

# Supplementary materials

## Contents

2	.....	Figures
2	.....	Figure S1. The proportion of femora that were broken in the Northern Sequence
3	.....	Figure S2. The proportion of humeri that were broken in the Northern Sequence
4	.....	Figure S3. The proportion of femora that were broken in the Southern Sequence
5	.....	Figure S4. The proportion of humeri that were broken in the Southern Sequence
6	.....	Figure S5. Proportion of teeth broken by sequence unit in the Northern Sequence.
7	.....	Figure S6. Proportion of teeth broken by sequence unit in the Southern Sequence.
8	.....	Tables
8	.....	Table S1: Murid digestion intensity
8	.....	Table S2: Sample column or area humerus data
8	.....	Table S3: Sample column or area femur data
9	.....	Table S4: Northern sequence femur data
10	.....	Table S5: Northern sequence humerus data
11	.....	Table S6: Southern sequence femur data
12	.....	Table S7: Southern sequence humerus data
13	.....	Table S8: Northern sequence arvicoline isolated molar digestion data
15	.....	Table S9: Southern sequence arvicoline isolated molar digestion data
16	.....	Table S10: Northern sequence arvicoline in situ molar digestion data
16	.....	Table S11: Southern sequence arvicoline in situ molar digestion data
16	.....	Table S12: Sample column or Area dentition breakage data
17	.....	Table S13: Northern sequence dentition breakage data
19	.....	Table S14: Southern sequence dentition breakage data
20	.....	Table S15: Sample column or Area arvicoline isolated molar digestion data
20	.....	Table S16: Sample column or Area arvicoline in situ molar digestion data

