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Common carp aquaculture in Neolithic China dates back 8,000 years

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Supplementary Information for

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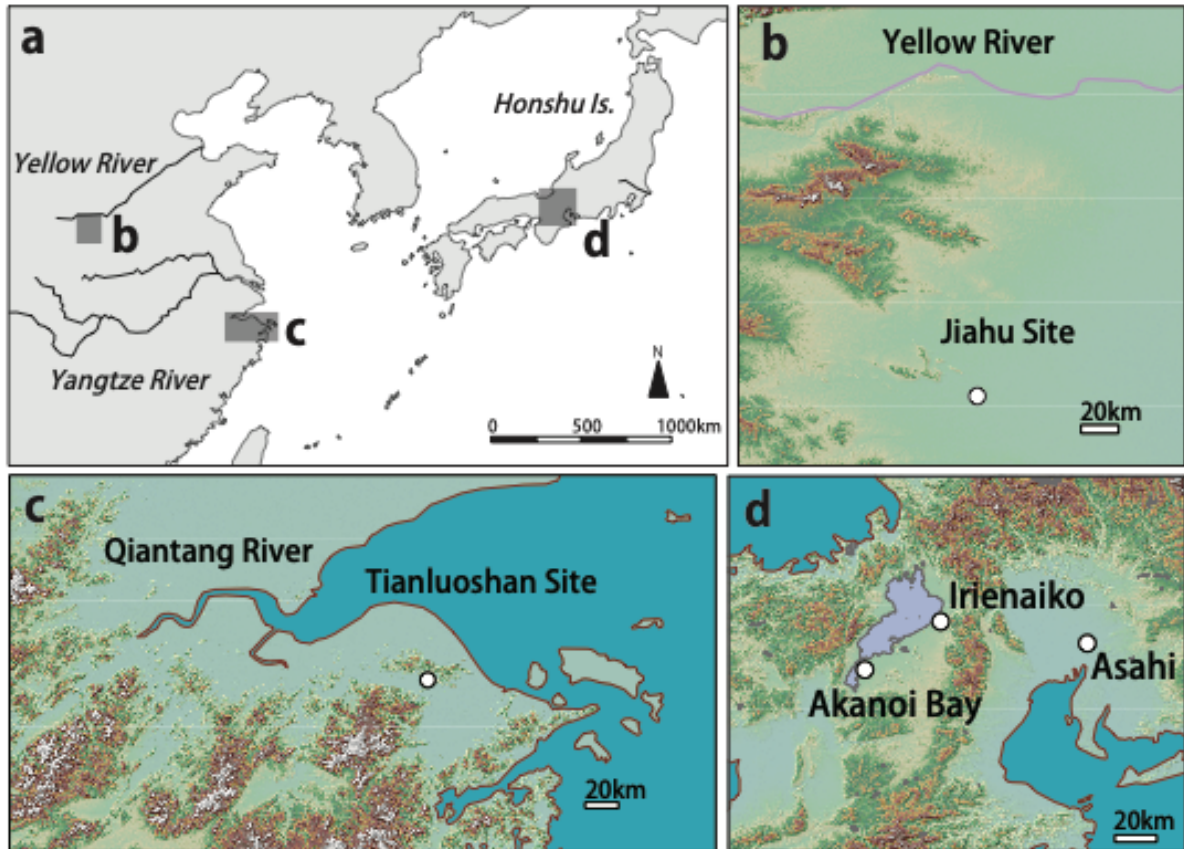
Supplementary Figure 2. Left pharyngeal bone and pharyngeal teeth of common carp, *Cyprinus carpio*.

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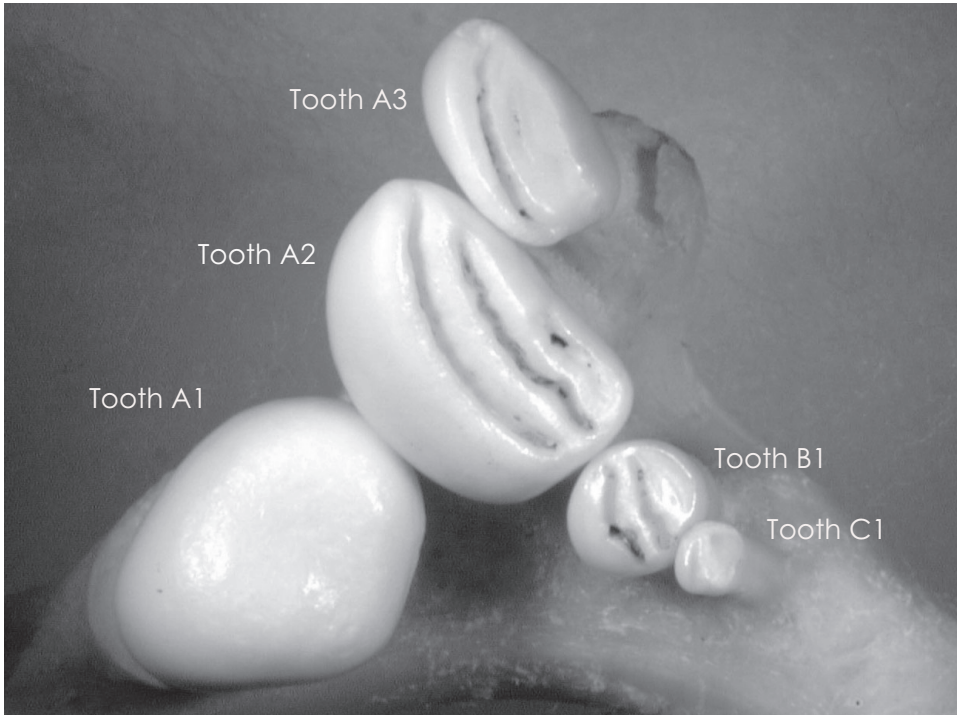
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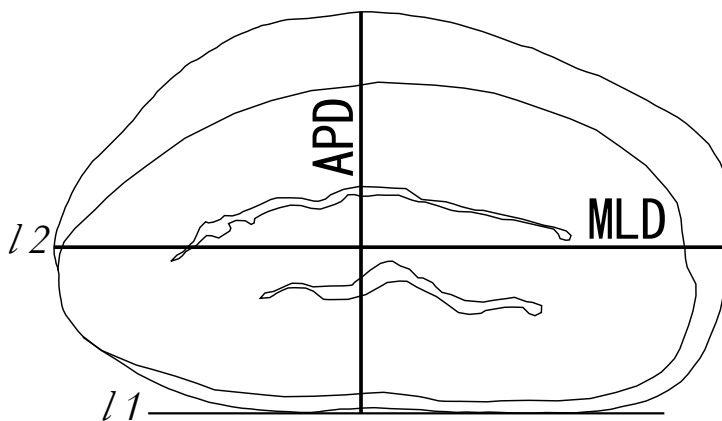
Supplementary Table 2. Pharyngeal bone samples with A2 teeth and measurements from the Jiahu site.



