

Canid evolution and palaeoecology in the
Pleistocene of western Europe, with particular
reference to the wolf *Canis lupus* L. 1758.

Lucy Olivia Holman Flower

Royal Holloway University of London

Doctor of Philosophy

Appendix 2: Measurement data

1. m1L

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	m1L
NHM 1	France		1	1843.12.29.7	F	<i>C. lupus</i>	L mand, I1-3, C1, P2-4, M1-2	26.39
NHM 2	Pyrenees Nr Abrantos, S of the Tagus, Portugal	Parzudacki clln	1	44.1.18.1	F	<i>C. lupus</i>	L mand, I1-3, C1, P1-4, M1-3	25.54
NHM 3		WC Tait clln.	1	1938.12.7.1	F	<i>C. lupus</i>	R mand, I1-3, C1, P1-4, M1-2	24.65
NHM 5	Riocalado, Burgos, Spain		1	11.10.5.2	F	<i>C. lupus</i>	L mand, I1-3, C1, P1-4, M1-3	27.72
NHM 8	Kocane, Macedonia		1	47.1121.a	F	<i>C. lupus</i>	L mand, I1-3, C1, P1-4, M1-2	25.81
NRM	Korvijaure, 7 miles N Kiruna	15.4.1959	1	A58 0112	F	<i>C. lupus</i>	L+R mand + cranium. R mand I1-3, C1, P1, P2 loose, P3-4, M1-3	27.08
NRM	S Finnskoga, Skrackarberget	1985.07.29	1	A865126	F	<i>C. lupus</i>	L+R mand+cranium. R mand, I1-3, P1-4, M1-3	29.13
NRM	Jadraas, 5km N	1991.06.14	1	A915068	F	<i>C. lupus</i>	L+R mand+cranium. R teeth P4, M1-2	28.4

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	m1L
NRM	Vastra Amtervik, Hensgard	1993.02.24	1	A935024	F	<i>C. lupus</i>	L+R mand+cranium. L mand, I1-3, C1, P2-4, M1-2	28.66
NRM	Nas-snoan, v71/jvg	1993.08.18	1	A935178	F	<i>C. lupus</i>	L+R mand+cranium. L mand I1-3, C1, P1-4, M1-3	28.03
NRM	Nyskoga, Kringsberg, Bontjarn	1994.01.19	1	A945045	F	<i>C. lupus</i>	L+R mand+cranium. R mand, I1-3, P1-4, M1-3	28.4
NRM	Vastmandland, Grythyttan	1999.12.17	1	20005111	F	<i>C. lupus</i>	L+R mand+cranium. R mand I2-3, C1, P2-4, M1-3	28.58
NRM	Narke, Degerfors, Atorp	2001.12.26	1	20025005	F	<i>C. lupus</i>	L+R mand+cranium. L mand I1-3, P1-4, M1-3	28.32
NRM	Atorp 3.5 km NW, Degerfors, Varmland	2002.03.05	1	20035026	F	<i>C. lupus</i>	L+R mand+cranium. L mand I1-3, C1, P1-4, M1-3	29.13
NRM	Odlingen, Sillerud, Arjang, Varmland	2004.02.07	1	20045040	F	<i>C. lupus</i>	L+R mand+cranium. R mand I1-3, C1, P1-4, M1-3	28.21
NRM	Ovre Hurr, Tocksfors, Varmland	2006.05.30	1	20065236	F	<i>C. lupus</i>	L+R mand+cranium. L mand, I1-2, C1, P1-4, M1-3	28.98

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	m1L
NRM	Rickebo, Hallbo, Bollnas, Halsingland	2006.03.14	1	20065047	F	<i>C. lupus</i>	L+R mand+cranium. R mand I1-3, C1, P1-4, M1-3	29.83
NRM	Ronnas, Ostra, Leksand, Dalarna	2007.10.09	1	20075381	F	<i>C. lupus</i>	L+R mand+cranium. R mand I1-3, C1, P1-4, M1-3	28.67
NRM	Jarbo, Backefors, Dalsland Varmland, Nordmark,	2007.?	1	20075314	F	<i>C. lupus</i>	L+R mand+cranium. L mand I1-3, C1, P1-4, M1-3	28.93
NRM	Algsjion 2 km S Halsingland, Bollnas, Lottefors;	2009.01.25	1	20095063	F	<i>C. lupus</i>	L+R mand+cranium. R mand I1-3, C1, P1 alv, P1-4, M1-3	29.06
NRM	Rv 83 Vastmanland, Hallefors,	2007.08.19	1	20075312	F	<i>C. lupus</i>	L+R mand + cranium. R mand I1-3, C1, P1-4, M1-3	29.21
NRM	Ornviken,	2010.01.02	1	20105028	F	<i>C. lupus</i>	L+R mand+cranium. L mand I1-3, C1, P1-4, M1-3	28.96
NHM 4	Riocalado, Burgos, Spain		1	11.10.5.1	M	<i>C. lupus</i>	L mand, I1-3, C1, P1-4, M1-3	30.18
NHM 6	Seville, Spain	On note '2 carnassials in tooth case'	1	95.3.3.6	M	<i>C. lupus</i>	R mand, I1-3, C1, P2-4, M1-3. No P1 or alv	27.27

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	m1L
NHM 7	Ukraine on modern ticket, on skull and original		1	34.6.28.47	M	<i>C. lupus</i>	L mand, I1-3, C1, P3-4, M1-3	28.49
NHM 11	Moscow district, Russia		1	82.9.18.2	M	<i>C. lupus</i>	L mand, I1-3, C1 fract, P1-4, M1-3	31.39
NHM Ost	Abrantos, S of Tagus, Portugal		1	1937.2.10.2	M	<i>C. lupus</i>	R mand, I2, C1, P4, M1-3	29.5
NHM Ost	Bosnia, Yugoslavia		1	1935.8.5.1	M	<i>C. lupus</i>	R mand, I1-3, C1, P1-4, M1-2	27.54
NHM 9	Norbotten, N Sweden (in arctic circle).		1	28.5.4.1	M	<i>C. lupus</i>	L mand, I1-3, C1, P1-4, M1-3	27.94
NRM	Ljusdal, Ramsjo (s:n)	12.2.1926	1	A580255	M	<i>C. lupus</i>	L+R mand + fract cranium. L mand, I1-3, C1, P1-4, M1-3	29.67
NRM	Jokkmokk	11.02.1852	1	A583532	M	<i>C. lupus</i>	L+R mand + cranium. R mand I1-3, C1, P1-4, M1-3	30.24
NRM	Orebro	1852	1	A583547	M	<i>C. lupus</i>	L+R mand+cranium. R mand I1-3, C1, P1-4, M1-3	29.14

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	m1L
NRM	Sweden	1907	1	A589147	M	<i>C. lupus</i>	L+R mand + cranium. R teeth I1-3, C1, P1-4, M1-2	31.24
NRM	Sweden	1908	1	A589199	M	<i>C. lupus</i>	L+R mand+cranium. L mand I1-3, C1, P1-4, M1-3	30.43
NRM	Luktjomtjuolta, Vilhelmina	15.1.1937	1	A590009	M	<i>C. lupus</i>	L+R mand+cranium. L mand I1-3, C1, P2-4, M1-2	28.67
NRM	Lina alv station	25.12.1977	1	A775097	M	<i>C. lupus</i>	L+R mand+cranium. L mand I1, I3, C1, P1-4, M1-3	29.71
NRM	Atran, Ogardet	1984.09.12	1	A845131	M	<i>C. lupus</i>	L+R mand+cranium. R mand I1-3, C1, P1-4, M1-3	30.98
NRM	Hede, 3 mil NV, Norrstadjan	1989.04.17	1	A895039	M	<i>C. lupus</i>	L+R mand+cranium. R mand I1-3, P1-4, M1-3	31.35
NRM	Kiruna-Gallivare, Gaddmyr, Jvg	1992.08.24	1	A925106	M	<i>C. lupus</i>	L+R mand+cranium. R mand, I1-3, P2-4, M1-3	29.95
NRM	Boras	1996.01.04	1	A965002	M	<i>C. lupus</i>	L+R mand+cranium. L teeth I1-3, C1, P1-4, M1-2	29.21

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	m1L
NRM	Jarna, Flaten, Dalarna	1999.2.6	1	A995016	M	<i>C. lupus</i>	L+R mand+cranium. R mand, I1-2, P1-4, M1-3	31.91
NRM	Varmland, Eksharad, Halgan; Kolarkojan	1999.06.04	1	995230	M	<i>C. lupus</i>	L+R mand+cranium. R mand, I3, C1, P1-4, M1-3	30.29
NRM	Jumkil kyrka, Uppsala	2000.11.19	1	20005365	M	<i>C. lupus</i>	L+R mand+cranium. L mand I1-3, C1, P1-4, M1-3	30.95
NRM	Uddalen, Ed, Dalsland	2003.05.12	1	20035114	M	<i>C. lupus</i>	L+R mand+cranium. R mand I1-3, C1. extra P1? P1, P2-3 broken, P4, M1-3	30.82
NRM	Ostermoren, Smedjebacken, Dalarna	2004.12.09	1	20045305	M	<i>C. lupus</i>	L+R mand+cranium. R mand I1-3, C1, P1-4, M1-2, M3 alv	30.62
NRM	Dala Floda, Borlange, Dalarna	2003.03.09	1	20035024	M	<i>C. lupus</i>	L+R mand+cranium. R mand I1-3, C1, P1 alv, P2-4, M1-3	31.26
NRM	IV 225 (road?), Osmo, Sodermanland	2005.11.26	1	20065027	M	<i>C. lupus</i>	L+broken R mand+cranium. L mand I1-2, C1, P1-4, M1-2, M3 alv	29.45
NRM	Lanasberget, Grundsjo, Ljungaverk, Medelpad	2005.09.02	1	20055287	M	<i>C. lupus</i>	L+R mand+cranium. L mand I1-3, C1, P1-4, M1-3	30.74

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	m1L
NRM	Mullhyttan, Orebro, Narke	2006.09.15	1	20065414	M	<i>C. lupus</i>	L+R mand+cranium. R mand I1-3, C1, P1-4, M1-2, M3 alv	30.63
NRM	Avik, Laxa, Narke	2007.04.27	1	20075186	M	<i>C. lupus</i>	L+R mand + cranium. L mand I1-3, C1, P1 alv, P2-4, M1-2, M3 alv	31.04
NRM	Malung-Appelbo, Dalarna	2007.12	1	20085027	M	<i>C. lupus</i>	L+R mand +cranium. L mand, I1-3, C1, P1-4, M1-3	31.36
NRM	Dalarna, Torsby, Ostmark; Sojensoasen ΣΟΙΓΓΙΟΣΣΕ, ΡΙΓΟ,	2007.09.15	1	20075373	M	<i>C. lupus</i>	L+R mand+cranium. R mand I1-3, C1, P1-4, M1-3	31.86
NRM	Bjorneborg, Kristinehamn, Varmland	2007.12.27	1	20085036	M	<i>C. lupus</i>	L+R mand+cranium. L mand I1-3, C1, P1-4, M1-3	31.44
NHM 23 K	Cae Gwyn Cave		2	M2613	Dr H Hicks and E Bouwerie Luxmoore esq	<i>C. lupus</i>	From mounted board with cranial frags. 1). R lower M1	31.61
NMW PH1.147	Ogof yr Ychen	Abyss chamber 3	2	864		<i>C. lupus</i>	L mand, C1, P1-4, M1-2	28.35
SMES bay 4, iv 266 drw	Black Rock quarries, Tenby		3	D2610	Pres by T Roberts, 1882	<i>C. lupus</i>	Back portion of R mand, M1-2	29.77

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	m1L
SMES bay 4, iv 266 drw	Black Rock quarries, Tenby		3	D2611	Pres by T Roberts, 1882	<i>C. lupus</i>	R lower M1	31.05
SMES bay 4, iv 266 drw	Black Rock quarries, Tenby		3	D2605	Pres by T Roberts, 1882	<i>C. lupus</i>	R mand, I2-3, C1, P2, P4, M1-2	27.76
NHM 43 C	Kents Cavern	none	3	18982	McEnergy clln	<i>C.lupus</i>	L lower M1	27.63
NHM 43 C	Kents Cavern	None	3	16754	Pur Mr McEnergy's sale	<i>C.lupus</i>	L lower M1	30.22
NHM 43 C	Kents Cavern	Cave earth, 4th level	3	M848	Pres by Lord Haldon, July 1883	<i>C.lupus</i>	L ramus frag, M1-M2	27.14
TM G/B1/B244	Kents Cavern	Cave Earth	3	P13417	W. Pengelly	<i>C. lupus</i>	L lower M1 in mand frag	29.91
NHM 43 E drw 24	Oreston Cave	Presv type 2	3	46982	Purch 1876	<i>C. lupus</i>	L lower M1 (in box with L upper C1)	27.74
NHM 43 E drw 24	Oreston Cave	Pres type 2	3	46981	Purch 1876	<i>C. lupus</i>	2). L ramus, C1, P1-4, M1-2	27.15

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	m1L
WH	Oreston Cave		3	1989 G 140 1.8	TC	<i>C. lupus</i>	L mand frag, M1-2	27.46
WH	Oreston Cave		3	1989 G 140.1.4	TC	<i>C. lupus</i>	L mand frag, P4, M1	30.35
BC	Oreston Cave		3	Cd2928	J. Cottle c1ln 1830	<i>C. lupus</i>	L lower M1	28.71
NMW From gallery	Paviland	none	3	24.94/46		<i>C. lupus</i>	R mand ramus, P1, P3-4, M1	28.5
SM Blue boxes	Paviland		3	SM.1836.6.3 03		<i>C. lupus</i>	R mand ramus, P2-4, M1	29.5
SM Blue boxes	Paviland		3	SM.1836.6.3 04		<i>C. lupus</i>	R mand frag, M1-2	29.39
SM Blue boxes	Paviland		3	SM.1836.6.3 08	Excav 1823	<i>Not hyena, C. lupus</i>	R mand frag, M1-2	29.94
SM Blue boxes	Paviland		3	SM.1836.6.3 12		<i>Not hyena, C. lupus</i>	R lower M1 in mand frag	30.79

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	m1L
MM R4 ColE D 1	Pin Hole Cave	PH (F)	3	LL.1995		<i>C. lupus</i>	L mand ramus, P1-4, M1-2	28.08
MM Gallery	Pin Hole		3	LL11898 TTNCM 44/1995/61/	Rev'd. D. Williams & Beard c1ln	<i>C. lupus</i>	L mand, I2-3, C1, post P2, P3- 4, M1-3	27.82
SHC D27/3	Sandford Hill	Cave or fissure deps	3	3		<i>C. lupus</i>	L mand ramus, P4, M1-2	30.31
NHM 45D drw 13	Banwell Bone Cave		5a	M404d	Egerton c1ln, 1882	<i>C. lupus</i>	R mand ramus, C1, P2-M2.	28.91
NHM 45D drw 13	Banwell Bone Cave		5a	M223	Enniskillen c1ln	<i>C. lupus</i>	R mand ramus, P3-4, M1-2	28.52
NHM 45D drw 13	Banwell Bone Cave		5a	44642	Pres Benj Bright esq, 1873	<i>C. lupus</i>	R mand frag, M1, P4.	31.2
NHM 45D drw 13	Banwell Bone Cave		5a	44648		<i>C. lupus</i>	2). R lower M1	28.16
NHM Andy's office	Banwell Bone Cave	Entrance to Baker's Pit extension, 1950's	5a	M84868	Percy Baker c1ln	<i>C. lupus</i>	R mand, P1-4, M1-2	31.01

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	m1L
SHC D19/4	Banwell Bone Cave	Cave dep	5a	TTNCM 40/1995/61	William Beard clln	<i>C. lupus</i>	R mand ramus, post P3, P4, M1-3	32.75
SHC D19/4	Banwell Bone Cave		5a	TTNCM 40/1995/60	William Beard clln	<i>C. lupus</i>	R mand ramus, P4, M1-3	32.12
SHC D19/3	Banwell Bone Cave		5a	TTNCM 40/1995/59	William Beard clln	<i>C. lupus</i>	R post mand frag, M1-3	28.77
SHC D19/3	Banwell Bone Cave		5a	TTNCM 40/1995/57	William Beard clln	<i>C. lupus</i>	R mand ramus, M1-3	28.42
SHC D19/3	Banwell Bone Cave		5a	TTNCM 40/1995/47	William Beard clln	<i>C. lupus</i>	R mand ramus, P2-3, M1	27.88
SHC D19/3	Banwell Bone Cave		5a	TTNCM 40/1995/54	William Beard clln	<i>C. lupus</i>	R mand ramus, C1, P1-4, M1	30.59
SHC D19/2	Banwell Bone Cave		5a	TTNCM 40/1995/53	William Beard clln	<i>C. lupus</i>	R mand frag, M1-2	30.87
SHC Display	Banwell Bone Cave		5a	45/1995/634		<i>C. lupus</i>	R mand, C1, P2-4, M1.	33.26

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	m1L
SM From fox & wolf box in display case 9	Bosco's Den		5a	SM. 18581.49		<i>C. lupus</i>	R lower M1	30.57
MM R5 ColK D15	Windy Knoll		5a	P2496a-j	Dawkins	<i>C. lupus</i>	L mand ramus, C1, M1-2	31.26
UMZC	Wretton, Norfolk		5a	Wr1a 1989 G 141		<i>C. lupus</i>	R mand C1, P1-4, M1-2, M3 alv	32.37
WH NHM 53A, 2nd drw from bottom	Steetley Quarry Stump Cross Cave		5a	88 (FS 04700)		<i>C. lupus</i>	R mand ramus, P3-4, M1	28.73
SM On display	Bacon Hole		5a	M43234	Stump cross cave 1980 III c	<i>C. lupus</i>	R ramus, P1, frag P2, frag P3, P4, M1-2	31.4
In bag	Minchin Hole		5c	SM. 850:2.166		<i>C. lupus</i>	L mand, C1, P1-4, M1-2 M3 lv	29.61
SMES 3A Display	Barrington		5c	SM.1852.2.4 5		<i>C. lupus</i>	R lower M1	28.18
			5e			<i>C. lupus</i>	L lower M1	28.18

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	m1L
TM G/B6/B112	Joint Mitnor Cave		5e	P35082	1940	<i>C. lupus</i>	R ramus, P1-4, M1-2	27.43
TM G/B6/B112	Joint Mitnor Cave		5e	P35085	1940	<i>C. lupus</i>	R ramus frag, P4, M1-2	29.37
TM G/B6/B112	Joint Mitnor Cave		5e	P35114	1940	<i>C. lupus</i>	R lower M1 in mand frag	28.36
BGS 483956	Clevedon Cave		6	16350		<i>C. lupus</i>	R mand, P2-4, M1-3	26.95
BC	Clevedon Cave		6	Ce15071	B. N. S. Soc	<i>C. lupus</i>	R lower M1	28.37
BC	Clevedon Cave		6	Ce15087	S.H. Reynolds	<i>C. lupus</i>	R post mand, M1, M3	27.85
BC	Clevedon Cave		6	Ce12520	B. N. S. Soc	<i>C. lupus</i>	R mand ramus, C1, P2-4, M1	28.29
SHC D46/1	Bleadon Cavern		7	TTNCM 41/1995/12	W. Beard clln	<i>C. lupus</i>	R mand, P1-4, M1-2	28.55

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	m1L
SHC D65/3	Bleadon Cavern	Fissure in Bleadon quarry, Bleadon, Soms, 1872.	7	TTNCM 41/1995/3001	Pres'd by Rev. Wadham Pigott Williams, 1878	<i>C. lupus</i>	R mand, P4, M1-2	31.13
BGS 483890	Crayford, Kent		7	5112a	Spurrell clln	<i>C. lupus</i>	R M1	28.48
NHM 44 D drw 7	Hutton Cave	none	7	44739a	none	<i>C. lupus</i>	R+L mand frags. LC1, P4, M1-2	27.58
SHC D40/2	Hutton Cave		7	TTNCM 42/1995/44	Rev D Williams and W Beard clln	<i>C. lupus</i>	R and L mand assoc - L mand, P2, P4, M1-2	28.81
BGS 483847	Ilford, Essex		7		Dr RP Cotton clln, pres by Cotton, 1878	<i>C. lupus</i>	L mand ramus frag, P2-4, M1	28.95
BCM 6, 7, box 123	Marsworth	Pitstone no 3 quarry	7	1980.544.h8/9		<i>C. lupus</i>	R lower M1	28.02
BCM Touch of Bucks & fossils & ice	Marsworth	Pitstone no 3 quarry	7	AYBCM: 1980.544.g9/12a		<i>C. lupus</i>	R lower M1	27.84
NHM 43 I d 18	Tornewton Cave	VV-OS, 7th layer	7	none	Sutcliffe, 1964	<i>C. lupus</i>	R lower M1	27.16

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	m1L
VER 108	Grotta di Paglicci, Italy	Str VI	2	V5767		<i>C. lupus</i>	L mand, C1, P4, M1	29.18
NHM 36 E d 36/E/19	Perick Cave, Westphalia, Germany	none	2.4	28571		<i>C. lupus</i>	L mand, I2-3, P1-4, M1-3	30.36
NHM 36 E d 36/E/19	Sundwig Cave, Westphalia, Germany	none	2.4	M436	Enniskillen clln 1882	<i>C. lupus</i>	L mand ramus, P2, P4, M1-2	29.24
NHM 36 E d 36/E/19	Sundwig Cave, Westphalia, Germany	none	2.4	28573 1988/22377	Purchd 1853	<i>C. lupus</i>	L ramus, P3-4, M1-2	28.52
SIW	Ranis, Thuringia, Germany		2.4	(Ranis 21896) 31300		<i>C. lupus</i>	L mand ramus, M1-2	28.51
StM 80	Bad Canstatt, Germany	Stuttgart Travertine	2.8	(SE.12.2.57/ 0.F)	28.42	<i>C. lupus</i>	L mand frag, P4, M1	28.42
StM 80	Villa Seckendorf, Bad Canstatt, Germany	Stuttgart Travertine	2.8	31302 (21.2.57/10)	28.515	<i>C. lupus</i>	L mand ramus, C1, P2-4, M1	30.07
StM 80	Villa Seckendorf, Bad Canstatt, Germany	Stuttgart Travertine	2.8	31397 (SE.26.2.57/ 1)		<i>C. lupus</i>	L mand ramus, P1-4, M1	26.94

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	m1L
StM 80	Villa Seckendorf, Bad Canstatt, Germany	Stuttgart Travertine	2.8	31304.1 (7.3.57/6)		<i>C. lupus</i>	L lower M1	29.85
StM 80	Villa Seckendorf, Bad Canstatt, Germany	Stuttgart Travertine	2.8	31304.2 (7.3.57/6)		<i>C. lupus</i>	L lower M1	29.59
StM 80	Villa Seckendorf, Bad Canstatt, Germany	Stuttgart Travertine	2.8	31301 (21.2.57/10)		<i>C. lupus</i>	L mand ramus, P1-4, M1, alvs i1-3, C1.	27.79
SIW 3 d 9	Taubach, Germany		2.8	1968/10851 (Taub 12243)		<i>C. lupus</i>	R mand ramus	29.07
NHM 35 L d 14	Monte Tignoso, Italy		2.8	M7172		<i>Canis?</i>	R ramus frag, M1	27.58
StM 71	Dobelhaldeschacht, Germany	fkpl. 4	3	34258/2		<i>C. lupus</i>	L lower M1	26.78
SIW	Weimar-Ehringsdorf, Germany		3	1966/4476 (Ehr 10670)		<i>C. lupus</i>	L lower M1	28.42
SIW	Weimar-Ehringsdorf, Germany		3	1966/4470 (ehr 3842)		<i>C. lupus</i>	L lower M1	26.77

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	m1L
NHM 52 B	Grays Thurrock	Brickfields centered on TQ 622781	9	23141		<i>C. mosbachensis</i>	Right lower M1	25.86
NHM 25 E d 14	Boxgrove	Project A, Q1, area TP4, Unit 4c-surface, Field no (2+3)	13	F2+3/1		<i>C. mosbachensis</i>	R mand ramus, I3, C1, P1-4, M1-3	23.29
NHM 25 F d 25	Boxgrove	Project A, Q2, area GTP17, unit 4c surface, field no F63(2)	13	F63 (2)		<i>C. mosbachensis</i>	R lower M1	23.37
NHM 25 F d 25	Boxgrove	Project A, Q2, area 17, unit 4c surface, field no F9 (part)	13	F9/2		<i>C. mosbachensis</i>	R mand, C1, P2-4, M1	22.8
NHM 44D 3rd drw from top	Westbury	no strat info	13	M33942	Bishop clln	<i>C. mosbachensis</i>	L mand, M1	23.21
NHM 44D 3rd drw from top	Westbury	Bed 3	13	M33940	M Bishop 1974	<i>C. mosbachensis</i>	L mand ramus, P2-4, M1-3	25.7
NHM 44D 3rd drw from top	Westbury	Bed 3	13	M33937	M Bishop 1974	<i>C. mosbachensis</i>	Left mand ramus, P4, M1-2	22.78
NHM 44 E drw 18	Westbury	Unstrat calc memb	13	none	Bishop, 1974	<i>C. mosbachensis</i>	L lower M1	23.38