## Figures

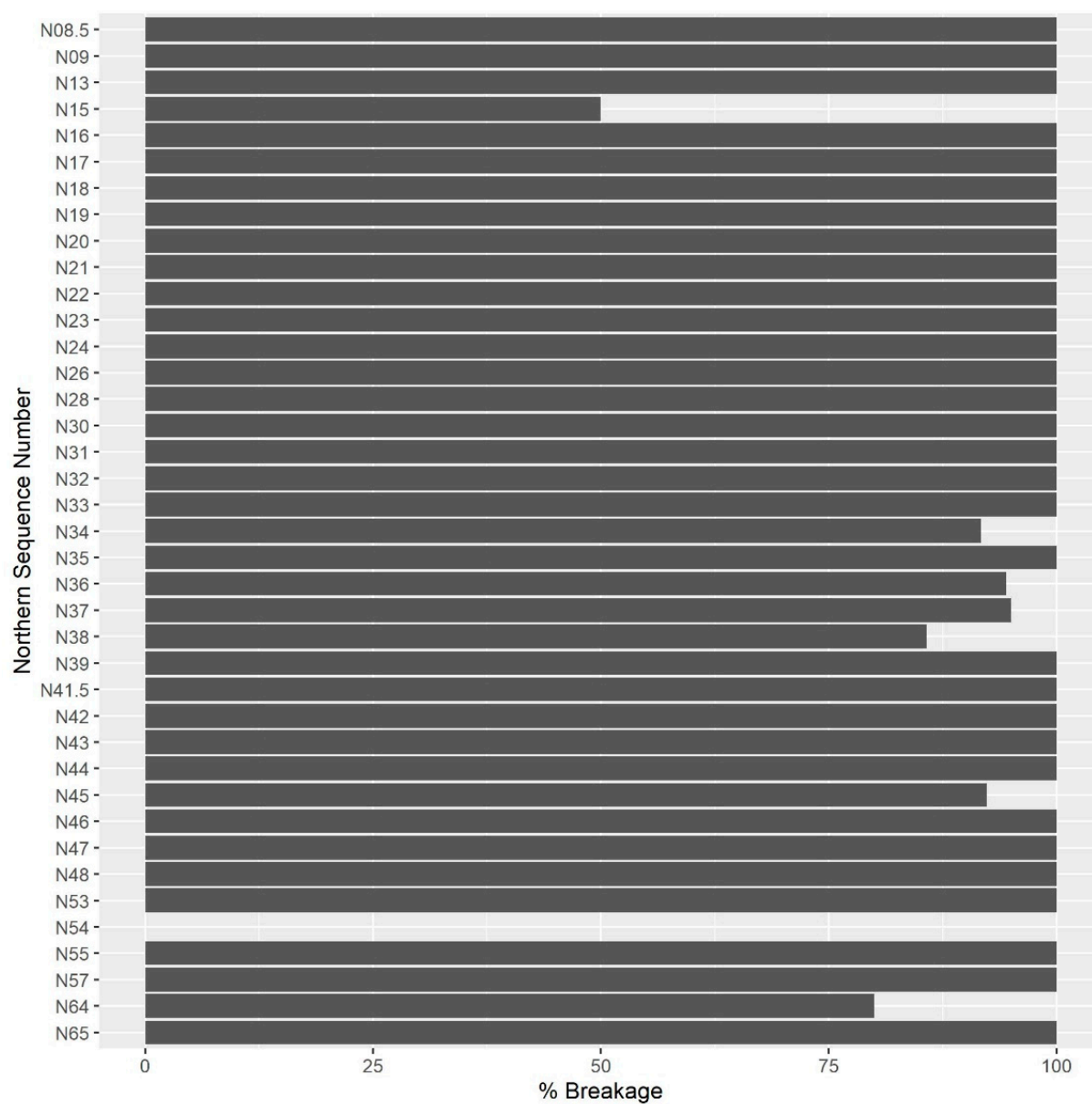


Figure S1. The proportion of femora that were broken in the Northern Sequence

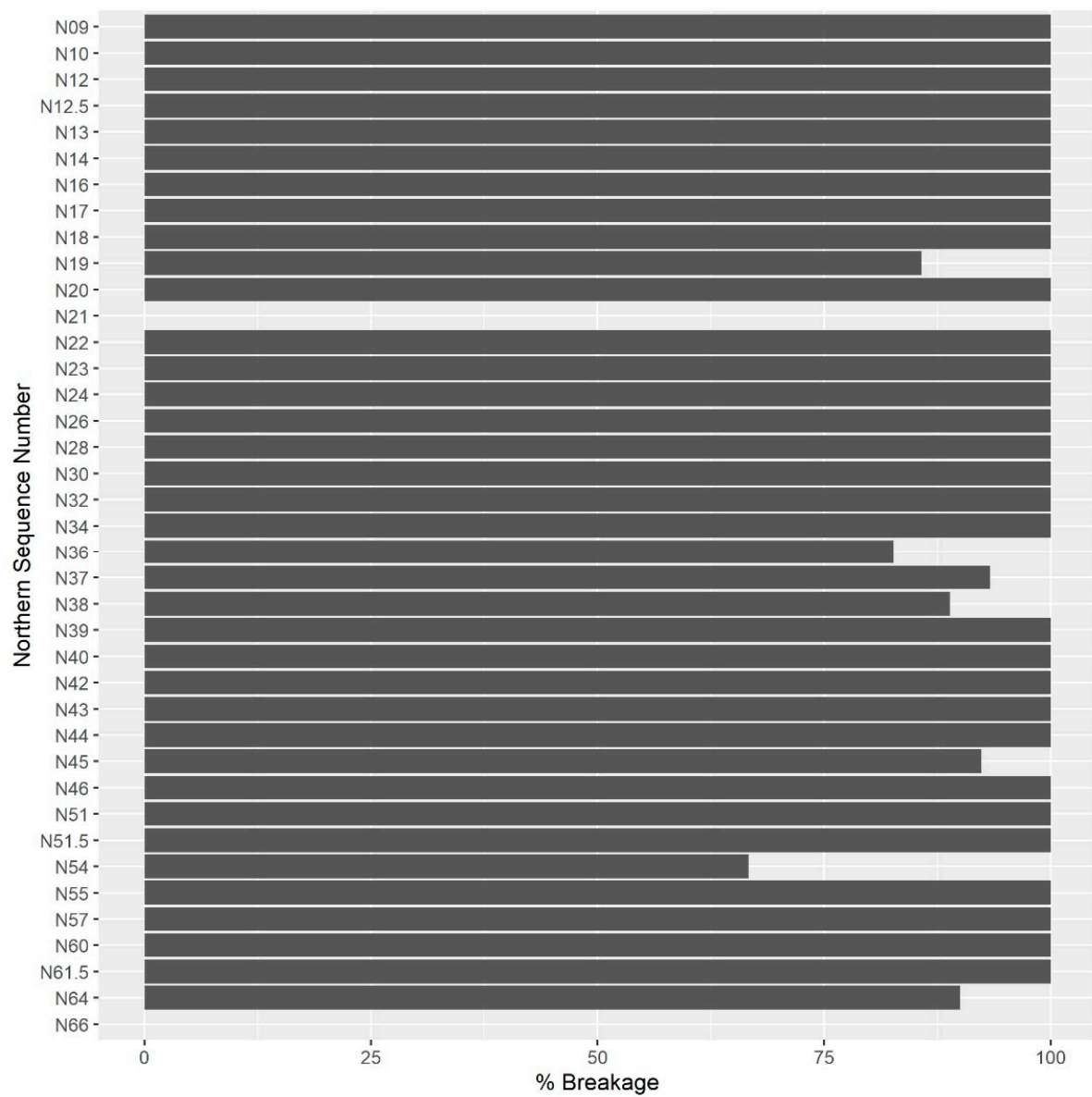


Figure S2. The proportion of humeri that were broken in the Northern Sequence