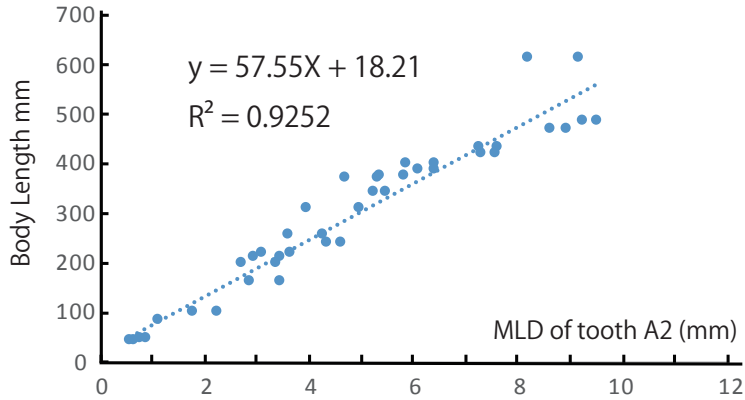
Supplementary Figure 1. Location of Jiahu (b), Tianluoshan (c) and the Japanese archaeological sites (d). The Jiahu 賈湖 site is located 22 km north of Wuyang, Henan Province, and the Tianluoshan 田螺山 is situated 22 km northwest of Ningbo, in northeast Zhejiang Province, P.R. China. The Asahi 朝日 site is shared between Kiyosu city and Nishi ward of Nagoya city, Aichi prefecture, Japan. Irienaiko 入江内湖 is in Maibara city and the Akanoi Bay 赤野井湾 site in Moriyama city, Shiga prefecture. Maps made using topographic data from NASA's Distributed Active Archive Centers (DAACs) (<https://earthdata.nasa.gov>) and Natural Land Numerical Information, Policy Bureau of the Ministry of Land, Infrastructure, Transport and Tourism in Japan (<http://nlftp.mlit.go.jp/ksj-c/index.html>).



Supplementary Figure 2. Left pharyngeal bone and pharyngeal teeth of common carp, *Cyprinus carpio*. There are three teeth in row A, one tooth in row B, and one tooth in row C.



Supplementary Figure 3. Measurements of A2 tooth of common carp, *Cyprinus carpio*. MLD is the maximum mesio-lateral length (l_2) along an axis parallel to the posterior margin (l_1). APD is the maximum antero-posterior length along an axis orthogonal to MLD.



Supplementary Figure 4. Standard body length regression for contemporary common carp. Based on a sample (n = 39) from Lake Biwa, Japan.

Supplementary Table 1. Frequency of cyprinid pharyngeal bones and teeth from the Jiahu site by cultural period.

Cyprinid	Jiahu I	Jiahu II	Jiahu III	Sub-totals
<i>Cyprinus carpio</i>	87	684	77	848
<i>Ctenopharyngodon idella</i>	27	65	15	107
<i>Mylopharyngodon piceus</i>	11	46	6	63
<i>Carassius auratus</i>	3	21	4	28
<i>Cyprinus longzhouensis</i>	0	20	0	20
<i>Megalobrama</i> sp.	1	38	2	41
<i>Culter</i> sp.	1	1	1	3
<i>Elopichthys bambusa</i>	0	1	0	1
<i>Cultrichthys</i> sp.	0	1	0	1
<i>Cultrinae</i> , gen et sp indet.	0	6	4	10
<i>Barbinae</i> , gen et sp indet.	0	3	3	6
Total	130	886	112	1128

Supplementary Table 2. Pharyngeal bone samples with A2 teeth and measurements from the Jiahu site. The data are sorted by cultural period. The total number of A2 teeth where the MLD could be measured is 588 (Period I= 47, Period II= 483, Period III= 58).

ID	Provenance	Period	Pharyngeal teeth				Status of A2			Note
			L/R	A row	B row	C row	No. of grooves	MLD mm	Estimated BL mm	
972	H494	1	L	2	1	1	3	5.38	328.06	
973	H494	1	R	1,2	1		?	5.16	315.29	
977	H494	1	L	2	1		2	5.54	337.42	
979	H494	1	L	1,2			2	4.74	291.48	
980	H494	1	R	1,2	1	1	3.5	7.25	435.66	
981	H494	1	R	1,2	1	2	3	5.10	312.16	
983	H494	1	R	1,2			3	5.41	329.56	
984	H494	1	R	1,2	1		3	6.47	390.87	
985	H494	1	R	1,2	1		2	4.94	302.91	
1013	H494	1	R	2,3			2.5	4.57	281.53	
1018	H494	1	L	1,2	1		3.5	7.24	435.27	
1019	H494	1	L	2			2.5	4.79	293.92	loose tooth
1039	H494	1	L	1,2	1	1	3	5.16	315.65	
1040	H494	1	L	1,2	1		2	4.62	284.45	
1042	H494	1	L	1,2	1		2	4.86	297.98	
1044	H494	1	L	1,2	1		2	5.02	307.56	
1046	H494	1	R	1,2	1	1	2	5.02	307.23	
1048	H494	1	R	2			3	5.32	324.41	loose tooth
1049	H494	1	L	2			2.5	4.84	297.07	loose tooth
1050	H494	1	R	2			3	4.61	283.66	loose tooth
1052	H479	1	L	1,2			3	7.76	464.96	
1055	H479	1	R	1,2	1	1	2	4.63	284.73	
1056	H479	1	R	2	1		2	5.88	357.05	
1057	H479	1	R	2,3	1		3	5.94	360.45	
1062	H479	1	L	1,2	1		2	3.73	233.33	
1064	H479	1	L	1,2			2	3.59	224.87	
1065	H479	1	L	2	1		3	5.49	334.46	
1066	H479	1	R	1,2			3	6.16	373.00	
1067	H479	1	R	1,2,3			1.5	2.86	182.79	
1068	H479	1	R	1,2			2	4.34	268.46	
1069	H479	1	R	1,2	1	1	3	6.90	415.87	
1071	H479	1	L	1,2	1		4	7.39	444.14	
1072	H479	1	L	1,2			3	5.68	345.26	
1073	H479	1	L	2			3	7.89	472.73	loose tooth
1074	H479	1	L	1,2,3			2.5	5.96	361.50	
1078	H479	1	R	1,2,3			3.5	6.67	402.64	
1085	H489	1	L	1,2,3	1		3	5.49	334.51	
1087	H489	1	L	1,2		1	3	5.96	361.65	
1088	H489	1	L	2	1	1	3	6.02	364.85	
1089	H489	1	L	1,2	1	1	3	6.17	373.51	
1090	H489	1	L	1,2	1	1	3	4.84	296.75	
1091	H489	1	R	1,2	1		3.5	6.52	393.54	
1129	H466	1	L	1,2	1		?	3.14	199.27	
1131	H466	1	L	2	1		2	4.01	249.34	