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	m1L
NHM 44 F drw 1	Westbury	Calc memb. Site W1A	13	none	NHM excav 1976	<i>C. mosbachensis</i>	L lower M1	24.29
NHM 44 F drw 30	Westbury	Grey silty conglom 18/6, W5 West. Calc memb	13	none	Post 1977	<i>C. mosbachensis</i>	L lower M1	24.95
NHM 55 E	Sidestrand	Forest bed - clay in depression, N of old tower.	13	M6169	A.C. Savin 1897	<i>C. mosbachensis</i>	R mandible ramus P2-M1	25.51
StM 58	Heppenloch		3.4	30119		<i>C. mosbachensis</i>	R lower M1	25.16
VER 00441	Monte Zoppega, Soave, Italy		3.4	V10918		<i>C. mosbachensis</i>	R mand ramus, M1-2	23.18
VER 00441	Monte Zoppega, Soave, Italy		3.4	V10919		<i>C. mosbachensis</i>	R mand ramus, P1-4, M1	21.36
SIW 1 d 4	Untermassfeld, Germany		4	1980/15308 (Mei 14820)		<i>C. mosbachensis</i>	R mand, C1, P1-4, M1-3	24.13
SIW 1 d 4	Untermassfeld, Germany		4	1980/15919 (Mei 15430)		<i>C. mosbachensis</i>	R mand ramus, C1, P3-4, M1	25.17

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	m1L
SIW 1 d 4	Untermassfeld, Germany		4	1984/20112 (Mei 19632)		<i>C. mosbachensis</i>	R mand ramus, P3-4, M1-3	24.12
SIW 1 d 4	Untermassfeld, Germany		4	1980/16969 (Mei 16460)		<i>C. mosbachensis</i>	R mand ramus, C1, P2-4, M1-2	23.82
SIW 1 d 4	Untermassfeld, Germany		4	1986/21085 (Mei 20604)		<i>C. mosbachensis</i>	R mand ramus, P2-4, M1-2	25.06
SIW 1 d 4	Untermassfeld, Germany		4	1980/17151 (Mei 16672)		<i>C. mosbachensis</i>	R mand ramus, C1, P1-4, M1-2	23.29
SIW 1 d 4	Untermassfeld, Germany		4	1980/16553 (Mei 16074)		<i>C. mosbachensis</i>	R mand, C1, P2-4, M1-2	23.72
SIW 1 d 4	Untermassfeld, Germany		4	1982/17995 (Mei 17515)		<i>C. mosbachensis</i>	R mand, P1-4, M1-3	25.75
SIW 1 d 4	Untermassfeld, Germany		4	1982/17995 (Mei 17515)		<i>C. mosbachensis</i>	R mand frag, post root P4, M1	25.35
SIW 1 d 5	Untermassfeld, Germany		4	1980/15357 (mei 14869)		<i>C. mosbachensis</i>	R mand, I3, C1, P1, post P2, P3-4, M1-2	23.49

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	m1L
FLO 0/02/013/01 (d1)	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF868		<i>C. arnensis</i>	R mand, I1-3, C1, P1-4, M1-3	21.19
FLO 0/02/013/04 (d4)	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF876		<i>C. arnensis</i>	R mand, I1-2, P2-3, post P4, M1-3	22.24
FLO 0/02/013/04 (d4)	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF878		<i>C. arnensis</i>	With cranial frag, PAIR. R mand, P3-4, M1-3	21.5
FLO 0/02/013/04 (d4)	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF884		<i>C. arnensis</i>	R mand ramus frag, P4, M1- 2	20.75
FLO 0/02/013/04 (d4)	Il Tasso, Italy	Upper Valdarno	4.4	IGF887		<i>C. arnensis</i>	R mand, P1-4, M1-3	21.81
FLO Strozzi Sala	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF11800		<i>C. arnensis</i>	R mand ramus, P1-4, M1-2, M3 alv	23.54
FLO 0/02/013/05	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF12967		<i>C. arnensis</i>	R mand ramus, P1-4, M1-2	22.73
FLO 0/02/013/05	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF877		<i>C. arnensis</i>	With upper palate, L+R mands. R mand ramus, P2- 4, M1-3	23.55

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	m1L
FLO Gallery	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF869		<i>C. arnensis</i>	With cranium, L+R mands. R mand, C1, P1-4, M1-3	20.71
FLO Gallery	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF867		<i>C. arnensis</i>	With cranium, L+R mand. R mand, P4, M1-2	21.25
FLO 0/02/013/01 (d1)	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF888		<i>C. etruscus</i>	L+ R mands PAIR. R mand ramus, P2-4, M1	25.4
FLO 0/02/013/01 (d1)	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF856		<i>C. etruscus</i>	R mand, C1, P1-4, M1-3	25.04
FLO 0/02/013/01 (d1)	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF860		<i>C. etruscus</i>	R mand frag, M1-3	26.67
FLO 0/02/013/02 (d2)	L'Inferno, Italy	Upper Valdarno	4.4	IGF858		<i>C. etruscus</i>	R Lower mand frag, M1-2	24.67
FLO 0/02/013/02 (d2)	Se Ville, Italy	Upper Valdarno	4.4	IGF882		<i>C. etruscus</i>	R mand ramus, P4, M1-3	24.38
FLO 0/02/013/02 (d2)	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF880		<i>C. majori</i> (<i>etruscus</i>)	R mand ramus, C1, P1-2, P4, M1	27.47

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	m1L
FLO 0/02/013/02 (d2)	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF859		<i>C. etruscus</i>	R mand ramus, C1, P2-4, M1	23.15
FLO Strozzi Sala	Upper Valdarno, Italy	Upper Valdarno	4.4	871		<i>C. etruscus</i>	R mand, I2-3, C1, P1-4, M1-2	25.21
FLO 0/02/013/05	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF12868		<i>C. etruscus</i>	R mand ramus, P2, M1	25.13
FLO 0/02/013/05	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF873		<i>C. majori</i> (<i>etruscus</i>)	R mand, I3, C1, P2-4, M1-3	23.69
FLO 0/02/013/05	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF12966		<i>C. etruscus</i>	R mand ramus, P3-4, M1	25.35
FLO 0/02/013/03 (d3)	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF11783		<i>C. etruscus</i>	R lower M1	23.18
NHM 35 L d 23	Olivola, Italy	Olivola	4.4	none		<i>C. etruscus</i>	R lower M1	24.87
FLO 0/02/013/07 (d7)	Val di Magna, Italy	Olivola	4.4	IGF4475		<i>C. etruscus</i>	R mand ramus, M1-2, roots P4	25.05

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	m1L
FLO 0/02/013/07 (d7)	Val di Magna, Italy	Olivola	4.4	IGF4476		<i>C. etruscus</i>	R mand ramus, P2, P4, M1	25.45
FLO Gallery	Olivola, Italy	Olivola	4.4	IGF4414		<i>C. etruscus</i>	R mand, C1, P1-4, M1-2	26.17

2. m1Ltrig

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	m1Ltrig
NHM 1	France		1	1843.12.29.7	F	<i>C. lupus</i>	L mand, I1-3, C1, P2-4, M1-2	18.16
NHM 2	Pyrenees Nr Abrantos, S of the Tagus, Portugal	Parzudacki clln	1	44.1.18.1	F	<i>C. lupus</i>	L mand, I1-3, C1, P1-4, M1-3	18.06
NHM 3		WC Tait clln.	1	1938.12.7.1	F	<i>C. lupus</i>	R mand, I1-3, C1, P1-4, M1-2	18.22
NHM 5	Riocalado, Burgos, Spain		1	11.10.5.2	F	<i>C. lupus</i>	L mand, I1-3, C1, P1-4, M1-3	19.18
NHM 8	Kocane, Macedonia		1	47.1121.a	F	<i>C. lupus</i>	L mand, I1-3, C1, P1-4, M1-2	19.35
NRM	Korvijaure, 7 miles N Kiruna	15.4.1959	1	A58 0112	F	<i>C. lupus</i>	L+R mand + cranium. R mand I1-3, C1, P1, P2 loose, P3-4, M1-3	18.42
NRM	S Finnskoga, Skrackarberget	1985.07.29	1	A865126	F	<i>C. lupus</i>	L+R mand+cranium. R mand, I1-3, P1-4, M1-3	20.25
NRM	Jadraas, 5km N	1991.06.14	1	A915068	F	<i>C. lupus</i>	L+R mand+cranium. R teeth P4, M1-2	19.75

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	m11trig
NRM	Vastra Amtervik, Hensgard	1993.02.24	1	A935024	F	<i>C. lupus</i>	L+R mand+cranium. L mand, I1-3, C1, P2-4, M1-2	19.99
NRM	Nas-snoan, v71/jvg	1993.08.18	1	A935178	F	<i>C. lupus</i>	L+R mand+cranium. L mand I1-3, C1, P1-4, M1-3	19.11
NRM	Nyskoga, Kringsberg, Bontjarn	1994.01.19	1	A945045	F	<i>C. lupus</i>	L+R mand+cranium. R mand, I1-3, P1-4, M1-3	19.2
NRM	Vastmandland, Grythyttan	1999.12.17	1	20005111	F	<i>C. lupus</i>	L+R mand+cranium. R mand I2-3, C1, P2-4, M1-3	20.03
NRM	Narke, Degerfors, Atorp	2001.12.26	1	20025005	F	<i>C. lupus</i>	L+R mand+cranium. L mand I1-3, P1-4, M1-3	19.64
NRM	Atorp 3.5 km NW, Degerfors, Varmland	2002.03.05	1	20035026	F	<i>C. lupus</i>	L+R mand+cranium. L mand I1-3, C1, P1-4, M1-3	20.3
NRM	Odlingen, Sillerud, Arjang, Varmland	2004.02.07	1	20045040	F	<i>C. lupus</i>	L+R mand+cranium. R mand I1-3, C1, P1-4, M1-3	19.71
NRM	Ovre Hurr, Tocksfors, Varmland	2006.05.30	1	20065236	F	<i>C. lupus</i>	L+R mand+cranium. L mand, I1-2, C1, P1-4, M1-3	20.3
NRM	Rickebo, Hallbo, Bollnas, Halsingland	2006.03.14	1	20065047	F	<i>C. lupus</i>	L+R mand+cranium. R mand I1-3, C1, P1-4, M1-3	20.31

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	m11trig
NRM	Ronnas, Ostra, Leksand, Dalarna	2007.10.09	1	20075381	F	<i>C. lupus</i>	L+R mand+cranium. R mand I1-3, C1, P1-4, M1-3	19.53
NRM	Jarbo, Backefors, Dalsland	2007.?	1	20075314	F	<i>C. lupus</i>	L+R mand+cranium. L mand I1-3, C1, P1-4, M1-3	19.2
NRM	Varmland, Nordmark, Algsjion 2 km S	2009.01.25	1	20095063	F	<i>C. lupus</i>	L+R mand+cranium. R mand I1-3, C1, P1 alv, P1-4, M1-3	20
NRM	Halsingland, Bollnas, Lottefors; Rv 83	2007.08.19	1	20075312	F	<i>C. lupus</i>	L+R mand + cranium. R mand I1-3, C1, P1-4, M1-3	19.98
NRM	Vastmanland, Hallefors, Ornviken,	2010.01.02	1	20105028	F	<i>C. lupus</i>	L+R mand+cranium. L mand I1-3, C1, P1-4, M1-3	20.48
NHM 4	Riocalado, Burgos, Spain	On note '2 carnassials in tooth case'	1	11.10.5.1	Recent Male	<i>C. lupus</i>	L mand, I1-3, C1, P1-4, M1-3	21.36
NHM 6	Seville, Spain		1	95.3.3.6	M	<i>C. lupus</i>	R mand, I1-3, C1, P2-4, M1-3. No P1 or alv	19.56
NHM 7	Ukraine on modern ticket, on skull and original		1	34.6.28.47	M	<i>C. lupus</i>	L mand, I1-3, C1, P3-4, M1-3	20.35
NHM 11	Moscow district, Russia		1	82.9.18.2	M	<i>C. lupus</i>	L mand, I1-3, C1 fract, P1-4, M1-3	22.14

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	m11trig
NHM Ost	Abrantos, S of Tagus, Portugal		1	1937.2.10.2	M	<i>C. lupus</i>	R mand, I2, C1, P4, M1-3	19.34
NHM Ost	Bosnia, Yugoslavia		1	1935.8.5.1	M	<i>C. lupus</i>	R mand, I1-3, C1, P1-4, M1-2	19.84
NHM 9	Norbotten, N Sweden (in arctic circle).		1	28.5.4.1	M	<i>C. lupus</i>	L mand, I1-3, C1, P1-4, M1-3	19.08
NRM	Ljusdal, Ramsjo (s:n)	12.2.1926	1	A580255	M	<i>C. lupus</i>	L+R mand + fract cranium. L mand, I1-3, C1, P1-4, M1-3	20.17
NRM	Jokkmokk	11.02.1852	1	A583532	M	<i>C. lupus</i>	L+R mand + cranium. R mand I1-3, C1, P1-4, M1-3	20.19
NRM	Orebro	1852	1	A583547	M	<i>C. lupus</i>	L+R mand+cranium. R mand I1-3, C1, P1-4, M1-3	20.12
NRM	Sweden	1907	1	A589147	M	<i>C. lupus</i>	L+R mand + cranium. R teeth I1-3, C1, P1-4, M1-2	21.97
NRM	Sweden	1908	1	A589199	M	<i>C. lupus</i>	L+R mand+cranium. L mand I1-3, C1, P1-4, M1-3	22.08
NRM	Luktjomtjuolta, Vilhelmina	15.1.1937	1	A590009	M	<i>C. lupus</i>	L+R mand+cranium. L mand I1-3, C1, P2-4, M1-2	19.79

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	m11trig
NRM	Lina alv station	25.12.1977	1	A775097	M	<i>C. lupus</i>	L+R mand+cranium. L mand I1, I3, C1, P1-4, M1-3	20.42
NRM	Atran, Ogardet	1984.09.12	1	A845131	M	<i>C. lupus</i>	L+R mand+cranium. R mand I1-3, C1, P1-4, M1-3	21.31
NRM	Hede, 3 mil NV, Norrstadsjan	1989.04.17	1	A895039	M	<i>C. lupus</i>	L+R mand+cranium. R mand I1-3, P1-4, M1-3	21.87
NRM	Kiruna-Gallivare, Gaddmyr, Jvg	1992.08.24	1	A925106	M	<i>C. lupus</i>	L+R mand+cranium. R mand, I1-3, P2-4, M1-3	20.36
NRM	Boras	1996.01.04	1	A965002	M	<i>C. lupus</i>	L+R mand+cranium. L teeth I1-3, C1, P1-4, M1-2	20.47
NRM	Jarna, Flaten, Dalarna	1999.2.6	1	A995016	M	<i>C. lupus</i>	L+R mand+cranium. R mand, I1-2, P1-4, M1-3	22.19
NRM	Varmland, Eksharad, Halgan; Kolarkojan	1999.06.04	1	995230	M	<i>C. lupus</i>	L+R mand+cranium. R mand, I3, C1, P1-4, M1-3	20.96
NRM	Jumkil kyrka, Uppsala	2000.11.19	1	20005365	M	<i>C. lupus</i>	L+R mand+cranium. L mand I1-3, C1, P1-4, M1-3	21.35
NRM	Uddalen, Ed, Dalsland	2003.05.12	1	20035114	M	<i>C. lupus</i>	L+R mand+cranium. R mand I1-3, C1. extra P1? P1, P2-3 broken, P4, M1-3	21.31

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	m11trig
NRM	Ostermoren, Smedjebacken, Dalarna	2004.12.09	1	20045305	M	<i>C. lupus</i>	L+R mand+cranium. R mand I1-3, C1, P1-4, M1-2, M3 alv	21.34
NRM	Dala Floda, Borlange, Dalarna IV 225 (road?), Osmo,	2003.03.09	1	20035024	M	<i>C. lupus</i>	L+R mand+cranium. R mand I1-3, C1, P1 alv, P2-4, M1-3 L+broken R mand+cranium. L mand I1-2, C1, P1-4, M1-2,	21.53
NRM	Sodermanland Lanasberget, Grundsjo, Ljungaverk,	2005.11.26	1	20065027	M	<i>C. lupus</i>	M3 alv	20.33
NRM	Medelpad	2005.09.02	1	20055287	M	<i>C. lupus</i>	L+R mand+cranium. L mand I1-3, C1, P1-4, M1-3	21.38
NRM	Mullhyttan, Orebro, Narke	2006.09.15	1	20065414	M	<i>C. lupus</i>	L+R mand+cranium. R mand I1-3, C1, P1-4, M1-2, M3 alv L+R mand + cranium. L mand	20.66
NRM	Avik, Laxa, Narke	2007.04.27	1	20075186	M	<i>C. lupus</i>	I1-3, C1, P1 alv, P2-4, M1-2, M3 alv	21.03
NRM	Malung-Appelbo, Dalarna	2007.12	1	20085027	M	<i>C. lupus</i>	L+R mand +cranium. L mand, I1-3, C1, P1-4, M1-3	21.22
NRM	Dalarna, Torsby, Ostmark; Sojensoasen	2007.09.15	1	20075373	M	<i>C. lupus</i>	L+R mand+cranium. R mand I1-3, C1, P1-4, M1-3	22.43

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	m11trig
NRM	Stormosse, Piro, Bjerneborg, Kristinehamn,	2007.12.27	1	20085036	M	<i>C. lupus</i>	L+R mand+cranium. L mand I1-3, C1, P1-4, M1-3	20.62
NHM 23 K	Cae Gwyn Cave		2	M2613	Pres by Dr H Hicks and E Bouwerie Luxmoore esq	<i>C. lupus</i>	From mounted board with cranial frags. 1). R lower M1	21.61
NMW PH1.147	Ogof yr Ychen	Abyss chamber 3	2	864		<i>C. lupus</i>	L mand, C1, P1-4, M1-2	20.54
SMES bay 4, iv 266 drw	Black Rock quarries, Tenby		3	D2610	Pres by T Roberts, 1882	<i>C. lupus</i>	Back portion of R mand, M1-2	21.62
SMES bay 4, iv 266 drw	Black Rock quarries, Tenby		3	D2611	Pres by T Roberts, 1882	<i>C. lupus</i>	R lower M1	22.77
SMES bay 4, iv 266 drw	Black Rock quarries, Tenby		3	D2605	Pres by T Roberts, 1882	<i>C. lupus</i>	R mand, I2-3, C1, P2, P4, M1-2	17.4
NHM 43 C	Kents Cavern	none	3	18982	McEnergy clln	<i>C. lupus</i>	L lower M1	19.53
NHM 43 C	Kents Cavern	None	3	16754	Pur Mr McEnergy's sale	<i>C. lupus</i>	L lower M1	21.06
NHM 43 C	Kents Cavern	Cave earth, 4th level	3	M848	Pres by Lord Haldon, July 1883	<i>C. lupus</i>	L ramus frag, M1-M2	20

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	m11trig
TM G/B1/B244	Kents Cavern	Cave Earth	3	P13417	W. Pengelly	<i>C. lupus</i>	L lower M1 in mand frag	20.06
NHM 43 E drw 24	Oreston Cave	Presv type 2	3	46982	Purch 1876	<i>C. lupus</i>	L lower M1 (in box with L upper C1)	19.92
NHM 43 E drw 24	Oreston Cave	Pres type 2	3	46981	Purch 1876	<i>C. lupus</i>	2). L ramus, C1, P1-4, M1-2	19.16
WH	Oreston Cave		3	1989 G 140 1.8	TC	<i>C. lupus</i>	L mand frag, M1-2	20.57
WH	Oreston Cave		3	1989 G 140.1.4	TC	<i>C. lupus</i>	L mand frag, P4, M1	21.81
BC	Oreston Cave		3	Cd2928	J. Cottle c1n 1830	<i>C. lupus</i>	L lower M1	20.48
NMW From gallery	Paviland	none	3	24.94/46		<i>C. lupus</i>	R mand ramus, P1, P3-4, M1	20.66
SM Blue boxes	Paviland		3	SM.1836.6.3 03		<i>C. lupus</i>	R mand ramus, P2-4, M1	21.18
SM Blue boxes	Paviland		3	SM.1836.6.3 04		<i>C. lupus</i>	R mand frag, M1-2	20.27

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	m11trig
SM Blue boxes	Paviland		3	SM.1836.6.308	Excav 1823	<i>C. lupus</i>	R mand frag, M1-2	21.44
SM Blue boxes	Paviland		3	SM.1836.6.312		<i>C. lupus</i>	R lower M1 in mand frag	22.45
MM R4 ColE D 1	Pin Hole Cave	PH (F)	3	LL.1995		<i>C. lupus</i>	L mand ramus, P1-4, M1-2	21.5
MM Gallery	Pin Hole		3	LL11898 TTNCM		<i>C. lupus</i>	L mand, I2-3, C1, post P2, P3-4, M1-3	20.43
SHC D27/3	Sandford Hill	Cave or fissure deps	3	44/1995/61/3	Rev'd. D. Williams & Beard clln	<i>C. lupus</i>	L mand ramus, P4, M1-2	20.82
NHM 45D drw 13	Banwell Bone Cave	5a	5a	M404d	Egerton clln, 1882	<i>C. lupus</i>	R mand ramus, C1, P2-M2.	21.56
NHM 45D drw 13	Banwell Bone Cave		5a	M223	Enniskillen clln	<i>C. lupus</i>	R mand ramus, P3-4, M1-2	20.87
NHM 45D drw 13	Banwell Bone Cave		5a	44642	Pres Benj Bright esq, 1873	<i>C. lupus</i>	R mand frag, M1, P4.	20.86
NHM 45D drw 13	Banwell Bone Cave		5a	44648		<i>C. lupus</i>	2). R lower M1	19.75

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	m11trig
NHM Andy's office	Banwell Bone Cave	Entrance to Baker's Pit extension, 1950's	5a	M84868	Percy Baker clln	<i>C. lupus</i>	R mand, P1-4, M1-2	22.59
SHC D19/4	Banwell Bone Cave	Cave dep	5a	TTNCM 40/1995/61	William Beard clln	<i>C. lupus</i>	R mand ramus, post P3, P4, M1-3	22.85
SHC D19/4	Banwell Bone Cave		5a	TTNCM 40/1995/60	William Beard clln	<i>C. lupus</i>	R mand ramus, P4, M1-3	23.09
SHC D19/3	Banwell Bone Cave		5a	TTNCM 40/1995/59	William Beard clln	<i>C. lupus</i>	R post mand frag, M1-3	20.65
SHC D19/3	Banwell Bone Cave		5a	TTNCM 40/1995/57	William Beard clln	<i>C. lupus</i>	R mand ramus, M1-3	20.75
SHC D19/3	Banwell Bone Cave		5a	TTNCM 40/1995/47	William Beard clln	<i>C. lupus</i>	R mand ramus, P2-3, M1	19.91
SHC D19/3	Banwell Bone Cave		5a	TTNCM 40/1995/54	William Beard clln	<i>C. lupus</i>	R mand ramus, C1, P1-4, M1	21.27
SHC D19/2	Banwell Bone Cave		5a	TTNCM 40/1995/53	William Beard clln	<i>C. lupus</i>	R mand frag, M1-2	22.89
SHC Display	Banwell Bone Cave		5a	45/1995/634		<i>C. lupus</i>	R mand, C1, P2-4, M1.	23.63

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	m11trig
SM From fox & wolf box in display case 9	Bosco's Den		5a	SM. 18581.49		<i>C. lupus</i>	R lower M1	21.38
MM R5 ColK D15	Windy Knoll		5a	P2496a-j	Dawkins	<i>C. lupus</i>	L mand ramus, C1, M1-2	21.57
UMZC	Wretton, Norfolk		5a	Wr1a 1989 G 141 88 (FS 04700)		<i>C. lupus</i>	R mand C1, P1-4, M1-2, M3 alv	22.23
WH NHM 53A, 2nd drw from bottom	Steetley Quarry Stump Cross Cave		5a 5a	 M43234	 Stump cross cave 1980 III c	<i>C. lupus</i> <i>C. lupus</i>	R mand ramus, P3-4, M1 R ramus, P1, frag P2, frag P3, P4, M1-2	21.28 22.32
SM On display	Bacon Hole		5c	SM. 850:2.166		<i>C. lupus</i>	L mand, C1, P1-4, M1-2 M3 lv	20.78
In bag	Minchin Hole		5c	SM.1852.2.4 5		<i>C. lupus</i>	R lower M1	20.24
SMES 3A Display	Barrington		5e			<i>C. lupus</i>	L lower M1	19.73
TM G/B6/B112	Joint Mitnor Cave		5e	P35082	1940	<i>C. lupus</i>	R ramus, P1-4, M1-2	18.37