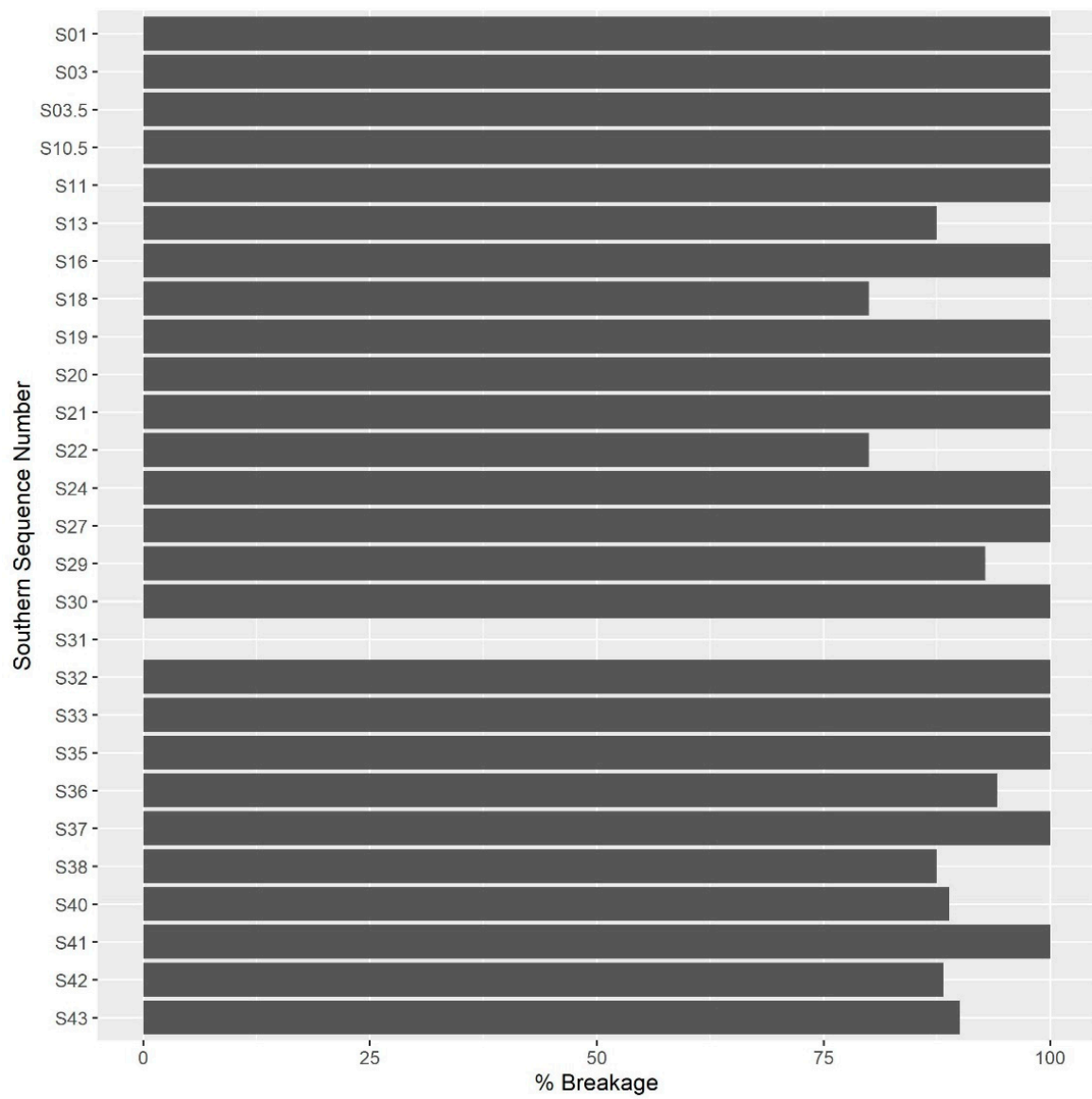


Figure S3. The proportion of femora that were broken in the Southern Sequence

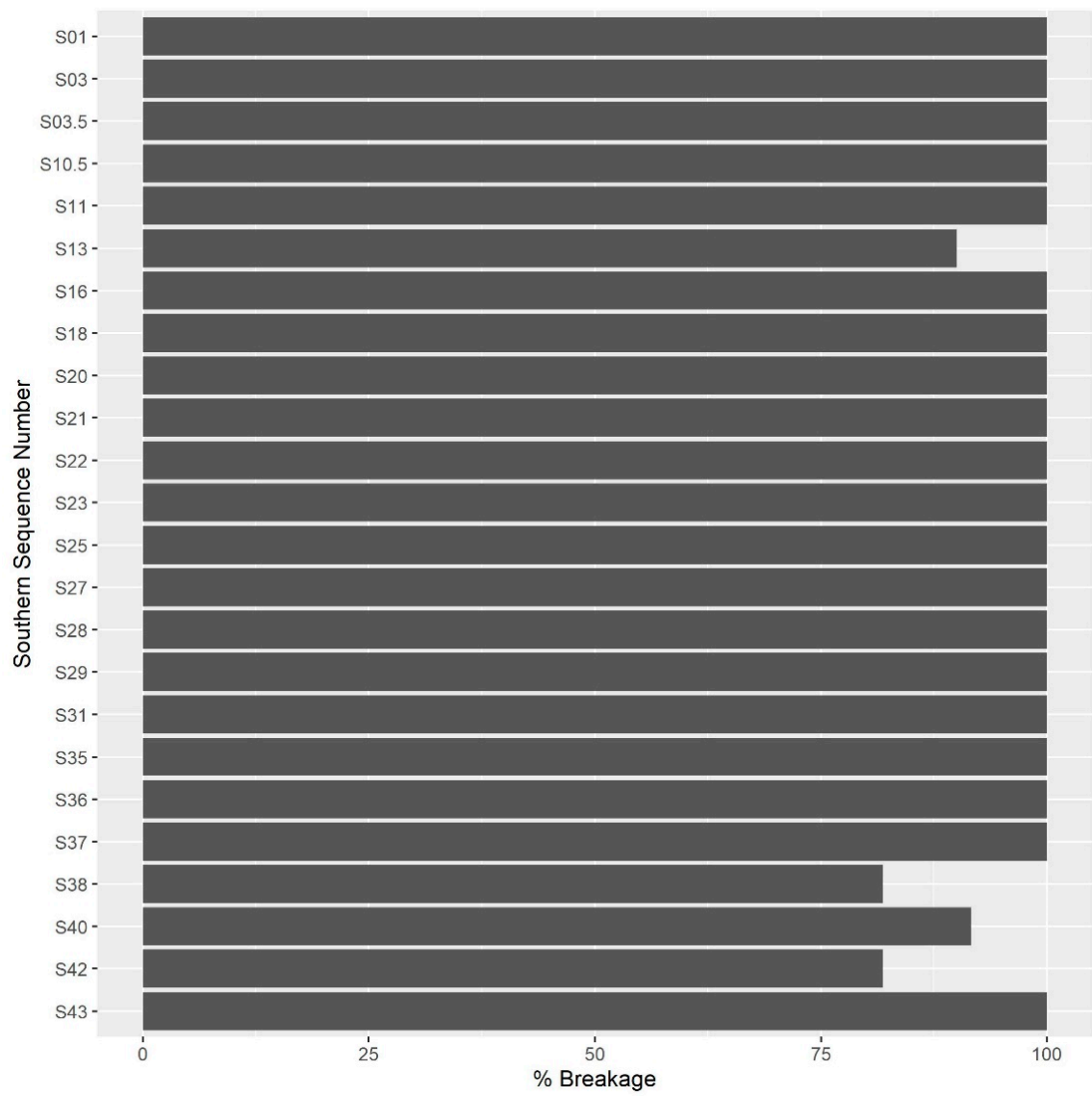


Figure S4. The proportion of humeri that