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SUPPLEMENTARY ONLINE MATERIAL FOR

**Fossil population structure and mortality analysis of the cave bears from
Urşilor Cave, north-western Romania**

Marius Robu

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Supplementary Online Material

Table 1. Wear stages of Urşilor lower molars.

Table 2. Wear stages of Urşilor mandibles.

Table 3. Cave bear mortality patterns recorded for various European sites

Table 4. Sex ratios of cave bears for various European sites.

References

Table 1. Wear stages of Urşilor lower molars.

Isolated (left and right)	M1	M2	M3
<i>I</i>	2	7	0
<i>II</i>	6	21	21
<i>III</i>	42	28	15
<i>IV</i>	12	8	19
<i>V</i>	9	2	0
<i>VI</i>	7	2	2
<i>VII</i>	3	2	1
<i>VIII</i>	0	0	2
<i>IX</i>	1	1	0

Table 2. Wear stages of Urşilor mandibles.

Mandible	Left	Right	Total
<i>I</i>	12	4	16
<i>II</i>	20	25	45
<i>III</i>	27	27	54
<i>IV</i>	7	11	18
<i>V</i>	7	6	13
<i>VI</i>	5	4	9
<i>VII</i>	2	2	4
<i>VIII</i>	1	2	3
<i>IX</i>	1	0	1

Table 3. Cave bear mortality patterns recorded for various European sites, on the basis of use wear analysis. %juv: percent juveniles; %ad: percent adults; %se: percent seniles.

Site	N	%juv	%ad	%se		Comments	Source
Urşilor	81	69.13	28.39	2.48	wet sieved	Mandible - left side	Robu (in press)
Urşilor	82	71.95	25.6	2.43	wet sieved	Mandible - right side	Robu (in press)
Urşilor	44	61.36	38.63	0	wet sieved	M1 left - isolated	Robu (in press)
Urşilor	38	60.52	36.84	2.63	wet sieved	M1 right - isolated	Robu (in press)
Urşilor	36	83.33	16.66	0	wet sieved	M2 right - isolated	Robu (in press)
Urşilor	34	73.52	23.52	2.94	wet sieved	M2 left - isolated	Robu (in press)
Urşilor	34	61.76	35.29	2.94	wet sieved	M3 right - isolated	Robu (in press)
Urşilor	26	57.69	38.46	3.84	wet sieved	M3 left - isolated	Robu (in press)
Peştera cu Oase	130	73.8	18.5	7.7	wet sieved	M1 and dp4	Pacher and Quilès 2013
Potočka zijalka	89	77.5	12.9	9.6	screened	M1 and dp4	Debeljak 2004
Schwabenreith	78	74.4	25.4	2.8	screened	M1 and dp4	Pacher 2000
Yarimbürgaz	65	48	40	12	unknown old	M1 and dp4	Stiner 1998
Mokriška jama	107	52.7	31.3	16	excavation old	M1 and dp4	Debeljak 2007
Bärenhöhle	72	75	6.9	18.1	excavation old	M1 and dp4	Weinstock 2000
Sibyllenhöhle	22	46.2	46.2	7.7	excavation old	M1 and dp4	Weinstock 2000
Zoolitenhöhle	103	78.9	21.1	0	excavation	M1 and dp4	Weinstock 2000
Divje babe	761	75.8	20.6	3.6	wet sieved	M1 and dp4	Debeljak 2002 Pacher and Quilès 2013
Gamssulzen	238	72.7	18.5	8.8	screened old	M1 and dp4	Germonpré and Sablin 2001
Goyet B4	47	60	21	19	excavation	M1 and dp4	

Table 4. Sex ratios of cave bears for various European sites.

Site	Method	F	M	%fem vs. %male	Sex ratio	Source
Urşilor	ASR-Cinf	60	14	81.1 vs. 18.9	4.4	Robu (in press)
	ASR-Csup	91	14	86.7 vs. 13.3	6.5	Robu (in press)
	Combined-adults	151	28	84.4 vs. 15.6	5.4	Robu (in press)
Peștera cu Oase	TSR-Cinf	22	25	46.8 vs. 53.2	0.9	Pacher and Quilès 2013
	ASR-Cinf	13	19	40.6 vs. 59.4	0.7	Pacher and Quilès 2013
	Juvenile-Cinf	9	6	60.0 vs. 40.0	1.5	Pacher and Quilès 2013
	Combined	27	36	42.9 vs. 57.1	0.8	Pacher and Quilès 2013
	Combined-adults	17	24	41.5 vs. 58.5	0.7	Pacher and Quilès 2013
	TSR-Cinf	27	29	48.2 vs. 51.8	0.9	Pacher 2004
Potočka zijalka	ASR-Cinf	27	29	48.2 vs. 51.8	0.9	Pacher 2004
	Combined	25	65	27.8 vs. 72.2	0.4	Pacher 2004
	Combined-adults	18	56	24.3 vs. 75.7	0.3	Pacher 2004
Schwabenreith	TSR-Cinf	81	52	60.9 vs. 39.1	1.6	Pacher 2000
	ASR-Cinf	53	30	63.8 vs. 36.1	1.8	Pacher 2000
	Combined	119	85	58.3 vs. 41.7	1.4	Pacher 2000
	Combined-adults	83	53	61.0 vs. 39.0	1.6	Pacher 2000
Gamssulzen	TSR-Cinf	36	31	53.7 vs. 46.3	1.2	Pacher and Quilès 2013
	ASR-Cinf	40	23	63.5 vs. 36.5	1.7	Pacher and Quilès 2013
	Combined	42	31	57.5 vs. 42.5	1.4	Pacher and Quilès 2013
Mokriška jama	Combined	273	477	36.4 vs. 63.6	0.6	Debeljak 2007
	Combined-adults	202	352	36.5 vs. 63.5	0.6	Debeljak 2007
Divje babe (2-10)	Combined	204	186	52.3 vs. 47.7	1.1	Debeljak 2004
	Combined-adults	133	111	54.5 vs. 45.5	1.2	Debeljak 2004
Goyet, B4	ASR	38	73	34.2 vs. 65.8	0.5	Germonpré 2004
	Combined-adults	68	127	34.9 vs. 65.1	0.5	Germonpré 2004
Yarimburgaz	TSR-Cinf	22	20	52.4 vs. 47.6	0.9	Stiner et al. 1998
Bärenhöhle	Mean			27.0 vs. 73.0		Weinstock 2000
Sibyllenhöhle	Mean			77.0 vs. 23.0		Weinstock 2000
Zoolithenhöhle	Mean			90.0 vs. 10.0		Weinstock 2000

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