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	m11trig
TM G/B6/B112	Joint Mitnor Cave		5e	P35085	1940	<i>C. lupus</i>	R ramus frag, P4, M1-2	20.85
TM G/B6/B112	Joint Mitnor Cave		5e	P35114	1940	<i>C. lupus</i>	R lower M1 in mand frag	20.04
BGS 483956	Clevedon Cave		6	16350		<i>C. lupus</i>	R mand, P2-4, M1-3	19.25
BC	Clevedon Cave		6	Ce15071	B. N. S. Soc	<i>C. lupus</i>	R lower M1	20.48
BC	Clevedon Cave		6	Ce15087	S.H. Reynolds	<i>C. lupus</i>	R post mand, M1, M3	19.46
BC	Clevedon Cave		6	Ce12520	B. N. S. Soc	<i>C. lupus</i>	R mand ramus, C1, P2-4, M1	20.65
SHC D46/1	Bleadon Cavern	Fissure in Bleadon quarry, Bleadon, Soms, 1872.	7	TTNCM 41/1995/12	W. Beard cIn Pres'd by Rev.	<i>C. lupus</i>	R mand, P1-4, M1-2	20.61
SHC D65/3	Bleadon Cavern		7	TTNCM 41/1995/300 1	Wadham Pigott Williams, 1878	<i>C. lupus</i>	R mand, P4, M1-2	22.66
BGS 483890	Crayford, Kent		7	5112a	Spurrell cIn	<i>C. lupus</i>	R M1	19.75

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	m11trig
NHM 44 D drw 7	Hutton Cave	none	7	44739a	none	<i>C. lupus</i>	R+L mand frags. LC1, P4, M1-2	21.46
SHC D40/2	Hutton Cave		7	TTNCM 42/1995/44	Rev D Williams and W Beard clln	<i>C. lupus</i>	R and L mand assoc - L mand, P2, P4, M1-2	19.89
BGS 483847	Ilford, Essex		7		Dr RP Cotton clln, pres by Cotton, 1878	<i>C. lupus</i>	L mand ramus frag, P2-4, M1	19.98
BCM 6, 7, box 123	Marsworth	Pitstone no 3 quarry	7	1980.544.h8 /9		<i>C. lupus</i>	R lower M1	18.85
BCM Touch of Bucks & fossils & ice	Marsworth	Pitstone no 3 quarry	7	AYBCM: 1980.544.g9/ 12a		<i>C. lupus</i>	R lower M1	19.41
NHM 43 I d 18	Tornewton Cave	VV-OS, 7th layer	7	none	Sutcliffe, 1964	<i>C. lupus</i>	R lower M1	18.69
VER 108	Grotta di Paglicci, Italy	Str VI	2	V5767		<i>C. lupus</i>	L mand, C1, P4, M1	19.05
NHM 36 E d 36/E/19	Perick Cave	none	2.4	28571	see notes	<i>C. lupus</i>	L mand, I2-3, P1-4, M1-3	21.48
NHM 36 E d 36/E/19	Perick Cave	none	2.4	M436	Enniskillen clln 1882	<i>C. lupus</i>	L mand ramus, P2, P4, M1-2	20.39

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	m11trig
NHM 36 E d 36/E/19	Perick Cave	none	2.4	28573	Purchd 1853	<i>C. lupus</i>	L ramus, P3-4, M1-2	19.51
SIW	Ranis, Thuringia, Germany		2.4	1988/22377 (Ranis 21896)		<i>C. lupus</i>	L mand ramus, M1-2	20.24
StM 80	Villa Seckendorf, Bad Canstatt, Germany	Stuttgart Travertine	2.8	31300 (SE.12.2.57/ 0.F)		<i>C. lupus</i>	L mand frag, P4, M1	19.99
StM 80	Villa Seckendorf, Bad Canstatt, Germany	Stuttgart Travertine	2.8	31302 (21.2.57/10)		<i>C. lupus</i>	L mand ramus, C1, P2-4, M1	21.77
StM 80	Villa Seckendorf, Bad Canstatt, Germany	Stuttgart Travertine	2.8	31397 (SE.26.2.57/ 1)		<i>C. lupus</i>	L mand ramus, P1-4, M1	19.31
StM 80	Villa Seckendorf, Bad Canstatt, Germany	Stuttgart Travertine	2.8	31304.1 (7.3.57/6)		<i>C. lupus</i>	L lower M1	20.28
StM 80	Villa Seckendorf, Bad Canstatt, Germany	Stuttgart Travertine	2.8	31304.2 (7.3.57/6)		<i>C. lupus</i>	L lower M1	20.83
StM 80	Villa Seckendorf, Bad Canstatt, Germany	Stuttgart Travertine	2.8	31301 (21.2.57/10)		<i>C. lupus</i>	L mand ramus, P1-4, M1, alvs i1-3, C1.	19.11
SIW 3 d 9	Taubach, Germany		2.8	1968/10851 (Taub 12243)		<i>C. lupus</i>	R mand ramus	19.93

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	m11trig
NHM 35 L d 14	Monte Tignoso, Italy		2.8	M7172	Crozier clln , Castelli clln on sticker on mands]	<i>Canis?</i>	R ramus frag, M1	19.32
StM 71	Dobelhaldeschacht, Germany	fkpl. 4	3	34258/2		<i>C. lupus</i>	L lower M1	18.54
SIW	Weimar-Ehringsdorf, Germany		3	1966/4476 (Ehr 10670)		<i>C. lupus</i>	L lower M1	19.43
SIW	Weimar-Ehringsdorf, Germany		3	1966/4470 (ehr 3842)		<i>C. lupus</i>	L lower M1	18.38
NHM 52 B	Grays Thurrock	brickfields centered on TQ 622781 Project A, Q1, area TP4, Unit 4c-	9	23141		<i>C. mosbachensis</i>	Right lower M1	17.5
NHM 25 E d 14	Boxgrove	surface, Field no (2+3) Project A, Q2, area GTP17, unit	13	F2+3/1		<i>C. mosbachensis</i>	R mand ramus, I3, C1, P1-4, M1-3	15.73
NHM 25 F d 25	Boxgrove	4c surface, field no F63 (2) PROJECT A, Q2, area 17, unit 4c	13	F63 (2)		<i>C. mosbachensis</i>	R lower M1	15.34
NHM 25 F d 25	Boxgrove	surface, field no F9 (part)	13	F9/2		<i>C. mosbachensis</i>	R mand, C1, P2-4, M1	14.44

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	m11trig
NHM 44D 3rd drw from top	Westbury	no strat info	13	M33942	Bishop clln	<i>C. mosbachensis</i>	L mand, M1	15.94
NHM 44D 3rd drw from top	Westbury	Bed 3	13	M33940	M Bishop 1974	<i>C. mosbachensis</i>	L mand ramus, P2-4, M1-3	18.36
NHM 44D 3rd drw from top	Westbury	Bed 3	13	M33937	M Bishop 1974	<i>C. mosbachensis</i>	Left mand ramus, P4, M1-2	14.84
NHM 44 E drw 18	Westbury	Unstrat calc memb	13	none	Bishop, 1974	<i>C. mosbachensis</i>	L lower M1	16.01
NHM 44 F drw 1	Westbury	Calc memb. Site W1A Grey silty conglom 18/6,	13	none	NHM excav 1976	<i>C. mosbachensis</i>	L lower M1	17.31
NHM 44 F drw 30	Westbury	W5 West. Calc memb	13	none	Post 1977	<i>C. mosbachensis</i>	L lower M1	17.04
NHM 3 A d 11	Westbury	Forest bed - clay in depression, N of old tower.	13	M47663	Excav 1980	<i>C. mosbachensis</i>	L lower M1	15.85
NHM 55 E	Sidestrand		13	M6169	A.C. Savin 1897	<i>C. mosbachensis</i>	R mandible ramus P2-M1	16.85

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	m11trig
VER 00441	Monte Zoppega, Soave, Italy		3.4	V10918		<i>C. mosbachensis</i>	R mand ramus, M1-2	15.7
VER 00441	Monte Zoppega, Soave, Italy		3.4	V10919		<i>C. mosbachensis</i>	R mand ramus, P1-4, M1	13.8
StM 58	Heppenloch		3.4	30119		<i>C. mosbachensis</i>	R lower M1	17.17
SIW 1 d 4	Untermassfeld, Germany		4	1980/15308 (Mei 14820)		<i>C. mosbachensis</i>	R mand, C1, P1-4, M1-3	15.99
SIW 1 d 4	Untermassfeld, Germany		4	1980/15919 (Mei 15430)		<i>C. mosbachensis</i>	R mand ramus, C1, P3-4, M1	16.65
SIW 1 d 4	Untermassfeld, Germany		4	1984/20111 (Mei 19631)		<i>C. mosbachensis</i>	R mand ramus, C1, P2-4, ant M1	17.52
SIW 1 d 4	Untermassfeld, Germany		4	1984/20112 (Mei 19632)		<i>C. mosbachensis</i>	R mand ramus, P3-4, M1-3	16.26
SIW 1 d 4	Untermassfeld, Germany		4	1980/16969 (Mei 16460)		<i>C. mosbachensis</i>	R mand ramus, C1, P2-4, M1-2	16.18
SIW 1 d 4	Untermassfeld, Germany		4	1986/21085 (Mei 20604)		<i>C. mosbachensis</i>	R mand ramus, P2-4, M1-2	16.94

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	m11trig
SIW 1 d 4	Untermassfeld, Germany		4	1980/17151 (Mei 16672)		<i>C. mosbachensis</i>	R mand ramus, C1, P1-4, M1-2	15.55
SIW 1 d 4	Untermassfeld, Germany		4	1980/16553 (Mei 16074)		<i>C. mosbachensis</i>	R mand, C1, P2-4, M1-2	15.74
SIW 1 d 4	Untermassfeld, Germany		4	1982/17995 (Mei 17515)		<i>C. mosbachensis</i>	R mand, P1-4, M1-3	16.91
SIW 1 d 4	Untermassfeld, Germany		4	1982/17995 (Mei 17515)		<i>C. mosbachensis</i>	R mand frag, post root P4, M1	16.79
SIW 1 d 5	Untermassfeld, Germany		4	1980/15357 (mei 14869)		<i>C. mosbachensis</i>	R mand, I3, C1, P1, post P2, P3-4, M1-2	15.71
FLO 0/02/013/01 (d1)	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF868		<i>C. arnensis</i>	R mand, I1-3, C1, P1-4, M1-3	14.22
FLO 0/02/013/04 (d4)	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF876		<i>C. arnensis</i>	R mand, I1-2, P2-3, post P4, M1-3	14.39
FLO 0/02/013/04 (d4)	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF878		<i>C. arnensis</i>	With cranial frag, PAIR. R mand, P3-4, M1-3	14.63
FLO 0/02/013/04 (d4)	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF884		<i>C. arnensis</i>	R mand ramus frag, P4, M1-2	14.04

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	m11trig
FLO 0/02/013/04 (d4)	Il Tasso, Italy	Upper Valdarno	4.4	IGF887		<i>C. arnensis</i>	In box with max. R mand, P1-4, M1-3	14.26
FLO Strozzi Sala	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF11800		<i>C. arnensis</i>	R mand ramus, P1-4, M1-2, M3 alv	15.54
FLO 0/02/013/05	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF12967		<i>C. arnensis</i>	R mand ramus, P1-4, M1-2	14.86
FLO 0/02/013/05	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF877		<i>C. arnensis</i>	With upper palate, L+R mands. R mand ramus, P2-4, M1-3	15.78
FLO Gallery	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF869		<i>C. arnensis</i>	With cranium, L+R mand. R mand, C1, P1-4, M1-3	13.81
FLO Gallery	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF867		<i>C. arnensis</i>	With cranium, L+R mand. R mand, P4, M1-2	14.83
FLO 0/02/013/01 (d1)	Upper Valdarno, Italy		4.4	IGF888		<i>C. etruscus</i>	L+ R mand. PAIR. R mand ramus, P2-4, M1	16.94
FLO 0/02/013/01 (d1)	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF856		<i>C. etruscus</i>	R mand, C1, P1-4, M1-3	16.99
FLO 0/02/013/01 (d1)	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF860		<i>C. etruscus</i>	R mand frag, M1-3	18.47

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	m11trig
FLO 0/02/013/02 (d2)	Se Ville, Italy	Upper Valdarno	4.4	IGF882		<i>C. etruscus</i>	R mand ramus, P4, M1-3	16.28
FLO 0/02/013/02 (d2)	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF859		<i>C. etruscus</i>	R mand ramus, C1, P2-4, M1	16.07
FLO Strozzi Sala	Upper Valdarno, Italy	Upper Valdarno	4.4	871		<i>C. etruscus</i>	R mand, I2-3, C1, P1-4, M1-2	18.05
FLO 0/02/013/05	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF12868		<i>C. etruscus</i>	R mand ramus, P2, M1	17.81
FLO 0/02/013/05	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF873		<i>C. majori (etruscus)</i>	R mand, I3, C1, P2-4, M1-3	15.46
FLO 0/02/013/05	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF12966		<i>C. etruscus</i>	R mand ramus, P3-4, M1	16.91
FLO 0/02/013/03 (d3)	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF11783		<i>C. etruscus</i>	R lower M1	15.85
NHM 35 L d 23	Olivola, Italy	Olivola	4.4	none		<i>C. etruscus?</i>	R lower M1	15.74
FLO 0/02/013/07 (d7)	Val di Magna, Italy	Olivola	4.4	IGF4475		<i>C. etruscus</i>	R mand ramus, M1-2, roots P4	16.94

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	m11trig
FLO 0/02/013/07 (d7)	Val di Magna, Italy	Olivola	4.4	IGF4476		<i>C. etruscus</i>	R mand ramus, P2, P4, M1	17.51
FLO Gallery	Olivola, Italy	Olivola	4.4	IGF4414		<i>C. etruscus</i>	R mand, C1, P1-4, M1-2	18.08

3. m1Ltal

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	m1Ltal
NHM 1	France		1	1843.12.29.7	F	<i>C. lupus</i>	L mand, I1-3, C1, P2-4, M1-2	7.57
NHM 2	Pyrenees Nr Abrantos, S of the Tagus, Portugal	Parzudacki clln	1	44.1.18.1	F	<i>C. lupus</i>	L mand, I1-3, C1, P1-4, M1-3	7.46
NHM 3		WC Tait clln.	1	1938.12.7.1	F	<i>C. lupus</i>	R mand, I1-3, C1, P1-4, M1-2	6.95
NHM 5	Riocalado, Burgos, Spain		1	11.10.5.2	F	<i>C. lupus</i>	L mand, I1-3, C1, P1-4, M1-3	7.46
NHM 8	Kocane, Macedonia		1	47.1121.a	F	<i>C. lupus</i>	L mand, I1-3, C1, P1-4, M1-2	7.25
NRM	Korvijaure, 7 miles N Kiruna	15.4.1959	1	A58 0112	F	<i>C. lupus</i>	L+R mand + cranium. R mand I1-3, C1, P1, P2 loose, P3-4, M1-3	7.04
NRM	S Finnskoga, Skrackarberget	1985.07.29	1	A865126	F	<i>C. lupus</i>	L+R mand+cranium. R mand, I1-3, P1-4, M1-3	7.72
NRM	Jadraas, 5km N	1991.06.14	1	A915068	F	<i>C. lupus</i>	L+R mand+cranium. R teeth P4, M1-2	7.41

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	m1Ltal
NRM	Vastra Amtervik, Hensgard	1993.02.24	1	A935024	F	<i>C. lupus</i>	L+R mand+cranium. L mand, I1-3, C1, P2-4, M1-2	7.37
NRM	Nas-snoan, v71/jvg	1993.08.18	1	A935178	F	<i>C. lupus</i>	L+R mand+cranium. L mand I1-3, C1, P1-4, M1-3	7.73
NRM	Nyskoga, Kringsberg, Bontjarn	1994.01.19	1	A945045	F	<i>C. lupus</i>	L+R mand+cranium. R mand, I1-3, P1-4, M1-3	7.54
NRM	Vastmandland, Grythyttan	1999.12.17	1	20005111	F	<i>C. lupus</i>	L+R mand+cranium. R mand I2-3, C1, P2-4, M1-3	7.41
NRM	Narke, Degerfors, Atorp	2001.12.26	1	20025005	F	<i>C. lupus</i>	L+R mand+cranium. L mand I1-3, P1-4, M1-3	8.73
NRM	Atorp 3.5 km NW, Degerfors, Varmland	2002.03.05	1	20035026	F	<i>C. lupus</i>	L+R mand+cranium. L mand I1-3, C1, P1-4, M1-3	7.44
NRM	Odlingen, Sillerud, Arjang, Varmland	2004.02.07	1	20045040	F	<i>C. lupus</i>	L+R mand+cranium. R mand I1-3, C1, P1-4, M1-3	7.79
NRM	Ovre Hurr, Tocksfors, Varmland	2006.05.30	1	20065236	F	<i>C. lupus</i>	L+R mand+cranium. L mand, I1-2, C1, P1-4, M1-3	7.96

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	m1Ltal
NRM	Rickebo, Hallbo, Bollnas, Halsingland	2006.03.14	1	20065047	F	<i>C. lupus</i>	L+R mand+cranium. R mand I1-3, C1, P1-4, M1-3	8.61
NRM	Ronnas, Ostra, Leksand, Dalarna	2007.10.09	1	20075381	F	<i>C. lupus</i>	L+R mand+cranium. R mand I1-3, C1, P1-4, M1-3	7.91
NRM	Jarbo, Backefors, Dalsland Varmland, Nordmark,	2007.?	1	20075314	F	<i>C. lupus</i>	L+R mand+cranium. L mand I1-3, C1, P1-4, M1-3	7.88
NRM	Algsjion 2 km S Halsingland,	2009.01.25	1	20095063	F	<i>C. lupus</i>	L+R mand+cranium. R mand I1-3, C1, P1 alv, P1-4, M1-3	7.53
NRM	Bollnas, Lottefors; Rv 83 Vastmanland, Hallefors,	2007.08.19	1	20075312	F	<i>C. lupus</i>	L+R mand + cranium. R mand I1-3, C1, P1-4, M1-3	7.72
NRM	Ornviken,	2010.01.02	1	20105028	F	<i>C. lupus</i>	L+R mand+cranium. L mand I1-3, C1, P1-4, M1-3	6.74
NHM 4	Riocalado, Burgos, Spain		1	11.10.5.1	M	<i>C. lupus</i>	L mand, I1-3, C1, P1-4, M1-3	7.92
NHM 6	Seville, Spain	On note '2 carnassials in tooth case'	1	95.3.3.6	M	<i>C. lupus</i>	R mand, I1-3, C1, P2-4, M1-3. No P1 or alv	7.28

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	m1Ltal
NHM 7	Ukraine on modern ticket, on skull and original		1	34.6.28.47	M	<i>C. lupus</i>	L mand, I1-3, C1, P3-4, M1-3	7.57
NHM 11	Moscow district, Russia		1	82.9.18.2	M	<i>C. lupus</i>	L mand, I1-3, C1 fract, P1-4, M1-3	8.41
NHM Ost	Abrantos, S of Tagus, Portugal		1	1937.2.10.2	M	<i>C. lupus</i>	R mand, I2, C1, P4, M1-3	8.55
NHM Ost	Bosnia, Yugoslavia		1	1935.8.5.1	M	<i>C. lupus</i>	R mand, I1-3, C1, P1-4, M1-2	6.82
NHM 9	Norbotten, N Sweden (in arctic circle).		1	28.5.4.1	M	<i>C. lupus</i>	L mand, I1-3, C1, P1-4, M1-3	7.41
NRM	Ljusdal, Ramsjo (s:n)	12.2.1926	1	A580255	M	<i>C. lupus</i>	L+R mand + fract cranium. L mand, I1-3, C1, P1-4, M1-3	7.44
NRM	Jokkmokk	11.02.1852	1	A583532	M	<i>C. lupus</i>	L+R mand + cranium. R mand I1-3, C1, P1-4, M1-3	8.02
NRM	Orebro	1852	1	A583547	M	<i>C. lupus</i>	L+R mand+cranium. R mand I1-3, C1, P1-4, M1-3	8.69

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	m1Ltal
NRM	Sweden	1907	1	A589147	M	<i>C. lupus</i>	L+R mand + cranium. R teeth I1-3, C1, P1-4, M1-2	8.84
NRM	Sweden	1908	1	A589199	M	<i>C. lupus</i>	L+R mand+cranium. L mand I1-3, C1, P1-4, M1-3	8.74
NRM	Luktjomtjuolta, Vilhelmina	15.1.1937	1	A590009	M	<i>C. lupus</i>	L+R mand+cranium. L mand I1-3, C1, P2-4, M1-2	7.34
NRM	Lina alv station	25.12.1977	1	A775097	M	<i>C. lupus</i>	L+R mand+cranium. L mand I1, I3, C1, P1-4, M1-3	8.02
NRM	Atran, Ogardet	1984.09.12	1	A845131	M	<i>C. lupus</i>	L+R mand+cranium. R mand I1-3, C1, P1-4, M1-3	8.29
NRM	Hede, 3 mil NV, Norrstadjan	1989.04.17	1	A895039	M	<i>C. lupus</i>	L+R mand+cranium. R mand I1-3, P1-4, M1-3	8.24
NRM	Kiruna-Gallivare, Gaddmyr, Jvg	1992.08.24	1	A925106	M	<i>C. lupus</i>	L+R mand+cranium. R mand, I1-3, P2-4, M1-3	8.29
NRM	Boras	1996.01.04	1	A965002	M	<i>C. lupus</i>	L+R mand+cranium. L teeth I1-3, C1, P1-4, M1-2	7.12

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	m1Ltal
NRM	Jarna, Flaten, Dalarna	1999.2.6	1	A995016	M	<i>C. lupus</i>	L+R mand+cranium. R mand, I1-2, P1-4, M1-3	7.92
NRM	Varmland, Eksharad, Halgan; Kolarkojan	1999.06.04	1	995230	M	<i>C. lupus</i>	L+R mand+cranium. R mand, I3, C1, P1-4, M1-3	7.38
NRM	Jumkil kyrka, Uppsala	2000.11.19	1	20005365	M	<i>C. lupus</i>	L+R mand+cranium. L mand I1-3, C1, P1-4, M1-3	7.9
NRM	Uddalen, Ed, Dalsland	2003.05.12	1	20035114	M	<i>C. lupus</i>	L+R mand+cranium. R mand I1-3, C1. extra P1? P1, P2-3 broken, P4, M1-3	7.92
NRM	Ostermoren, Smedjebacken, Dalarna	2004.12.09	1	20045305	M	<i>C. lupus</i>	L+R mand+cranium. R mand I1-3, C1, P1-4, M1-2, M3 alv	8.04
NRM	Dala Floda, Borlange, Dalarna	2003.03.09	1	20035024	M	<i>C. lupus</i>	L+R mand+cranium. R mand I1-3, C1, P1 alv, P2-4, M1-3	8.55
NRM	IV 225 (road?), Osmo, Sodermanland	2005.11.26	1	20065027	M	<i>C. lupus</i>	L+broken R mand+cranium. L mand I1-2, C1, P1-4, M1-2, M3 alv	7.22
NRM	Lanasberget, Grundsjo, Ljungaverk,	2005.09.02	1	20055287	M	<i>C. lupus</i>	L+R mand+cranium. L mand I1-3, C1, P1-4, M1-3	8.83

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	m1Ltal
NRM	Mullhyttan, Orebro, Narke	2006.09.15	1	20065414	M	<i>C. lupus</i>	L+R mand+cranium. R mand l1-3, C1, P1-4, M1-2, M3 alv	8.47
NRM	Avik, Laxa, Narke	2007.04.27	1	20075186	M	<i>C. lupus</i>	L+R mand + cranium. L mand l1-3, C1, P1 alv, P2-4, M1-2, M3 alv	8.57
NRM	Malung-Appelbo, Dalarna	2007.12	1	20085027	M	<i>C. lupus</i>	L+R mand +cranium. L mand, l1-3, C1, P1-4, M1-3	8.29
NRM	Dalarna, Torsby, Ostmark; Sojensoasen	2007.09.15	1	20075373	M	<i>C. lupus</i>	L+R mand+cranium. R mand l1-3, C1, P1-4, M1-3	7.87
NRM	Stormosse, Piro, Bjerneborg, Kristinehamn,	2007.12.27	1	20085036	M	<i>C. lupus</i>	L+R mand+cranium. L mand l1-3, C1, P1-4, M1-3	9.22
NHM 23 K	Cae Gwyn Cave		2	M2613	Pres by Dr H Hicks and E Bouwerie Luxmoore esq	<i>C. lupus</i>	From mounted board with cranial frags. 1). R lower M1	8.54
NMW PH1.147	Ogof yr Ychen	Abyss chamber 3	2	864		<i>C. lupus</i>	L mand, C1, P1-4, M1-2	7.94
SMES bay 4, iv 266 drw	Black Rock quarries, Tenby		3	D2610	Pres by T Roberts, 1882	<i>C. lupus</i>	Back portion of R mand, M1-2	7.09

