0.050) are provided in bold.

Site	VA																							
	Periostitis				Specific infection				Non-specific Infect				Path											
	Males	%	Females	%	All	%	Males	%	Females	%	All	%	Males	%	Females	%	All	%	Males	%	Females	%	All	%
Brough of Gurness	0/0		0/1	0	0/1	0	0/0		0/1	0	0/1	0	0/0		0/0		0/0				0/0		1/1	100
Scar	0/1	0	0/1	0	1/3	33.3	0/1	0	0/1	0	0/3	0	1/1	100	1/1	100	2/2	100	1/1	100	1/1	100	3/3	100
Buckquoy	1/1	100	0/0		1/1	100	0/1	0	0/0		0/1	0	1/1	100	0/0		1/1	100	1/1	100	0/0		1/1	100
Brough Road	0/1	0	0/2	0	0/4	0	0/1	0	0/2	0	0/4	0	0/1	0	1/2	50	1/4	25	1/1	100	2/2	100	4/4	100
Westness Newark Bay	1/5	20	2/3	66.7	3/8	37.5	0/5	0	0/3	0	0/8	0	2/5	40	2/3	66.7	4/8	50	5/5	100	2/3	66.7	7/8	87.5
Pierowall	1/6	16.7	3/13	23.1	5/21	23.8	0/6	0	1/13	7.7	1/21	4.8	3/6	50	5/13	38.5	9/21	42.9	5/6	83.3	11/13	84.6	17/21	81
Deerness	0/2	0	0/0		0/2	0	0/2	0	0/0		0/2	0	2/2	100	0/0		2/2	100	2/2	100	0/0		2/2	100
Skara Brae	0/0		0/0		0/1	0	0/0		0/0		0/1	0	0/0		0/0		0/1	0	0/0		0/0		1/1	100
P value	0.354		0.673		0.719		NA		0.958		0.994		0.344		0.681		0.208		0.856		0.472		0.911	

Table 44. Crude prevalence rates (CPRs) of osteological indicators of specific and non-specific infection among individuals from the various VA sites, along with the results of statistical tests (p values). Statistically significant results (≤ 0.050) are provided in bold.

Site	LNP																							
	Periostitis				Specific infection				Non-specific Infect				Path											
	Males	%	Females	%	All	%	Males	%	Females	%	All	%	Males	%	Females	%	All	%	Males	%	Females	%	All	%
Skail House Bu of Cairston	0/1	0	0/1	0	0/2	0	0/2	0	0/2	0	0/5	0	0/2	0	0/2	0	0/5	0			1/1	100	2/2	100
Westness Newark Bay	10/23	43.5	14/30	46.7	27/78	34.6	3/23	13	1/30	3.3	4/82	4.9	14/23	60.9	19/30	63.3	37/83	44.6	17/23	73.9	23/30	76.7	51/81	
Deerness	0/0		0/1	0	0/1	0	0/0		0/1	0	0/1	0	0/0		0/1	0	0/1	0	0/0		0/1	0	0/1	0
	2/8	25	0/3	0	2/12	16.7	1/8	12.5	0/3	0	1/12	8.3	5/8	62.5	1/3	33.3	7/13	53.8	8/8	100	3/3	100	12/12	
	0/1	0	0/0		0/1	0	0/1	0	0/0		0/1	0	0/1	0	0/0		1/3	33.3	1/1	100	0/0		2/3	

P value 0.553 0.205 0.383 0.932 0.918 0.898 0.243 0.147 0.174 0.363 0.482 0.059

Table 45. Crude prevalence rates (CPRs) of osteological indicators of specific and non-specific infection among individuals from the various LNP sites, along with the results of statistical tests (p values). Statistically significant results (≤ 0.050) are provided in bold.

PVP																	
Male																	
Pathology	Site Name		Pred. Animal		Animal use		Pred. Cereal		Fish		LCCODE		Plaggen		East/West		
	Chi ²	N	Chi ²	N	Chi ²	N	Chi ²	N	Chi ²	N	Chi ²	N	Chi ²	N	Chi ²	N	
	(p)		(p)	(p)		(p)		(p)		(p)		(p)		(p)		(p)	
Periostitis	0.224	9	NA	4	NA	4	NA	8	0.827	8	0.855	10	NA	4	0.686	8	
Spec infection	0.029	9	NA	4	NA	4	NA	8	NA	8	0.435	10	NA	4	NA	8	
Non-specific inf	0.247	9	NA	4	0.135	4	NA	8	0.315	8	0.549	10	NA	4	0.408	8	
Pathology	0.268	9	NA	4	0.513	4	NA	8	0.827	8	0.435	10	NA	4	0.686	8	
Female																	
Pathology	Site Name		Pred. Animal		Animal use		Pred. Cereal		Fish		LCCODE		Plaggen		East/West		
	Chi ²	N	Chi ²	N	Chi ²	N	Chi ²	N	Chi ²	N	Chi ²	N	Chi ²	N	Chi ²	N	
	(p)		(p)	(p)		(p)		(p)		(p)		(p)		(p)		(p)	
Periostitis	NA	6	NA	2	NA	2	NA	7	0.809	7	0.408	8	0.386	1	0.809	7	
Spec infection	NA	7	NA	3	NA	3	NA	9	0.257	9	0.598	10	NA	1	0.257	9	
Non-specific inf	NA	7	NA	3	NA	3	NA	9	0.635	9	0.389	10	0.505	1	0.635	9	
Pathology	NA	7	NA	3	NA	3	NA	9	NA	9	NA	10	NA	1	NA	9	

Table 46. Statistical results of Chi2 tests (p values) comparing the prevalence of specific and non-specific infection among individuals from PVP sites with different subsistence practices and site types, by sex. Statistically significant results (≤ 0.050) are provided in bold.

VA																	
Male																	
Pathology	Site Name		Pred. Animal		Animal use		Pred. Cereal		Fish		LCCODE		Plaggen		East/West		
	Chi ²	N	Chi ²	N	Chi ²	N	Chi ²	N	Chi ²	N	Chi ²	N	Chi ²	N	Chi ²	N	
	(p)		(p)	(p)		(p)		(p)		(p)		(p)		(p)		(p)	
Periostitis	0.104	10	0.621	11	0.685	11	0.633	17	0.032	16	0.157	17	0.747	10	0.761	17	
Spec infection	NA	10	NA	11	NA	11	NA	17	NA	16	NA	17	NA	10	NA	17	
Non-specific inf	0.368	10	0.428	11	0.166	11	0.331	17	0.302	16	0.399	17	0.429	10	0.772	17	
Pathology	NA	10	0.740	11	0.730	11	0.797	17	0.790	16	0.973	17	0.389	10	0.218	17	

Pathology	Site Name		Pred. Animal		Animal use		Female Pred. Cereal		Fish		LCCODE		Plaggen		East/West	
	Chi ²	N	Chi ²	N	Chi ²	N	Chi ²	N	Chi ²	N	Chi ²	N	Chi ²	N	Chi ²	N
	(p)		(p)		(p)		(p)		(p)		(p)		(p)		(p)	
Periostitis	0.809	7	0.551	16	0.423	15	0.502	20	NA	19	0.534	21	0.383	16	0.306	21
Spec infection	NA	7	0.790	16	0.685	15	0.814	20	NA	19	0.884	21	0.696	16	0.469	21
Non-specific inf	1.000	6	0.242	16	0.756	15	0.257	20	NA	19	0.511	20	0.756	15	0.769	20
Pathology	0.290	7	0.696	16	0.551	15	0.608	20	NA	19	0.559	21	0.568	16	0.432	21

Table 47. Statistical results of Chi2 tests (p values) comparing the prevalence of specific and non-specific infection among individuals from PVP sites with different subsistence practices and site types, by sex. Statistically significant results (≤ 0.050) are provided in bold.