were broken in the Southern Sequence

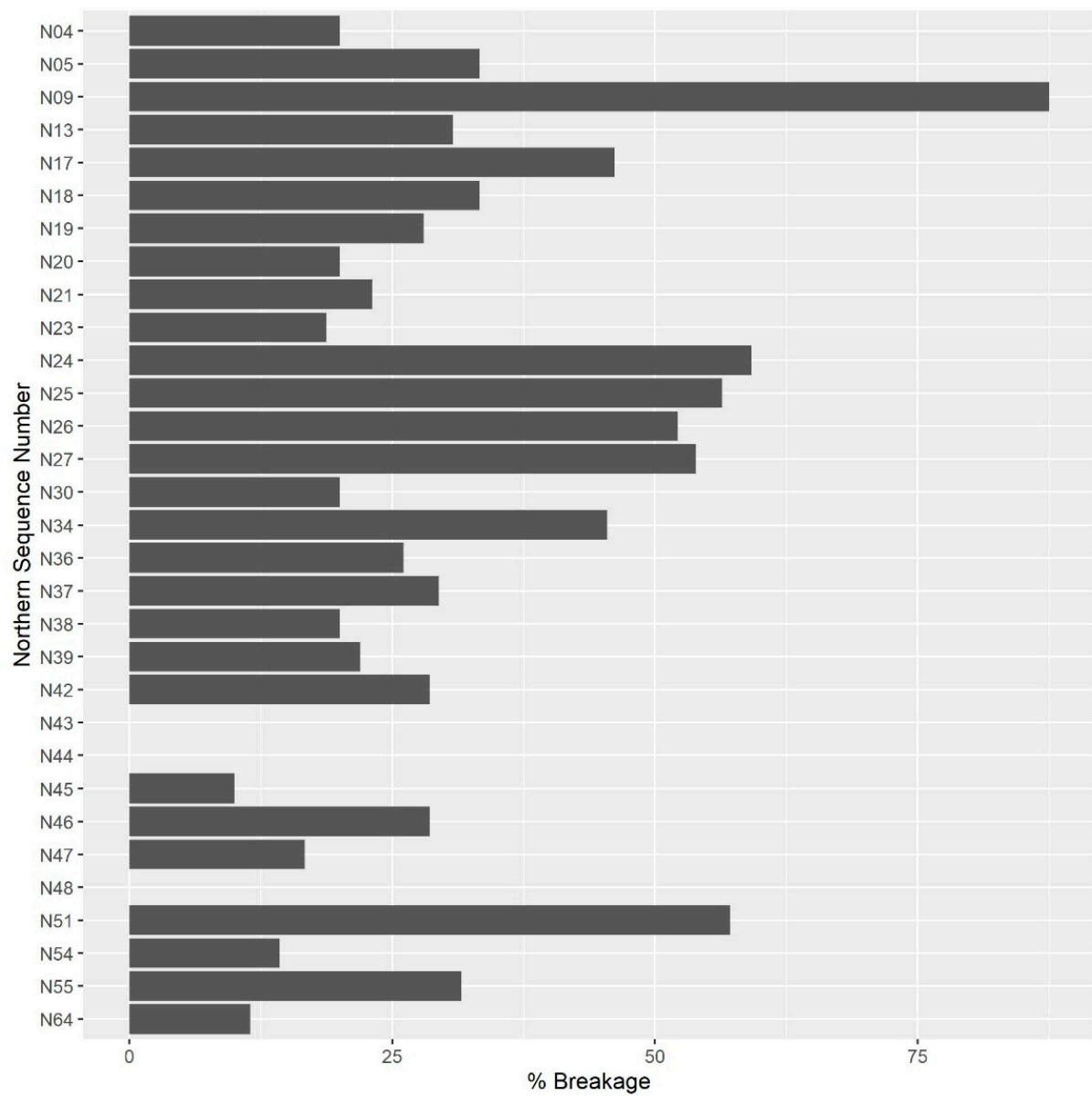


Figure S5. Proportion of isolated teeth broken by sequence unit in the Northern Sequence. Units with fewer than five specimens have been removed.