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	m1Ltal
SMES bay 4, iv 266 drw	Black Rock quarries, Tenby		3	D2605	Pres by T Roberts, 1882	<i>C. lupus</i>	R mand, I2-3, C1, P2, P4, M1-2	6.95
NHM 43 C	Kent's Cavern	none	3	18982	McEnergy clln	<i>C. lupus</i>	L lower M1	7.77
NHM 43 C	Kent's Cavern	None	3	16754	Pur Mr McEnergy's sale	<i>C. lupus</i>	L lower M1	8.38
NHM 43 C	Kent's Cavern	Cave earth, 4th level	3	M848	Pres by Lord Haldon, July 1883	<i>C. lupus</i>	L ramus frag, M1-M2	6.71
TM G/B1/B244	Kents Cavern	Cave Earth	3	P13417	W. Pengelly	<i>C. lupus</i>	L lower M1 in mand frag	8.04
NHM 43 E drw 24	Oreston Cave	Presv type 2	3	46982	Purch 1876	<i>C. lupus</i>	L lower M1 (in box with L upper C1)	7.68
NHM 43 E drw 24	Oreston Cave	Pres type 2	3	46981	Purch 1876	<i>C. lupus</i>	2). L ramus, C1, P1-4, M1-2	6.98
WH	Oreston Cave		3	1989 G 140 1.8	TC	<i>C. lupus</i>	L mand frag, M1-2	7.16

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	m1Ltal
WH	Oreston Cave		3	1989 G 140.1.4	TC	<i>C. lupus</i>	L mand frag, P4, M1	8.35
BC	Oreston Cave		3	Cd2928	J. Cottle cIn 1830	<i>C. lupus</i>	L lower M1	6.59
NMW From gallery	Paviland		3	24.94/46		<i>C. lupus</i>	R mand ramus, P1, P3-4, M1	7.04
SM Blue boxes	Paviland		3	SM.1836.6.3 03		<i>C. lupus</i>	R mand ramus, P2-4, M1	7.17
SM Blue boxes	Paviland		3	SM.1836.6.3 04		<i>C. lupus</i>	R mand frag, M1-2	7.05
SM Blue boxes	Paviland		3	SM.1836.6.3 08	Excav 1823	<i>C. lupus</i>	R mand frag, M1-2	7.5
SM Blue boxes	Paviland		3	SM.1836.6.3 12		<i>C. lupus</i>	R lower M1 in mand frag	7.37
MM R4 CoLE D 1	Pin Hole Cave	PH (F)	3	LL.1995		<i>C. lupus</i>	L mand ramus, P1-4, M1-2	7.58

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	m1Ltal
MM Gallery	Pin Hole		3	LL11898		<i>C. lupus</i>	L mand, I2-3, C1, post P2, P3-4, M1-3	6.48
SHC D27/3	Sandford Hill	Cave or fissure deps	3	TTNCM 44/1995/61/3	Rev'd. D. Williams & Beard clln	<i>C. lupus</i>	L mand ramus, P4, M1-2	7.59
NHM 45D drw 13	Banwell Bone Cave		5a	M404d	Egerton clln, 1882	<i>C. lupus</i>	R mand ramus, C1, P2-M2.	6.86
NHM 45D drw 13	Banwell Bone Cave		5a	M223	Enniskillen clln	<i>C. lupus</i>	R mand ramus, P3-4, M1-2	7.25
NHM 45D drw 13	Banwell Bone Cave		5a	44642	Pres Benj Bright esq, 1873	<i>C. lupus</i>	R mand frag, M1, P4.	8.41
NHM 45D drw 13	Banwell Bone Cave		5a	44648		<i>C. lupus</i>	2). R lower M1	6.82
NHM Andy's office	Banwell Bone Cave	Entrance to Baker's Pit extension, 1950's	5a	M84868	Percy Baker clln	<i>C. lupus</i>	R mand, P1-4, M1-2	7.71
SHC D19/4	Banwell Bone Cave	Cave dep	5a	TTNCM 40/1995/61	William Beard clln	<i>C. lupus</i>	R mand ramus, post P3, P4, M1-3	8.09

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	m1Ltal
SHC D19/4	Banwell Bone Cave		5a	TTNCM 40/1995/60	William Beard clln	<i>C. lupus</i>	R mand ramus, P4, M1-3	6.97
SHC D19/3	Banwell Bone Cave		5a	TTNCM 40/1995/59	William Beard clln	<i>C. lupus</i>	R post mand frag, M1-3	7.17
SHC D19/3	Banwell Bone Cave		5a	TTNCM 40/1995/57	William Beard clln	<i>C. lupus</i>	R mand ramus, M1-3	7.01
SHC D19/3	Banwell Bone Cave		5a	TTNCM 40/1995/47	William Beard clln	<i>C. lupus</i>	R mand ramus, P2-3, M1	7.05
SHC D19/3	Banwell Bone Cave		5a	TTNCM 40/1995/54	William Beard clln	<i>C. lupus</i>	R mand ramus, C1, P1-4, M1	7.62
SHC D19/2	Banwell Bone Cave		5a	TTNCM 40/1995/53	William Beard clln	<i>C. lupus</i>	R mand frag, M1-2	7.92
SHC Display SM From fox & wolf box in display case 9	Banwell Bone Cave		5a	45/1995/634		<i>C. lupus</i>	R mand, C1, P2-4, M1.	8
	Bosco's Den		5a	SM. 18581.49		<i>C. lupus</i>	R lower M1	7.42

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	m1Ltal
MM R5 ColK D15	Windy Knoll		5a	P2496a-j	Dawkins	<i>C. lupus</i>	L mand ramus, C1, M1-2	8.19
UMZC	Wretton, Norfolk		5a	Wr1a 1989 G 141 88 (FS 04700)		<i>C. lupus</i>	R mand C1, P1-4, M1-2, M3 alv	9.02
WH NHM 53A, 2nd drw from bottom	Steetley Quarry Stump Cross Cave		5a 5a	M43234	Stump cross cave 1980 III c	<i>C. lupus</i>	R mand ramus, P3-4, M1 R ramus, P1, frag P2, frag P3, P4, M1-2	6.84 7.65
SM On display	Bacon Hole		5c	SM. 850:2.166		<i>C. lupus</i>	L mand, C1, P1-4, M1-2 M3 lv	7.93
In bag	Minchin Hole		5c	SM.1852.2.4 5		<i>C. lupus</i>	R lower M1	7.57
SMES 3A Display	Barrington		5e			<i>C. lupus</i>	L lower M1	7.1
TM G/B6/B112	Joint Mitnor Cave		5e	P35082	1940	<i>C. lupus</i>	R ramus, P1-4, M1-2	7.43

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	m1Ltal
TM G/B6/B112	Joint Mitnor Cave		5e	P35085	1940	<i>C. lupus</i>	R ramus frag, P4, M1-2	7.92
TM G/B6/B112	Joint Mitnor Cave		5e	P35114	1940	<i>C. lupus</i>	R lower M1 in mand frag	7.16
BGS 483956	Clevedon Cave		6	16350		<i>C. lupus</i>	R mand, P2-4, M1-3	6.94
BC	Clevedon Cave		6	Ce15071	B. N. S. Soc	<i>C. lupus</i>	R lower M1	6.56
BC	Clevedon Cave		6	Ce15087	S.H. Reynolds	<i>C. lupus</i>	R post mand, M1, M3	7.37
SHC D46/1	Bleadon Cavern		7	TTNCM 41/1995/12	W. Beard clln	<i>C. lupus</i>	R mand, P1-4, M1-2	6.28
SHC D65/3	Bleadon Cavern	Fissure in Bleadon quarry, Bleadon, Soms, 1872.	7	TTNCM 41/1995/300 1	Pres'd by Rev. Wadham Pigott Williams, 1878	<i>C. lupus</i>	R mand, P4, M1-2	7.56
BGS 483890	Crayford, Kent		7	5112a	Spurrell clln	<i>C. lupus</i>	R M1	6.5

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	m1Ltal
NHM 44 D drw 7	Hutton Cave	none	7	44739a	none	<i>C. lupus</i>	R+L mand frags. LC1, P4, M1-2	8.25
SHC D40/2	Hutton Cave		7	TTNCM 42/1995/44	Rev D Williams and W Beard clln	<i>C. lupus</i>	R and L mand assoc - L mand, P2, P4, M1-2	7.97
BGS 483847	Ilford, Essex		7		Dr RP Cotton clln, pres by Cotton, 1878	<i>C. lupus</i>	L mand ramus frag, P2-4, M1	9.17
BCM 6, 7, box 123	Marsworth	Pitstone no 3 quarry	7	1980.544.h8 /9		<i>C. lupus</i>	R lower M1	7.72
BCM Touch of Bucks & fossils & ice	Marsworth	Pitstone no 3 quarry	7	AYBCM: 1980.544.g9/ 12a		<i>C. lupus</i>	R lower M1	7.34
NHM 43 I d 18	Tornewton Cave	VV-OS, 7th layer	7	none	Sutcliffe, 1964	<i>C. lupus</i>	R lower M1	6.79
VER 108	Grotta di Paglicci, Italy	Str VI	2	V5767	#REF!	<i>C. lupus</i>	L mand, C1, P4, M1	8.05
NHM 36 E d 36/E/19	Perick Cave	none	2.4	28571	see notes	<i>C. lupus</i>	L mand, I2-3, P1-4, M1-3	7.84

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	m1Ltal
NHM 36 E d 36/E/19	Perick Cave	none	2.4	M436	Enniskillen cln 1882	<i>C. lupus</i>	L mand ramus, P2, P4, M1-2	7.27
NHM 36 E d 36/E/19	Perick Cave	none	2.4	28573 1988/22377 (Ranis 21896)	Purchd 1853	<i>C. lupus</i>	L ramus, P3-4, M1-2	6.59
SIW	Ranis, Thuringia, Germany		2.4	1968/10851 (Taub 12243) 31300 (SE.12.2.57/ 0.F)		<i>C. lupus</i>	L mand ramus, M1-2	6.99
SIW 3 d 9	Taubach, Germany Villa Seckendorf, Bad Canstatt, Germany	Stuttgart Travertine	2.8	31302 (21.2.57/10) 31397 (SE.26.2.57/ 1)	#REF!	<i>C. lupus</i>	R mand ramus	7.56
StM 80	Villa Seckendorf, Bad Canstatt, Germany	Stuttgart Travertine	2.8	31302 (21.2.57/10) 31397 (SE.26.2.57/ 1)	#REF!	<i>C. lupus</i>	L mand frag, P4, M1	8.03
StM 80	Villa Seckendorf, Bad Canstatt, Germany	Stuttgart Travertine	2.8	31302 (21.2.57/10) 31397 (SE.26.2.57/ 1)	#REF!	<i>C. lupus</i>	L mand ramus, C1, P2-4, M1	7.19
StM 80	Villa Seckendorf, Bad Canstatt, Germany	Stuttgart Travertine	2.8	31302 (21.2.57/10) 31397 (SE.26.2.57/ 1)	#REF!	<i>C. lupus</i>	L mand ramus, P1-4, M1	6.56
StM 80	Villa Seckendorf, Bad Canstatt, Germany	Stuttgart Travertine	2.8	31304.1 (7.3.57/6)		<i>C. lupus</i>	L lower M1	8.1

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	m1Ltal
StM 80	Villa Seckendorf, Bad Canstatt, Germany	Stuttgart Travertine	2.8	31304.2 (7.3.57/6)	Crozier cln on a ticket, Castelli cln on sticker on mands]	<i>C. lupus</i>	L lower M1	8.02
StM 80	Villa Seckendorf, Bad Canstatt, Germany	Stuttgart Travertine	2.8	31301 (21.2.57/10)		<i>C. lupus</i>	L mand ramus, P1-4, M1, alvs i1-3, C1.	6.72
NHM 35 L d 14	Monte Tignoso, Italy		2.8	M7172		<i>Canis?</i>	R ramus frag, M1	6.97
StM 71	Dobelhaldeschach t, Germany	fkpl. 4	3	34258/2		<i>C. lupus</i>	L lower M1	7.67
SIW	Weimar- Ehringsdorf, Germany		3	1966/4476 (Ehr 10670)		<i>C. lupus</i>	L lower M1	7.46
SIW	Weimar- Ehringsdorf, Germany		3	1966/4470 (ehr 3842)		<i>C. lupus</i>	L lower M1	6.68
NHM 52 B	Grays Thurrock	brickfields centered on TQ 622781 Project A, Q1, area	9	23141		<i>C. mosbachensis</i>	Right lower M1	6.77
NHM 25 E d 14	Boxgrove	TP4, Unit 4c- surface, Field no (2+3)	13	F2+3/1		<i>C. mosbachensis</i>	R mand ramus, I3, C1, P1-4, M1-3	6.52

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	m1Ltal
NHM 25 F d 25	Boxgrove	Project A, Q2, area GTP17, unit 4c surface, field no F63 (2)	13	F63 (2)		<i>C. mosbachensis</i>	R lower M1	6.76
NHM 25 F d 25	Boxgrove	Project A, Q2, area 17, unit 4c surface, field no F9 (part)	13	F9/2		<i>C. mosbachensis</i>	R mand, C1, P2-4, M1	6.99
NHM 44D 3rd drw from top	Westbury	no strat info	13	M33942	Bishop clln	<i>C. mosbachensis</i>	L mand, M1	6.1
NHM 44D 3rd drw from top	Westbury	Bed 3	13	M33940	M Bishop 1974	<i>C. mosbachensis</i>	L mand ramus, P2-4, M1-3	7.31
NHM 44D 3rd drw from top	Westbury	Bed 3	13	M33937	M Bishop 1974	<i>C. mosbachensis</i>	Left mand ramus, P4, M1-2	7.18
NHM 44 E drw 18	Westbury	Unstrat calc memb	13	none	Bishop, 1974	<i>C. mosbachensis</i>	L lower M1	6.74
NHM 44 E drw 18	Westbury	Unstrat. Calc memb	13	none	Bishop, 1974	<i>C. mosbachensis</i>	L lower M1 Tal	6.28
NHM 44 E drw 18	Westbury	Unstrat. Calc memb	13	none	Bishop, 1974	<i>C. mosbachensis</i>	L lower M1 Tal	6.61

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	m1Ltal
NHM 44 F drw 1	Westbury	Calc memb. Site W1A	13	none	NHM excav 1976	<i>C. mosbachensis</i>	L lower M1	6.77
NHM 44 F drw 30	Westbury	Grey silty conglom 18/6, W5 West.	13	none	Post 1977	<i>C. mosbachensis</i>	L lower M1	7.17
NHM 35 F Westbury drw	Westbury	Calc memb Bed 4 blackened breccia conglomerates	13	M33945	Bishop	<i>C. mosbachensis</i>	L lower M1 tal frag	6.1
NHM 3 A d 11	Westbury	Forest bed - clay in depression, N of old tower.	13	M47663	Excav 1980	<i>C. mosbachensis</i>	L lower M1	6.5
NHM 55 E	Sidestrand		13	M6169	A.C. Savin 1897	<i>C. mosbachensis</i>	R mandible ramus P2-M1	7.22
StM 58	Heppenloch		3.4	30119		<i>C. mosbachensis</i>	R lower M1	6.86
VER 00441	Monte Zoppega, Soave, Italy		3.4	V10918		<i>C. mosbachensis</i>	R mand ramus, M1-2	5.81
VER 00441	Monte Zoppega, Soave, Italy		3.4	V10919		<i>C. mosbachensis</i>	R mand ramus, P1-4, M1	6.62

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	m1Ltal
VER 00441	Cengelle II, Soave, Italy		3.4	V10118		<i>C. mosbachensis</i>	R lower M1 tal	7.32
SIW 1 d 4	Untermassfeld, Germany		4	1980/15308 (Mei 14820)		<i>C. mosbachensis</i>	R mand, C1, P1-4, M1-3	6.76
SIW 1 d 4	Untermassfeld, Germany		4	1980/15919 (Mei 15430)		<i>C. mosbachensis</i>	R mand ramus, C1, P3-4, M1	7.04
SIW 1 d 4	Untermassfeld, Germany		4	1984/20112 (Mei 19632)		<i>C. mosbachensis</i>	R mand ramus, P3-4, M1-3	6.99
SIW 1 d 4	Untermassfeld, Germany		4	1980/16969 (Mei 16460)		<i>C. mosbachensis</i>	R mand ramus, C1, P2-4, M1-2	6.86
SIW 1 d 4	Untermassfeld, Germany		4	1986/21085 (Mei 20604)		<i>C. mosbachensis</i>	R mand ramus, P2-4, M1-2	6.82
SIW 1 d 4	Untermassfeld, Germany		4	1980/17151 (Mei 16672)		<i>C. mosbachensis</i>	R mand ramus, C1, P1-4, M1-2	6.15
SIW 1 d 4	Untermassfeld, Germany		4	1980/16553 (Mei 16074)		<i>C. mosbachensis</i>	R mand, C1, P2-4, M1-2	6.46

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	m1Ltal
SIW 1 d 4	Untermassfeld, Germany		4	1982/17995 (Mei 17515)		<i>C. mosbachensis</i>	R mand, P1-4, M1-3	7.07
SIW 1 d 4	Untermassfeld, Germany		4	1982/17995 (Mei 17515)		<i>C. mosbachensis</i>	R mand frag, post root P4, M1	6.7
SIW 1 d 5	Untermassfeld, Germany		4	1980/15357 (mei 14869)		<i>C. mosbachensis</i>	R mand, I3, C1, P1, post P2, P3-4, M1-2	6.23
FLO 0/02/013/01 (d1)	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF868		<i>C. arnensis</i>	R mand, I1-3, C1, P1-4, M1-3	6.4
FLO 0/02/013/04 (d4)	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF876		<i>C. arnensis</i>	R mand, I1-2, P2-3, post P4, M1-3	5.96
FLO 0/02/013/04 (d4)	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF878		<i>C. arnensis</i>	With cranial frag, PAIR. R mand, P3-4, M1-3	5.81
FLO 0/02/013/04 (d4)	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF884		<i>C. arnensis</i>	R mand ramus frag, P4, M1-2	5.86
FLO 0/02/013/04 (d4)	Il Tasso, Italy	Upper Valdarno	4.4	IGF887		<i>C. arnensis</i>	In box with max. R mand, P1-4, M1-3	6.26

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	m1Ltal
FLO Strozzi Sala	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF11800		<i>C. arnensis</i>	R mand ramus, P1-4, M1-2, M3 alv	6.75
FLO 0/02/013/05	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF12967		<i>C. arnensis</i>	R mand ramus, P1-4, M1-2 With upper palate, L+R mands. R mand ramus, P2-4, M1-3	6.67
FLO 0/02/013/05	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF877		<i>C. arnensis</i>	With cranium, L+R mands. R mand, C1, P1-4, M1-3	7.16
FLO Gallery	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF869		<i>C. arnensis</i>	With cranium, L+R mand. R mand, P4, M1-2	6.19
FLO Gallery	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF867		<i>C. arnensis</i>	L+ R mands PAIR. R mand ramus, P2-4, M1	5.86
FLO 0/02/013/01 (d1)	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF888		<i>C. etruscus</i>	R mand, C1, P1-4, M1-3	7.15
FLO 0/02/013/01 (d1)	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF856		<i>C. etruscus</i>	R mand frag, M1-3	6.86
FLO 0/02/013/01 (d1)	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF860		<i>C. etruscus</i>		7.35

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	m1Ltal
FLO 0/02/013/02 (d2)	L'Inferno, Italy	Upper Valdarno	4.4	IGF858		<i>C. etruscus</i>	R Lower mand frag, M1-2	7.34
FLO 0/02/013/02 (d2)	Se Ville, Italy	Upper Valdarno	4.4	IGF882		<i>C. etruscus</i>	R mand ramus, P4, M1-3	6.37
FLO 0/02/013/02 (d2)	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF859		<i>C. etruscus</i>	R mand ramus, C1, P2-4, M1	6.16
FLO Strozzi Sala	Upper Valdarno, Italy	Upper Valdarno	4.4	871		<i>C. etruscus</i>	R mand, I2-3, C1, P1-4, M1-2	7.02
FLO 0/02/013/05	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF12868		<i>C. etruscus</i>	R mand ramus, P2, M1	6.81
FLO 0/02/013/05	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF873		<i>C. majori</i> (<i>etruscus</i>)	R mand, I3, C1, P2-4, M1-3	7.11
FLO 0/02/013/05	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF12966		<i>C. etruscus</i>	R mand ramus, P3-4, M1	6.83
FLO 0/02/013/03 (d3)	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF11783		<i>C. etruscus</i>	R lower M1	6.86

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	m1Ltal
NHM 35 L d 23 FLO 0/02/013/07 (d7)	Olivola, Italy	Olivola	4.4	none		<i>C. etruscus</i>	R lower M1	6.85
FLO 0/02/013/07 (d7)	Val di Magna, Italy	Olivola	4.4	IGF4475		<i>C. etruscus</i>	R mand ramus, M1-2, roots P4	6.91
FLO 0/02/013/07 (d7)	Val di Magna, Italy	Olivola	4.4	IGF4476		<i>C. etruscus</i>	R mand ramus, P2, P4, M1	6.88
FLO Gallery	Olivola, Italy	Olivola	4.4	IGF4414		<i>C. etruscus</i>	R mand, C1, P1-4, M1-2	6.84

4. m1W

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	m1W
NHM 1	France		1	1843.12.29.7	F	<i>C. lupus</i>	L mand, I1-3, C1, P2-4, M1-2	10.67
NHM 2	Pyrenees Nr Abrantos, S of the Tagus, Portugal	Parzudacki clln	1	44.1.18.1	F	<i>C. lupus</i>	L mand, I1-3, C1, P1-4, M1-3	10.37
NHM 3		WC Tait clln.	1	1938.12.7.1	F	<i>C. lupus</i>	R mand, I1-3, C1, P1-4, M1-2	10.18
NHM 5	Riocalado, Burgos, Spain		1	11.10.5.2	F	<i>C. lupus</i>	L mand, I1-3, C1, P1-4, M1-3	11.45
NHM 8	Kocane, Macedonia		1	47.1121.a	F	<i>C. lupus</i>	L mand, I1-3, C1, P1-4, M1-2	10.56
NRM	Korvijaure, 7 miles N Kiruna	15.4.1959	1	A58 0112	F	<i>C. lupus</i>	L+R mand + cranium. R mand I1-3, C1, P1, P2 loose, P3-4, M1-3	11.93
NRM	S Finnskoga, Skrackarberget	1985.07.29	1	A865126	F	<i>C. lupus</i>	L+R mand+cranium. R mand, I1-3, P1-4, M1-3	11.53
NRM	Jadraas, 5km N	1991.06.14	1	A915068	F	<i>C. lupus</i>	L+R mand+cranium. R teeth P4, M1-2	11.07

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	m1W
NRM	Vastra Amtervik, Hensgard	1993.02.24	1	A935024	F	<i>C. lupus</i>	L+R mand+cranium. L mand, I1-3, C1, P2-4, M1-2	11.39
NRM	Nas-snoan, v71/jvg	1993.08.18	1	A935178	F	<i>C. lupus</i>	L+R mand+cranium. L mand I1-3, C1, P1-4, M1-3	10.72
NRM	Nyskoga, Kringsberg, Bontjarn	1994.01.19	1	A945045	F	<i>C. lupus</i>	L+R mand+cranium. R mand, I1-3, P1-4, M1-3	10.68
NRM	Vastmandland, Grythyttan	1999.12.17	1	20005111	F	<i>C. lupus</i>	L+R mand+cranium. R mand I2-3, C1, P2-4, M1-3	11.22
NRM	Narke, Degerfors, Atorp	2001.12.26	1	20025005	F	<i>C. lupus</i>	L+R mand+cranium. L mand I1-3, P1-4, M1-3	11.06
NRM	Atorp 3.5 km NW, Degerfors, Varmland	2002.03.05	1	20035026	F	<i>C. lupus</i>	L+R mand+cranium. L mand I1-3, C1, P1-4, M1-3	10.54
NRM	Odlingen, Sillerud, Arjang, Varmland	2004.02.07	1	20045040	F	<i>C. lupus</i>	L+R mand+cranium. R mand I1-3, C1, P1-4, M1-3	11.42
NRM	Ovre Hurr, Tocksfors, Varmland	2006.05.30	1	20065236	F	<i>C. lupus</i>	L+R mand+cranium. L mand, I1-2, C1, P1-4, M1-3	11.67