Pathology	Site Name		Pred. Animal		Animal use		LNP Male Pred. Cereal		Fish		LCCODE		Plaggen		East/West	
	Chi ²	N	Chi ²	N	Chi ²	N	Chi ²	N	Chi ²	N	Chi ²	N	Chi ²	N	Chi ²	N
	(p)		(p)		(p)		(p)		(p)		(p)		(p)		(p)	
Periostitis	0.485	25	NA	10	0.598	10	0.598	10	NA	9	0.544	33	0.443	33	0.301	33
Spec infection	0.802	26	NA	11	0.621	11	0.621	11	NA	9	0.803	34	0.595	34	0.943	34
Non-specific inf	0.138	26	NA	11	0.154	11	0.154	11	NA	9	0.124	34	0.101	34	0.982	34
Pathology	0.709	25	NA	10	NA	10	NA	10	NA	9	0.789	33	0.632	33	0.097	33
Pathology	Site Name		Pred. Animal		Animal use		Female Pred. Cereal		Fish		LCCODE		Plaggen		East/West	
	Chi ²	N	Chi ²	N	Chi ²	N	Chi ²	N	Chi ²	N	Chi ²	N	Chi ²	N	Chi ²	N
	(p)		(p)		(p)		(p)		(p)		(p)		(p)		(p)	
Periostitis	0.356	31	NA	4	NA	4	NA	4	NA	3	0.396	34	0.396	34	0.129	34
Spec infection	0.793	32	NA	5	NA	5	NA	5	NA	3	0.803	35	0.803	35	0.756	35
Non-specific inf	0.077	32	NA	5	0.361	5	0.361	5	NA	3	0.093	35	0.093	35	0.383	35
Pathology	0.440	32	NA	5	NA	5	NA	5	NA	3	0.466	35	0.466	35	0.365	35

Table 48. Statistical results of Chi2 tests (p values) comparing the prevalence of specific and non-specific infection among individuals from LNP sites with different subsistence practices and site types, by sex. Statistically significant results (≤ 0.050) are provided in bold.

Pathology	Males											
	Weapons		Combs		Daggers		Agricultural Tools		Gaming pieces		Any	
	Chi ² (p)	N	Chi ² (p)	N	Chi ² (p)	N	Chi ² (p)	N	Chi ² (p)	N	Chi ² (p)	N
Periostitis	0.347	14	0.448	15	0.519	15	0.425	14	0.448	15	0.347	14
Spec infection	NA	14	NA	15	NA	15	NA	14	NA	15	NA	14
Non-specific inf	0.280	14	0.919	15	0.605	15	1.000	14	0.919	15	0.280	14
Pathology	0.369	14	0.685	15	0.605	15	0.672	14	0.685	15	0.369	14

Pathology	Females													
	Textile tools		Combs		Daggers		Agricultural Tools		Gaming pieces		Jewellery		Any	
	Chi ² (p)	N	Chi ² (p)	N	Chi ² (p)	N	Chi ² (p)	N	Chi ² (p)	N	Chi ² (p)	N	Chi ² (p)	N
Periostitis	0.115	21	0.115	21	0.517	21	0.292	21	0.517	21	0.517	21	0.517	21
Spec infection	0.676	21	0.676	21	0.819	21	0.619	21	0.819	21	0.567	21	0.567	21
Non-specific inf	0.038	20	0.038	20	NA	20	0.038	20	0.353	20	0.178	20	0.178	20
Pathology	0.364	21	0.364	21	0.619	21	0.281	21	0.035	21	0.950	21	0.950	21

Table 49. Statistical results of Chi2 tests (p values) comparing the prevalence of specific and non-specific infection between VA individuals with different grave goods, by sex. Statistically significant results (≤ 0.050) are provided in bold.

5.5. Violent Trauma

Site	PVP						
	Males	%	Females	%	All	%	
Newark Bay	0/1	0	0/2	0	0/3	0	
Westness	1/4	25	0/6	0	1/13	7.7	
Skaill Cist	0/1	0	0/0		0/1	0	
Skara Brae	0/1	0	0/1	0	0/2	0	
Buckquoy	0/1	0	0/0		0/1	0	
Brough Road	0/2	0	0/0		0/3	0	

	P value	0.893	NA	0.966			
		VA					
Site	Males	%	Females	%	All	%	
Brough of Gurness	0/0		0/1	0	0/1	0	
Scar	0/1	0	0/1	0	0/3	0	
Buckquoy	0/1	0	0/0		0/1	0	
Brough Road	0/1	0	1/2	50	1/4	25	
Westness	1/5	20	1/3	33.3	2/10	20	
Newark Bay	0/6	0	1/13	7.7	1/21	4.8	
Pierowall	3/3	100	0/0		3/3	100	
Deerness	0/0		0/0		0/0		
Skara Brae	0/0		0/0		0/1	0	
P value	0.045		0.516		0.012		
		LNP					
Site	Males	%	Females	%	All	%	
Skaill House	0/1	0	0/2	0	0/3	0	
Bu of Cairston	1/22	4.5	2/29	6.9	4/97	4.1	
Westness	0/0		0/1	0	0/1	0	
Newark Bay	2/8	25	1/3	33.3	3/13	23.1	
Deerness	0/1	0	0/0		0/4	0	
P value	0.375		0.277		0.044		

Table 50. Crude prevalence rates (CPRs) of violent trauma between individuals from the different sites, separated by phase and sex, along with the results of Chi2 statistical tests (p values). Statistically significant results (≤ 0.050) are provided in bold.

Site type/ Subsistence	PVP				VA				LNP			
	Males		Females		Males		Females		Males		Females	
Site name	Chi ² (p)	N	Chi ² (p)	N	Chi ² (p)	N	Chi ² (p)	N	Chi ² (p)	N	Chi ² (p)	N
	0.825	9	NA	7	0.361	11	0.427	7	0.954	24	0.701	31

Pred. animal	NA	4	NA	2	0.546	12	0.696	16	NA	10	NA	5
Animal use	NA	4	NA	2			0.101	15	0.361	5	0.598	10
Pred. cereal	NA	8	NA	8	0.523	18	0.666	20	0.598	10	0.361	5
Fish	0.827	8	NA	8	0.506	17	NA	19	NA	9	NA	3
LC code	0.574	10	NA	9	0.709	18	0.286	21	0.896	32	0.650	34
Plaggen	NA	4	NA	1	0.026	11	0.086	16	0.744	32	0.650	34
East/west	0.686	8	NA	8	0.036	18	0.186	21	0.119	32	0.117	34

Table 51. Statistical results of Chi2 tests (p values) comparing the prevalence of violent trauma among individuals from PVP, VA and LNP sites with different subsistence practices and site types, by sex. Statistically significant results (≤ 0.050) are provided in bold.

	Males		Females	
	Chi ² (p)	N	Chi ² (p)	N
<i>Grave good</i>				
<i>Any</i>	0.104	15	0.676	21
<i>Textile tools</i>	NA	NA	0.309	21
<i>Weapons</i>	0.104	15	NA	NA
<i>Combs</i>	0.468	16	0.309	21
<i>Daggers</i>	0.473	16	0.676	21
<i>Agricultural Tools</i>	0.255	15	0.496	21
<i>Gaming pieces</i>	0.226	16	0.676	21
<i>Jewellery</i>	NA	NA	0.676	21

Table 52. Statistical results of Chi2 tests (p values) comparing the prevalence of violent trauma between VA individuals with different grave goods, by sex. Statistically significant results (≤ 0.050) are provided in bold.