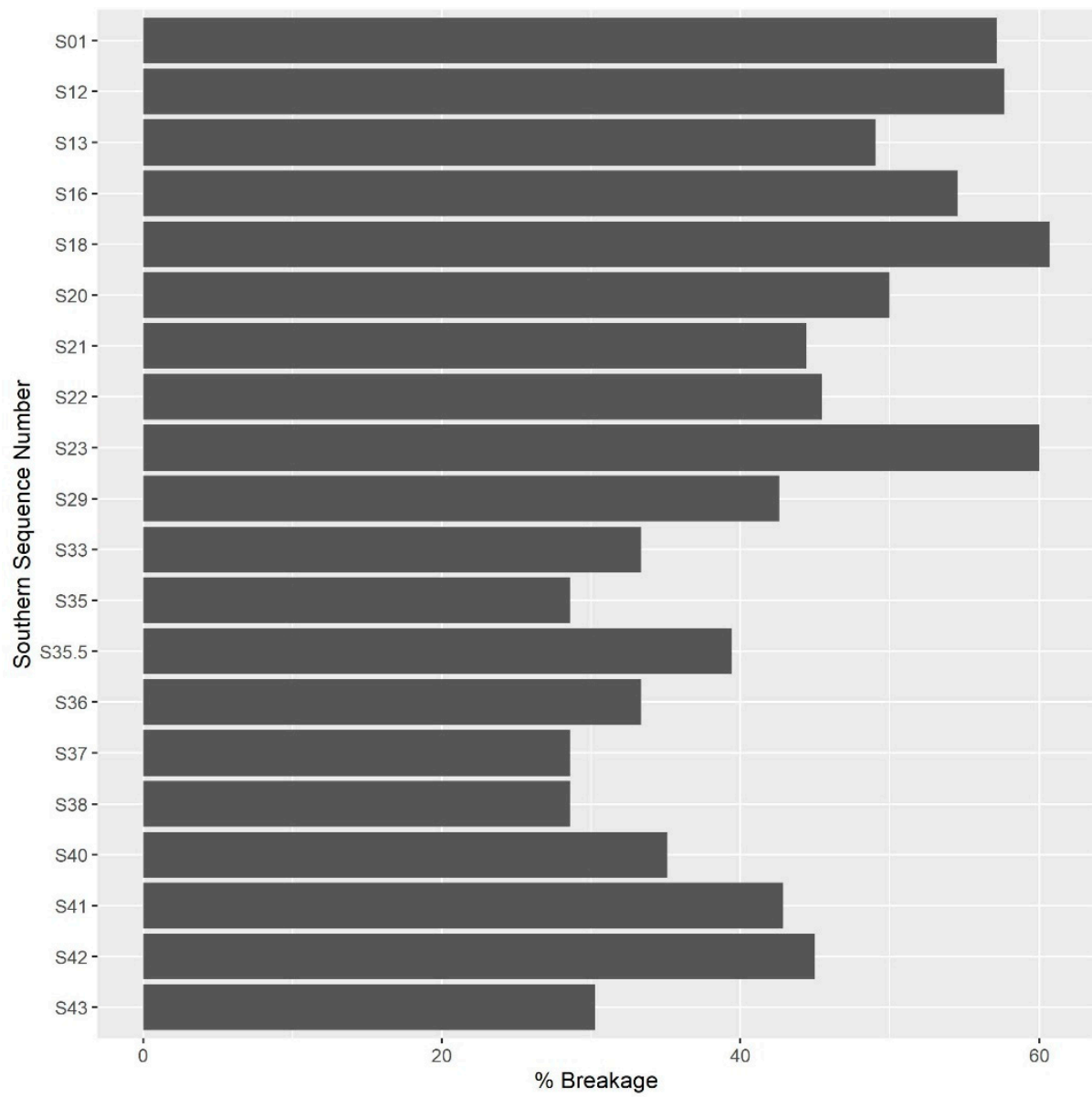


Figure S6. Proportion of isolated teeth broken by sequence unit in the Southern Sequence. Units with fewer than five specimens have been removed.

## Tables

Table S1: Murid digestion intensity

Sample Column	Digestion intensity					NA	Total NISP
	None	Light	Moderate	Heavy	Extreme		
B	0	0	0	0	0	5	5
B1	0	0	0	0	0	1	1
J	0	0	0	0	0	2	2
J1	0	0	0	0	0	0	0
L	0	0	0	0	0	1	1
L1	0	0	0	0	0	7	7
M	28	2	1	1	0	25	57
N	1	0	0	0	0	25	26
N1	6	2	0	0	0	34	42
SH18GS	50	7	0	1	1	31	91
SH19GS	16	0	0	1	0	49	66
<b>Total</b>	<b>101</b>	<b>11</b>	<b>1</b>	<b>3</b>	<b>2</b>	<b>180</b>	<b>298</b>

Table S2: Sample column or area humerus data

Sample column	Broken	Complete	Digestion intensity			Total
			None	Light	Moderate	
B	0	0	0	0	0	0
B1	6	0	3	1	2	6
J	0	0	0	0	0	0
J1	4	0	2	2	0	4
L	2	0	1	1	0	2
L1	3	0	0	3	0	3
M	36	2	32	6	0	38
N	28	2	19	9	2	30
N1	17	3	15	5	0	20
SH18GS	154	9	141	22	0	163
SH19GS	62	8	63	7	0	70
<b>Total</b>	<b>312</b>	<b>24</b>	<b>276</b>	<b>56</b>	<b>4</b>	<b>336</b>

Table S3: Sample column or area femur data

Sample column	Broken	Complete	Digestion intensity					Total
			None	Light	Moderate	Heavy	Extreme	
B	1	0	0	1	0	0	0	1
B1	3	0	2	1	0	0	0	3
J1	4	0	3	0	0	1	0	4
L	2	0	2	0	0	0	0	2
L1	1	0	0	1	0	0	0	1
M	41	1	21	15	3	1	2	42
N	39	3	24	13	4	1	0	42
N1	12	2	9	1	2	2	0	14
SH18GS	150	15	84	62	17	2	0	165
SH19GS	64	5	38	31	0	0	0	69
<b>Total</b>	<b>317</b>	<b>26</b>	<b>183</b>	<b>125</b>	<b>26</b>	<b>7</b>	<b>2</b>	<b>343</b>