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	m1W
NRM	Rickebo, Hallbo, Bollnas, Halsingland	2006.03.14	1	20065047	F	<i>C. lupus</i>	L+R mand+cranium. R mand I1-3, C1, P1-4, M1-3	12.06
NRM	Ronnas, Ostra, Leksand, Dalarna	2007.10.09	1	20075381	F	<i>C. lupus</i>	L+R mand+cranium. R mand I1-3, C1, P1-4, M1-3	10.71
NRM	Jarbo, Backefors, Dalsland Varmland, Nordmark,	2007.?	1	20075314	F	<i>C. lupus</i>	L+R mand+cranium. L mand I1-3, C1, P1-4, M1-3	11.17
NRM	Algsjion 2 km S Halsingland, Bollnas, Lottefors;	2009.01.25	1	20095063	F	<i>C. lupus</i>	L+R mand+cranium. R mand I1-3, C1, P1 alv, P1-4, M1-3	11.41
NRM	Rv 83 Vastmanland, Hallefors,	2007.08.19	1	20075312	F	<i>C. lupus</i>	L+R mand + cranium. R mand I1-3, C1, P1-4, M1-3	11.45
NRM	Ornviken,	2010.01.02	1	20105028	F	<i>C. lupus</i>	L+R mand+cranium. L mand I1-3, C1, P1-4, M1-3	11.68
NHM 4	Riocalado, Burgos, Spain		1	11.10.5.1	M	<i>C. lupus</i>	L mand, I1-3, C1, P1-4, M1-3	12.09
NHM 6	Seville, Spain	On note '2 carnassials in tooth case'	1	95.3.3.6	M	<i>C. lupus</i>	R mand, I1-3, C1, P2-4, M1-3. No P1 or alv	11.08

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	m1W
NHM 7	Ukraine on modern ticket, on skull and original		1	34.6.28.47	M	<i>C. lupus</i>	L mand, I1-3, C1, P3-4, M1-3	11.37
NHM 11	Moscow district, Russia		1	82.9.18.2	M	<i>C. lupus</i>	L mand, I1-3, C1 fract, P1-4, M1-3	12.73
NHM Ost	Abrantos, S of Tagus, Portugal		1	1937.2.10.2	M	<i>C. lupus</i>	R mand, I2, C1, P4, M1-3	11.56
NHM Ost	Bosnia, Yugoslavia		1	1935.8.5.1	M	<i>C. lupus</i>	R mand, I1-3, C1, P1-4, M1-2	10.67
NHM 9	Norbotten, N Sweden (in arctic circle).		1	28.5.4.1	M	<i>C. lupus</i>	L mand, I1-3, C1, P1-4, M1-3	11.49
NRM	Ljusdal, Ramsjo (s:n)	12.2.1926	1	A580255	M	<i>C. lupus</i>	L+R mand + fract cranium. L mand, I1-3, C1, P1-4, M1-3	11.96
NRM	Jokkmokk	11.02.1852	1	A583532	M	<i>C. lupus</i>	L+R mand + cranium. R mand I1-3, C1, P1-4, M1-3	12.98
NRM	Orebro	1852	1	A583547	M	<i>C. lupus</i>	L+R mand+cranium. R mand I1-3, C1, P1-4, M1-3	12.9

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	m1W
NRM	Sweden	1907	1	A589147	M	<i>C. lupus</i>	L+R mand + cranium. R teeth I1-3, C1, P1-4, M1-2	12.26
NRM	Sweden	1908	1	A589199	M	<i>C. lupus</i>	L+R mand+cranium. L mand I1-3, C1, P1-4, M1-3	12.31
NRM	Luktjomtjuolta, Vilhelmina	15.1.1937	1	A590009	M	<i>C. lupus</i>	L+R mand+cranium. L mand I1-3, C1, P2-4, M1-2	11.96
NRM	Lina alv station	25.12.1977	1	A775097	M	<i>C. lupus</i>	L+R mand+cranium. L mand I1, I3, C1, P1-4, M1-3	12.12
NRM	Atran, Ogardet	1984.09.12	1	A845131	M	<i>C. lupus</i>	L+R mand+cranium. R mand I1-3, C1, P1-4, M1-3	12.14
NRM	Hede, 3 mil NV, Norrstadjan	1989.04.17	1	A895039	M	<i>C. lupus</i>	L+R mand+cranium. R mand I1-3, P1-4, M1-3	12.29
NRM	Kiruna-Gallivare, Gaddmyr, Jvg	1992.08.24	1	A925106	M	<i>C. lupus</i>	L+R mand+cranium. R mand, I1-3, P2-4, M1-3	11.88
NRM	Boras	1996.01.04	1	A965002	M	<i>C. lupus</i>	L+R mand+cranium. L teeth I1-3, C1, P1-4, M1-2	11.87

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	m1W
NRM	Jarna, Flaten, Dalarna	1999.2.6	1	A995016	M	<i>C. lupus</i>	L+R mand+cranium. R mand, I1-2, P1-4, M1-3	12.31
NRM	Varmland, Eksharad, Halgan; Kolarkojan	1999.06.04	1	995230	M	<i>C. lupus</i>	L+R mand+cranium. R mand, I3, C1, P1-4, M1-3	11.99
NRM	Jumkil kyrka, Uppsala	2000.11.19	1	20005365	M	<i>C. lupus</i>	L+R mand+cranium. L mand I1- 3, C1, P1-4, M1-3	12.29
NRM	Uddalen, Ed, Dalsland	2003.05.12	1	20035114	M	<i>C. lupus</i>	L+R mand+cranium. R mand I1- 3, C1. extra P1? P1, P2-3 broken, P4, M1-3	12.67
NRM	Ostermoren, Smedjebacken, Dalarna	2004.12.09	1	20045305	M	<i>C. lupus</i>	L+R mand+cranium. R mand I1- 3, C1, P1-4, M1-2, M3 alv	12.55
NRM	Dala Floda, Borlange, Dalarna	2003.03.09	1	20035024	M	<i>C. lupus</i>	L+R mand+cranium. R mand I1- 3, C1, P1 alv, P2-4, M1-3	12.31
NRM	IV 225 (road?), Osmo, Sodermanland	2005.11.26	1	20065027	M	<i>C. lupus</i>	L+broken R mand+cranium. L mand I1-2, C1, P1-4, M1-2, M3 alv	11.57
NRM	Lanasberget, Grundsjo, Ljungaverk,	2005.09.02	1	20055287	M	<i>C. lupus</i>	L+R mand+cranium. L mand I1- 3, C1, P1-4, M1-3	12.21

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	m1W
NRM	Mullhyttan, Orebro, Narke	2006.09.15	1	20065414	M	<i>C. lupus</i>	L+R mand+cranium. R mand I1-3, C1, P1-4, M1-2, M3 alv	12.45
NRM	Avik, Laxa, Narke	2007.04.27	1	20075186	M	<i>C. lupus</i>	L+R mand + cranium. L mand I1-3, C1, P1 alv, P2-4, M1-2, M3 alv	12.3
NRM	Malung-Appelbo, Dalarna	2007.12	1	20085027	M	<i>C. lupus</i>	L+R mand +cranium. L mand, I1-3, C1, P1-4, M1-3	12.21
NRM	Dalarna, Torsby, Ostmark; Sojensoasen	2007.09.15	1	20075373	M	<i>C. lupus</i>	L+R mand+cranium. R mand I1-3, C1, P1-4, M1-3	12.99
NRM	Stormosse, Piro, Bjorneborg, Kristinehamn,	2007.12.27	1	20085036	M	<i>C. lupus</i>	L+R mand+cranium. L mand I1-3, C1, P1-4, M1-3	11.72
NHM 23 K	Cae Gwyn Cave		2	M2613	Pres by Dr H Hicks and E Bouwerie Luxmoore esq	<i>C. lupus</i>	From mounted board with cranial frags. 1). R lower M1	12.06
NMW PH1.147	Ogof yr Ychen	Abyss chamber 3	2	864		<i>C. lupus</i>	L mand, C1, P1-4, M1-2	11.52
SMES bay 4, iv 266 drw	Black Rock quarries, Tenby		3	D2610	Pres by T Roberts, 1882	<i>C. lupus</i>	Back portion of R mand, M1-2	11.54

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	m1W
SMES bay 4, iv 266 drw	Black Rock quarries, Tenby		3	D2611	Pres by T Roberts, 1882	<i>C. lupus</i>	R lower M1	13.32
SMES bay 4, iv 266 drw	Black Rock quarries, Tenby		3	D2605	Pres by T Roberts, 1882	<i>C. lupus</i>	R mand, I2-3, C1, P2, P4, M1-2	10.83
NHM 43 C	Kents Cavern	none	3	18982	McEnery cIn	<i>C. lupus</i>	L lower M1	11.42
NHM 43 C	Kents Cavern	None	3	16754	Pur Mr McEnery's sale	<i>C. lupus</i>	L lower M1	12.36
NHM 43 C	Kents Cavern	Cave earth, 4th level	3	M848	Pres by Lord Haldon, July 1883	<i>C. lupus</i>	L ramus frag, M1-M2	11.58
TM G/B1/B244	Kents Cavern	Cave Earth	3	P13417	W. Pengelly	<i>C. lupus</i>	L lower M1 in mand frag	11.63
NHM 43 E drw 24	Oreston Cave	Presv type 2	3	46982	Purch 1876	<i>C. lupus</i>	L lower M1 (in box with L upper C1)	11.48
NHM 43 E drw 24	Oreston Cave	Pres type 2	3	46981	Purch 1876	<i>C. lupus</i>	2). L ramus, C1, P1-4, M1-2	10.6

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	m1W
WH	Oreston Cave		3	1989 G 140 1.8	TC	<i>C. lupus</i>	L mand frag, M1-2	11.79
WH	Oreston Cave		3	1989 G 140.1.4	TC	<i>C. lupus</i>	L mand frag, P4, M1	12.58
BC	Oreston Cave		3	Cd2928	J. Cottle c1n 1830	<i>C. lupus</i>	L lower M1	11.04
NMW From gallery	Paviland	none	3	24.94/46		<i>C. lupus</i>	R mand ramus, P1, P3-4, M1	11.29
SM Blue boxes	Paviland		3	SM.1836.6.3 03		<i>C. lupus</i>	R mand ramus, P2-4, M1	11.98
SM Blue boxes	Paviland		3	SM.1836.6.3 04		<i>C. lupus</i>	R mand frag, M1-2	12.17
SM Blue boxes	Paviland		3	SM.1836.6.3 08	Excav 1823	<i>C. lupus</i>	R mand frag, M1-2	12.18
SM Blue boxes	Paviland		3	SM.1836.6.3 12		<i>C. lupus</i>	R lower M1 in mand frag	11.85

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	m1W
MM R4 ColE D 1	Pin Hole Cave	PH (F)	3	LL.1995		<i>C. lupus</i>	L mand ramus, P1-4, M1-2	11.5
MM Gallery	Pin Hole		3	LL11898 TTNCM		<i>C. lupus</i>	L mand, I2-3, C1, post P2, P3-4, M1-3	10.79
SHC D27/3	Sandford Hill	Cave or fissure deps	3	44/1995/61/ 3	Rev'd. D. Williams & Beard clln	<i>C. lupus</i>	L mand ramus, P4, M1-2	11.58
NHM 45D drw 13	Banwell Bone Cave		5a	M404d	Egerton clln, 1882	<i>C. lupus</i>	R mannd ramus, C1, P2-M2.	12.15
NHM 45D drw 13	Banwell Bone Cave		5a	M223	Enniskillen clln	<i>C. lupus</i>	R mand ramus, P3-4, M1-2	11.36
NHM 45D drw 13	Banwell Bone Cave		5a	44642	Pres Benj Bright esq, 1873	<i>C. lupus</i>	R mand frag, M1, P4.	12.66
NHM 45D drw 13	Banwell Bone Cave		5a	44648		<i>C. lupus</i>	2). R lower M1	11.18
NHM Andy's office	Banwell Bone Cave	Entrance to Baker's Pit extension, 1950's	5a	M84868	Percy Baker clln	<i>C. lupus</i>	R mand, P1-4, M1-2	13.2

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	m1W
SHC D19/4	Banwell Bone Cave	Cave dep	5a	TTNCM 40/1995/61	William Beard clln	<i>C. lupus</i>	R mand ramus, post P3, P4, M1-3	12.84
SHC D19/4	Banwell Bone Cave		5a	TTNCM 40/1995/60	William Beard clln	<i>C. lupus</i>	R mand ramus, P4, M1-3	13.52
SHC D19/3	Banwell Bone Cave		5a	TTNCM 40/1995/59	William Beard clln	<i>C. lupus</i>	R post mand frag, M1-3	11.77
SHC D19/3	Banwell Bone Cave		5a	TTNCM 40/1995/57	William Beard clln	<i>C. lupus</i>	R mand ramus, M1-3	11.62
SHC D19/3	Banwell Bone Cave		5a	TTNCM 40/1995/47	William Beard clln	<i>C. lupus</i>	R mand ramus, P2-3, M1	11.14
SHC D19/3	Banwell Bone Cave		5a	TTNCM 40/1995/54	William Beard clln	<i>C. lupus</i>	R mand ramus, C1, P1-4, M1	12.5
SHC D19/2	Banwell Bone Cave		5a	TTNCM 40/1995/53	William Beard clln	<i>C. lupus</i>	R mand frag, M1-2	13.46
SHC Display	Banwell Bone Cave		5a	45/1995/634		<i>C. lupus</i>	R mand, C1, P2-4, M1.	12.94

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	m1W
SM From fox & wolf box in display case 9	Bosco's Den		5a	SM. 18581.49		<i>C. lupus</i>	R lower M1	12.39
MM R5 ColK D15	Windy Knoll		5a	P2496a-j	Dawkins	<i>C. lupus</i>	L mand ramus, C1, M1-2	12.37
UMZC	Wretton, Norfolk		5a	Wr1a 1989 G 141		<i>C. lupus</i>	R mand C1, P1-4, M1-2, M3 alv	12.76
WH NHM 53A, 2nd drw from bottom	Steetley Quarry		5a	88 (FS 04700)		<i>C. lupus</i>	R mand ramus, P3-4, M1	11.8
	Stump Cross Cave		5a	M43234	Stump cross cave 1980 III c	<i>C. lupus</i>	R ramus, P1, frag P2, frag P3, P4, M1-2	13.14
SM On display	Bacon Hole		5c	SM. 850:2.166		<i>C. lupus</i>	L mand, C1, P1-4, M1-2 M3 lv	11.94
In bag	Minchin Hole		5c	SM.1852.2.4 5		<i>C. lupus</i>	R lower M1	11.16
SMES 3A Display	Barrington		5e			<i>C. lupus</i>	L lower M1	11.37

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	m1W
TM G/B6/B112	Joint Mitnor Cave		5e	P35082	1940	<i>C. lupus</i>	R ramus, P1-4, M1-2	10.64
TM G/B6/B112	Joint Mitnor Cave		5e	P35085	1940	<i>C. lupus</i>	R ramus frag, P4, M1-2	11.94
TM G/B6/B112	Joint Mitnor Cave		5e	P35114	1940	<i>C. lupus</i>	R lower M1 in mand frag	11.58
BGS 483956	Clevedon Cave		6	16350		<i>C. lupus</i>	R mand, P2-4, M1-3	11.13
BC	Clevedon Cave		6	Ce15071	B. N. S. Soc	<i>C. lupus</i>	R lower M1	11.39
BC	Clevedon Cave		6	Ce15087	S.H. Reynolds	<i>C. lupus</i>	R post mand, M1, M3	11.66
BC	Clevedon Cave		6	Ce12520	B. N. S. Soc	<i>C. lupus</i>	R mand ramus, C1, P2-4, M1	11.9
SHC D46/1	Bleadon Cavern		7	TTNCM 41/1995/12	W. Beard clIn	<i>C. lupus</i>	R mand, P1-4, M1-2	12.39

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	m1W
SHC D65/3	Bleadon Cavern	Fissure in Bleadon quarry, Bleadon, Soms, 1872.	7	TTNCM 41/1995/3001	Pres'd by Rev. Wadham Pigott Williams, 1878	<i>C. lupus</i>	R mand, P4, M1-2	11.76
BGS 483890	Crayford, Kent		7	5112a	Spurrell clln	<i>C. lupus</i>	R M1	11.5
NHM 44 D drw 7	Hutton Cave	none	7	44739a	none	<i>C. lupus</i>	R+L mand frags. LC1, P4, M1-2	11.19
SHC D40/2	Hutton Cave		7	TTNCM 42/1995/44	Rev D Williams and W Beard clln	<i>C. lupus</i>	R and L mand assoc - L mand, P2, P4, M1-2	11.09
BGS 483847	Ilford, Essex		7		Dr RP Cotton clln, pres by Cotton, 1878	<i>C. lupus</i>	L mand ramus frag, P2-4, M1	11.1
BCM 6, 7, box 123	Marsworth	Pitstone no 3 quarry	7	1980.544.h8/9		<i>C. lupus</i>	R lower M1	10.66
BCM Touch of Bucks & fossils & ice	Marsworth	Pitstone no 3 quarry	7	AYBCM: 1980.544.g9/12a		<i>C. lupus</i>	R lower M1	10.91
NHM 43 I d 18	Tornewton Cave	VV-OS, 7th layer	7	none	Sutcliffe, 1964	<i>C. lupus</i>	R lower M1	9.99

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	m1W
VER 108	Grotta di Paglicci, Italy	Str VI	2	V5767	#REF!	<i>C. lupus</i>	L mand, C1, P4, M1	11.34
NHM 36 E d 36/E/19	Perick Cave	none	2.4	28571	see notes	<i>C. lupus</i>	L mand, I2-3, P1-4, M1-3	12.18
NHM 36 E d 36/E/19	Perick Cave	none	2.4	M436	Enniskillen cIn 1882	<i>C. lupus</i>	L mand ramus, P2, P4, M1-2	11.85
NHM 36 E d 36/E/19	Perick Cave	none	2.4	28573	Purchd 1853	<i>C. lupus</i>	L ramus, P3-4, M1-2	10.92
SIW	Ranis, Thuringia, Germany		2.4	1988/22377 (Ranis 21896)		<i>C. lupus</i>	L mand ramus, M1-2	11.46
SIW 3 d 9	Taubach, Germany		2.8	1968/10851 (Taub 12243)		<i>C. lupus</i>	R mand ramus	11.51
StM 80	Villa Seckendorf, Bad Canstatt, Germany	Stuttgart Travertine	2.8	31300 (SE.12.2.57/0.F)		<i>C. lupus</i>	L mand frag, P4, M1	11.01
StM 80	Villa Seckendorf, Bad Canstatt, Germany	Stuttgart Travertine	2.8	31302 (21.2.57/10)		<i>C. lupus</i>	L mand ramus, C1, P2-4, M1	12.05

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	m1W
StM 80	Villa Seckendorf, Bad Canstatt, Germany	Stuttgart Travertine	2.8	31397 (SE.26.2.57/ 1)		<i>C. lupus</i>	L mand ramus, P1-4, M1	10.72
StM 80	Villa Seckendorf, Bad Canstatt, Germany	Stuttgart Travertine	2.8	31304.1 (7.3.57/6)		<i>C. lupus</i>	L lower M1	12.03
StM 80	Villa Seckendorf, Bad Canstatt, Germany	Stuttgart Travertine	2.8	31304.2 (7.3.57/6)		<i>C. lupus</i>	L lower M1	11.84
StM 80	Villa Seckendorf, Bad Canstatt, Germany	Stuttgart Travertine	2.8	31301 (21.2.57/10)		<i>C. lupus</i>	L mand ramus, P1-4, M1, alvs i1-3, C1.	11.3
NHM 35 L d 14	Monte Tignoso, Italy		2.8	M7172	Crozet clln on a ticket, Castelli clln on sticker on mands]	<i>Canis?</i>	R ramus frag, M1	10.26
StM 71	Dobelhaldeschach t, Germany	fkpl. 4	3	34258/2		<i>C. lupus</i>	L lower M1	10.54
SIW	Weimar- Ehringsdorf, Germany		3	1966/4476 (Ehr 10670)		<i>C. lupus</i>	L lower M1	11.51
SIW	Weimar- Ehringsdorf, Germany		3	1966/4470 (ehr 3842)		<i>C. lupus</i>	L lower M1	9.91

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	m1W
NHM 52 B	Grays Thurrock	brickfields centered on TQ 622781 PROJECT A, Q1, area TP4, Unit 4c-	9	23141		<i>C. mosbachensis</i>	Right lower M1	9.75
NHM 25 E d 14	Boxgrove	surface, Field no (2+3) PROJECT A, Q2, area GTP17, unit 4c	13	F2+3/1		<i>C. mosbachensis</i>	R mand ramus, I3, C1, P1-4, M1-3	8.96
NHM 25 F d 25	Boxgrove	surface, field no F63 (2)	13	F63 (2)		<i>C. mosbachensis</i>	R lower M1	9.14
NHM 25 F d 25	Boxgrove	Project A, Q2, area 17, unit 4c surface, field no F9 (part)	13	F9/2		<i>C. mosbachensis</i>	R mand, C1, P2-4, M1	8.14
NHM 44D 3rd drw from top	Westbury	no strat info	13	M33942	Bishop clln	<i>C. mosbachensis</i>	L mand, M1	8.99
NHM 44D 3rd drw from top	Westbury	Bed 3	13	M33940	M Bishop 1974	<i>C. mosbachensis</i>	L mand ramus, P2-4, M1-3	10.57
NHM 44D 3rd drw from top	Westbury	Bed 3	13	M33937	M Bishop 1974	<i>C. mosbachensis</i>	Left mand ramus, P4, M1-2	9.01
NHM 44 E drw 18	Westbury	Unstrat calc memb	13	none	Bishop, 1974	<i>C. mosbachensis</i>	L lower M1	9.15

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	m1W
NHM 44 F drw 1	Westbury	Calc memb. Site W1A	13	none	NHM excav 1976	<i>C. mosbachensis</i>	L lower M1	9.58
NHM 44 F drw 30	Westbury	Grey silty conglom 18/6, W5 West. Calc memb Forest bed - clay in depression, N of old tower.	13	none	Post 1977	<i>C. mosbachensis</i>	L lower M1	9.56
NHM 55 E	Sidestrand		13	M6169	A.C. Savin 1897	<i>C. mosbachensis</i>	R mandible ramus P2-M1	10.32
StM 58	Heppenloch		3.4	30119		<i>C. mosbachensis</i>	R lower M1	9.94
VER 00441	Monte Zoppega, Soave, Italy		3.4	V10918		<i>C. mosbachensis</i>	R mand ramus, M1-2	8.55
VER 00441	Monte Zoppega, Soave, Italy		3.4	V10919		<i>C. mosbachensis</i>	R mand ramus, P1-4, M1	8.02
SIW 1 d 4	Untermassfeld, Germany		4	1980/15308 (Mei 14820)		<i>C. mosbachensis</i>	R mand, C1, P1-4, M1-3	9.33
SIW 1 d 4	Untermassfeld, Germany		4	1980/15919 (Mei 15430)		<i>C. mosbachensis</i>	R mand ramus, C1, P3-4, M1	9.22

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	m1W
SIW 1 d 4	Untermassfeld, Germany		4	1984/20112 (Mei 19632)		<i>C. mosbachensis</i>	R mand ramus, P3-4, M1-3	9.46
SIW 1 d 4	Untermassfeld, Germany		4	1980/16969 (Mei 16460)		<i>C. mosbachensis</i>	R mand ramus, C1, P2-4, M1-2	9.2
SIW 1 d 4	Untermassfeld, Germany		4	1986/21085 (Mei 20604)		<i>C. mosbachensis</i>	R mand ramus, P2-4, M1-2	9.09
SIW 1 d 4	Untermassfeld, Germany		4	1980/17151 (Mei 16672)		<i>C. mosbachensis</i>	R mand ramus, C1, P1-4, M1-2	8.29
SIW 1 d 4	Untermassfeld, Germany		4	1980/16553 (Mei 16074)		<i>C. mosbachensis</i>	R mand, C1, P2-4, M1-2	8.87
SIW 1 d 4	Untermassfeld, Germany		4	1982/17995 (Mei 17515)		<i>C. mosbachensis</i>	R mand, P1-4, M1-3	9.76
SIW 1 d 4	Untermassfeld, Germany		4	1982/17995 (Mei 17515)		<i>C. mosbachensis</i>	R mand frag, post root P4, M1	9.19
SIW 1 d 5	Untermassfeld, Germany		4	1980/15357 (mei 14869)		<i>C. mosbachensis</i>	R mand, I3, C1, P1, post P2, P3-4, M1-2	9.48