Catalogue D. Stable Isotope Statistical Results

Phases

<i>Pre-Viking Phase (PVP)</i>	Prior to AD 750
<i>Viking Age (VA)</i>	AD 750- 1100
<i>Late Norse Phase (LNP)</i>	AD 1100-1299

Pathology

<i>CO</i>	Cribriform orbitalia
<i>PH</i>	Porotic hyperostosis
<i>CF</i>	Cribriform femora
<i>Calc</i>	Calculus
<i>AMTL</i>	Antemortem tooth loss
<i>LEH</i>	Linear enamel hypoplasia
<i>OD</i>	Osteochondritis dissecans
<i>OA</i>	Osteoarthritis

6.1.4. Pathology

6.1.4.1. Nutritional Deficiencies

Pathology	PVP																	
	Males						Females						All Sexes					
	ANOVA		Levene's		Spearman's rho		ANOVA		Levene's		Spearman's rho		ANOVA		Levene's		Spearman's rho	
	$\delta^{13}\text{C}$	$\delta^{15}\text{N}$	$\delta^{13}\text{C}$	$\delta^{15}\text{N}$	$\delta^{13}\text{C}$	$\delta^{15}\text{N}$	$\delta^{13}\text{C}$	$\delta^{15}\text{N}$	$\delta^{13}\text{C}$	$\delta^{15}\text{N}$	$\delta^{13}\text{C}$	$\delta^{15}\text{N}$	$\delta^{13}\text{C}$	$\delta^{15}\text{N}$	$\delta^{13}\text{C}$	$\delta^{15}\text{N}$	$\delta^{13}\text{C}$	$\delta^{15}\text{N}$
p	p	p	p	p	p	p	p	p	p	p	p	p	p	p	p	p	p	p
CO	0.843	0.196	0.068	0.605	1.000	0.332	0.172	0.585	NA	NA	0.225	0.225	0.131	0.219	0.186	0.420	0.127	0.313
CO Stage*	0.368	0.368	NA	NA	0.667	0.667	0.221	0.221	NA	NA	0.333	0.333	0.296	0.565	NA	NA	0.226	0.343
PH	NA	NA	NA	NA	NA	NA	0.680	0.501	NA	NA	0.553	1.000	0.701	0.500	0.162	0.941	0.920	0.688
CF	0.988	0.222	0.843	0.396	0.735	0.127	0.322	0.276	NA	NA	0.278	0.158	0.298	0.506	0.625	0.791	0.272	0.417
Scurvy	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Rickets	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nutri. deficiency	0.842	0.091	0.228	0.308	0.797	0.078	0.225	0.877	0.132	0.111	0.213	0.797	0.128	0.498	0.054	0.050	0.125	0.418

Table 1. Statistical results of ANOVA tests (*p* values) comparing bone collagen $\delta^{13}\text{C}$ and $\delta^{15}\text{N}$ values between PVP individuals with and without specific indicators of nutritional deficiency indicators, by sex. Statistically significant results (≤ 0.050) are provided in bold.

Pathology	VA																	
	Males						Females						All Sexes					
	ANOVA		Levene's		Spearman's rho		ANOVA		Levene's		Spearman's rho		ANOVA		Levene's		Spearman's rho	
	$\delta^{13}\text{C}$	$\delta^{15}\text{N}$	$\delta^{13}\text{C}$	$\delta^{15}\text{N}$	$\delta^{13}\text{C}$	$\delta^{15}\text{N}$	$\delta^{13}\text{C}$	$\delta^{15}\text{N}$	$\delta^{13}\text{C}$	$\delta^{15}\text{N}$	$\delta^{13}\text{C}$	$\delta^{15}\text{N}$	$\delta^{13}\text{C}$	$\delta^{15}\text{N}$	$\delta^{13}\text{C}$	$\delta^{15}\text{N}$	$\delta^{13}\text{C}$	$\delta^{15}\text{N}$
p	p	p	p	p	p	p	p	p	p	p	p	p	p	p	p	p	p	p
CO	0.960	0.597	0.454	0.377	0.638	0.474	0.163	0.137	0.236	0.279	0.200	0.203	0.366	0.303	0.637	0.051	0.283	0.324
CO Stage*	0.380	0.373	NA	NA	0.441	0.434	0.221	0.221	NA	NA	0.333	0.333	0.148	0.136	NA	NA	0.204	0.124
PH	0.812	0.754	0.358	0.206	0.881	0.765	0.365	0.489	0.537	0.949	0.215	0.476	0.780	0.823	0.712	0.981	0.570	0.910
CF	0.252	0.338	0.669	0.898	0.277	0.456	0.203	0.207	0.038	0.082	0.304	0.274	0.071	0.082	0.007	0.016	0.129	0.161
Scurvy	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Rickets	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nutri. deficiency	0.554	0.628	0.843	0.775	0.605	0.679	0.743	0.743	0.169	0.347	0.963	0.819	0.719	0.704	0.672	0.893	0.660	0.861

Table 2. Statistical results of ANOVA tests (*p* values) comparing bone collagen $\delta^{13}\text{C}$ and $\delta^{15}\text{N}$ values between VA individuals with and without specific indicators of nutritional deficiency indicators, by sex. Statistically significant results (≤ 0.050) are provided in bold.

Pathology	LNP																	
	Males						Females						All Sexes					
	ANOVA		Levene		Spearman's rho		ANOVA		Levene		Spearman's rho		ANOVA		Levene		Spearman's rho	
	$\delta^{13}\text{C}$	$\delta^{15}\text{N}$	$\delta^{13}\text{C}$	$\delta^{15}\text{N}$	$\delta^{13}\text{C}$	$\delta^{15}\text{N}$	$\delta^{13}\text{C}$	$\delta^{15}\text{N}$	$\delta^{13}\text{C}$	$\delta^{15}\text{N}$	$\delta^{13}\text{C}$	$\delta^{15}\text{N}$	$\delta^{13}\text{C}$	$\delta^{15}\text{N}$	$\delta^{13}\text{C}$	$\delta^{15}\text{N}$	$\delta^{13}\text{C}$	$\delta^{15}\text{N}$
p	p	p	p	p	p	p	p	p	p	p	p	p	p	p	p	p	p	p
CO	0.126	0.107	0.546	0.585	0.168	0.053	0.850	0.897	0.825	0.045	0.848	1.000	0.437	0.736	0.650	0.192	0.436	1.000
CO Stage*	0.114	0.195	NA	NA	0.696	0.666	0.645	0.396	NA	NA	0.503	0.356	0.037	0.091	NA	NA	0.677	0.671
PH	0.707	0.930	0.561	0.847	0.848	1.000	0.663	0.645	0.557	0.124	0.498	0.450	0.714	0.724	0.350	0.655	0.487	0.501
CF	0.612	0.586	0.436	0.759	0.491	0.263	0.138	0.268	0.810	0.605	0.107	0.209	0.184	0.537	0.488	0.945	0.179	0.292
Scurvy	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Rickets	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nutri. deficiency	0.475	0.429	0.886	0.855	0.433	0.302	0.846	0.937	0.475	0.158	0.795	0.941	0.927	0.996	0.312	0.598	0.887	0.835

Table 3. Statistical results of ANOVA tests (p values) comparing bone collagen $\delta^{13}\text{C}$ and $\delta^{15}\text{N}$ values between LNP individuals with and without specific indicators of nutritional deficiency indicators, by sex. Statistically significant results (≤ 0.050) are provided in bold.

6.1.4.2. Dental Pathologies

Pathology	PVP														
	Males				Females				All Sexes						
	ANOVA		Spearman's rho		ANOVA		Spearman's rho		ANOVA		Spearman's rho				
	$\delta^{13}\text{C}$	$\delta^{15}\text{N}$	$\delta^{13}\text{C}$	$\delta^{15}\text{N}$	$\delta^{13}\text{C}$	$\delta^{15}\text{N}$	$\delta^{13}\text{C}$	$\delta^{15}\text{N}$	$\delta^{13}\text{C}$	$\delta^{15}\text{N}$	$\delta^{13}\text{C}$	$\delta^{15}\text{N}$	$\delta^{13}\text{C}$	$\delta^{15}\text{N}$	$\delta^{13}\text{C}$
p	p	p	p	p	p	p	p	p	p	p	p	p	r	p	r
Calc scale	0.082	0.851	0.303	0.623	NA	NA	0.095	0.175	0.909	0.876	0.770			0.791	
Caries (Y/N)	0.656	0.714	0.976	0.903	0.040	0.130	0.095	0.175	0.183	0.483	0.138			0.203	
No. caries	0.656	0.714	0.976	0.903	NA	NA	0.095	0.175	0.204	0.591	0.020	-0.717	0.381	0.312	
AMTL (Y/N)	0.836	0.065	0.056	0.388	0.834	0.979	0.627	0.707	0.929	0.041	0.202			0.277	
No. AMTL	0.871	0.175	0.912	0.117	0.785	0.872	0.669	0.590	0.726	0.191	0.512			0.183	
Periodontal disease (Y/N)	0.261	0.759	0.752	0.081	0.834	0.979	0.627	0.707	0.422	0.852	0.812			0.138	
Abscesses (Y/N)	NA	NA	NA	NA	0.834	0.979	0.627	0.707	0.163	0.048	0.174			0.117	
No. Abscess	NA	NA	NA	NA	0.785	0.872	0.095	0.175	0.234	0.145	0.049	-0.635	0.117		
Avg attrition stage	0.566	0.317	0.752	0.081	0.834	0.979	NA	NA	0.881	0.578	0.917			0.362	

Table 4. Statistical results of ANOVA tests (*p* values) comparing bone collagen $\delta^{13}\text{C}$ and $\delta^{15}\text{N}$ values between PVP individuals with and without specific dental pathologies, by sex. Statistically significant results (≤ 0.050) are provided in bold.