ID	Provenance	Period	Pharyngeal teeth			Status of A2			Note	
			L/R	A row	B row	C row	No. of grooves	MLD mm		Estimated BL mm
1132	H466	1	R	1,2			4	6.40	387.07	
1135	H466	1	L	1,2			2	4.45	274.55	
1136	H466	1	R	1,2	1		2	3.46	217.77	
1	F50	2	L	1,2,3	1		3	4.55	280.45	
2	F50	2	L	1,2	1	1	3	3.95	245.78	
3	F50	2	L	1,2	1	1	?	4.55	280.12	
4	F50	2	R	1,2,3	1	1	2	3.51	220.64	
5	F50	2	R	1,2,3	1	1	2	3.71	231.75	
6	F50	2	R	1,2			2	4.22	261.34	
22	F50	2	L	1,2	1	1	2?	5.44	331.38	
23	F50	2	L	1,2			2	4.02	250.02	
28	F50	2	L	1,2	1		1.5	3.83	238.64	
29	F50	2	R	1,2			2	5.40	329.33	
30	F50	2	R	1,2	1	1	2	4.48	276.09	
32	F50	2	R	1,2	1	1	2	3.47	218.08	
33	F50	2	R	2	1		3	5.53	336.79	
35	F50	2	R	1,2	1		1	2.48	161.03	
36	WJF50	2	L	1,2	1		2	5.65	343.73	
37	WJF50	2	L	2	1	1	3	6.33	383.07	
40	WJF50	2	L	1,2	1		1	2.89	184.43	
42	WJF50	2	L	1,2,3	1		1	3.70	231.11	
44	WJF50	2	R	1,2,3	1		3	5.33	325.18	
45	WJF50	2	R	1,2	1		3	7.40	444.39	
46	WJF50	2	R	1,2	1	1	3	5.78	350.91	
47	WJF50	2	R	1,2	1		2	4.34	267.96	
48	WJF50	2	R	1,2	1	1	2	3.88	241.76	
49	WJF50	2	R	1,2	1		3	6.62	399.53	
50	WJF50	2	R	1,2			2	3.93	244.50	
60	WJF50	2	L	1,2			1	4.18	258.82	
61	WJF50	2	L	1,2,3	1		2	3.84	239.40	
62	WJF50	2	L	1,2,3	1	1	2	3.42	214.97	
70	WJT43H483	2	L	2,3	1	1	2	4.15	256.99	
72	WJT43H483	2	L	1,2		1	2	2.63	169.93	
77	WJT43H483	2	L	1,2	1		2	5.05	309.24	
79	WJT43H483	2	L	1,2			2.5	5.02	307.29	
80	WJT43H483	2	L	2	1		2.5	2.73	175.31	
81	WJT43H483	2	L	1,2	1		2.5	4.50	277.12	
82	WJT43H483	2	L	1,2	1		2.5	3.98	247.20	
83	WJT43H483	2	R	1,2	1	1	2	2.87	183.34	
84	WJT43H483	2	R	1,2	1		1+	3.81	237.52	
85	WJT43H483	2	R	2			2.5	4.33	267.60	loose tooth
86	WJT43H483	2	R	2			2.5	4.21	260.66	loose tooth
87	WJT43H483	2	R	1,2			2	4.98	304.89	
88	WJT43H483	2	R	1,2			2	3.44	216.43	
89	WJT43H483	2	R	2	1		2	3.12	198.09	
90	WJT43H483	2	R	1,2	1		2.5	4.43	273.10	
91	WJT43H483	2	R	1,2	1		2	3.07	194.76	
92	WJT43H483	2	R	1,2	1	1	2.5	4.92	301.31	
93	WJT43H483	2	R	1,2		1	2	4.15	257.11	

ID	Provenance	Period	Pharyngeal teeth				Status of A2			Note
			L/R	A row	B row	C row	No. of grooves	MLD mm	Estimated BL mm	
94	WJT43H483	2	R	1,2		1	2	3.95	245.46	
95	WJT43H483	2	R	1,2	1		2	2.55	164.86	
96	WJT43H483	2	R	1,2,3	?	1	2	3.37	212.33	
97	WJT43H483	2	R	1,2,3	1		2	4.79	294.16	
98	WJT43H483	2	R	1,2,3			1+	3.04	193.29	
100	WJT43H483	2	R	1,2	1	1	2	3.47	217.84	
101	WJT43H483	2	R	2		1	1+	2.68	172.40	
102	WJT43H483	2	R	2,3	1		1	3.29	207.85	
103	WJT43H483	2	R	1,2			2	4.33	267.53	
104	WJT43H483	2	R	1,2,3	1		1+	2.40	156.57	
181	WJT106AH474	2	L	1,2			2.5	4.04	250.84	
182	WJT106AH474	2	L	1,2	1		1.5	3.01	191.40	
183	WJT106AH474	2	L	1,2,3	1		2	3.63	227.46	
184	WJT106AH474	2	L	1,2	1		2	4.48	276.13	
185	WJT106AH474	2	L	1,2	1	1	2	4.31	266.64	
187	WJT106AH474	2	L	1,2,3			2	3.69	230.85	
188	WJT106AH474	2	R	1,,2	1		2	3.07	195.17	
189	WJT106AH474	2	L	1,2			2	3.71	232.11	
190	WJT106AH474	2	R	1,2			2.5	4.64	285.36	
195	WJT106AH474	2	L	1,2	1		2	3.70	231.24	
196	WJT106AH474	2	L	1,2	1	1	2	3.45	217.01	
197	WJT106AH474	2	L	1,2	1		2.5	3.64	227.76	
198	WJT106AH474	2	L	1,2			2	3.33	210.01	
199	WJT106AH474	2	L	1,2,3	1	1	3	4.86	298.02	
200	WJT106AH474	2	L	1,2			2	3.74	233.58	
201	WJT106AH474	2	L	1,2	1		3	4.04	250.98	
202	WJT106AH474	2	L	1,2			2.5	4.01	249.24	
203	WJT106AH474	2	L	1,2			3	5.59	340.11	
204	WJT106AH474	2	L	1,2,3			2	3.94	245.33	
205	WJT106AH474	2	L	1,2,,3			?2	3.73	233.11	
206	WJT106AH474	2	R	1,2	1	1	2	2.80	179.63	
207	WJT106AH474	2	R	1,2	1		2	3.38	213.10	
209	WJT106AH474	2	R	2	1		2.5	4.03	250.46	
210	WJT106AH474	2	R	2	1	1	2.5	3.72	232.73	
211	WJT106AH474	2	R	1,2			3	6.17	373.32	
212	WJT106AH474	2	R	2		1	3	4.08	253.00	
214	WJT106AH474	2	R	1,2	1	1	2.5	3.93	244.78	
215	WJT106AH474	2	R	1,2	1		2	2.62	169.06	
223	WJT106AH474	2	L	1,2,3	1		2	2.83	181.44	
224	WJT106AH474	2	L	1,2			3	6.29	380.71	
225	WJT106AH474	2	R	1,2			3	4.18	258.75	
226	WJT106AH474	2	R	2	1		2	2.74	175.81	
227	WJT106AH474	2	R	2	1		2	3.54	221.86	
228	WJT106AH474	2	R	2			2	4.13	256.30	loose tooth
229	WJT106AH474	2	R	2			3	3.88	241.60	loose tooth
233	WJT106AH474	2	L	1,2	1	1	3	6.11	369.96	
234	WJT106AH474	2	L	1,2,3	1		3	5.38	328.17	
235	WJT106AH474	2	L	2	1		3	4.72	289.93	
236	WJT106AH474	2	L	1,2,3			2.5	3.84	239.58	