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	m1W
FLO 0/02/013/04 (d4)	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF876		<i>C. arnensis</i>	R mand, I1-2, P2-3, post P4, M1-3	8.18
FLO 0/02/013/04 (d4)	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF878		<i>C. arnensis</i>	With cranial frag, PAIR. R mand, P3-4, M1-3	8.08
FLO 0/02/013/04 (d4)	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF884		<i>C. arnensis</i>	R mand ramus frag, P4, M1-2	7.85
FLO 0/02/013/04 (d4)	Il Tasso, Italy	Upper Valdarno	4.4	IGF887		<i>C. arnensis</i>	In box with max. R mand, P1- 4, M1-3	8.28
FLO Strozzi Sala	Upper Valdarno, Italy	Upper Valdarno	4.4	11800		<i>C. arnensis</i>	R mand ramus, P1-4, M1-2, M3 alv	8.82
FLO 0/02/013/05	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF12967		<i>C. arnensis</i>	R mand ramus, P1-4, M1-2	8.79
FLO 0/02/013/05	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF877		<i>C. arnensis</i>	With upper palate, L+R mands. R mand ramus, P2-4, M1-3	8.9
FLO Gallery	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF869		<i>C. arnensis</i>	With cranium, L+R mands. R mand, C1, P1-4, M1-3	7.93

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	m1W
FLO Gallery	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF867		<i>C. arnensis</i>	With cranium, L+R mand. R mand, P4, M1-2	8.44
FLO 0/02/013/01 (d1)	Upper Valdarno, Italy		4.4	IGF888		<i>C. etruscus</i>	L+ R mands PAIR. R mand ramus, P2-4, M1	9.74
FLO 0/02/013/01 (d1)	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF856		<i>C. etruscus</i>	R mand, C1, P1-4, M1-3	10.29
FLO 0/02/013/01 (d1)	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF860		<i>C. etruscus</i>	R mand frag, M1-3	10.34
FLO 0/02/013/02 (d2)	L'Inferno, Italy	Upper Valdarno	4.4	IGF858		<i>C. etruscus</i>	R Lower mand frag, M1-2	9.68
FLO 0/02/013/02 (d2)	Se Ville, Italy	Upper Valdarno	4.4	IGF882		<i>C. etruscus</i>	R mand ramus, P4, M1-3	9.22
FLO 0/02/013/02 (d2)	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF859		<i>C. etruscus</i>	R mand ramus, C1, P2-4, M1	9.51
FLO Strozzi Sala	Upper Valdarno, Italy	Upper Valdarno	4.4	871		<i>C. etruscus</i>	R mand, I2-3, C1, P1-4, M1-2	10.24

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	m1W
FLO 0/02/013/05	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF12868		<i>C. etruscus</i>	R mand ramus, P2, M1	9.5
FLO 0/02/013/05	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF873		<i>C. majori</i> (<i>etruscus</i>)	R mand, I3, C1, P2-4, M1-3	9.17
FLO 0/02/013/05	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF12966		<i>C. etruscus</i>	R mand ramus, P3-4, M1	9.29
FLO 0/02/013/03 (d3)	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF11783		<i>C. etruscus</i>	R lower M1	9.37
NHM 35 L d 23 FLO 0/02/013/07 (d7)	Olivola, Italy	Olivola	4.4	none		<i>C. etruscus</i>	R lower M1	9.31
FLO 0/02/013/07 (d7)	Val di Magna, Italy	Olivola	4.4	IGF4475		<i>C. etruscus</i>	R mand ramus, M1-2, roots P4	9.57
FLO 0/02/013/07 (d7)	Val di Magna, Italy	Olivola	4.4	IGF4476		<i>C. etruscus</i>	R mand ramus, P2, P4, M1	9.5
FLO Gallery	Olivola, Italy	Olivola	4.4	IGF4414		<i>C. etruscus</i>	R mand, C1, P1-4, M1-2	9.9

5. p4L

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	p4L
NHM 1	France		1	1843.12.29.7	F	<i>C. lupus</i>	L mand, I1-3, C1, P2-4, M1-2	14.69
NHM 2	Pyrenees Nr Abrantos, S of the Tagus, Portugal	Parzudacki clln	1	44.1.18.1	F	<i>C. lupus</i>	L mand, I1-3, C1, P1-4, M1-3	15.35
NHM 3		WC Tait clln.	1	1938.12.7.1	F	<i>C. lupus</i>	R mand, I1-3, C1, P1-4, M1-2	14.18
NHM 5	Riocalado, Burgos, Spain		1	11.10.5.2	F	<i>C. lupus</i>	L mand, I1-3, C1, P1-4, M1-3	15.71
NHM 8	Kocane, Macedonia		1	47.1121.a	F	<i>C. lupus</i>	L mand, I1-3, C1, P1-4, M1-2	14.67
NRM	Korvijaure, 7 miles N Kiruna	15.4.1959	1	A58 0112	F	<i>C. lupus</i>	L+R mand + cranium. R mand I1-3, C1, P1, P2 loose, P3-4, M1-3	15.21
NRM	S Finnskoga, Skrackarberget	1985.07.29	1	A865126	F	<i>C. lupus</i>	L+R mand+cranium. R mand, I1-3, P1-4, M1-3	15.56
NRM	Jadraas, 5km N	1991.06.14	1	A915068	F	<i>C. lupus</i>	L+R mand+cranium. R teeth P4, M1-2	15.06

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	p4L
NRM	Vastra Amtervik, Hensgard	1993.02.24	1	A935024	F	<i>C. lupus</i>	L+R mand+cranium. L mand, I1-3, C1, P2-4, M1-2	15.73
NRM	Nas-snoan, v71/jvg	1993.08.18	1	A935178	F	<i>C. lupus</i>	L+R mand+cranium. L mand I1-3, C1, P1-4, M1-3	14.25
NRM	Nyskoga, Kringsberg, Bontjarn	1994.01.19	1	A945045	F	<i>C. lupus</i>	L+R mand+cranium. R mand, I1-3, P1-4, M1-3	14.66
NRM	Vastmandland, Grythyttan	1999.12.17	1	20005111	F	<i>C. lupus</i>	L+R mand+cranium. R mand I2-3, C1, P2-4, M1-3	15.17
NRM	Narke, Degerfors, Atorp	2001.12.26	1	20025005	F	<i>C. lupus</i>	L+R mand+cranium. L mand I1-3, P1-4, M1-3	14.18
NRM	Atorp 3.5 km NW, Degerfors, Varmland	2002.03.05	1	20035026	F	<i>C. lupus</i>	L+R mand+cranium. L mand I1-3, C1, P1-4, M1-3	15.28
NRM	Odlingen, Sillerud, Arjang, Varmland	2004.02.07	1	20045040	F	<i>C. lupus</i>	L+R mand+cranium. R mand I1-3, C1, P1-4, M1-3	15.1
NRM	Ovre Hurr, Tocksfors, Varmland	2006.05.30	1	20065236	F	<i>C. lupus</i>	L+R mand+cranium. L mand, I1-2, C1, P1-4, M1-3	15.64

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	p4L
NRM	Rickebo, Hallbo, Bollnas, Halsingland	2006.03.14	1	20065047	F	<i>C. lupus</i>	L+R mand+cranium. R mand I1-3, C1, P1-4, M1-3	16.13
NRM	Ronnas, Ostra, Leksand, Dalarna	2007.10.09	1	20075381	F	<i>C. lupus</i>	L+R mand+cranium. R mand I1-3, C1, P1-4, M1-3	15.25
NRM	Jarbo, Backefors, Dalsland Varmland, Nordmark,	2007.?	1	20075314	F	<i>C. lupus</i>	L+R mand+cranium. L mand I1-3, C1, P1-4, M1-3	14.3
NRM	Algsjion 2 km S Halsingland, Bollnas, Lottefors;	2009.01.25	1	20095063	F	<i>C. lupus</i>	L+R mand+cranium. R mand I1-3, C1, P1 alv, P1-4, M1-3	15.14
NRM	Rv 83 Vastmanland, Hallefors,	2007.08.19	1	20075312	F	<i>C. lupus</i>	L+R mand + cranium. R mand I1-3, C1, P1-4, M1-3	15.44
NRM	Ornviken,	2010.01.02	1	20105028	F	<i>C. lupus</i>	L+R mand+cranium. L mand I1-3, C1, P1-4, M1-3	14.95
NHM 4	Riocalado, Burgos, Spain		1	11.10.5.1	M	<i>C. lupus</i>	L mand, I1-3, C1, P1-4, M1-3	16.5
NHM 6	Seville, Spain	On note '2 carnassials in tooth case'	1	95.3.3.6	M	<i>C. lupus</i>	R mand, I1-3, C1, P2-4, M1-3. No P1 or alv	15.62

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	p4L
NHM 7	Ukraine on modern ticket, on skull and original Norbotten, N Sweden (in arctic circle).		1	34.6.28.47	M	<i>C. lupus</i>	L mand, I1-3, C1, P3-4, M1-3	16.16
NHM 9			1	28.5.4.1	M	<i>C. lupus</i>	L mand, I1-3, C1, P1-4, M1-3	14.35
NHM 11			Moscow district, Russia	1	82.9.18.2	M	<i>C. lupus</i>	L mand, I1-3, C1 fract, P1-4, M1-3
NHM Ost	Abrantos, S of Tagus, Portugal		1	1937.2.10.2	M	<i>C. lupus</i>	R mand, I2, C1, P4, M1-3	15.23
NHM Ost	Bosnia, Yugoslavia		1	1935.8.5.1	M	<i>C. lupus</i>	R mand, I1-3, C1, P1-4, M1-2	14.44
NRM	Ljusdal, Ramsjo (s:n)	12.2.1926	1	A580255	M	<i>C. lupus</i>	L+R mand + fract cranium. L mand, I1-3, C1, P1-4, M1-3	15.48
NRM	Jokkmokk	11.02.1852	1	A583532	M	<i>C. lupus</i>	L+R mand + cranium. R mand I1-3, C1, P1-4, M1-3	15.98
NRM	Orebro	1852	1	A583547	M	<i>C. lupus</i>	L+R mand+cranium. R mand I1-3, C1, P1-4, M1-3	16.15

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	p4L
NRM	Sweden	1907	1	A589147	M	<i>C. lupus</i>	L+R mand + cranium. R teeth I1-3, C1, P1-4, M1-2	17.36
NRM	Sweden	1908	1	A589199	M	<i>C. lupus</i>	L+R mand+cranium. L mand I1-3, C1, P1-4, M1-3	16.36
NRM	Luktjomtjuolta, Vilhelmina	15.1.1937	1	A590009	M	<i>C. lupus</i>	L+R mand+cranium. L mand I1-3, C1, P2-4, M1-2	15.71
NRM	Lina alv station	25.12.1977	1	A775097	M	<i>C. lupus</i>	L+R mand+cranium. L mand I1, I3, C1, P1-4, M1-3	16.06
NRM	Atran, Ogardet	1984.09.12	1	A845131	M	<i>C. lupus</i>	L+R mand+cranium. R mand I1-3, C1, P1-4, M1-3	15.88
NRM	Hede, 3 mil NV, Norrstadian	1989.04.17	1	A895039	M	<i>C. lupus</i>	L+R mand+cranium. R mand I1-3, P1-4, M1-3	16.05
NRM	Kiruna-Gallivare, Gaddmyr, Jvg	1992.08.24	1	A925106	M	<i>C. lupus</i>	L+R mand+cranium. R mand, I1-3, P2-4, M1-3	15.49
NRM	Boras	1996.01.04	1	A965002	M	<i>C. lupus</i>	L+R mand+cranium. L teeth I1-3, C1, P1-4, M1-2	15.25

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	p4L
NRM	Jarna, Flaten, Dalarna	1999.2.6	1	A995016	M	<i>C. lupus</i>	L+R mand+cranium. R mand, I1-2, P1-4, M1-3	16.25
NRM	Varmland, Eksharad, Halgan; Kolarkojan	1999.06.04	1	995230	M	<i>C. lupus</i>	L+R mand+cranium. R mand, I3, C1, P1-4, M1-3	15.22
NRM	Jumkil kyrka, Uppsala	2000.11.19	1	20005365	M	<i>C. lupus</i>	L+R mand+cranium. L mand I1-3, C1, P1-4, M1-3	15.91
NRM	Uddalen, Ed, Dalsland	2003.05.12	1	20035114	M	<i>C. lupus</i>	L+R mand+cranium. R mand I1-3, C1. extra P1? P1, P2-3 broken, P4, M1-3	16.35
NRM	Ostermoren, Smedjebacken, Dalarna	2004.12.09	1	20045305	M	<i>C. lupus</i>	L+R mand+cranium. R mand I1-3, C1, P1-4, M1-2, M3 alv	16.02
NRM	Dala Floda, Borlange, Dalarna IV 225 (road?), Osmo,	2003.03.09	1	20035024	M	<i>C. lupus</i>	L+R mand+cranium. R mand I1-3, C1, P1 alv, P2-4, M1-3 L+broken R mand+cranium.	15.36
NRM	Sodermanland Lanasberget, Grundsjo,	2005.11.26	1	20065027	M	<i>C. lupus</i>	L mand I1-2, C1, P1-4, M1-2, M3 alv	15.72
NRM	Ljungaverk,	2005.09.02	1	20055287	M	<i>C. lupus</i>	L+R mand+cranium. L mand I1-3, C1, P1-4, M1-3	15.44

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	p4L
NRM	Mullhyttan, Orebro, Narke	2006.09.15	1	20065414	M	<i>C. lupus</i>	L+R mand+cranium. R mand I1-3, C1, P1-4, M1-2, M3 alv	16.43
NRM	Avik, Laxa, Narke	2007.04.27	1	20075186	M	<i>C. lupus</i>	L+R mand + cranium. L mand I1-3, C1, P1 alv, P2-4, M1-2, M3 alv	15.9
NRM	Malung-Appelbo, Dalarna	2007.12	1	20085027	M	<i>C. lupus</i>	L+R mand +cranium. L mand, I1-3, C1, P1-4, M1-3	15.5
NRM	Dalarna, Torsby, Ostmark; Sojensoasen	2007.09.15	1	20075373	M	<i>C. lupus</i>	L+R mand+cranium. R mand I1-3, C1, P1-4, M1-3	17.01
NRM	Stormosse, Piro, Bjorneborg, Kristinehamn,	2007.12.27	1	20085036	M	<i>C. lupus</i>	L+R mand+cranium. L mand I1-3, C1, P1-4, M1-3	16.15
NMW PH1.147	Ogof yr Ychen	Abyss chamber 3	2	864		<i>C. lupus</i>	L mand, C1, P1-4, M1-2	16.24
UBSS	Sun Hole	7 Ft	2	none		<i>C. lupus</i>	R lower P4	15.01
SMES bay 4, iv 266 drw	Black Rock Quarry		3	D2604	Pres by T Roberts, 1882	<i>C. lupus</i>	L mand, P2-4, M1-2	15.9

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	p4L
NHM 43 C	Kents Cavern	Cave earth, 4th level	3	M849	Pres by Lord Haldon, July 1883	<i>C. lupus</i>	L ramus frag, P2-P4	15.94
TM Gallery	Kents Cavern	Unknown	3	P30687	MacEnery?	<i>C. lupus</i>	L ramus, I1-3, C1, P2-4, M1-2	15.93
TM G/B1/217	Kents Cavern		3	P12677		<i>C. lupus</i>	L lower P4	15.32
NHM 43 E drw 24	Oreston Cave	Pres type 2	3	46981 1989 G 140 1.1	Purch 1876	<i>C. lupus</i>	2). L ramus, C1, P1-4, M1-2	15.52
WH	Oreston Cave		3	(FS04323)		<i>C. lupus</i>	L mand ramus, P2-4, M1-2	16.66
WH	Oreston Cave		3	1989 G 140.1.4	TC	<i>C. lupus</i>	L mand frag, P4, M1	16.87
BC	Oreston Cave		3	Cd2930	J. Cottle clln 1830	<i>C. lupus</i>	L lower P4	17.44
BC	Oreston Cave		3	Cd2945	J. Cottle clln 1830	<i>C. lupus</i>	L lower P4	14.75

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	p4L
BC, lower drw	Oreston Cave		3	Cd3257	J. Cottle clln 1830	<i>C. lupus</i>	L mand frag, P4	16.24
NMW From gallery	Paviland	none	3	24.94/46		<i>C. lupus</i>	R mand ramus, P1, P3-4, M1	15.96
SM Blue boxes	Paviland		3	SM.1836.6.3 03		<i>C. lupus</i>	R mand ramus, P2-4, M1	16.71
SM Blue boxes	Paviland		3	SM.1836.6.3 07	Excav 1823	<i>C. lupus</i>	R ant mand frag, P1-4	15.9
SM Blue boxes	Paviland		3	SM.1836.6.3 06		<i>C. lupus</i>	R mand ramus, P2-4	17.18
MM R4 ColE D 1	Pin Hole	PH (F)	3	LL.1995		<i>C. lupus</i>	L mand ramus, P1-4, M1-2	16.24
MM Gallery	Pin Hole		3	LL11898 TTNCM		<i>C. lupus</i>	L mand, I2-3, C1, post P2, P3-4, M1-3	16.11
SHC D27/3	Sandford Hill	Cave or fissure deps	3	44/1995/61/3	Rev'd. D. Williams & Beard clln	<i>C. lupus</i>	L mand ramus, P4, M1-2	15.77

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	p4L
NHM 45D drw 13	Banwell Bone Cave		5a	M404d	Egerton clln, 1882	<i>C. lupus</i>	R mand ramus, C1, P2-M2.	16.47
NHM 45D drw 13	Banwell Bone Cave		5a	M223	Enniskillen clln	<i>C. lupus</i>	R mand ramus, P3-4, M1-2	16.44
NHM 45D drw 13	Banwell Bone Cave		5a	44642	Pres Benj Bright esq, 1873	<i>C. lupus</i>	R mand frag, M1, P4.	17.44
NHM Andy's office	Banwell Bone Cave	Entrance to Baker's Pit extension, 1950's	5a	M84868	Percy Baker clln	<i>C. lupus</i>	R mand, P1-4, M1-2	17.85
UBSS	Banwell bone Cave		5a	M15-A		<i>C. lupus</i>	R lower P4 in ramus frag	17.49
SHC D19/4	Banwell Bone Cave	Cave dep	5a	TTNCM 40/1995/61	William Beard clln	<i>C. lupus</i>	R mand ramus, post P3, P4, M1-3	18.08
SHC D19/4	Banwell Bone Cave		5a	TTNCM 40/1995/58	William Beard clln	<i>C. lupus</i>	R mand ramus, P1-4, M1-2	16.38
SHC D19/4	Banwell Bone Cave		5a	TTNCM 40/1995/60	William Beard clln	<i>C. lupus</i>	R mand ramus, P4, M1-3	17.41

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	p4L
SHC D19/3	Banwell Bone Cave		5a	TTNCM 40/1995/55	William Beard cln	<i>C. lupus</i>	R mand ramus, P4, M1	14.49
SHC D19/3	Banwell Bone Cave		5a	TTNCM 40/1995/63	William Beard cln	<i>C. lupus</i>	R mand ramus, C1, P4, M1	16.36
SHC D19/3	Banwell Bone Cave		5a	TTNCM 40/1995/54	William Beard cln	<i>C. lupus</i>	R mand ramus, C1, P1-4, M1	17.91
SHC D19/2	Banwell Bone Cave	Cave dep	5a	TTNCM 40/1995/50	William Beard cln	<i>C. lupus</i>	R mand ramus, P1-4	16.61
SHC D19/2	Banwell Bone Cave		5a	TTNCM 40/1995/52	William Beard cln	<i>C. lupus</i>	R mand ramus, P2-4	16.49
SHC D19/2	Banwell Bone Cave		5a	TTNCM 40/1995/49	William Beard cln	<i>C. lupus</i>	R mand ramus, P2-4	17.98
SHC D19/2	Banwell Bone Cave		5a	TTNCM 40/1995/31/ 7	William Beard cln	<i>C. lupus</i>	R lower P4	17.02
SHC D19/2	Banwell Bone Cave		5a	TTNCM 40/1995/31/ 5	William Beard cln	<i>C. lupus</i>	R lower P4	16.28

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	p4L
SHC D19/2	Banwell Bone Cave		5a	TTNCM 40/1995/31/ 10	William Beard clln	<i>C. lupus</i>	R lower P4	15.66
SHC D19/2	Banwell Bone Cave		5a	TTNCM 40/1995/31/ 11	William Beard clln	<i>C. lupus</i>	R lower P4	16.72
SHC D19/2	Banwell Bone Cave		5a	TTNCM 40/1995/31/ 29	William Beard clln	<i>C. lupus</i>	R lower P4	16.22
SHC D19/2	Banwell Bone Cave		5a	TTNCM 40/1995/31/ 22	William Beard clln	<i>C. lupus</i>	R lower P4	16.86
SHC D19/2	Banwell Bone Cave		5a	TTNCM 40/1995/31/ 12	William Beard clln	<i>C. lupus</i>	R lower P4	16.41
SHC D68/8	Banwell Bone Cave		5a	185/2002/56	Clld by APC, DCS and RJ 07/2001.	<i>C. lupus</i>	R lower P4 in mand frag	17.02
SHC Display SM From fox & wolf box in display case 9	Banwell Bone Cave		5a	45/1995/634		<i>C. lupus</i>	R mand, C1, P2-4, M1.	16.82
	Bosco's Den		5a	SM. 1858.1.57		<i>C. lupus</i>	L mand ramus, P2, P4 (P3 alv fits above).	15.74

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	p4L
SM From fox & wolf box in display case 9	Bosco's Den		5a	SM. 1858.1.20 1989 G 141 88 (FS 04700)		<i>C. lupus</i>	L mand ramus, C1, P1-4, ant M1	18
WH NHM 53A, 2nd drw from bottom	Steetley Quarry		5a		Stump cross cave	<i>C. lupus</i>	R mand ramus, P3-4, M1	17.11
	Stump Cross Cave		5a	M43234	1980 III c	<i>C. lupus</i>	R ramus, P1, frag P2, frag P3, P4, M1-2	17.93
MM R5 ColK D15	Windy Knoll		5a	P2496a-j		<i>C. lupus</i>	L lower P4 in mand frag.	17.3
UMZC	Wretton		5a	Wr1a		<i>C. lupus</i>	R mand C1, P1-4, M1-2, M3 alv	17.6
SM On display	Bacon Hole		5c	SM. 850:2.166		<i>C. lupus</i>	L mand, C1, P1-4, M1-2 M3 lv	15.18
TM G/B6/B109	Joint Mitnor Cave		5e	P35045	1940	<i>C. lupus</i>	R lower P4	16.17
TM G/B6/B112	Joint Mitnor Cave		5e	P35082	1940	<i>C. lupus</i>	R ramus, P1-4, M1-2	15.41

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	p4L
TM G/B6/B112	Joint Mitnor Cave		5e	P35083	1940	<i>C. lupus</i>	R lower P4 in mand frag	15.05
TM G/B6/B112	Joint Mitnor Cave		5e	P35085	1940	<i>C. lupus</i>	R ramus frag, P4, M1-2	15.86
BGS 483956	Clevedon Cave		6	16350		<i>C. lupus</i>	R mand, P2-4, M1-3	15.9
BC	Clevedon Cave		6	Ce15102	S.H. Reynolds	<i>C. lupus</i>	R lower P4	15.39
BC	Clevedon Cave		6	Ce12520	B. N. S. Soc	<i>C. lupus</i>	R mand ramus, C1, P2-4, M1	16.44
BC	Clevedon Cave		6	Ce15055- 15070	B. N. S. Soc	<i>C. lupus</i>	R lower P4	15.5
BC	Clevedon Cave		6	Ce15055- 15070	B. N. S. Soc	<i>C. lupus</i>	R lower P4	15.93
BC	Clevedon Cave		6	Ce15055- 15070	B. N. S. Soc	<i>C. lupus</i>	R lower P4	15.72

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	p4L
BC	Clevedon Cave		6	Ce15055-15070	B. N. S. Soc	<i>C. lupus</i>	R lower P4	15.02
SHC D46/1	Bleadon Cave	Fissure in Bleadon quarry, Bleadon, Soms, 1872.	7	TTNCM 41/1995/12	W. Beard clln	<i>C. lupus</i>	R mand, P1-4, M1-2	16.75
SHC D65/3	Bleadon Cave		7	TTNCM 41/1995/300 1	Pres'd by Rev. Wadham Pigott Williams, 1878	<i>C. lupus</i>	R mand, P4, M1-2	16.68
NHM 48 C	Crayford		7	M5047b	Spurrell clln	<i>C. lupus</i>	L mand, P4, M1, fract M2	15.52
NHM 44 D drw 7	Hutton Cave	none	7	44739a	none	<i>C. lupus</i>	R+L mand frags. LC1, P4, M1-2	15.22
SHC D40/2	Hutton Cave		7	TTNCM 42/1995/51	Rev D Williams and W Beard clln	<i>C. lupus</i>	L lower P4	17.29
SHC D40/2	Hutton Cave		7	TTNCM 42/1995/44	Rev D Williams and W Beard clln	<i>C. lupus</i>	R and L mand assoc - L mand, P2, P4, M1-2	15.55
BGS 483847	Ilford		7	204	Dr RP Cotton clln, pres by Cotton, 1878	<i>C. lupus</i>	R mand ramus frag, C1, P2-4, M1-2	15.88