Pathology	VA												
	Males				Females				All Sexes				
	ANOVA		Spearman's rho		ANOVA		Spearman's rho		ANOVA		Spearman's rho		
	$\delta^{13}\text{C}$	$\delta^{15}\text{N}$	$\delta^{13}\text{C}$	$\delta^{15}\text{N}$	$\delta^{13}\text{C}$	$\delta^{15}\text{N}$	$\delta^{13}\text{C}$	$\delta^{15}\text{N}$	$\delta^{13}\text{C}$	$\delta^{15}\text{N}$	$\delta^{13}\text{C}$	$\delta^{15}\text{N}$	
<i>p</i>	<i>p</i>	<i>p</i>	<i>r</i>	<i>p</i>	<i>p</i>	<i>p</i>	<i>p</i>	<i>p</i>	<i>p</i>	<i>p</i>	<i>p</i>	<i>p</i>	
Calc scale	0.689	0.483	0.695	0.927	0.253	0.435	0.235	0.213	0.597	0.750	0.944	0.945	
Caries (Y/N)	0.038	0.060	0.025	0.816	0.072	0.379	0.242	0.990	0.728	0.066	0.095	0.395	0.395
No. caries	0.052	0.096	0.025	0.816	0.072	0.210	0.322	0.873	0.941	0.078	0.241	0.946	0.962
AMTL (Y/N)	0.543	0.615	0.660	0.757	0.215	0.185	0.215	0.185	0.330	0.388	0.135	0.164	
No. AMTL	0.223	0.485	0.798	0.769	0.014	0.142	0.234	0.366	0.030	0.334	0.615	0.424	
Periodontal disease (Y/N)	0.117	0.221	0.660	0.757	0.786	0.773	0.485	0.466	0.647	0.839	0.924	0.724	
Abscesses (Y/N)	0.343	0.563	0.364	0.563	0.962	0.530	0.777	0.324	0.223	0.206	0.198	0.197	
No. Abscess	0.090	0.182	0.052	0.154	0.955	0.790	0.516	0.221	0.036	0.057	0.263	0.277	
Avg attrition stage	0.149	0.218	0.721	0.752	0.650	0.545	0.727	0.866	0.963	0.936	0.886	0.948	

Table 5. Statistical results of ANOVA tests (*p* values) comparing bone collagen $\delta^{13}\text{C}$ and $\delta^{15}\text{N}$ values between VA individuals with and without specific dental pathologies, by sex. Statistically significant results (≤ 0.050) are provided in bold.

Pathology	LNP																
	Males				Females				All Sexes								
	ANOVA		Spearman's rho		ANOVA		Spearman's rho		ANOVA		Spearman's rho						
	$\delta^{13}\text{C}$	$\delta^{15}\text{N}$	$\delta^{13}\text{C}$	$\delta^{15}\text{N}$	$\delta^{13}\text{C}$	$\delta^{15}\text{N}$	$\delta^{13}\text{C}$	$\delta^{15}\text{N}$	$\delta^{13}\text{C}$	$\delta^{15}\text{N}$	$\delta^{13}\text{C}$	$\delta^{15}\text{N}$					
<i>p</i>	<i>p</i>	<i>p</i>	<i>r</i>	<i>p</i>	<i>r</i>	<i>p</i>	<i>p</i>	<i>p</i>	<i>r</i>	<i>p</i>	<i>p</i>	<i>p</i>	<i>r</i>	<i>p</i>	<i>r</i>		
Calc scale	0.582	0.736	0.727	0.780	0.312	0.098	0.902	0.728	0.359	0.399	0.754	0.928					
Caries (Y/N)	0.348	0.353	0.544	0.543	0.336	0.484	0.145	0.535	0.277	0.308	0.265	0.458					
No. caries	0.650	0.618	0.555	0.604	0.088	0.118	0.090	0.524	0.157	0.173	0.167	0.433					
AMTL (Y/N)	0.054	0.197	0.036	0.484	0.136	0.670	0.650	0.571	0.560	0.221	0.443	0.220	0.396				
No. AMTL	0.101	0.325	0.003	0.636	0.040	0.474	0.035	0.550	0.479	0.489	0.001	0.358	0.179	0.460			
Periodontal disease (Y/N)	0.015	0.028	0.009	0.580	0.015	0.551	0.000	0.079	0.000	0.686	0.080	0.000	0.003	0.000	0.584	0.001	0.419
Abscesses (Y/N)	0.533	0.290	0.392	0.324	0.392	0.759	0.093	0.503	0.193	0.261	0.090	0.252					
No. Abscess	0.687	0.703	0.259	0.399	0.096	0.486	0.034	0.425	0.298	0.064	0.474	0.047	0.266	0.215			
Avg attrition stage	0.065	0.021	0.828	0.755	0.818	0.542	0.613	0.943	0.205	0.022	0.699	0.883					

OA_Knees	0.532	0.708	NA	NA	0.363	0.661	0.056	0.018	NA	NA	0.150	0.158	0.054	0.259	0.723	0.782	0.088	0.326
OA_Feet	0.978	0.890	NA	NA	0.661	0.661	0.922	0.954	0.215	0.155	0.638	0.638	0.900	0.841	0.874	0.970	0.947	0.592
OA_Elbows	0.984	0.884	NA	NA	0.555	0.846	NA	NA	NA	NA	NA	NA	0.870	0.842	NA	NA	0.465	0.466
OA_Hips**	0.916	0.814	0.377	0.247	0.756	0.027	0.419	0.321	0.080	0.112	0.169	0.065	0.730	0.878	0.081	0.490	0.495	0.039
OA_Jaw	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OA_Sternocostal	0.300	0.885	0.369	0.039	0.332	1.000	0.660	0.219	NA	NA	0.559	0.182	0.165	0.959	0.578	0.285	0.089	0.885
Squatting facets	0.707	0.099	NA	NA	1.000	0.182	NA	NA	NA	NA	NA	NA	0.708	0.340	NA	NA	0.873	0.244
Mandibular torus	0.852	0.899	0.130	0.832	0.735	1.000	0.310	0.808	NA	NA	0.225	0.742	0.238	0.828	0.409	0.562	0.332	0.931
Load-bearing	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.314	0.962	0.389	0.300	0.314	0.962

Table 8. Statistical results of ANOVA tests (*p* values) comparing bone collagen $\delta^{13}\text{C}$ and $\delta^{15}\text{N}$ values between PVP individuals with and without load-bearing or occupational stress indicators, by sex. Statistically significant results (≤ 0.050) are provided in bold.