ID	Provenance	Period	Pharyngeal teeth				Status of A2			Note
			L/R	A row	B row	C row	No. of grooves	MLD mm	Estimated BL mm	
237	WJT106AH474	2	L	1,2	1	1	?2+	4.10	254.15	
239	WJT106AH474	2	L	2	1	1	1.5	2.87	183.46	
240	WJT106AH474	2	L	1,2			2.5	2.99	190.24	
242	WJT106AH474	2	L	1,2			3	3.94	244.98	
243	WJT106AH474	2	L	1,2			2	2.89	184.50	
244	WJT106AH474	2	L	1,2	1		2	3.30	208.27	
246	WJT106AH474	2	L	2	1		2	3.88	241.97	
247	WJT106AH474	2	L	2	1	1	2	2.68	172.55	
248	WJT106AH474	2	L	1,2,3	1	1	2	3.21	203.06	
249	WJT106AH474	2	L	2	1		1.5	2.03	135.22	
250	WJT106AH474	2	L	1,2			2	3.95	245.67	
251	WJT106AH474	2	L	1,2		1	2	3.70	231.53	
252	WJT106AH474	2	L	1,2	1		2	4.62	284.57	
253	WJT106AH474	2	R	1,2			2.5	3.75	234.14	
254	WJT106AH474	2	R	1,2			2	3.48	218.73	
255	WJT106AH474	2	L	1,2,3	1		2	4.22	260.99	
256	WJT106AH474	2	L	2			2	4.22	261.42	loose tooth
257	WJT106AH474	2	L	1,2			2	3.27	206.75	
258	WJT106AH474	2	L	1,2			2.5	3.96	246.48	
260	WJT106AH474	2	L	1,2	1		2	3.54	222.10	
262	WJT106AH474	2	L	1,2			2	3.47	217.87	
263	WJT106AH474	2	R	1,2			2.5	4.40	271.89	
265	WJT106AH474	2	L	1,2			2.5	3.64	227.97	
266	WJT106AH474	2	L	1,2	1		2	2.98	190.05	
267	WJT106AH474	2	L	1,2	1	1	2	3.79	236.37	
268	WJT106AH474	2	L	1,2	1	1	2	4.16	257.80	
269	WJT106AH474	2	L	2	1		1	4.48	276.42	
270	WJT106AH474	2	L	1,2	1		2	4.35	268.63	
271	WJT106AH474	2	L	1,2	1		2	3.89	242.21	
275	WJT106AH474	2	L	1,2			2	3.34	210.55	
276	WJT106AH474	2	L	1,2	1		?	3.46	217.67	
277	WJT106AH474	2	L	1,2			2	3.31	208.85	
278	WJT106AH474	2	L	1,2,3			2	4.01	248.98	
279	WJT106AH474	2	L	1,2			2	3.80	237.25	
280	WJT106AH474	2	L	1,2	1		2	3.86	240.51	
282	WJT106AH474	2	L	1,2	1	1	2.5	4.53	279.24	
284	WJT106AH474	2	L	1,2	1		3	3.69	230.91	
285	WJT106AH474	2	L	1,2	1		1	4.00	248.49	
286	WJT106AH474	2	L	1,2,3			2.5	4.60	283.16	
287	WJT106AH474	2	L	1,2	1	1	2.5	4.79	294.32	
288	WJT106AH474	2	L	1,2	1	1	1	4.69	288.26	
290	WJT106AH474	2	L	1,2	1	1	2.5	3.86	240.42	
291	WJT106AH474	2	L	1,2	1		2	3.72	232.53	
292	WJT106AH474	2	L	1,2	1		2	3.85	240.21	
293	WJT106AH474	2	L	1,2			2	3.81	237.89	
296	WJT106AH474	2	R	1,2			2	5.31	323.96	
297	WJT106AH474	2	L	2			2	3.42	215.23	loose tooth
298	WJT106AH474	2	R	1,2			2	4.02	249.99	
300	WJT106AH474	2	R	1,2	1	1	?1	3.97	246.60	