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	p4L
NMW Box 2.20	Pontnewydd Cave	LBC	7	94.38H/3 F4974		<i>C. lupus</i>	R lower P4	15.16
VER 108	Grotta Paglicci	Str VI	2	V5767		<i>C. lupus</i>	L mand, C1, P4, M1	16.64
StM 70	Hohle Fels		2.4	none		<i>C. lupus</i>	L mand, P3-4, roots M1	16.25
NHM 36 E d 36/E/19	Perick Cave	none	2.4	28571	see notes	<i>C. lupus</i>	L mand, I2-3, P1-4, M1-3	17.05
NHM 36 E d 36/E/19	Perick Cave	none	2.4	M436	Enniskillen clln 1882	<i>C. lupus</i>	L mand ramus, P2, P4, M1-2	15.58
NHM 36 E d 36/E/19	Perick Cave		2.4	28570		<i>C. lupus</i>	From above, R mand, P3-4, M1-3	16.93
NHM 36 E d 36/E/19	Perick Cave Villa Seckendorf, Bad Canstatt, Germany	none Stuttgart Travertine	2.4	28573 31300 (SE.12.2.57/ 0.F)	Purchd 1853	<i>C. lupus</i>	L ramus, P3-4, M1-2	16.05
StM 80			2.8			<i>C. lupus</i>	L mand frag, P4, M1	15.82

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	p4L
StM 80	Villa Seckendorf, Bad Canstatt, Germany	Stuttgart Travertine	2.8	37300 (12.2.57.o.f)	in Ziegler, 1996 fig'rd	<i>C. lupus</i>	L + R mand ramii. L mand ramus I3, C1, P1-4	16.15
StM 80	Villa Seckendorf, Bad Canstatt, Germany	Stuttgart Travertine	2.8	31302 (21.2.57/10)		<i>C. lupus</i>	L mand ramus, C1, P2-4, M1	17.83
StM 80	Villa Seckendorf, Bad Canstatt, Germany	Stuttgart Travertine	2.8	31397 (SE.26.2.57/ 1)		<i>C. lupus</i>	L mand ramus, P1-4, M1	16.08
StM 80	Villa Seckendorf, Bad Canstatt, Germany	Stuttgart Travertine	2.8	31301 (21.2.57/10)		<i>C. lupus</i>	L mand ramus, P1-4, M1, alvs i1-3, C1.	15.03
SIW 3 d 9	Taubach		2.8	1968/10851 (Taub 12243)		<i>C. lupus</i>	R mand ramus	15.73
NHM 52 B	Grays Thurrock	Project A, Q1, area TP4, Unit 4c-	9	23140	purch'd 1849	<i>C. mosbachensis</i>	L ramus portion, P2-4, M1 root	16.41
NHM 25 E d 14	Boxgrove	surface, Field no (2+3)	13	F2+3/1		<i>C. mosbachensis</i>	R mand ramus, I3, C1, P1-4, M1-3	13.52
NHM 25 F d 25	Boxgrove	Project A, Q2, area 17, unit 4c surface, field no F9 (part)	13	F9/2		<i>C. mosbachensis</i>	R mand, C1, P2-4, M1	13.56

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	p4L
NHM 44D 3rd drw from top	Westbury	Bed 3	13	M33940	M Bishop 1974	<i>C. mosbachensis</i>	L mand ramus, P2-4, M1-3	14.73
NHM 44D 3rd drw from top	Westbury	Bed 3	13	M33937	M Bishop 1974	<i>C. mosbachensis</i>	Left mand ramus, P4, M1-2	13.29
NHM 44 E drw 10	Westbury	Bed 3	13	47519	Bishop 1973	<i>C. mosbachensis</i>	L lower P3	12.01
NHM 44 F drw 1	Westbury	Calc memb. Site W1A	13	none	NHM excav 1976	<i>C. mosbachensis</i>	L lower P4	13.83
NHM 44 F drw 1	Westbury	Calc memb site W1B	13	none	NHM excav 1976	<i>C. mosbachensis</i>	L lower P4	13.69
NHM 44 G drw 5	Westbury	Unstrat.	13	none		<i>C. mosbachensis</i>	L lower P4	12.78
UBSS	Westbury	none Forest bed - clay in depression, N of	13	none		<i>C. mosbachensis</i>	L lower P4	13.62
NHM 55 E	Sidestrand	old tower.	13	M6169	A.C. Savin 1897	<i>C. mosbachensis</i>	R mandible ramus P2-M1	15.44

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	p4L
VER 00441	Monte Zopegga		3.4	V10919		<i>C. mosbachensis</i>	R mand ramus, P1-4, M1	12.42
SIW 1 d 4	Untermassfeld, Germany		4	1980/15308 (Mei 14820)		<i>C. mosbachensis</i>	R mand, C1, P1-4, M1-3	13.35
SIW 1 d 4	Untermassfeld, Germany		4	1980/15919 (Mei 15430)		<i>C. mosbachensis</i>	R mand ramus, C1, P3-4, M1	14.12
SIW 1 d 4	Untermassfeld, Germany		4	1984/20111 (Mei 19631)		<i>C. mosbachensis</i>	R mand ramus, C1, P2-4, ant M1	14.78
SIW 1 d 4	Untermassfeld, Germany		4	1984/20112 (Mei 19632)		<i>C. mosbachensis</i>	R mand ramus, P3-4, M1-3	13.54
SIW 1 d 4	Untermassfeld, Germany		4	1980/16969 (Mei 16460)		<i>C. mosbachensis</i>	R mand ramus, C1, P2-4, M1- 2	13.32
SIW 1 d 4	Untermassfeld, Germany		4	1986/21085 (Mei 20604)		<i>C. mosbachensis</i>	R mand ramus, P2-4, M1-2	14.39
SIW 1 d 4	Untermassfeld, Germany		4	1980/17151 (Mei 16672)		<i>C. mosbachensis</i>	R mand ramus, C1, P1-4, M1- 2	12.75

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	p4L
SIW 1 d 4	Untermassfeld, Germany		4	1980/16553 (Mei 16074)		<i>C. mosbachensis</i>	R mand, C1, P2-4, M1-2	13.43
SIW 1 d 4	Untermassfeld, Germany		4	1982/17995 (Mei 17515)		<i>C. mosbachensis</i>	R mand, P1-4, M1-3	13.7
SIW 1 d 4	Untermassfeld, Germany		4	1982/17970 (mei 17490)		<i>C. mosbachensis</i>	R mand frag, P3-4	13.33
SIW 1 d 4	Untermassfeld, Germany		4	1980/16554 (mei 16075)		<i>C. mosbachensis</i>	R mand frag, P3-4	12.98
SIW 1 d 5	Untermassfeld, Germany		4	1980/15357 (mei 14869)		<i>C. mosbachensis</i>	R mand, I3, C1, P1, post P2, P3-4, M1-2	13.65
FLO 0/02/013/01 (d1)	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF868		<i>C. arnensis</i>	R mand, I1-3, C1, P1-4, M1-3	13.24
FLO 0/02/013/03 (d3)	Il Tasso, Italy	Upper Valdarno	4.4	1249V		<i>C. arnensis</i>	R lower P4	13.77
FLO 0/02/013/04 (d4)	Il Tasso, Italy	Upper Valdarno	4.4	IGF876		<i>C. arnensis</i>	With max frag, L + R mands held together. L mand, I3, P2-4, M1-3	13.07

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	p4L
FLO 0/02/013/04 (d4)	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF878		<i>C. arnensis</i>	With cranial frag, PAIR. R mand, P3-4, M1-3	13.02
FLO 0/02/013/04 (d4)	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF884		<i>C. arnensis</i>	R mand ramus frag, P4, M1- 2	12.57
FLO 0/02/013/04 (d4)	Il Tasso, Italy	Upper Valdarno	4.4	IGF887		<i>C. arnensis</i>	In box with max. R mand, P1- 4, M1-3	12.52
FLO Strozzi Sala	Upper Valdarno, Italy	Upper Valdarno	4.4	11800		<i>C. arnensis</i>	R mand ramus, P1-4, M1-2, M3 alv	13.92
FLO 0/02/013/05	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF12967		<i>C. arnensis</i>	R mand ramus, P1-4, M1-2 With upper palate, L+R	13.68
FLO 0/02/013/05	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF877		<i>C. arnensis</i>	mands. R mand ramus, P2-4, M1-3	13.34
FLO Gallery	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF869		<i>C. arnensis</i>	With cranium, L+R mand. R mand, C1, P1-4, M1-3	12.72
FLO Gallery	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF867		<i>C. arnensis</i>	With cranium, L+R mand. R mand, P4, M1-2	13.53

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	p4L
FLO 0/02/013/01 (d1)	Upper Valdarno, Italy	Upper Valdarno (Valdarno superiore)	4.4	IGF888		<i>C. etruscus</i>	L and R mands connected by 2 metal posts. L mand ramus, P2-4, M1-2	14.59
FLO 0/02/013/01 (d1)	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF866		<i>C. etruscus</i>	L mand ramus, P2-4, M1-3	15.45
FLO 0/02/013/01 (d1)	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF881		<i>C. etruscus</i>	L mand, P4, M1, M3.	14.88
FLO 0/02/013/01 (d1)	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF886		<i>C. etruscus</i>	L mand ramus, P3 frag, P4, M1, M2 frag	14.94
FLO 0/02/013/01 (d1)	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF872		<i>Canis majori</i>	L mand, C1, P2-4, M1-2, M3 alv	15
FLO 0/02/013/02 (d2)	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF863		<i>C. majori</i> (<i>etruscus</i>)	L and mand ramus, P2-4	16.56
FLO 0/02/013/02 (d2)	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF11781		<i>C. etruscus</i>	L mand, I3, C1, P1-4, M1-2. Broken in half at M1.	15.04
FLO 0/02/013/03 (d3)	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF1244V		<i>C. etruscus</i>	L mand frag, P4, M1	14.84

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	p4L
FLO Strozzi Sala	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF12469		<i>C. etruscus</i>	L mand, P2-4, M1-2, M3 alv	15.92
FLO Strozzi Sala	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF11791		<i>C. etruscus</i>	L mand, I3, C1, P1-4, 1-3	14.51
FLO 0/02/013/05	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF864		<i>C. majori (etruscus)</i>	L mand ramus, P3-4, M1-2, M3 alv	14.41
FLO 0/02/013/03 (d3)	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF11783		<i>C. etruscus</i>	L lower P4	14.73
NHM 35 L d 23 FLO 0/02/013/07 (d7)	Olivola Val di Magna, Italy	Olivola	4.4	M5680 IGF4474	Forsyth Major, Oct 1895	<i>C. etruscus</i>	L ramus, P4, M1-2 L mand ramus, P1, post P3, P4, M1-2, alv M3	15.03 16.07
FLO 0/02/013/07 (d7)	Val di Magna, Italy	Olivola	4.4	IGF4473		<i>C. etruscus</i>	L mand ramus, P2? P4, M1, M2	15.73
FLO 0/02/013/07 (d7)	Val di Magna, Italy	Olivola	4.4	IGF4413		<i>C. etruscus</i>	L mand, I2-3, C1, P1, P3-4, M1, def M2??	14.25

6. p4W

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	p4W
NHM 1	France		1	1843.12.29.7	F	<i>C. lupus</i>	L mand, I1-3, C1, P2-4, M1-2	7.35
NHM 2	Pyrenees Nr Abrantos, S of the Tagus,	Parzudacki clln	1	44.1.18.1	F	<i>C. lupus</i>	L mand, I1-3, C1, P1-4, M1-3	7.12
NHM 3	Portugal	WC Tait clln.	1	1938.12.7.1	F	<i>C. lupus</i>	R mand, I1-3, C1, P1-4, M1-2	6.81
NHM 5	Riocalado, Burgos, Spain		1	11.10.5.2	F	<i>C. lupus</i>	L mand, I1-3, C1, P1-4, M1-3	7.81
NHM 8	Kocane, Macedonia		1	47.1121.a	F	<i>C. lupus</i>	L mand, I1-3, C1, P1-4, M1-2	7.55
NRM	Korvijaure, 7 miles N Kiruna	15.4.1959	1	A58 0112	F	<i>C. lupus</i>	L+R mand + cranium. R mand I1-3, C1, P1, P2 loose, P3-4, M1-3	7.79
NRM	S Finnskoga, Skrackarberget	1985.07.29	1	A865126	F	<i>C. lupus</i>	L+R mand+cranium. R mand, I1-3, P1-4, M1-3	7.71
NRM	Jadraas, 5km N	1991.06.14	1	A915068	F	<i>C. lupus</i>	L+R mand+cranium. R teeth P4, M1-2	7.66

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	p4W
NRM	Vastra Amtervik, Hensgard	1993.02.24	1	A935024	F	<i>C. lupus</i>	L+R mand+cranium. L mand, I1-3, C1, P2-4, M1-2	8.26
NRM	Nas-snoan, v71/jvg	1993.08.18	1	A935178	F	<i>C. lupus</i>	L+R mand+cranium. L mand I1-3, C1, P1-4, M1-3	6.75
NRM	Nyskoga, Kringsberg, Bontjarn	1994.01.19	1	A945045	F	<i>C. lupus</i>	L+R mand+cranium. R mand, I1-3, P1-4, M1-3	7.29
NRM	Vastmandland, Grythyttan	1999.12.17	1	20005111	F	<i>C. lupus</i>	L+R mand+cranium. R mand I2-3, C1, P2-4, M1-3	7.85
NRM	Narke, Degerfors, Atorp	2001.12.26	1	20025005	F	<i>C. lupus</i>	L+R mand+cranium. L mand I1-3, P1-4, M1-3	7.41
NRM	Atorp 3.5 km NW, Degerfors, Varmland	2002.03.05	1	20035026	F	<i>C. lupus</i>	L+R mand+cranium. L mand I1-3, C1, P1-4, M1-3	7.66
NRM	Odlingen, Sillerud, Arjang, Varmland	2004.02.07	1	20045040	F	<i>C. lupus</i>	L+R mand+cranium. R mand I1-3, C1, P1-4, M1-3	7.82
NRM	Ovre Hurr, Tocksfors, Varmland	2006.05.30	1	20065236	F	<i>C. lupus</i>	L+R mand+cranium. L mand, I1-2, C1, P1-4, M1-3	8

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	p4W
NRM	Rickebo, Hallbo, Bollnas, Halsingland	2006.03.14	1	20065047	F	<i>C. lupus</i>	L+R mand+cranium. R mand I1-3, C1, P1-4, M1-3	9.08
NRM	Ronnas, Ostra, Leksand, Dalarna	2007.10.09	1	20075381	F	<i>C. lupus</i>	L+R mand+cranium. R mand I1-3, C1, P1-4, M1-3	8.51
NRM	Jarbo, Backefors, Dalsland	2007.?	1	20075314	F	<i>C. lupus</i>	L+R mand+cranium. L mand I1-3, C1, P1-4, M1-3	7.31
NRM	Varmland, Nordmark, Algsjion 2 km S Halsingland, Bollnas, Lottefors;	2009.01.25	1	20095063	F	<i>C. lupus</i>	L+R mand+cranium. R mand I1-3, C1, P1 alv, P1-4, M1-3	8.1
NRM	Rv 83 Vastmanland, Hallefors, Ornviken,	2007.08.19	1	20075312	F	<i>C. lupus</i>	L+R mand + cranium. R mand I1-3, C1, P1-4, M1-3	7.64
NRM		2010.01.02	1	20105028	F	<i>C. lupus</i>	L+R mand+cranium. L mand I1-3, C1, P1-4, M1-3	7.73
NHM 4	Riocalado, Burgos, Spain		1	11.10.5.1	M	<i>C. lupus</i>	L mand, I1-3, C1, P1-4, M1-3	8.15
NHM 6	Seville, Spain	On note '2 carnassials in tooth case'	1	95.3.3.6	M	<i>C. lupus</i>	R mand, I1-3, C1, P2-4, M1-3. No P1 or alv	7.33

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	p4W
NHM 7	Ukraine on modern ticket, on skull and original Norbotten, N Sweden (in arctic circle).		1	34.6.28.47	M	<i>C. lupus</i>	L mand, I1-3, C1, P3-4, M1-3	8.11
NHM 9			1	28.5.4.1	M	<i>C. lupus</i>	L mand, I1-3, C1, P1-4, M1-3	7.34
NHM 11			1	82.9.18.2	M	<i>C. lupus</i>	L mand, I1-3, C1 fract, P1-4, M1-3	8.59
NHM Ost	Abrantos, S of Tagus, Portugal		1	1937.2.10.2	M	<i>C. lupus</i>	R mand, I2, C1, P4, M1-3	7.35
NHM Ost	Bosnia, Yugoslavia		1	1935.8.5.1	M	<i>C. lupus</i>	R mand, I1-3, C1, P1-4, M1-2	7.7
NRM	Ljusdal, Ramsjo (s:n)	12.2.1926	1	A580255	M	<i>C. lupus</i>	L+R mand + fract cranium. L mand, I1-3, C1, P1-4, M1-3	7.8
NRM	Jokkmokk	11.02.1852	1	A583532	M	<i>C. lupus</i>	L+R mand + cranium. R mand I1-3, C1, P1-4, M1-3	8.57
NRM	Orebro	1852	1	A583547	M	<i>C. lupus</i>	L+R mand+cranium. R mand I1-3, C1, P1-4, M1-3	8.42

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	p4W
NRM	Sweden	1907	1	A589147	M	<i>C. lupus</i>	L+R mand + cranium. R teeth I1-3, C1, P1-4, M1-2	8.15
NRM	Sweden	1908	1	A589199	M	<i>C. lupus</i>	L+R mand+cranium. L mand I1-3, C1, P1-4, M1-3	9.7
NRM	Luktjomtjuolta, Vilhelmina	15.1.1937	1	A590009	M	<i>C. lupus</i>	L+R mand+cranium. L mand I1-3, C1, P2-4, M1-2	7.95
NRM	Lina alv station	25.12.1977	1	A775097	M	<i>C. lupus</i>	L+R mand+cranium. L mand I1, I3, C1, P1-4, M1-3	8.66
NRM	Atran, Ogardet	1984.09.12	1	A845131	M	<i>C. lupus</i>	L+R mand+cranium. R mand I1-3, C1, P1-4, M1-3	8.33
NRM	Hede, 3 mil NV, Norrstadjan	1989.04.17	1	A895039	M	<i>C. lupus</i>	L+R mand+cranium. R mand I1-3, P1-4, M1-3	8.09
NRM	Kiruna-Gallivare, Gaddmyr, Jvg	1992.08.24	1	A925106	M	<i>C. lupus</i>	L+R mand+cranium. R mand, I1-3, P2-4, M1-3	7.52
NRM	Boras	1996.01.04	1	A965002	M	<i>C. lupus</i>	L+R mand+cranium. L teeth I1-3, C1, P1-4, M1-2	7.97

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	p4W
NRM	Jarna, Flaten, Dalarna	1999.2.6	1	A995016	M	<i>C. lupus</i>	L+R mand+cranium. R mand, I1-2, P1-4, M1-3	8.07
NRM	Varmland, Eksharad, Halgan; Kolarkojan	1999.06.04	1	995230	M	<i>C. lupus</i>	L+R mand+cranium. R mand, I3, C1, P1-4, M1-3	8.13
NRM	Jumkil kyrka, Uppsala	2000.11.19	1	20005365	M	<i>C. lupus</i>	L+R mand+cranium. L mand I1-3, C1, P1-4, M1-3	7.91
NRM	Uddalen, Ed, Dalsland	2003.05.12	1	20035114	M	<i>C. lupus</i>	L+R mand+cranium. R mand I1-3, C1. extra P1? P1, P2-3 broken, P4, M1-3	8.52
NRM	Ostermören, Smedjebacken, Dalarna	2004.12.09	1	20045305	M	<i>C. lupus</i>	L+R mand+cranium. R mand I1-3, C1, P1-4, M1- 2, M3 alv	8.83
NRM	Dala Floda, Borlange, Dalarna	2003.03.09	1	20035024	M	<i>C. lupus</i>	L+R mand+cranium. R mand I1-3, C1, P1 alv, P2- 4, M1-3	8.25
NRM	IV 225 (road?), Osmo, Sodermanland	2005.11.26	1	20065027	M	<i>C. lupus</i>	L+broken R mand+cranium. L mand I1- 2, C1, P1-4, M1-2, M3 alv	8.19
NRM	Lanasberget, Grundsjö, Ljungaverk,	2005.09.02	1	20055287	M	<i>C. lupus</i>	L+R mand+cranium. L mand I1-3, C1, P1-4, M1-3	7.76

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	p4W
NRM	Mullhyttan, Orebro, Narke	2006.09.15	1	20065414	M	<i>C. lupus</i>	L+R mand+cranium. R mand I1-3, C1, P1-4, M1-2, M3 alv	9
NRM	Avik, Laxa, Narke	2007.04.27	1	20075186	M	<i>C. lupus</i>	L+R mand + cranium. L mand I1-3, C1, P1 alv, P2-4, M1-2, M3 alv	8.6
NRM	Malung-Appelbo, Dalarna	2007.12	1	20085027	M	<i>C. lupus</i>	L+R mand +cranium. L mand, I1-3, C1, P1-4, M1-3	8.18
NRM	Dalarna, Torsby, Ostmark; Sojensoasen	2007.09.15	1	20075373	M	<i>C. lupus</i>	L+R mand+cranium. R mand I1-3, C1, P1-4, M1-3	8.6
NRM	Stormosse, Piro, Bjorneborg, Kristinehamn,	2007.12.27	1	20085036	M	<i>C. lupus</i>	L+R mand+cranium. L mand I1-3, C1, P1-4, M1-3	8.89
NMW PH1.147	Ogof yr Ychen	Abyss chamber 3	2	864		<i>C. lupus</i>	L mand, C1, P1-4, M1-2	7.45
UBSS	Sun Hole	7 Ft	2	none		<i>C. lupus</i>	R lower P4	8.08
SMES bay 4, iv 266 drw	Black Rock Quarry		3	D2604	Pres by T Roberts, 1882	<i>C. lupus</i>	L mand, P2-4, M1-2	8.00

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	p4W
NHM 43 C	Kents Cavern	Cave earth, 4th level	3	M849	Pres by Lord Haldon, July 1883	<i>C. lupus</i>	L ramus frag, P2-P4	7.82
TM Gallery	Kents Cavern	Unknown	3	P30687	MacEnery?	<i>C. lupus</i>	L ramus, I1-3, C1, P2-4, M1-2	8.20
TM G/B1/217	Kents Cavern		3	P12677		<i>C. lupus</i>	L lower P4	7.71
NHM 43 E drw 24	Oreston Cave	Pres type 2	3	46981 1989 G 140 1.1	Purch 1876	<i>C. lupus</i>	2). L ramus, C1, P1-4, M1-2	7.84
WH	Oreston Cave		3	(FS04323)		<i>C. lupus</i>	L mand ramus, P2-4, M1-2	8.82
WH	Oreston Cave		3	1989 G 140.1.4	TC	<i>C. lupus</i>	L mand frag, P4, M1	8.65
BC	Oreston Cave		3	Cd2930	J. Cottle clln 1830	<i>C. lupus</i>	L lower P4	8.90
BC	Oreston Cave		3	Cd2945	J. Cottle clln 1830	<i>C. lupus</i>	L lower P4	8.11

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	p4W
BC, lower drw	Oreston Cave		3	Cd3257	J. Cottle clln 1830	<i>C. lupus</i>	L mand frag, P4	7.76
NMW From gallery	Paviland	none	3	24.94/46		<i>C. lupus</i>	R mand ramus, P1, P3-4, M1	7.97
SM Blue boxes	Paviland		3	SM.1836.6.303		<i>C. lupus</i>	R mand ramus, P2-4, M1	8.59
SM Blue boxes	Paviland		3	SM.1836.6.307	Excav 1823	<i>C. lupus</i>	R ant mand frag, P1-4	8.77
SM Blue boxes	Paviland		3	SM.1836.6.306		<i>C. lupus</i>	R mand ramus, P2-4	8.89
MM R4 Cole D 1	Pin Hole	PH (F)	3	LL.1995		<i>C. lupus</i>	L mand ramus, P1-4, M1-2	8.07
MM Gallery	Pin Hole		3	LL11898 TTNCM		<i>C. lupus</i>	L mand, I2-3, C1, post P2, P3-4, M1-3	7.34
SHC D27/3	Sandford Hill	Cave or fissure deps	3	44/1995/61/3	Rev'd. D. Williams & Beard clln	<i>C. lupus</i>	L mand ramus, P4, M1-2	8.24