Table S4: Northern sequence femur data

Sequence Unit	Broken	Complete	Digestion intensity					Total NISP
			None	Light	Moderate	Heavy	Extreme	
N08.5	1	0	0	1	0	0	0	1
N09	1	0	0	1	0	0	0	1
N13	2	0	2	0	0	0	0	2
N15	1	1	1	0	0	0	0	2
N15	1	1	0	1	0	0	0	2
N16	1	0	0	0	1	0	0	1
N17	8	0	5	2	1	0	0	8
N18	6	0	3	2	0	1	0	6
N19	2	0	0	2	0	0	0	2
N20	3	0	2	1	0	0	0	3
N21	2	0	0	2	0	0	0	2
N22	2	0	0	1	0	0	1	2
N23	2	0	2	0	0	0	0	2
N24	7	0	3	4	0	0	0	7
N26	5	0	3	1	1	0	0	5
N28	3	0	2	0	0	0	1	3
N30	1	0	0	1	0	0	0	1
N31	2	0	1	1	0	0	0	2
N32	1	0	0	0	1	0	0	1
N33	1	0	1	0	0	0	0	1
N34	11	1	0	1	0	0	0	12
N34	11	1	9	2	0	0	0	12
N35	1	0	1	0	0	0	0	1
N36	17	1	0	1	0	0	0	18
N36	17	1	8	9	0	0	0	18
N37	19	1	1	0	0	0	0	20
N37	19	1	9	6	3	1	0	20
N38	6	1	1	0	0	0	0	7
N38	6	1	3	3	0	0	0	7
N39	5	0	4	1	0	0	0	5
N41.5	1	0	0	1	0	0	0	1
N42	4	0	1	3	0	0	0	4
N43	3	0	0	2	1	0	0	3
N44	1	0	1	0	0	0	0	1
N45	12	1	0	1	0	0	0	13
N45	12	1	7	5	0	0	0	13
N46	2	0	2	0	0	0	0	2
N47	1	0	0	1	0	0	0	1
N48	2	0	2	0	0	0	0	2
N53	1	0	1	0	0	0	0	1
N54	0	1	1	0	0	0	0	1
N55	3	0	2	0	1	0	0	3
N57	1	0	1	0	0	0	0	1
N64	4	1	0	0	0	1	0	5
N64	4	1	2	1	0	1	0	5
N65	2	0	2	0	0	0	0	2
<b>Total</b>	<b>217</b>	<b>15</b>	<b>83</b>	<b>57</b>	<b>9</b>	<b>4</b>	<b>2</b>	<b>232</b>

Table S5: Northern sequence humerus data

Sequence Unit	Broken	Complete	Digestion intensity			Total NISP
			None	Light	Moderate	
N09	1	0	1	0	0	1
N10	1	0	1	0	0	1
N12	1	0	0	1	0	1
N12.5	1	0	1	0	0	1
N13	1	0	0	0	1	1
N14	1	0	0	0	1	1
N16	1	0	1	0	0	1
N17	7	0	6	1	0	7
N18	2	0	0	2	0	2
N19	6	1	1	0	0	7
N19	6	1	6	0	0	7
N20	2	0	2	0	0	2
N21	0	1	1	0	0	1
N22	1	0	0	1	0	1
N23	3	0	3	0	0	3
N24	9	0	9	0	0	9
N26	4	0	2	2	0	4
N28	1	0	1	0	0	1
N30	1	0	1	0	0	1
N32	1	0	0	0	1	1
N34	8	0	4	3	1	8
N36	19	4	4	0	0	23
N36	19	4	17	2	0	23
N37	14	1	1	0	0	15
N37	14	1	10	4	0	15
N38	8	1	1	0	0	9
N38	8	1	8	0	0	9
N39	6	0	6	0	0	6
N40	1	0	1	0	0	1
N42	2	0	1	1	0	2
N43	2	0	2	0	0	2
N44	3	0	2	1	0	3
N45	12	1	1	0	0	13
N45	12	1	11	1	0	13
N46	3	0	3	0	0	3
N51	1	0	0	1	0	1
N51.5	2	0	2	0	0	2
N54	2	1	0	1	0	3
N54	2	1	2	0	0	3
N55	1	0	0	1	0	1
N57	1	0	0	1	0	1
N60	1	0	1	0	0	1
N61.5	1	0	1	0	0	1
N64	9	1	1	0	0	10
N64	9	1	7	2	0	10
N66	0	1	1	0	0	1
<b>Total</b>	<b>210</b>	<b>22</b>	<b>123</b>	<b>25</b>	<b>4</b>	<b>232</b>

Table S6: Southern sequence femur data

Sequence Unit	Broken	Complete	Digestion intensity				Total NISP
			None	Light	Moderate	Heavy	
S01	1	0	1	0	0	0	1
S03	1	0	1	0	0	0	1
S03.5	1	0	1	0	0	0	1
S10.5	1	0	0	1	0	0	1
S11	1	0	0	1	0	0	1
S13	7	1	0	1	0	0	8
S13	7	1	4	2	1	0	8
S16	1	0	0	0	0	1	1
S18	4	1	0	1	0	0	5
S18	4	1	3	0	1	0	5
S19	1	0	1	0	0	0	1
S20	3	0	0	2	1	0	3
S21	3	0	2	1	0	0	3
S22	4	1	0	1	0	0	5
S22	4	1	2	2	0	0	5
S24	1	0	1	0	0	0	1
S27	2	0	1	1	0	0	2
S29	13	1	1	0	0	0	14
S29	13	1	6	5	2	0	14
S30	4	0	2	2	0	0	4
S31	0	1	1	0	0	0	1
S32	1	0	0	1	0	0	1
S33	1	0	1	0	0	0	1
S35	10	0	3	4	3	0	10
S36	16	1	1	0	0	0	17
S36	16	1	6	6	4	0	17
S37	6	0	3	2	1	0	6
S38	7	1	0	1	0	0	8
S38	7	1	4	3	0	0	8
S40	8	1	0	1	0	0	9
S40	8	1	5	3	0	0	9
S41	2	0	1	1	0	0	2
S42	15	2	2	0	0	0	17
S42	15	2	11	4	0	0	17
S43	9	1	0	1	0	0	10
S43	9	1	3	6	0	0	10
<b>Total</b>	<b>206</b>	<b>21</b>	<b>67</b>	<b>53</b>	<b>13</b>	<b>1</b>	<b>227</b>

Table S7: Southern sequence humerus data

Sequence Unit	Broken	Complete	Digestion intensity		Total NISP
			None	Light	
S01	2	0	2	0	2
S03	1	0	1	0	1
S03.5	1	0	0	1	1
S10.5	1	0	0	1	1
S11	3	0	0	3	3
S13	9	1	1	0	10
S13	9	1	5	4	10
S16	1	0	0	1	1
S18	2	0	2	0	2
S20	2	0	2	0	2
S21	1	0	0	1	1
S22	6	0	5	1	6
S23	2	0	2	0	2
S25	1	0	1	0	1
S27	2	0	2	0	2
S28	1	0	1	0	1
S29	9	0	9	0	9
S31	2	0	1	1	2
S35	13	0	10	3	13
S36	7	0	7	0	7
S37	8	0	8	0	8
S38	9	2	2	0	11
S38	9	2	9	0	11
S40	11	1	0	1	12
S40	11	1	9	2	12
S42	9	2	0	2	11
S42	9	2	9	0	11
S43	20	0	19	1	20
<b>Total</b>	<b>161</b>	<b>12</b>	<b>107</b>	<b>22</b>	<b>173</b>