Pathology	VA															
	Males								Females							
	ANOVA		Levene's		Spearman's rho				ANOVA		Levene's		Spearman's rho			
	$\delta^{13}\text{C}$	$\delta^{15}\text{N}$	$\delta^{13}\text{C}$	$\delta^{15}\text{N}$	$\delta^{13}\text{C}$	$\delta^{15}\text{N}$	r	r	$\delta^{13}\text{C}$	$\delta^{15}\text{N}$	$\delta^{13}\text{C}$	$\delta^{15}\text{N}$	$\delta^{13}\text{C}$	$\delta^{15}\text{N}$	r	r
Platymeria	0.096	0.074	0.698	0.158	0.200		0.330		0.224	0.700	0.133	0.123	0.237	1.000		
Platynemia	NA	NA	NA	NA	NA		NA		0.898	0.641	0.212	0.826	0.881	0.881		
OD	0.423	0.406	0.148	0.017	0.211		0.478		0.507	0.603	0.327	0.536	0.669	0.618		
OA	0.496	0.379	0.444	0.425	0.654		0.400		0.170	0.246	0.081	0.085	0.127	0.212		
OA_Verts	0.823	0.975	0.954	0.876	0.710		0.853		0.776	0.730	0.929	0.973	0.620	0.534		
OA_Shoulder**	0.026	0.023	0.997	0.645	0.031	0.801	0.010	0.875	0.852	0.751	0.255	0.353	0.848	0.747		
OA_Hands	0.584	0.623	0.476	0.353	0.342		0.841		0.575	0.499	0.214	0.202	0.383	0.130		
OA_Knees	0.622	0.485	0.103	0.019	0.508		0.743		0.887	0.862	0.718	0.565	0.942	0.826		
OA_Feet	0.509	0.368	NA	NA	0.555		0.369		0.297	0.093	0.204	0.281	0.280	0.026	0.768	
OA_Elbows	0.256	0.367	0.009	0.439	0.372		0.259		0.891	0.434	0.017	0.226	1.000	0.576		
OA_Hips**	0.310	0.462	0.264	0.927	0.250		0.357		0.436	0.072	0.000	0.022	0.702	0.117		
OA_Jaw	0.862	0.855	0.125	0.365	0.894		1.000		0.446	0.472	0.917	0.736	0.415	0.415		
OA_Sternocostal	0.089	0.237	0.987	0.791	0.103		0.162		0.069	0.009	0.068	0.048	0.101	0.001	0.785	
Squatting facets	0.643	0.842	0.266	0.388	0.276		0.697		0.162	0.125	0.485	0.334	0.069	0.032	-0.798	
Mandibular torus	0.234	0.418	0.004	0.656	0.277		0.282		0.581	0.906	0.950	0.277	0.429	0.604		
Load-bearing	NA	NA	NA	NA	NA		NA		0.334	0.671	0.284	0.220	0.216	0.893		

Pathology	All Sexes							
	ANOVA		Levene's		Spearman's rho			
	$\delta^{13}C$	$\delta^{15}N$	$\delta^{13}C$	$\delta^{15}N$	$\delta^{13}C$	$\delta^{15}N$		
	<i>p</i>	<i>p</i>	<i>p</i>	<i>p</i>	<i>p</i>	<i>r</i>	<i>p</i>	<i>r</i>
<i>Platymeria</i>	0.039	0.225	0.097	0.019	0.035	0.462	0.323	
<i>Platynemia</i>	0.602	0.367	0.023	0.231	0.796		0.432	
<i>OD</i>	0.950	0.886	0.692	0.620	0.980		0.899	
<i>OA</i>	0.679	0.833	0.403	0.506	0.192		0.518	
<i>OA_Verts</i>	0.488	0.479	0.708	0.933	0.396		0.293	
<i>OA_Shoulder**</i>	0.132	0.189	0.542	0.065	0.477		0.437	
<i>OA_Hands</i>	0.360	0.338	0.247	0.321	0.214		0.199	
<i>OA_Knees</i>	0.564	0.495	0.907	0.736	0.464		0.683	
<i>OA_Feet</i>	0.333	0.284	0.801	0.953	0.339		0.683	
<i>OA_Elbows</i>	0.301	0.177	0.001	0.172	0.516		0.214	
<i>OA_Hips**</i>	0.203	0.063	0.000	0.097	0.796		0.496	
<i>OA_Jaw</i>	0.321	0.560	0.277	0.559	0.306		0.406	
<i>OA_Sternocostal</i>	0.024	0.018	0.148	0.421	0.025	0.448	0.006	0.532
<i>Squatting facets</i>	0.303	0.678	0.865	0.206	0.183		0.374	
<i>Mandibular torus</i>	0.245	0.718	0.153	0.133	0.305		0.824	
<i>Load-bearing</i>	0.407	0.746	0.034	0.184	0.407		0.746	

Table 9. Statistical results of ANOVA tests (*p* values) comparing bone collagen $\delta^{13}C$ and $\delta^{15}N$ values between VA individuals with and without load-bearing or occupational stress indicators, by sex. Statistically significant results (≤ 0.050) are provided in bold.

Pathology	LNP														
	Males						Females								
	ANOVA		Levene's		Spearman's rho		ANOVA		Levene's		Spearman's rho				
	$\delta^{13}C$	$\delta^{15}N$	$\delta^{13}C$	$\delta^{15}N$	$\delta^{13}C$	$\delta^{15}N$	$\delta^{13}C$	$\delta^{15}N$	$\delta^{13}C$	$\delta^{15}N$	$\delta^{13}C$	$\delta^{15}N$			
<i>p</i>	<i>p</i>	<i>p</i>	<i>p</i>	<i>p</i>	<i>r</i>	<i>p</i>	<i>r</i>	<i>p</i>	<i>p</i>	<i>p</i>	<i>p</i>	<i>p</i>	<i>r</i>	<i>p</i>	
<i>Platymeria</i>	0.050	0.079	0.181	0.128	0.034	0.791	0.034	0.791	0.277	0.481	NA	NA	0.225		0.225
<i>Platynemia</i>	NA	NA	NA	NA	NA			NA	NA	NA	NA	NA	NA		NA
<i>OD</i>	NA	NA	NA	NA	NA			NA	0.439	0.203	NA	NA	0.397		0.128

OA	0.938	0.762	0.091	0.130	0.911	0.654	0.751	0.686	0.931	0.737	0.751	0.972	
OA_Verts	0.919	0.972	0.063	0.099	0.866	0.866	0.115	0.120	0.072	0.455	0.279	0.200	
OA_Shoulder**	0.937	0.658	0.543	0.838	0.923	0.720	0.684	0.664	0.762	0.243	0.601	0.988	
OA_Hands	0.144	0.058	0.803	0.413	0.178	0.116	0.002	0.096	0.088	0.967	0.009	0.554	0.082
OA_Knees	0.890	0.890	NA	NA	0.874	0.750	0.627	0.631	0.127	0.605	0.477	0.686	
OA_Feet	0.775	0.873	0.845	0.548	0.908	0.817	0.980	0.980	NA	NA	0.918	0.605	
OA_Elbows	0.905	0.912	0.162	0.142	0.729	0.908	0.456	0.322	0.142	0.842	0.556	0.540	
OA_Hips**	0.561	0.208	0.841	0.251	0.799	0.450	0.214	0.179	0.099	0.400	0.474	0.683	
OA_Jaw	NA	NA	NA	NA	NA	NA	0.081	0.743	NA	NA	0.138	0.820	
OA_Sternocostal	0.293	0.287	0.072	0.146	0.259	0.373	0.959	0.891	0.815	0.355	0.689	0.895	
Squatting facets	NA	NA	NA	NA	NA	NA	0.742	0.856	NA	NA	NA	NA	
Mandibular torus	0.506	0.547	NA	NA	0.555	0.310	0.269	0.317	NA	NA	0.244	0.416	
Load-bearing	0.461	0.849	0.034	0.143	0.631	0.857	0.729	0.474	0.526	0.597	0.494	0.726	