ID	Provenance	Period	Pharyngeal teeth			Status of A2			Note		
			L/R	A row	B row	C row	No. of grooves	MLD mm		Estimated BL mm	
302	WJT106AH474	2	R	1,2	1			2	4.61	283.84	
303	WJT106AH474	2	R	1,2	1			2	4.86	297.97	
305	WJT106AH474	2	R	1,2				2	3.23	204.05	
306	WJT106AH474	2	R	1,2	1			2.5	4.98	304.88	
307	WJT106AH474	2	R	1,2				3	4.68	287.83	
308	WJT106AH474	2	R	1,2	1		1	2	3.58	224.38	
309	WJT106AH474	2	R	2				2	3.48	218.61	loose tooth
310	WJT106AH474	2	R	1,2	1			3	4.67	287.40	
311	WJT106AH474	2	R	1,2	1		1	2	5.13	313.97	
312	WJT106AH474	2	R	1,2				2	3.45	217.18	
314	WJT106AH474	2	R	1,2				3	4.15	257.33	
315	WJT106AH474	2	R	1,2	1		1	2	3.52	220.91	
316	WJT106AH474	2	R	2	1			2	2.93	186.72	
318	WJT106AH474	2	R	1,2				2	3.91	243.18	
320	WJT106AH474	2	R	1,2	1			2	3.41	214.53	
321	WJT106AH474	2	R	1,2				2	3.58	224.21	
324	WJT106AH474	2	R	1,2	1			2	3.04	193.50	
327	WJT106AH474	2	R	1,2,3				2	3.29	207.76	
328	WJT106AH474	2	R	1,2	1			3	4.27	264.15	
330	WJT106AH474	2	R	1,2	1			2	3.89	242.42	
331	WJT106AH474	2	R	2	1		1	2	3.20	202.63	
332	WJT106AH474	2	R	2				2	3.36	211.76	loose tooth
333	WJT106AH474	2	R	2	1		1	2	3.92	244.11	
335	WJT106AH474	2	R	1,2	1			2	3.45	217.02	
336	WJT106AH474	2	R	1,2	1			2	4.21	260.63	
337	WJT106AH474	2	R	2	1			2	3.35	211.00	
338	WJT106AH474	2	R	2				2	3.69	230.66	loose tooth
339	WJT106AH474	2	L	1,2	1			2.5	3.83	238.99	
340	WJT106AH474	2	R	1,2	1			2	3.51	220.27	
341	WJT106AH474	2	R	1,2	1		1	2	4.17	258.27	
342	WJT106AH474	2	R	1,2				2	5.00	306.48	
343	WJT106AH474	2	R	1,2	1		1	2.5	4.33	267.67	
346	WJT106AH474	2	R	2	1			2.5	3.17	200.99	
348	WJT106AH474	2	R	1,2	1			1	3.02	192.25	
349	WJT106AH474	2	R	1,2	1			2	3.42	215.07	
350	WJT106AH474	2	R	1,2	1			2.5	3.80	236.82	
351	WJT106AH474	2	R	1,2,3				2	3.30	208.49	
352	WJT106AH474	2	L	2				2.5	4.18	259.15	loose tooth
353	WJT106AH474	2	R	1,2,3	1			2	3.40	214.21	
354	WJT106AH474	2	R	1,2	1			2	3.44	216.61	
355	WJT106AH474	2	R	1,2	1		1	2.5	4.14	256.58	
356	WJT106AH474	2	L	1,2				1.5	3.78	236.03	
358	WJT106AH474	2	R	1,2				2	2.87	183.73	
359	WJT106AH474	2	R	1,2				2	4.51	277.71	
362	WJT106AH474	2	R	2,3				3	3.73	233.11	
363	WJT106AH474	2	R	1,2	1			2.5	4.23	261.61	
366	WJT106AH474	2	R	1,2	1			1.5	3.07	194.88	
459	H460	2	L	1,2	1			2	3.57	223.87	
461	H460	2	L	2,3				1+	3.55	222.88	

ID	Provenance	Period	Pharyngeal teeth				Status of A2			Note
			L/R	A row	B row	C row	No. of grooves	MLD mm	Estimated BL mm	
462	H460	2	L	2	1		2	3.65	228.58	
463	H460	2	L	1,2	1	1	?1	3.43	215.50	
465	H460	2	L	1,2	1	1	2	4.45	274.34	
466	H460	2	L	2	1		2	4.01	249.35	
468	H460	2	R	1,2	1	1	3	3.66	228.89	
469	H460	2	R	1,2	1	1	2	3.43	215.98	
470	H460	2	R	1,2,3			2	3.57	223.60	
472	H460	2	L	1,2		1	2	3.23	204.00	
473	H460	2	L	1,2	1		2	2.99	190.38	
474	H460	2	R	1,2,3			2	4.03	250.14	
475	H460	2	R	1,2	1		2	2.79	178.67	
476	H460	2	R	1,2	1		2	3.20	202.39	
483	H460	2	L	1,2	1	1	3	4.56	280.75	
485	H460	2	L	1,2			2	3.41	214.45	
486	H460	2	L	2	3		2	4.32	267.01	
487	H460	2	L	1,2	1	1	2	3.46	217.32	
488	H460	2	L	2	1		2	3.44	216.52	
490	H460	2	L	1,2	1		2	3.52	220.87	
491	H460	2	L	1,2,3	1		2	3.35	211.14	
492	H460	2	L	1,2	1	1	2	3.18	201.56	
493	H460	2	L	1,2	1	1	2	3.00	191.19	
494	H460	2	L	1,2	1	1	2.5	3.74	233.65	
495	H460	2	L	2			2	3.78	236.01	loose tooth
496	H460	2	L	1,2,3	1	1	1+	3.55	222.94	
497	H460	2	L	1,2	1		2.5	3.63	227.39	
498	H460	2	L	1,2,3	1			3.56	223.35	
500	H460	2	R	1,2	1		2	4.15	257.30	
503	H460	2	R	1,2	1	1	3	4.56	280.83	
504	H460	2	R	1,2	1		2	3.61	226.42	
505	H460	2	R	1,2	1	1	2	4.12	255.64	
506	H460	2	R	1,2	1		2	3.58	224.22	
508	H460	2	R	1,2	1	1	2	2.79	178.82	
509	H460	2	R	1,2	1	1	2	3.49	219.20	
511	H460	2	R	1,2	1		2	2.71	174.41	
516	H460	2	L	1,2	1	1	2	3.78	236.11	
517	H460	2	L	1,2	1		2.5	4.20	259.98	
518	H460	2	L	1,2	1	1	3	4.75	291.75	
519	H460	2	L	1,2	1		2	3.70	231.14	
520	H460	2	L	1,2	1		2	4.11	254.72	
521	H460	2	L	2	1	1	2	3.26	205.82	
523	H460	2	L	2	1		2	4.39	271.11	
525	H460	2	L	1,2,3			3	3.90	243.01	
527	H460	2	L	2	1		2	2.93	187.10	
529	H460	2	R	1,2	1		2	3.18	201.30	
530	H460	2	R	1,2,3	1		2+	4.73	290.77	
531	H460	2	R	1,2	1	1	2	4.35	268.55	
532	H460	2	R	1,2	1	1	2	3.92	244.24	
533	H460	2	R	1,2	1		2	3.84	239.54	
535	H460	2	R	2	1		2	3.14	199.21	