Table S8: Northern sequence arvicoline isolated molar digestion data

Se- quence unit	Digestion intensity					Total NISP
	None	Light	Moderate	Heavy	Extreme	
N01	1	0	0	0	0	1
N02	3	0	0	0	0	3
N04	0	2	0	0	0	2
N05	2	1	0	1	0	4
N07	1	0	1	0	0	2
N08	3	0	0	0	0	3
N09	4	1	0	0	0	5
N10	1	0	0	0	0	1
N12	1	0	0	0	0	1
N13	10	0	1	0	0	11
N14	0	0	1	0	0	1
N16	3	0	0	0	0	3
N17	20	8	3	0	0	31
N18	16	4	1	0	0	21
N19	17	3	1	1	0	22
N20	6	0	0	0	0	6
N21	9	2	1	0	0	12
N22	2	0	0	0	0	2
N23	11	2	0	0	0	13
N24	25	2	3	1	1	32
N25	21	4	1	0	1	27
N26	7	0	3	1	0	11
N27	9	2	1	1	0	13
N28	3	1	0	0	0	4
N29	0	1	0	0	0	1
N30	3	0	0	0	0	3
N31	0	1	0	0	0	1
N34	3	0	1	1	1	6
N36	78	9	2	0	0	89
N37	31	4	0	1	0	36
N38	30	2	0	0	0	32
N39	25	1	0	1	1	28
N41	2	1	0	0	0	3
N42	10	0	0	0	0	10
N43	8	0	0	0	0	8
N44	3	0	0	0	0	3
N45	11	1	0	0	0	12
N46	1	2	0	0	1	4
N47	2	0	1	0	0	3
N48	2	0	1	0	0	3
N49	1	1	0	0	0	2
N50	1	0	0	0	0	1
N51	2	0	0	0	0	2
N53	2	0	0	0	0	2
N54	1	0	0	0	0	1
N55	9	1	0	0	0	10
N56	2	0	0	0	0	2
N58	1	0	0	0	0	1

N59	1	0	0	0	0	1
N61	0	1	0	0	0	1
N63	2	0	0	0	0	2
N64	38	6	1	0	0	45
N66	4	0	0	0	0	4
N67	1	0	0	0	0	1
N68	0	0	1	0	0	1
<b>Total</b>	<b>449</b>	<b>63</b>	<b>24</b>	<b>8</b>	<b>5</b>	<b>549</b>

Table S9: Southern sequence arvicoline isolated molar digestion data

Sequence unit	Digestion intensity					Total NISP
	None	Light	Moderate	Heavy	Extreme	
S01	4	0	0	1	0	5
S02	0	1	0	1	0	2
S03	0	1	0	0	0	1
S05	1	0	0	0	0	1
S07	1	0	0	0	0	1
S10.5	2	0	0	0	0	2
S11	1	1	0	0	0	2
S12	11	3	2	0	0	16
S13	32	9	4	2	0	47
S14	2	1	0	0	0	3
S15	2	0	0	0	0	2
S16	8	0	0	0	0	8
S18	13	0	1	0	0	14
S19	2	0	0	0	0	2
S20	3	2	0	0	0	5
S21	6	0	0	0	0	6
S22	6	1	0	0	0	7
S23	3	0	0	0	0	3
S24	2	0	0	0	0	2
S26	3	0	0	0	0	3
S27	3	0	0	0	0	3
S28	1	0	0	0	0	1
S29	24	6	1	0	1	32
S30	1	2	0	0	1	4
S31	1	1	1	0	0	3
S32	2	1	0	0	0	3
S33	5	2	0	0	0	7
S34	4	0	0	0	0	4
S35	30	5	5	1	0	41
S35.5	24	3	0	2	0	29
S36	41	3	3	1	0	48
S37	9	0	1	0	1	11
S38	34	6	3	1	0	44
S39	1	0	0	0	0	1
S40	35	7	3	2	1	48
S41	5	0	1	0	0	6
S42	54	9	2	1	0	66
S43	45	13	2	2	0	62
<b>Total</b>	<b>421</b>	<b>77</b>	<b>29</b>	<b>14</b>	<b>4</b>	<b>545</b>

Table S10: Northern sequence arvicoline in situ molar digestion data

Sequence unit	Digestion intensity		Total NISP
	None	Light	
N02	1	0	1
N04	1	0	1
N21	1	0	1
N36	0	1	1
N38	7	1	8
N41	1	0	1
N43	2	0	2
N44	1	0	1
N47	1	0	1
N59	1	0	1
N64	2	0	2
<b>Total</b>	<b>18</b>	<b>2</b>	<b>20</b>

Table S11: Southern sequence arvicoline in situ molar digestion data

Sequence unit	Digestion intensity		Total NISP
	None		
S24	1		1
S29	1		1
S35	1		1
S36	1		1
S38	1		1
<b>Total</b>	<b>5</b>		<b>5</b>

Table S12: Sample column or Area dentition breakage data

Sample Column	Loose	In situ	Complete	Broken
B	32	5	19	18
B1	20	1	7	14
J	31	4	16	19
J1	8	1	5	4
L	8	0	4	4
L1	54	2	30	26
M	297	29	152	174
N	131	8	41	98
N1	122	17	25	114
SH18GS	53	8	22	39
SH18GS18a	525	39	205	359
SH18GS18b	121	18	45	94
SH18GS18c	41	3	11	33
SH18GS19	273	57	68	262
<b>Total</b>	<b>1716</b>	<b>192</b>	<b>650</b>	<b>1258</b>