All Sexes

Pathology	ANOVA		Levene's		Spearman's rho			
	$\delta^{13}\text{C}$	$\delta^{15}\text{N}$	$\delta^{13}\text{C}$	$\delta^{15}\text{N}$	$\delta^{13}\text{C}$	$\delta^{15}\text{N}$		
	p	p	p	p	p	r	p	r
Platymeria	0.010	0.034	0.186	0.041	0.004	0.733	0.020	0.634
Platynemia	NA	NA	NA	NA	NA		NA	
OD	0.514	0.216	NA	NA	0.425		0.129	
OA	0.997	0.796	0.142	0.260	0.997		0.796	
OA_Verts	0.103	0.110	0.027	0.195	0.104		0.084	
OA_Shoulder**	0.737	0.628	0.788	0.291	0.697		0.977	
OA_Hands	0.001	0.012	0.226	0.968	0.004	0.418	0.018	0.350
OA_Knees	0.736	0.624	0.190	0.235	0.696		0.668	
OA_Feet	0.843	0.504	0.426	0.268	0.958		0.540	
OA_Elbows	0.607	0.694	0.123	0.154	0.566		0.602	
OA_Hips**	0.527	0.655	0.688	0.551	0.958		0.897	
OA_Jaw	0.064	0.702	NA	NA	0.105		0.696	
OA_Sternocostal	0.312	0.198	0.624	0.162	0.235		0.221	
Squatting facets	0.742	0.856	NA	NA	0.742		0.742	

Mandibular torus	0.173	0.397	0.151	0.152	0.201	0.236
Load-bearing	0.300	0.268	0.338	0.140	0.300	0.268

Table 10. Statistical results of ANOVA tests (p values) comparing bone collagen $\delta^{13}\text{C}$ and $\delta^{15}\text{N}$ values between LNP individuals with and without load-bearing or occupational stress indicators, by sex. Statistically significant results (≤ 0.050) are provided in bold.

6.1.4.5. Non-specific and specific infections

Phase	Pathology	Males								Females									
		ANOVA		Levene's		Spearman's rho				ANOVA		Levene's		Spearman's rho					
		$\delta^{13}\text{C}$	$\delta^{15}\text{N}$	$\delta^{13}\text{C}$	$\delta^{15}\text{N}$	$\delta^{13}\text{C}$	$\delta^{15}\text{N}$	r	p	r	$\delta^{13}\text{C}$	$\delta^{15}\text{N}$	$\delta^{13}\text{C}$	$\delta^{15}\text{N}$	$\delta^{13}\text{C}$	$\delta^{15}\text{N}$	r	p	r
PVP	Periostitis	0.804	0.930	0.177	0.164	0.766		0.547		0.706	0.864	0.465	0.069	0.854		0.573			
	Spec inf	0.851	0.718	0.284	0.428	0.851		0.718		0.099	0.914	0.114	0.270	0.099		0.912			
	Non-specific inf	0.761	0.602	0.229	0.256	0.761		0.602		0.630	0.259	0.701	0.204	0.630		0.259			
	Pathology	0.024	0.019	0.291	0.219	0.024	-0.820	0.019	-0.835	NA	NA	NA	NA	NA		NA			
VA	Periostitis	0.856	0.775	0.316	0.582	0.908		1.000		0.619	0.820	0.689	0.291	0.507		0.447			
	Spec infection	NA	NA	NA	NA	NA		NA		0.046	0.047	0.338	0.365	0.046	0.504	0.047	0.503		
	Non-specific inf	0.505	0.341	0.525	0.848	0.505		0.341		0.258	0.333	0.482	0.900	0.258		0.333			
	Pathology	0.030	0.040	0.126	0.080	0.030	-0.652	0.040	-0.626	0.453	0.633	0.308	0.449	0.453		0.633			
LNP	Periostitis	0.199	0.305	0.243	0.021	0.165		0.425		0.443	0.166	0.023	0.263	0.593		0.333			
	Spec infection	0.642	0.191	0.451	0.882	0.642		0.191		0.646	0.788	0.232	0.206	0.646		0.788			
	Non-specific inf	0.821	0.889	0.092	0.035	0.821		0.889		0.336	0.396	0.021	0.711	0.336		0.396			
	Pathology	0.529	0.559	0.700	0.898	0.529		0.559		0.849	0.991	0.264	0.465	0.849		0.991			

Table 11. Statistical results of ANOVA tests (p values) comparing bone collagen $\delta^{13}\text{C}$ and $\delta^{15}\text{N}$ values between individuals with and without evidence of non-specific or specific infections, by phase and sex. Statistically significant results (≤ 0.050) are provided in bold.

6.1.5. Violent Trauma

Phase	Males						Females						All Sexes							
	ANOVA		Levene's		Spearman's rho		ANOVA		Levene's		Spearman's rho		ANOVA		Levene's		Spearman's rho			
	$\delta^{13}\text{C}$	$\delta^{15}\text{N}$	$\delta^{13}\text{C}$	$\delta^{15}\text{N}$	$\delta^{13}\text{C}$	$\delta^{15}\text{N}$	$\delta^{13}\text{C}$	$\delta^{15}\text{N}$	$\delta^{13}\text{C}$	$\delta^{15}\text{N}$	$\delta^{13}\text{C}$	$\delta^{15}\text{N}$	$\delta^{13}\text{C}$	$\delta^{15}\text{N}$	$\delta^{13}\text{C}$	$\delta^{15}\text{N}$	$\delta^{13}\text{C}$	r	p	r
PVP	0.848	0.744	NA	NA	0.742	0.742	NA	NA	NA	NA	NA	NA	0.671	0.918	NA	NA	0.441		0.805	
VA	0.409	0.146	0.156	0.039	0.323	0.122	0.158	0.332	NA	NA	0.225	0.225	0.791	0.803	0.772	0.472	0.817		0.908	

LNP 0.142 0.196 0.188 0.539 0.094 0.203 0.358 **0.037** NA NA 0.441 0.158 **0.048** 0.072 0.470 0.446 **0.031** **0.539** **0.047** **0.504**

Table 12. Statistical results of ANOVA tests (*p* values) comparing bone collagen $\delta^{13}\text{C}$ and $\delta^{15}\text{N}$ values between individuals with and without evidence of violent trauma, by phase and sex. Statistically significant results (≤ 0.050) are provided in bold.

6.1.6. Burial Practices

Setting	VA																	
	Males									Females								
	ANOVA		Levene's		Spearman's rho		No	ANOVA		Levene's		Spearman's rho		No				
	$\delta^{13}\text{C}$	$\delta^{15}\text{N}$	$\delta^{13}\text{C}$	$\delta^{15}\text{N}$	$\delta^{13}\text{C}$	$\delta^{15}\text{N}$		$\delta^{13}\text{C}$	$\delta^{15}\text{N}$	$\delta^{13}\text{C}$	$\delta^{15}\text{N}$	$\delta^{13}\text{C}$	$\delta^{15}\text{N}$					
<i>p</i>	<i>p</i>	<i>p</i>	<i>p</i>	<i>p</i>	<i>r</i>	<i>p</i>	<i>r</i>	<i>p</i>	<i>p</i>	<i>p</i>	<i>p</i>	<i>p</i>	<i>r</i>	<i>p</i>	<i>r</i>			
Churchyard	0.136	0.372	0.806	0.639	0.153		0.408	0.193	8	0.001	0.252	0.020	0.142	0.001	0.709	0.252	0.294	15
Cist	0.078	0.204	0.555	0.167	0.059	-0.613	0.197		8	0.019	0.359	0.054	0.190	0.019	-0.561	0.359		15
Boat burial	0.765	0.647	0.793	0.887	0.766		0.649		8	0.412	0.372	0.256	0.297	0.412		0.372		15
Grave goods	0.543	0.676	0.299	0.593	0.571		0.72		8	0.095	0.748	0.072	0.441	0.095		0.748		15
Jewellery	NA	NA	NA	NA	NA		NA		8	0.095	0.748	0.072	0.441	0.095		0.748		15
Beads	0.669	0.685	0.219	0.15	0.694		0.712		8	0.384	0.872	0.258	0.267	0.384		0.872		15
Weapons	0.543	0.676	0.299	0.593	0.571		0.72		8	NA	NA	NA	NA	NA		NA		15
Agricultural tools	0.694	0.712	0.17	0.099	0.694		0.712		8	0.196	0.617	0.145	0.682	0.192		0.617		15
Textile implements	NA	NA	NA	NA	NA		NA		8	0.196	0.617	0.145	0.682	0.196		0.617		15
Gaming pieces	0.399	0.293	0.257	0.178	0.42		0.313		8	0.384	0.872	0.258	0.267	0.384		0.872		15
Comb	0.465	0.356	0.287	0.272	0.42		0.313		8	0.196	0.617	0.145	0.682	0.196		0.617		15
Dagger	0.421	0.422	0.341	0.196	0.368		0.392		8	NA	NA	NA	NA	NA		NA		18