ID	Provenance	Period	Pharyngeal teeth			Status of A2			Note	
			L/R	A row	B row	C row	No. of grooves	MLD mm		Estimated BL mm
538	H460	2	R	1,2	1		2	4.21	260.95	
539	H460	2	R	1,2			2	3.41	214.38	
540	H460	2	R	2	1		2	3.14	198.84	
541	H460	2	L	1,2,3			2	3.65	228.26	
543	H460	2	L	1,2	1	1	2	3.33	210.27	
544	H460	2	L	1,2	1	1	2.5	4.06	252.33	
545	H460	2	L	1,2	1	1	2	3.49	219.28	
546	H460	2	L	1,2	1		2	3.84	239.20	
547	H460	2	L	1,2	1		2	2.86	182.81	
548	H460	2	L	2	1	1	2	3.52	220.83	
549	H460	2	L	1,2	1	1	2	3.80	237.02	
552	H460	2	L	1,2			2	3.97	247.06	
553	H460	2	L	1,2			2	3.45	217.00	
554	H460	2	R	1,2,3			2	4.33	267.45	
555	H460	2	R	1,2			2	3.71	231.62	
556	H460	2	R	1,2			2	3.43	215.50	
557	H460	2	R	1,2	1		2	3.44	216.60	
558	H460	2	R	1,2	1		2	3.98	247.38	
559	H460	2	R	1,2	1	1	2	4.50	277.37	
560	H460	2	R	1,2	1		3	3.71	231.78	
562	H460	2	R	1,2	1		2.5	4.14	256.69	
563	H460	2	R	1,2	1	1	1+	3.51	220.62	
566	H460	2	R	2	1		1+	3.01	191.51	
567	H460	2	R	1,2			2	3.35	211.00	
570	H460	2	L	2	1		?1	1.96	130.86	
578	H490	2	L	1,2	1		2	4.21	260.96	
579	H490	2	L	1,2			2.5	3.86	240.58	
580	H490	2	L	2	1	1	2	3.67	229.74	
581	H490	2	L	1,2	1	1	3	4.14	256.87	
582	H490	2	L	2			2	4.90	300.48	loose tooth
585	H490	2	L	1,2	1		2	4.25	262.98	
587	H490	2	L	1,2			2	3.91	243.31	
588	H490	2	L	1,2	1	1	2	3.27	206.47	
592	H490	2	L	1,2			2	2.10	139.44	
593	H490	2	R	2	1		2	2.90	185.03	
595	H490	2	R	1,2	1	1	3	3.71	231.75	
596	H490	2	R	2			2.5	4.27	264.14	loose tooth
599	H490	2	R	1,2			2.5	4.25	263.06	
600	H490	2	R	1,2	1		2.5	4.66	286.84	
601	H490	2	R	2,3	1		2	3.56	223.38	
603	H490	2	R	1,2			2	3.57	223.84	
616	H483	2	L	1,2,3			2.5	4.56	280.76	
617	H483	2	L	1,2	1		2	4.07	252.83	
619	H483	2	L	1,2	1		3	4.57	281.58	
622	H483	2	L	1,2			2	4.11	254.78	
623	H483	2	L	1,2	1			2.80	179.25	
627	H483	2	L	2	1			4.92	301.81	
629	H483	2	L	2			2	3.85	239.67	loose tooth
630	H483	2	L	1,2			2	3.72	232.40	

ID	Provenance	Period	Pharyngeal teeth			Status of A2			Note	
			L/R	A row	B row	C row	No. of grooves	MLD mm		Estimated BL mm
632	H483	2	L	1,2			2	3.45	216.81	
634	H483	2	L	2	1	1	2	3.27	206.39	
635	H483	2	L	1,2	1	1	2	3.91	243.20	
636	H483	2	L	1,2			2	3.70	231.11	
637	H483	2	L	2			2	4.11	254.92	loose tooth
638	H483	2	L	1,2	1	1	2	2.97	189.00	
639	H483	2	L	2	1		2	2.74	175.95	
640	H483	2	L	1,2	1		2	2.51	162.51	
642	H483	2	R	2	1		?	2.62	168.84	
643	H483	2	R	1,2			3	7.09	426.72	
646	H483	2	R	1,2	1		2	5.15	315.02	
648	H483	2	R	1,2	1		2	3.40	214.11	
651	H483	2	R	1,2	1		2.5	3.91	243.41	
652	H483	2	R	1,2	1		2	2.71	174.40	
653	H483	2	R	2			2.5	4.95	303.36	loose tooth
654	H483	2	R	1,2			2	3.05	193.66	
655	H483	2	R	1,2	1		2	4.04	250.74	
656	H483	2	R	1,2	1		2	2.99	190.70	
658	H483	2	R	1,2			2	3.47	218.04	
659	H483	2	R	2	1		?	3.45	217.10	
660	H483	2	R	2			2	3.52	220.99	
661	H483	2	R	1,2	1		2	3.45	216.89	
663	H483	2	R	1,2			2	3.80	237.23	
665	H483	2	R	2			2	3.95	245.96	loose tooth
666	H483	2	R	1,2	1		2	3.77	235.49	
668	H483	2	R	1,2	1		2	2.85	182.13	
672	T43H483	2	L	1,2			2	3.47	218.08	
673	T43H483	2	L	1,2	1		2	4.43	273.25	
674	T43H483	2	L	1,2			2	4.50	277.52	
675	T43H483	2	L	1,2	1	1	2	3.38	212.80	
677	T43H483	2	L	1,2	1		2	3.88	241.79	
678	T43H483	2	L	1,2	1	1	2	3.05	193.60	
679	T43H483	2	L	1,2	1		2.5	3.02	192.34	
683	T43H483	2	L	1,2	1		2	3.77	235.50	
689	T43H483	2	R	1,2,3	1	1	2	4.80	294.40	
692	T43H483	2	R	2			2	4.46	275.05	loose tooth
693	T43H483	2	R	1,2	1		1	2.83	181.40	
696	T43H483	2	R	1,2			2	3.95	245.63	
701	T43H483	2	L	1,2	1		3	5.46	332.98	
702	T43H483	2	L	1,2	1		2.5	4.21	260.83	
713	T43H483	2	L	1,2			2	3.13	198.64	
715	T43H483	2	L	2			1	3.23	204.11	loose tooth
719	T43H483	2	L	2	1		1.5	3.37	212.39	
720	T43H483	2	L	1,2	1	1	2	4.26	263.84	
723	T43H483	2	L	2	1		2	3.90	242.72	
724	T43H483	2	L	1,2			2	3.43	215.99	
725	T43H483	2	L	1,2	1	1	2	4.27	264.01	
726	T43H483	2	L	1,2	1		2	3.01	191.70	
727	T43H483	2	L	1,2,3			2	3.37	212.59	