Table S13: Northern sequence dentition breakage data

Se- quence Unit	Isolated molars			In situ molars		
	Complete	Broken	Total	Broken	Complete	Total
N01	1	0	1	0	0	0
N02	2	2	4	1	0	1
N04	4	1	5	0	2	2
N05	4	2	6	0	0	0
N06	0	1	1	0	0	0
N07	1	1	2	0	1	1
N08	1	2	3	0	0	0
N09	1	7	8	0	0	0
N10	2	1	3	0	1	1
N12	2	0	2	0	0	0
N13	9	4	13	0	0	0
N14	1	2	3	0	0	0
N15	0	1	1	0	0	0
N16	3	0	3	0	0	0
N17	21	18	39	0	1	1
N18	26	13	39	0	4	4
N19	18	7	25	0	2	2
N20	4	1	5	0	1	1
N21	10	3	13	0	1	1
N22	3	1	4	0	1	1
N23	13	3	16	0	0	0
N24	20	29	49	0	5	5
N25	17	22	39	0	0	0
N26	11	12	23	0	0	0
N27	12	14	26	0	0	0
N28	3	1	4	0	0	0
N29	1	0	1	0	0	0
N30	4	1	5	0	0	0
N31	2	0	2	0	0	0
N32	1	2	3	0	0	0
N34	6	5	11	0	0	0
N36	85	30	115	2	18	20
N37	48	20	68	0	4	4
N38	28	7	35	4	7	11
N39	32	9	41	0	0	0
N41	2	1	3	0	2	2
N42	10	4	14	2	6	8
N43	13	0	13	0	4	4
N44	7	0	7	0	1	1
N45	18	2	20	0	3	3
N46	5	2	7	1	1	2
N47	5	1	6	0	3	3
N48	5	0	5	0	1	1
N49	2	1	3	0	0	0
N50	1	1	2	0	1	1
N51	3	4	7	0	0	0
N52	2	0	2	0	0	0
N53	2	1	3	0	0	0

N54	6	1	7	0	0	0
N55	13	6	19	0	1	1
N56	4	0	4	0	1	1
N57	3	1	4	0	1	1
N58	3	1	4	1	1	2
N59	1	0	1	0	1	1
N60	0	2	2	0	2	2
N61	0	1	1	0	0	0
N62	0	1	1	0	0	0
N63	3	0	3	0	0	0
N64	54	7	61	0	7	7
N65	1	0	1	0	1	1
N66	3	1	4	0	1	1
N67	0	1	1	0	0	0
N68	1	0	1	0	0	0
<b>Total</b>	<b>563</b>	<b>261</b>	<b>824</b>	<b>11</b>	<b>86</b>	<b>97</b>

Table S14: Southern sequence dentition breakage data

Se- quence unit	Isolated molars			In situ molars		
	Broken	Complete	Total	Complete	Broken	Total
S01	4	3	7	2	0	2
S02	1	2	3	0	0	0
S03	0	1	1	0	0	0
S04	1	0	1	0	0	0
S05	2	0	2	0	0	0
S06	0	1	1	0	0	0
S07	1	1	2	0	0	0
S08	0	1	1	0	0	0
S10.5	0	2	2	0	0	0
S11	0	2	2	0	0	0
S12	15	11	26	0	0	0
S13	25	26	51	3	0	3
S14	2	1	3	0	0	0
S15	2	0	2	0	0	0
S16	6	5	11	0	0	0
S18	17	11	28	2	0	2
S19	1	2	3	0	0	0
S20	4	4	8	0	0	0
S21	4	5	9	0	0	0
S22	5	6	11	1	0	1
S23	3	2	5	0	0	0
S24	0	2	2	2	1	3
S26	3	1	4	0	0	0
S27	1	1	2	0	0	0
S28	0	3	3	3	0	3
S29	23	31	54	3	0	3
S30	1	3	4	0	0	0
S31	1	3	4	0	0	0
S32	0	4	4	0	0	0
S33	3	6	9	0	0	0
S34	0	4	4	0	0	0
S35	12	30	42	3	1	4
S35.5	13	20	33	5	0	5
S36	18	36	54	6	0	6
S37	4	10	14	0	2	2
S38	14	35	49	2	0	2
S39	3	0	3	0	0	0
S40	20	37	57	2	0	2
S41	3	4	7	0	0	0
S42	36	44	80	7	0	7
S43	23	53	76	6	1	7
<b>Total</b>	<b>271</b>	<b>413</b>	<b>684</b>	<b>47</b>	<b>5</b>	<b>52</b>

Table S15: Sample column or Area arvicoline isolated molar digestion data

Sample Column	Digestion intensity					Total
	None	Light	Moderate	Heavy	Extreme	
B	14	4	1	1	0	20
B1	12	0	2	0	0	14
J	19	1	0	0	1	21
J1	5	1	0	0	0	6
L	1	2	0	1	0	4
L1	16	4	0	0	0	20
M	146	28	14	4	2	194
N	58	6	1	3	3	71
N1	62	8	2	0	0	72
SH18GS	468	88	36	15	4	611
SH19GS	167	20	6	0	0	193
<b>Total</b>	<b>968</b>	<b>162</b>	<b>62</b>	<b>24</b>	<b>10</b>	<b>1226</b>

Table S16: Sample column or Area arvicoline in situ molar digestion data

Sample Column	Digestion intensity			Total
	None	Light	Moderate	
B	2	0	0	2
M	1	0	0	1
N	1	0	0	1
N1	3	0	0	3
SH18GS	7	1	0	8
SH19GS	11	2	0	13
<b>Total</b>	<b>25</b>	<b>3</b>	<b>0</b>	<b>28</b>