Setting	All Sexes									
	ANOVA		Levene's		Spearman's rho		No.			
	$\delta^{13}\text{C}$	$\delta^{15}\text{N}$	$\delta^{13}\text{C}$	$\delta^{15}\text{N}$	$\delta^{13}\text{C}$	$\delta^{15}\text{N}$				
<i>p</i>	<i>p</i>	<i>p</i>	<i>p</i>	<i>p</i>	<i>r</i>	<i>p</i>	<i>r</i>			

<i>Churchyard</i>	0.001	0.137	0.057	0.032	0.000	0.660	0.165	34
<i>Cist</i>	0.005	0.121	0.02	0.007	0.001	-0.538	0.140	35
<i>Boat burial</i>	0.476	0.549	0.576	0.627	0.460		0.415	35
Grave goods	0.147	0.801	0.355	0.346	0.061		0.941	35
<i>Jewellery</i>	0.045	0.304	0.014	0.137	0.005	-0.462	0.386	35
<i>Beads</i>	0.945	0.544	0.771	0.552	0.830		0.429	34
<i>Weapons</i>	0.678	0.802	0.607	0.944	0.622		0.764	35
<i>Agricultural tools</i>	0.530	0.913	0.989	0.694	0.324		0.854	33
<i>Textile implements</i>	0.168	0.408	0.086	0.435	0.056	-0.331	0.388	34
<i>Gaming pieces</i>	0.229	0.536	0.118	0.228	0.136		0.616	34
<i>Comb</i>	0.134	0.310	0.065	0.142	0.073		0.372	34
<i>Dagger</i>	0.467	0.677	0.251	0.187	0.473		0.943	34

Table 13. Statistical results of ANOVA tests (*p* values) comparing bone collagen $\delta^{13}\text{C}$ and $\delta^{15}\text{N}$ values between VA individuals with different burial settings and with or without grave goods, by sex. Statistically significant results (≤ 0.050) are provided in bold.

6.1.7. Site, site type and subsistence

	PVP																
	Males								Females								
	ANOVA		Levene's		Spearman's rho		No	ANOVA		Levene's		Spearman's rho *not age controlled		No			
$\delta^{13}\text{C}$	$\delta^{15}\text{N}$	$\delta^{13}\text{C}$	$\delta^{15}\text{N}$	$\delta^{13}\text{C}$	$\delta^{15}\text{N}$	$\delta^{13}\text{C}$		$\delta^{15}\text{N}$	$\delta^{13}\text{C}$	$\delta^{15}\text{N}$	$\delta^{13}\text{C}$	$\delta^{15}\text{N}$					
<i>Site type</i>	<i>p</i>	<i>p</i>	<i>p</i>	<i>p</i>	<i>p</i>	<i>r</i>	<i>p</i>	<i>p</i>	<i>p</i>	<i>p</i>	<i>p</i>	<i>p</i>	<i>r</i>	<i>p</i>	<i>r</i>		
<i>Site</i>	0.445	0.975	0.020	0.001	0.052	-0.702	0.833	8	0.089	0.307	0.197	0.093	0.005	-0.871	0.770	0.124	8
<i>Name type</i>	0.445	0.975	0.020	0.001	0.209		0.606	8	0.021	0.408	0.333	0.045	0.028	-0.760	1.000		8
<i>Plaggen</i>	NA	NA	NA	NA	NA		NA	4	NA	NA	NA	NA	NA		NA		3
<i>Pred animal</i>	NA	NA	NA	NA	NA		NA	3	NA	NA	NA	NA	NA		NA		2
<i>Pred cereal</i>	NA	NA	NA	NA	NA		NA	7	NA	NA	NA	NA	NA		NA		7
<i>Pred fish</i>	NA	NA	NA	NA	NA		NA	7	0.043	0.202	0.252	0.095	0.032	0.798	1.000		7
<i>Animal use</i>	NA	NA	NA	NA	1.000		1.000	3	NA	NA	NA	NA	NA		NA		2
<i>East/West</i>	NA	NA	NA	NA	NA		NA	3	0.043	0.202	0.252	0.095	0.032	-0.798	1.000		7

<i>LC Code</i>	0.353	0.884	0.073	0.231	0.065	0.678	0.976	8	0.6	0.439	0.226	0.444	0.552	0.555	8
<i>% Cattle</i>	NA	NA	NA	NA	1.000		1.000	3	NA	NA	NA	NA	NA	NA	2
<i>% Sheep/Goat</i>	NA	NA	NA	NA	1.000		1.000	3	NA	NA	NA	NA	NA	NA	2
<i>% Pig</i>	NA	NA	NA	NA	1.000		1.000	3	NA	NA	NA	NA	NA	NA	2

All Sexes controlled for age juves+

	ANOVA		Levene's		Spearman's rho		No.
	$\delta^{13}\text{C}$	$\delta^{15}\text{N}$	$\delta^{13}\text{C}$	$\delta^{15}\text{N}$	$\delta^{13}\text{C}$	$\delta^{15}\text{N}$	
<i>Site type</i>	p	p	p	p	p	p	
<i>Site</i>	0.005	0.999	0.001	0.001	0.204	0.996	17
<i>Name type</i>	0.003	0.994	0.000	0.000	0.141	0.970	17
<i>Plaggen</i>	NA	NA	NA	NA	NA	NA	7
<i>Pred animal</i>	NA	NA	NA	NA	NA	NA	5
<i>Pred cereal</i>	NA	NA	NA	NA	NA	NA	15
<i>Pred fish</i>	0.001	0.853	0.045	0.005	0.137	0.977	15
<i>Animal use</i>	0.423	0.999	0.127	0.125	0.581	0.974	5
<i>East/West</i>	0.001	0.853	0.045	0.005	0.137	0.977	15
<i>LC Code</i>	0.844	0.960	0.458	0.491	0.216	0.959	17
<i>% Cattle</i>	0.423	0.999	0.127	0.125	0.928	0.958	5
<i>% Sheep/Goat</i>	0.423	0.999	0.127	0.125	0.143	0.969	5
<i>% Pig</i>	0.423	0.999	0.127	0.125	0.260	0.997	3

Table 14. Statistical results of ANOVA tests (*p* values) comparing bone collagen $\delta^{13}\text{C}$ and $\delta^{15}\text{N}$ values between PVP individuals from sites with different subsistence practices, by sex. Statistically significant results (≤ 0.050) are provided in bold. Under "All Sexes", individuals of unknown sex are included, restricted to individuals juvenile and older.