ID	Provenance	Period	Pharyngeal teeth			Status of A2			Note		
			L/R	A row	B row	C row	No. of grooves	MLD mm		Estimated BL mm	
728	T43H483	2	L	1,2	1			1+	2.37	154.60	
729	T43H483	2	L	1,2,3	1		1	1	2.34	152.87	
731	T43H483	2	L	1,2				2	3.69	230.99	
733	T43H483	2	R	1,2	1			2	2.96	188.42	
737	T43H483	2	R	2				2.5	4.55	280.45	loose tooth
738	T43H483	2	R	1,2	1			2	3.51	220.56	
741	T43H483	2	R	2				2	2.53	163.85	loose tooth
742	T43H483	2	R	2	1			?	3.04	193.08	
745	T43H483	2	R	1,2	1			2	3.54	222.31	
746	T43H483	2	R	1,2				2	3.57	223.90	
750	T43H483	2	R	1,2				2	3.97	246.95	
751	T43H483	2	R	1,2	1		1	2	4.30	265.90	
764	T43H483	2	L	1,2	1			2	2.60	168.15	
765	T43H483	2	L	1,2	1		1	2	2.85	182.31	
767	T43H483	2	L	1,2	1			2	3.57	223.79	
769	T43H483	2	L	1,2,3				1	2.28	149.48	
771	T43H483	2	L	1,2				2	3.00	191.17	
772	T43H483	2	L	1,2	1			2	3.81	237.64	
774	T43H483	2	L	1,2				2	3.13	198.71	
775	T43H483	2	L	1,2	1		1	1	2.91	185.60	
776	T43H483	2	L	1,2				2	3.42	215.15	
777	T43H483	2	L	1,2	1			1.5	2.14	141.65	
778	T43H483	2	L	1,2	1		1	1	2.16	142.79	
779	T43H483	2	L	1,2	1			2	2.89	184.93	
781	T43H483	2	L	1,2				2	2.75	176.61	
782	T43H483	2	L	1,2,3	1		1	1.5	2.35	153.58	
783	T43H483	2	L	1,2,3	1			2	2.94	187.41	
784	T43H483	2	L	1,2	1			1.5	2.32	151.93	
786	T43H483	2	R	1,2				2	3.70	231.25	
788	T43H483	2	R	1,2,3	1			2	4.22	261.54	
789	T43H483	2	R	1,2,3	1		1	2	3.16	200.07	
792	T43H483	2	R	1,2	1		1	1.5	2.52	163.38	
794	T43H483	2	R	1,2	1			1	2.64	170.54	
796	T43H483	2	R	1,2	1			2	2.33	152.56	
798	T43H483	2	R	1,2	1			1	3.00	190.75	
799	T43H483	2	R	1,2			1	2	3.40	214.06	
800	T43H483	2	R	2,3	1			2	2.63	169.84	
801	T43H483	2	R	1,2	1			2	2.43	158.16	
802	T43H483	2	R	1,2	1			1.5	2.39	155.69	
804	T43H483	2	R	1,2	1			2	3.40	213.75	
805	T43H483	2	R	1,2	1			2	2.68	172.75	
806	T43H483	2	R	1,2				2	2.26	148.51	
807	T43H483	2	R	1,2	1		1	2	2.65	170.91	
808	T43H483	2	R	1,2				2	3.33	209.88	
809	T43H483	2	R	1,2	1		1	2	2.16	142.45	
810	T43H483	2	R	1,2	1			1	1.82	123.17	
811	T43H483	2	R	1,2	1			1+	1.84	124.27	
812	T43H483	2	R	2	1			1.5	2.34	152.86	
813	T43H483	2	R	1,2	1		1	2	2.28	149.25	

ID	Provenance	Period	Pharyngeal teeth			Status of A2			Note	
			L/R	A row	B row	C row	No. of grooves	MLD mm		Estimated BL mm
814	T43H483	2	R	1,2		1	1	2.29	150.17	
824	H455(1)	2	L	1,2			2	3.88	241.42	
825	H455(1)	2	R	1,2,3	1		2.5	4.86	298.25	
826	H455(1)	2	R	1,2			2	3.64	227.69	
827	H455(4)	2	L	1,2,3	1	1	4	6.32	382.32	
828	H455(4)	2	L	1,2	1		3	5.54	337.54	
829	H455(4)	2	L	1,2,3	1	1	3	7.36	441.87	
830	H455(4)	2	L	2	1		3	5.28	322.46	
832	H455(4)	2	L	1,2	1		2	4.23	261.61	
833	H455(4)	2	R	1,2	1	1	3	7.84	469.85	
834	H455(4)	2	R	2	1	1	3	8.29	495.55	
835	H455(4)	2	R	1,2	1	1	3	6.34	383.28	
836	H455(4)	2	R	1,2			2	3.95	245.79	
841	H455(5)	2	L	1,2	1		3	5.56	338.65	
842	H455(5)	2	R	1,2,3			3	3.95	245.72	
843	H455(5)	2	L	1,2,3	1		3	4.47	275.44	
856	H455(6)	2	L	1,2	1		2	3.11	197.12	
858	H455(6)	2	R	1,2	1	1	2.5	4.37	270.19	
859	H455(6)	2	R	1,2	1	1	2.5	4.61	283.76	
860	H455(6)	2	R	2	1		3	4.26	263.83	
862	H455(6)	2	R	1,2			3	4.50	277.56	
864	H455(2)	2	L	1,2	1	1	2.5	4.92	301.37	
866	H455(2)	2	R	1,2	1	1	2	4.17	258.64	
873	H455(8)	2	L	1,2	1	1	3	5.31	323.97	
875	H455(8)	2	L	1,2			3	5.04	308.59	
876	H455(8)	2	L	1,2	1		3	4.93	302.29	
877	H455(8)	2	L	2	1	1	3	5.95	361.20	
878	H455(8)	2	L	2	1	1	2	5.08	310.94	
879	H455(8)	2	L	1,2	1		2	3.52	220.69	
880	H455(8)	2	L	1,2	1		3	4.14	256.83	
882	H455(8)	2	R	1,2	1	1	2.5	3.87	241.00	
884	H455(8)	2	R	1,2			1	3.16	200.39	
889	H455(8)	2	R	1,2	1		2	3.62	226.96	
895	H458	2	R	1,2	1	1	2.5	3.79	236.41	
896	H458	2	R	1,2	1	1	3	5.29	322.64	
897	H458	2	R	1,2	1		3	6.73	405.70	
898	H458	2	L	1,2	1	1	2	3.96	246.08	
909	H458	2	L	1,2	1	1	4	8.87	528.99	
910	H458	2	L	1,2			3	8.28	495.09	
912	H458	2	L	1,2	1		3	6.99	420.99	
913	H458	2	L	1,2	1	1	3	4.98	305.10	
915	H458	2	L	2			3	6.89	415.28	loose tooth
916	H458	2	L	1,2	1	1	3	5.90	357.82	
917	H458	2	L	2,3			3.5	6.88	414.52	
918	H458	2	L	1,2	1	1	3	5.68	345.53	
919	H458	2	L	1,2			2	4.43	273.34	
920	H458	2	L	1,2	1	1	2	3.89	242.15	
922	H458	2	L	1,2		1	2	3.58	224.25	
923	H458	2	L	1,2	1		2.5	3.76	234.61	