VA

<i>Site type</i>	Males								Females						
	ANOVA		Levene's		Spearman's rho		No	ANOVA		Levene's		Spearman's rho			No
	$\delta^{13}\text{C}$	$\delta^{15}\text{N}$	$\delta^{13}\text{C}$	$\delta^{15}\text{N}$	$\delta^{13}\text{C}$	$\delta^{15}\text{N}$		$\delta^{13}\text{C}$	$\delta^{15}\text{N}$	$\delta^{13}\text{C}$	$\delta^{15}\text{N}$	$\delta^{13}\text{C}$	$\delta^{15}\text{N}$		
	p	p	p	p	p	p		p	p	p	p	p	r	p	r

Site	0.661	0.741	0.300	0.430	0.420	0.531	5	0.022	0.647	0.089	0.234	0.030	0.600	0.400	0.255	11
Name type	0.634	0.800	0.305	0.422	0.252	0.374	5	0.013	0.643	0.061	0.199	0.030	-0.600	0.400	-0.255	11
Plaggen	NA	NA	NA	NA	NA	NA	5	NA	NA	NA	NA	NA	NA	NA	NA	11
Pred animal	0.373	0.365	0.222	0.252	NA	NA	5	0.329	0.404	0.262	0.265	NA	NA	NA	NA	11
Pred cereal	0.399	0.293	0.257	0.178	NA	NA	5	0.412	0.372	0.256	0.297	NA	NA	NA	NA	11
Pred fish	0.346	0.373	0.261	0.181	0.268	0.383	5	NA	NA	NA	NA	NA	NA	NA	NA	11
Animal use	0.612	0.756	0.251	0.251	0.816	0.842	5	0.044	0.444	0.140	0.125	0.030	-0.600	0.400	-0.255	11
East/West	0.326	0.754	0.759	0.464	0.278	0.400	5	0.006	0.462	0.035	0.167	0.030	-0.600	0.400	-0.255	11
LC Code	0.630	0.550	0.443	0.290	0.227	0.349	5	0.153	0.484	0.208	0.257	0.030	-0.600	0.400	-0.255	11
% Cattle	0.558	0.676	0.256	0.408	0.624	0.686	5	0.054	0.495	0.187	0.193	0.030	-0.600	0.400	-0.255	11
% Sheep/Goat	0.558	0.676	0.356	0.408	0.316	0.436	5	0.054	0.495	0.187	0.193	0.030	-0.600	0.400	-0.255	11
% Pig	0.558	0.676	0.356	0.408	0.699	0.768	5	0.054	0.495	0.187	0.193	0.030	-0.600	0.400	-0.255	11

All Sexes controlled for age juves+

Site type	ANOVA		Levene's		Spearman's rho				No.
	$\delta^{13}\text{C}$	$\delta^{15}\text{N}$	$\delta^{13}\text{C}$	$\delta^{15}\text{N}$	$\delta^{13}\text{C}$	$\delta^{15}\text{N}$			
	p	p	p	p	p	r	p		
Site	0.036	0.534	0.027	0.056	0.009	0.522	0.165	0.293	22
Name type	0.023	0.531	0.157	0.085	0.007	-0.533	0.154	-0.300	22
Plaggen	NA	NA	NA	NA	NA	NA	NA	NA	22
Pred animal	0.123	0.207	0.047	0.087	NA	NA	NA	NA	22
Pred cereal	0.142	0.188	0.023	0.063	NA	NA	NA	NA	22
Pred fish	0.413	0.575	0.191	0.174	0.320	NA	0.570	NA	22
Animal use	0.170	0.521	0.087	0.083	0.058	-0.392	0.305	NA	22
East/West	0.007	0.427	0.187	0.101	0.007	-0.536	0.152	NA	22
LC Code	0.056	0.242	0.034	0.018	0.013	-0.500	0.181	-0.282	22
% Cattle	0.023	0.503	0.034	0.077	0.208	NA	0.311	NA	22
% Sheep/Goat	0.047	0.540	0.033	0.049	0.005	0.552	0.210	0.265	22
% Pig	0.047	0.540	0.033	0.049	0.014	-0.495	0.229	-0.970	22

Table 15. Statistical results of ANOVA tests (*p* values) comparing bone collagen $\delta^{13}\text{C}$ and $\delta^{15}\text{N}$ values between VA individuals from sites with different subsistence practices, by sex. Statistically significant results (≤ 0.050) are provided in bold. Under "All Sexes", individuals of unknown sex are included, restricted to individuals juvenile and older.

LNP

<i>Site type</i>	Males									Females								
	ANOVA		Levene's		Spearman's rho			No	ANOVA		Levene's		Spearman's rho			No		
	$\delta^{13}\text{C}$	$\delta^{15}\text{N}$	$\delta^{13}\text{C}$	$\delta^{15}\text{N}$	$\delta^{13}\text{C}$	$\delta^{15}\text{N}$	r		$\delta^{13}\text{C}$	$\delta^{15}\text{N}$	$\delta^{13}\text{C}$	$\delta^{15}\text{N}$	$\delta^{13}\text{C}$	$\delta^{15}\text{N}$	r			
	p	p	p	p	p	r	p	r		p	p	p	p	p	r	p	r	
<i>Site</i>	0.000	0.017	0.434	0.548	0.003	0.530	0.108	0.300	30	0.001	0.032	0.432	0.364	0.002	0.523	0.008	0.452	33
<i>Name type</i>	0.000	0.017	0.434	0.548	0.000	-0.656	0.012	-0.452	30	0.001	0.032	0.432	0.364	0.002	-0.523	0.008	-0.452	33
<i>Plaggen</i>	0.000	0.031	0.898	0.936	0.000	0.618	0.043	0.378	29	0.000	0.009	0.680	0.373	0.002	0.527	0.009	0.449	33
<i>Pred animal</i>	NA	NA	NA	NA	NA		NA		9	NA	NA	NA	NA	NA		NA		4
<i>Pred cereal</i>	NA	NA	NA	NA	NA		NA		9	0.269	0.758	0.423	0.423	0.225		0.742		4
<i>Pred fish</i>	NA	NA	NA	NA	NA		NA		9	NA	NA	NA	NA	NA		NA		3
<i>Animal use</i>	NA	NA	NA	NA	NA		NA		9	0.269	0.758	0.423	0.423	0.225		0.742		4
<i>East/West</i>	0.006	0.128	0.269	0.339	0.007	-0.483	0.172	-0.256	30	0.001	0.052	0.456	0.493	0.005	-0.476	0.051	-0.343	33
<i>LC Code</i>	0.085	0.062	0.209	0.141	0.121		0.094		30	0.328	0.117	0.245	0.223	0.254		0.117		33
<i>% Cattle</i>	NA	NA	NA	NA	NA		NA		9	0.269	0.758	0.423	0.423	0.225		0.742		4
<i>% Sheep/Goat</i>	NA	NA	NA	NA	NA		NA		9	0.269	0.758	0.423	0.423	0.225		0.742		4
<i>% Pig</i>	NA	NA	NA	NA	NA		NA		9	0.269	0.758	0.423	0.423	0.225		0.742		4

All Sexes

<i>Site type</i>	ANOVA		Levene's		Spearman's rho			No.	
	$\delta^{13}\text{C}$	$\delta^{15}\text{N}$	$\delta^{13}\text{C}$	$\delta^{15}\text{N}$	$\delta^{13}\text{C}$	$\delta^{15}\text{N}$			
	<i>p</i>	<i>003,0</i>	<i>p</i>	<i>p</i>	<i>p</i>	<i>r</i>	<i>p</i>	<i>r</i>	
<i>Site</i>	0.000	0.009	0.336	0.440	0.000	0.443	0.011	0.287	78
<i>Name type</i>	0.000	0.009	0.336	0.440	0.000	-0.521	0.001	-0.366	78
<i>Plaggen</i>	0.000	0.004	0.970	0.956	0.000	0.498	0.003	0.329	78
<i>Pred animal</i>	NA	NA	NA	NA	NA		NA		13

<i>Pred cereal</i>	0.744	0.425	0.236	0.132	0.556		0.281		14
<i>Pred fish</i>	NA	NA	NA	NA	NA		NA		13
<i>Animal use</i>	0.744	0.425	0.236	0.132	0.556		0.281		14
<i>East/West</i>	0.000	0.058	0.214	0.527	0.000	-0.404	0.047	-0.225	78
<i>LC Code</i>	0.219	0.076	0.191	0.226	0.689		0.953		78
<i>% Cattle</i>	0.744	0.425	0.236	0.132	0.556		0.281		14
<i>% Sheep/Goat</i>	0.744	0.425	0.236	0.132	0.556		0.281		14
<i>% Pig</i>	0.744	0.425	0.236	0.132	0.556		0.281		14

Table 16. Statistical results of ANOVA tests (*p* values) comparing bone collagen $\delta^{13}\text{C}$ and $\delta^{15}\text{N}$ values between LNP individuals from sites with different subsistence practices, by sex. Statistically significant results (≤ 0.050) are provided in bold. Under "All Sexes", individuals of unknown sex are included, restricted to individuals juvenile and older.