ID	Provenance	Period	Pharyngeal teeth			Status of A2			Note		
			L/R	A row	B row	C row	No. of grooves	MLD mm		Estimated BL mm	
924	H458	2	L	2	1			2.5	5.27	321.62	
925	H458	2	L	2	1			2	3.71	232.13	
926	H458	2	L	1,2				?	7.17	430.99	
927	H458	2	L	1,2				2.5	4.35	268.63	
928	H458	2	L	1,2	1			2	4.12	255.24	
929	H458	2	L	2	1	1		2	5.72	347.73	
930	H458	2	L	1,2				3	5.29	322.73	
931	H458	2	R	1,2	1			3	5.80	352.03	
932	H458	2	R	1,2	1			3	6.97	419.91	
933	H458	2	R	1,2	1			3	6.61	398.90	
934	H458	2	R	1,2				3	6.28	379.99	
935	H458	2	R	1,2	1			3	7.64	458.19	
936	H458	2	R	1,2,3	1			3	6.98	420.48	
937	H458	2	R	1,2,3	1	1		3	6.31	381.49	
938	H458	2	R	1,2,3	1	1		3	6.18	374.24	
939	H458	2	R	1,2	1	1		3	6.83	411.82	
940	H458	2	R	1,2,3	1	1		3	4.60	282.98	
941	H458	2	R	1,2	1			3	5.63	342.30	
942	H458	2	R	1,2,3	1			3	6.26	379.04	
943	H458	2	R	1,2,3	1	1		3	5.58	339.67	
944	H458	2	R	1,2				2	4.19	259.71	
945	H458	2	R	1,2	1	1		2	2.69	173.13	
947	H458	2	R	1,2	1	1		2	4.25	262.75	
948	H458	2	R	1,2	1			2	3.63	227.06	
949	H458	2	R	1,2	1			3	5.73	347.98	
950	H458	2	R	1,2	1			3	5.62	342.05	
952	H458	2	R	1,2	1			3	4.58	282.28	
953	H458	2	R	2	1	1		3	4.73	290.76	
957	H458	2	R	1,2,3	1	1		2	3.93	244.44	
958	H458	2	R	1,2	1	1		2	4.51	277.77	
960	H458	2	L	1,2	1			3	5.84	354.64	
961	H458	2	R	1,2	1	1		2.5	4.82	295.95	
962	H458	2	L	1,2				3	5.61	341.37	
964	H458	2	L	1,2	1			2	3.35	210.96	
965	H458	2	R	2				4	7.27	436.82	loose tooth
1107	H496	2	L	2	1			2	2.99	190.21	
1109	H496	2	L	1,2	1			2	2.15	141.84	
1111	H496	2	R	1,2	1			2	4.69	288.51	
1113	H496	2	R	1,2	1	1		2	3.39	213.30	
1114	H496	2	R	2				2.5	5.02	307.32	loose tooth
1115	H496	2	R	1,2				3	5.84	354.57	
1116	H496	2	L	2				3	4.95	303.44	loose tooth
1117	H496	2	L	1,2				2	4.11	254.92	
1122	H486	2	R	1,2	1			2	3.87	241.35	
1126	H451	2	R	1,2				2	5.41	329.80	
115	H485	3	L	1,2	1			2	3.48	218.57	
116	H485	3	L	1,2	1			2	2.72	174.64	
117	H485	3	L	1,2				2	2.74	176.23	
118	H485	3	L	1,2	1			2	4.07	252.54	

ID	Provenance	Period	Pharyngeal teeth			Status of A2			Note	
			L/R	A row	B row	C row	No. of grooves	MLD mm		Estimated BL mm
119	H485	3	L	1,2	1		2	3.15	199.69	
120	H485	3	L	1,2	1		2	3.28	206.99	
121	H485	3	L	1,2,3			2	3.60	225.63	
123	H485	3	L	1,2	1		2	2.35	153.51	
124	H485	3	L	1,2,3	1		?	2.68	172.32	
125	H485	3	L	1,2			2	2.96	188.73	
126	H485	3	L	1,2	1		2	2.86	182.97	
127	H485	3	L	1,2	1		2	2.96	188.45	
129	H485	3	L	1,2	1		2	3.19	202.01	
130	H485	3	R	1,2,3	1		2	3.57	223.87	
132	H485	3	R	1,2	1		2	3.07	194.99	
133	H485	3	R	1,2	1		2	2.91	185.79	
135	H485	3	R	1,2	1	1	2	2.97	189.55	
136	H485	3	R	1,2,3	1		1.5	2.34	152.73	
138	H485	3	R	2,3	1		?	2.85	182.49	
139	H485	3	R	1,2	1	1	2	1.94	129.68	
140	H485	3	R	1,2	1		2	3.12	197.93	
141	H485	3	R	1,2			2	2.77	177.58	
142	H485	3	L	2			3	6.79	409.56	loose tooth
143	H485	3	L	2	1		2.5	4.20	260.25	
144	H485	3	L	2	1	1	3	3.92	243.88	
145	H485	3	L	1,2	1		3.5	6.08	368.60	
146	H485	3	L	2	1		3	6.15	372.40	
148	H485	3	L	2	1		3.5	8.47	505.87	
149	H485	3	L	1,2	1	1	3	6.32	382.07	
150	H485	3	L	1,2	1		4	6.18	374.40	
153	H485	3	L	1,2	1		4	7.20	432.65	
154	H485	3	L	1,2	1	1	3	4.75	292.07	
155	H485	3	L	1,2	1	1	3	6.24	377.44	
156	H485	3	R	1,2			3	6.52	393.84	
159	H485	3	R	1,2	1		3	6.06	367.19	
173	H485	3	L	1,2	1		2	3.33	210.20	
174	H485	3	L	2	1		4	6.72	405.23	
175	H485	3	L	1,2	1		3	6.97	419.73	
176	H485	3	L	1,2,3	1		3	6.34	383.62	
177	H485	3	L	1,2			2	2.95	188.11	
178	H485	3	R	2	1	1	3.5	5.82	353.52	
180	H485	3	R	2			3	6.45	389.92	loose tooth
1097	H468	3	L	1,2	1		2	3.62	226.43	
1098	H468	3	R	1,2	1		1.5	2.26	148.47	
1100	H468	3	R	1,2			3	5.70	346.31	
1141	H441	3	L	1,2	1		2	3.15	199.38	
1142	H441	3	L	1,2			2	2.53	164.07	
1143	H441	3	L	1,2	1		2	3.37	212.51	
1144	H441	3	L	1,2	1	1	2	4.50	277.25	
1147	H441	3	L	2			4	9.73	578.89	loose tooth
1149	H441	3	R	1,2	1		2	3.22	203.80	
1150	H441	3	R	1,2	1		2	3.60	225.32	
1151	H441	3	R	1,2			2	3.46	217.77	

ID	Provenance	Period	Pharyngeal teeth				Status of A2			Note
			L/R	A row	B row	C row	No. of grooves	MLD mm	Estimated BL mm	
1160	H441	3	L	2	1	1	2	2.56	165.46	
1161	H441	3	R	1,2,3	1	1	2	2.84	181.60	
1162	H441	3	R	1,2	1		2	3.90	242.75	
1163	H441	3	R	1,2,3	1		2.5	4.17	258.12	
1164	H441	3	R	2,3	1		2	2.60	168.20	