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	p4W
NHM 45D drw 13	Banwell Bone Cave		5a	M404d	Egerton clln, 1882	<i>C. lupus</i>	R mand ramus, C1, P2-M2.	8.56
NHM 45D drw 13	Banwell Bone Cave		5a	M223	Enniskillen clln	<i>C. lupus</i>	R mand ramus, P3-4, M1-2	8.05
NHM 45D drw 13	Banwell Bone Cave		5a	44642	Pres Benj Bright esq, 1873	<i>C. lupus</i>	R mand frag, M1, P4.	8.85
NHM Andy's office	Banwell Bone Cave	Entrance to Baker's Pit extension, 1950's	5a	M84868	Percy Baker clln	<i>C. lupus</i>	R mand, P1-4, M1-2	8.84
UBSS	Banwell bone Cave		5a	M15-A		<i>C. lupus</i>	R lower P4 in ramus frag	8.55
SHC D19/4	Banwell Bone Cave	Cave dep	5a	TTNCM 40/1995/61	William Beard clln	<i>C. lupus</i>	R mand ramus, post P3, P4, M1-3	8.98
SHC D19/4	Banwell Bone Cave		5a	TTNCM 40/1995/58	William Beard clln	<i>C. lupus</i>	R mand ramus, P1-4, M1-2	8.63
SHC D19/4	Banwell Bone Cave		5a	TTNCM 40/1995/60	William Beard clln	<i>C. lupus</i>	R mand ramus, P4, M1-3	9.47

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	p4W
SHC D19/3	Banwell Bone Cave		5a	TTNCM 40/1995/55	William Beard clln	<i>C. lupus</i>	R mand ramus, P4, M1	7.44
SHC D19/3	Banwell Bone Cave		5a	TTNCM 40/1995/63	William Beard clln	<i>C. lupus</i>	R mand ramus, C1, P4, M1	8.84
SHC D19/3	Banwell Bone Cave		5a	TTNCM 40/1995/54	William Beard clln	<i>C. lupus</i>	R mand ramus, C1, P1-4, M1	9.01
SHC D19/2	Banwell Bone Cave	Cave dep	5a	TTNCM 40/1995/50	William Beard clln	<i>C. lupus</i>	R mand ramus, P1-4	8.48
SHC D19/2	Banwell Bone Cave		5a	TTNCM 40/1995/52	William Beard clln	<i>C. lupus</i>	R mand ramus, P2-4	8.90
SHC D19/2	Banwell Bone Cave		5a	TTNCM 40/1995/49	William Beard clln	<i>C. lupus</i>	R mand ramus, P2-4	9.54
SHC D19/2	Banwell Bone Cave		5a	TTNCM 40/1995/31/ 7	William Beard clln	<i>C. lupus</i>	R lower P4	9.97
SHC D19/2	Banwell Bone Cave		5a	TTNCM 40/1995/31/ 5	William Beard clln	<i>C. lupus</i>	R lower P4	7.63

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	p4W
SHC D19/2	Banwell Bone Cave		5a	TTNCM 40/1995/31/ 10	William Beard cIn	<i>C. lupus</i>	R lower P4	8.92
SHC D19/2	Banwell Bone Cave		5a	TTNCM 40/1995/31/ 11	William Beard cIn	<i>C. lupus</i>	R lower P4	8.33
SHC D19/2	Banwell Bone Cave		5a	TTNCM 40/1995/31/ 29	William Beard cIn	<i>C. lupus</i>	R lower P4	7.25
SHC D19/2	Banwell Bone Cave		5a	TTNCM 40/1995/31/ 22	William Beard cIn	<i>C. lupus</i>	R lower P4	8.92
SHC D19/2	Banwell Bone Cave		5a	TTNCM 40/1995/31/ 12	William Beard cIn	<i>C. lupus</i>	R lower P4	8.08
SHC D68/8	Banwell Bone Cave		5a	185/2002/56	Clld by APC, DCS and RJ 07/2001.	<i>C. lupus</i>	R lower P4 in mand frag	8.17
SHC D68/8	Banwell Bone Cave		5a	185/2002/51	Clld by APC, DCS and RJ 07/2001.	? <i>C. lupus</i>	R lower P...? In mand frag	9.72
SHC Display	Banwell Bone Cave		5a	45/1995/634		<i>C. lupus</i>	R mand, C1, P2-4, M1.	8.90

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	p4W
SM From fox & wolf box in display case 9	Bosco's Den		5a	SM. 1858.1.57		<i>C. lupus</i>	L mand ramus, P2, P4 (P3 alv fits above).	7.98
SM From fox & wolf box in display case 9	Bosco's Den		5a	SM. 1858.1.20 1989 G 141 88 (FS 04700)		<i>C. lupus</i>	L mand ramus, C1, P1-4, ant M1	8.89
WH NHM 53A, 2nd drw from bottom	Steetley Quarry Stump Cross Cave		5a		Stump cross cave 1980 III c	<i>C. lupus</i>	R mand ramus, P3-4, M1	8.37
			5a	M43234		<i>C. lupus</i>	R ramus, P1, frag P2, frag P3, P4, M1-2	9.03
MM R5 ColK D15	Windy Knoll		5a	P2496a-j		<i>C. lupus</i>	L lower P4 in mand frag.	8.55
UMZC	Wretton		5a	Wr1a		<i>C. lupus</i>	R mand C1, P1-4, M1-2, M3 alv	9.03
SM On display	Bacon Hole		5c	SM. 850:2.166		<i>C. lupus</i>	L mand, C1, P1-4, M1-2 M3 lv	7.92
TM G/B6/B109	Joint Mitnor Cave		5e	P35045	1940	<i>C. lupus</i>	R lower P4	7.49

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	p4W
TM G/B6/B112	Joint Mitnor Cave		5e	P35082	1940	<i>C. lupus</i>	R ramus, P1-4, M1-2	7.02
TM G/B6/B112	Joint Mitnor Cave		5e	P35083	1940	<i>C. lupus</i>	R lower P4 in mand frag	8.34
TM G/B6/B112	Joint Mitnor Cave		5e	P35085	1940	<i>C. lupus</i>	R ramus frag, P4, M1-2	8.52
BGS 483956	Clevedon Cave		6	16350		<i>C. lupus</i>	R mand, P2-4, M1-3	7.56
BC	Clevedon Cave		6	Ce15102	S.H. Reynolds	<i>C. lupus</i>	R lower P4	7.79
BC	Clevedon Cave		6	Ce12520	B. N. S. Soc	<i>C. lupus</i>	R mand ramus, C1, P2-4, M1	8.95
BC	Clevedon Cave		6	Ce15055-15070	B. N. S. Soc	<i>C. lupus</i>	R lower P4	8.58
BC	Clevedon Cave		6	Ce15055-15070	B. N. S. Soc	<i>C. lupus</i>	R lower P4	8.36

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	p4W
BC	Clevedon Cave		6	Ce15055-15070	B. N. S. Soc	<i>C. lupus</i>	R lower P4	7.78
BC	Clevedon Cave		6	Ce15055-15070	B. N. S. Soc	<i>C. lupus</i>	R lower P4	7.81
SHC D46/1	Bleadon Cave	Fissure in Bleadon quarry, Bleadon, Soms, 1872.	7	TTNCM 41/1995/12	W. Beard clln Pres'd by Rev.	<i>C. lupus</i>	R mand, P1-4, M1-2	8.77
SHC D65/3	Bleadon Cave		7	TTNCM 41/1995/300	Wadham Pigott Williams, 1878	<i>C. lupus</i>	R mand, P4, M1-2	7.90
NHM 48 C	Crayford		7	M5047b	Spurrell clln	<i>C. lupus</i>	L mand, P4, M1, fract M2	7.28
SHC D40/2	Hutton Cave		7	TTNCM 42/1995/51	Rev D Williams and W Beard clln	<i>C. lupus</i>	L lower P4	9.42
SHC D40/2	Hutton Cave		7	TTNCM 42/1995/44	Rev D Williams and W Beard clln	<i>C. lupus</i>	R and L mand assoc - L mand, P2, P4, M1-2	7.18
BGS 483847	Ilford		7	204	Dr RP Cotton clln, pres by Cotton, 1878	<i>C. lupus</i>	R mand ramus frag, C1, P2- 4, M1-2	8.03

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	p4W
NMW Box 2.20	Pontnewydd Cave	LBC	7	94.38H/3 F4974		<i>C. lupus</i>	R lower P4	7.46
VER 108	Paglicci	Str VI	2	V5767		<i>C. lupus</i>	L mand, C1, P4, M1	8.53
StM 70	Hohle Fels		2.4	none		<i>C. lupus</i>	L mand, P3-4, roots M1	7.84
NHM 36 E d 36/E/19	Perick	none	2.4	28571	see notes	<i>C. lupus</i>	L mand, I2-3, P1-4, M1-3	8.52
NHM 36 E d 36/E/19	Perick	none	2.4	M436	Enniskillen cln 1882	<i>C. lupus</i>	L mand ramus, P2, P4, M1-2	7.55
NHM 36 E d 36/E/19	Perick Villa Seckendorf, Bad Canstatt,	Stuttgart Travertine	2.4	28573 31300 (SE.12.2.57/ 0.F)	Purchd 1853	<i>C. lupus</i>	L ramus, P3-4, M1-2	7.36
StM 80	Villa Seckendorf, Bad Canstatt,	Stuttgart Travertine	2.8	37300 (12.2.57.o.f)		<i>C. lupus</i>	L mand frag, P4, M1	7.62
StM 80	Germany	Stuttgart Travertine	2.8	37300 (12.2.57.o.f)	in Ziegler, 1996 fig'rd	<i>C. lupus</i>	L + R mand ramii. L mand ramus I3, C1, P1-4	7.87

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	p4W
StM 80	Villa Seckendorf, Bad Canstatt, Germany	Stuttgart Travertine	2.8	31302 (21.2.57/10)		<i>C. lupus</i>	L mand ramus, C1, P2-4, M1	7.9
StM 80	Villa Seckendorf, Bad Canstatt, Germany	Stuttgart Travertine	2.8	31397 (SE.26.2.57/ 1)		<i>C. lupus</i>	L mand ramus, P1-4, M1	7.59
StM 80	Villa Seckendorf, Bad Canstatt, Germany	Stuttgart Travertine	2.8	31301 (21.2.57/10)		<i>C. lupus</i>	L mand ramus, P1-4, M1, alvs i1-3, C1.	7.7
SIW 3 d 9	TBH		2.8	1968/10851 (Taub 12243)		<i>C. lupus</i>	R mand ramus	7.76
NHM 52 B	Grays Thurrock	Project A, Q1, area TP4, Unit 4c-	9	23140	purch'd 1849	<i>C. mosbachensis</i>	L ramus portion, P2-4, M1 root	8.27
NHM 25 E d 14	Boxgrove	surface, Field no (2+3) Project A, Q2, area 17, unit 4c	13	F2+3/1		<i>C. mosbachensis</i>	R mand ramus, I3, C1, P1- 4, M1-3	6.27
NHM 25 F d 25	Boxgrove	surface, field no F9 (part)	13	F9/2		<i>C. mosbachensis</i>	R mand, C1, P2-4, M1	5.82
NHM 44D 3rd drw from top	Westbury	Bed 3	13	M33940	M Bishop 1974	<i>C. mosbachensis</i>	L mand ramus, P2-4, M1-3	6.98

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	p4W
NHM 44D 3rd drw from top	Westbury	Bed 3	13	M33937	M Bishop 1974	<i>C. mosbachensis</i>	Left mand ramus, P4, M1-2	6.50
NHM 44 E drw 10	Westbury	Bed 3	13	47519	Bishop 1973	<i>C. mosbachensis</i>	L lower P3	5.12
NHM 44 F drw 1	Westbury	Calc memb. Site W1A	13	none	NHM excav 1976	<i>C. mosbachensis</i>	L lower P4	6.06
NHM 44 F drw 1	Westbury	Calc memb site W1B	13	none	NHM excav 1976	<i>C. mosbachensis</i>	L lower P4	5.75
NHM 44 G drw 5	Westbury	Unstrat.	13	none		<i>C. mosbachensis</i>	L lower P4	5.96
UBSS	Westbury	none Forest bed - clay in depression, N of old tower.	13	none		<i>C. mosbachensis</i>	L lower P4	6.43
NHM 55 E	Sidestrand		13	M6169	A.C. Savin 1897	<i>C. mosbachensis</i>	R mandible ramus P2-M1	7.05
VER 00441	Monte Zoppega		3.4	V10919		<i>C. mosbachensis</i>	R mand ramus, P1-4, M1	5.44

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	p4W
SIW 1 d 4	Untermassfeld, Germany		4	1980/15308 (Mei 14820)		<i>C. mosbachensis</i>	R mand, C1, P1-4, M1-3	6.26
SIW 1 d 4	Untermassfeld, Germany		4	1980/15919 (Mei 15430)		<i>C. mosbachensis</i>	R mand ramus, C1, P3-4, M1	5.74
SIW 1 d 4	Untermassfeld, Germany		4	1984/20111 (Mei 19631)		<i>C. mosbachensis</i>	R mand ramus, C1, P2-4, ant M1	7.16
SIW 1 d 4	Untermassfeld, Germany		4	1984/20112 (Mei 19632)		<i>C. mosbachensis</i>	R mand ramus, P3-4, M1-3	6.33
SIW 1 d 4	Untermassfeld, Germany		4	1980/16969 (Mei 16460)		<i>C. mosbachensis</i>	R mand ramus, C1, P2-4, M1-2	6.62
SIW 1 d 4	Untermassfeld, Germany		4	1986/21085 (Mei 20604)		<i>C. mosbachensis</i>	R mand ramus, P2-4, M1-2	6.32
SIW 1 d 4	Untermassfeld, Germany		4	1980/17151 (Mei 16672)		<i>C. mosbachensis</i>	R mand ramus, C1, P1-4, M1-2	5.76
SIW 1 d 4	Untermassfeld, Germany		4	1980/16553 (Mei 16074)		<i>C. mosbachensis</i>	R mand, C1, P2-4, M1-2	6.24

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	p4W
SIW 1 d 4	Untermassfeld, Germany		4	1982/17995 (Mei 17515)		<i>C. mosbachensis</i>	R mand, P1-4, M1-3	6.46
SIW 1 d 4	Untermassfeld, Germany		4	1982/17970 (mei 17490)		<i>C. mosbachensis</i>	R mand frag, P3-4	6.03
SIW 1 d 4	Untermassfeld, Germany		4	1980/16554 (mei 16075)		<i>C. mosbachensis</i>	R mand frag, P3-4	6.19
SIW 1 d 5	Untermassfeld, Germany		4	1980/15357 (mei 14869)		<i>C. mosbachensis</i>	R mand, I3, C1, P1, post P2, P3-4, M1-2	6.07
FLO 0/02/013/01 (d1)	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF868		<i>C. arnensis</i>	R mand, I1-3, C1, P1-4, M1-3	6.11
FLO 0/02/013/03 (d3)	Il Tasso, Italy	Upper Valdarno	4.4	1249V		<i>C. arnensis</i>	R lower P4	5.78
FLO 0/02/013/04 (d4)	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF878		<i>C. arnensis</i>	With cranial frag, PAIR. R mand, P3-4, M1-3	5.81
FLO 0/02/013/04 (d4)	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF884		<i>C. arnensis</i>	R mand ramus frag, P4, M1-2	5.35

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	p4W
FLO 0/02/013/04 (d4)	Il Tasso, Italy	Upper Valdarno	4.4	IGF887		<i>C. arnensis</i>	In box with max. R mand, P1-4, M1-3	5.54
FLO Strozzi Sala	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF11800		<i>C. arnensis</i>	R mand ramus, P1-4, M1-2, M3 alv	5.87
FLO 0/02/013/05	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF12967		<i>C. arnensis</i>	R mand ramus, P1-4, M1-2	5.95
FLO 0/02/013/05	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF877		<i>C. arnensis</i>	With upper palate, L+R mands. R mand ramus, P2-4, M1-3	6.14
FLO Gallery	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF869		<i>C. arnensis</i>	With cranium, L+R mands. R mand, C1, P1-4, M1-3	5.82
FLO Gallery	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF867		<i>C. arnensis</i>	With cranium, L+R mand. R mand, P4, M1-2	6.06
FLO 0/02/013/01 (d1)	Upper Valdarno, Italy	Upper Valdarno (Valdarno superiore)	4.4	IGF888		<i>C. etruscus</i>	L and R mands connected by 2 metal posts. L mand ramus, P2-4, M1-2	7.34
FLO 0/02/013/01 (d1)	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF866		<i>C. etruscus</i>	L mand ramus, P2-4, M1-3	6.98

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	p4W
FLO 0/02/013/01 (d1)	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF881		<i>C. etruscus</i>	L mand, P4, M1, M3.	7.08
FLO 0/02/013/01 (d1)	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF886		<i>C. etruscus</i>	L mand ramus, P3 frag, P4, M1, M2 frag	6.68
FLO 0/02/013/01 (d1)	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF872		<i>Canis majori</i>	L mand, C1, P2-4, M1-2, M3 alv	6.33
FLO 0/02/013/02 (d2)	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF863		<i>C. majori (etruscus)</i>	L and mand ramus, P2-4	7.63
FLO 0/02/013/02 (d2)	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF11781		<i>C. etruscus</i>	L mand, I3, C1, P1-4, M1- 2. Broken in half at M1.	7.23
FLO Strozzi Sala	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF12469		<i>C. etruscus</i>	L mand, P2-4, M1-2, M3 alv	7.36
FLO Strozzi Sala	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF11791		<i>C. etruscus</i>	L mand, I3, C1, P1-4, 1-3	6.72
FLO 0/02/013/05	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF864		<i>C. majori (etruscus)</i>	L mand ramus, P3-4, M1- 2, M3 alv	6.97

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	p4W
FLO 0/02/013/03 (d3)	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF11783		<i>C. etruscus</i>	L lower P4	6.5
NHM 35 L d 23	Val di Magna, Olivola, Italy	Olivola	4.4	M5680	Forsyth Major, Oct 1895	<i>C. etruscus</i>	L ramus, P4, M1-2	6.22
FLO 0/02/013/07 (d7)	Val di Magna, Italy	Olivola	4.4	IGF4474		<i>C. etruscus</i>	L mand ramus, P1, post P3, P4, M1-2, alv M3	6.71
FLO 0/02/013/07 (d7)	Val di Magna, Italy	Olivola	4.4	IGF4473		<i>C. etruscus</i>	L mand ramus, P2? P4, M1, M2	6.83
FLO 0/02/013/07 (d7)	Val di Magna, Italy	Olivola	4.4	IGF4413		<i>C. etruscus</i>	L mand, I2-3, C1, P1, P3-4, M1, def M2??	6.58

7. m2L

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/sex	Species	Material	m2L
NHM 1	France		1	1843.12.29.7	F	<i>C. lupus</i>	L mand, I1-3, C1, P2-4, M1-2	11.88
NHM 2	Pyrenees	Parzudacki clln	1	44.1.18.1	F	<i>C. lupus</i>	L mand, I1-3, C1, P1-4, M1-3	11.04
NHM 5	Riocalado, Burgos, Spain		1	11.10.5.2	F	<i>C. lupus</i>	L mand, I1-3, C1, P1-4, M1-3	11.43
NHM 8	Kocane, Macedonia		1	47.1121.a	F	<i>C. lupus</i>	L mand, I1-3, C1, P1-4, M1-2	11.92
NRM	Korvijaure, 7 miles N Kiruna	15.4.1959	1	A58 0112	F	<i>C. lupus</i>	L+R mand + cranium. R mand I1-3, C1, P1, P2 loose, P3-4, M1-3	12.16
NRM	Kiruna	14.4.1908	1	A581198	F	<i>C. lupus</i>	L+R mand + cranium extreme tooth wear down to bone. L teeth I1-3, C1,	11.72
NRM	S Finnskoga, Skrackarberget	1985.07.29	1	A865126	F	<i>C. lupus</i>	L+R mand+cranium. R mand, I1-3, P1-4, M1-3	12.02
NRM	Vastra Amtervik, Hensgard	1993.02.24	1	A935024	F	<i>C. lupus</i>	L+R mand+cranium. L mand, I1-3, C1, P2-4, M1-2	11.45

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/sex	Species	Material	m2L
NRM	Nas-snoan, v71/jvg	1993.08.18	1	A935178	F	<i>C. lupus</i>	L+R mand+cranium. L mand I1-3, C1, P1-4, M1-3	12.18
NRM	Nyskoga, Kringsberg, Bontjarn	1994.01.19	1	A945045	F	<i>C. lupus</i>	L+R mand+cranium. R mand, I1-3, P1-4, M1-3	12.61
NRM	Vastmandland, Grythyttan	1999.12.17	1	20005111	F	<i>C. lupus</i>	L+R mand+cranium. R mand I2-3, C1, P2-4, M1-3	12.98
NRM	Narke, Degerfors, Atorp	2001.12.26	1	20025005	F	<i>C. lupus</i>	L+R mand+cranium. L mand I1-3, P1-4, M1-3	12.39
NRM	Atorp 3.5 km NW, Degerfors, Varmland	2002.03.05	1	20035026	F	<i>C. lupus</i>	L+R mand+cranium. L mand I1-3, C1, P1-4, M1-3	11.67
NRM	Odlingen, Sillerud, Arjang, Varmland	2004.02.07	1	20045040	F	<i>C. lupus</i>	L+R mand+cranium. R mand I1-3, C1, P1-4, M1-3	11.88
NRM	Ovre Hurr, Tocksfors, Varmland	2006.05.30	1	20065236	F	<i>C. lupus</i>	L+R mand+cranium. L mand, I1-2, C1, P1-4, M1-3	11.29
NRM	Rickebo, Hallbo, Bollnas, Halsingland	2006.03.14	1	20065047	F	<i>C. lupus</i>	L+R mand+cranium. R mand I1-3, C1, P1-4, M1-3	12.08

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/sex	Species	Material	m2L
NRM	Ronnas, Ostra, Leksand, Dalarna	2007.10.09	1	20075381	F	<i>C. lupus</i>	L+R mand+cranium. R mand I1-3, C1, P1-4, M1-3	13.13
NRM	Jarbo, Backefors, Dalsland	2007.?	1	20075314	F	<i>C. lupus</i>	L+R mand+cranium. L mand I1-3, C1, P1-4, M1-3	11.18
NRM	Varmland, Nordmark, Algsjion 2 km S	2009.01.25	1	20095063	F	<i>C. lupus</i>	L+R mand+cranium. R mand I1-3, C1, P1 alv, P1-4, M1-3	12.32
NRM	Halsingland, Bollnas, Lottefors; Rv 83	2007.08.19	1	20075312	F	<i>C. lupus</i>	L+R mand + cranium. R mand I1-3, C1, P1-4, M1-3	11.4
NRM	Vastmanland, Hallefors, Ornviken,	2010.01.02	1	20105028	F	<i>C. lupus</i>	L+R mand+cranium. L mand I1-3, C1, P1-4, M1-3	10.77
NHM 4	Riocalado, Burgos, Spain	On note '2 carnassials in tooth case'	1	11.10.5.1	M	<i>C. lupus</i>	L mand, I1-3, C1, P1-4, M1-3	11.65
NHM 6	Seville, Spain		1	95.3.3.6	M	<i>C. lupus</i>	R mand, I1-3, C1, P2-4, M1-3. No P1 or alv	11.59
NHM 9	Norbotten, N Sweden (in arctic circle).		1	28.5.4.1	M	<i>C. lupus</i>	L mand, I1-3, C1, P1-4, M1-3	11.66

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/sex	Species	Material	m2L
NHM 11	Moscow district, Russia		1	82.9.18.2	M	<i>C. lupus</i>	L mand, I1-3, C1 fract, P1-4, M1-3	12.83
NHM Ost	Abrantos, S of Tagus, Portugal		1	1937.2.10.2	M	<i>C. lupus</i>	R mand, I2, C1, P4, M1-3	11.45
NHM Ost	Bosnia, Yugoslavia		1	1935.8.5.1	M	<i>C. lupus</i>	R mand, I1-3, C1, P1-4, M1-2	11.94
NRM	Ljusdal, Ramsjo (s:n)	12.2.1926	1	A580255	M	<i>C. lupus</i>	L+R mand + fract cranium. L mand, I1-3, C1, P1-4, M1-3	11.39
NRM	Jokkmokk	11.02.1852	1	A583532	M	<i>C. lupus</i>	L+R mand + cranium. R mand I1-3, C1, P1-4, M1-3	12.07
NRM	Orebro	1852	1	A583547	M	<i>C. lupus</i>	L+R mand+cranium. R mand I1-3, C1, P1-4, M1-3	12.05
NRM	Sweden	1907	1	A589147	M	<i>C. lupus</i>	L+R mand + cranium. R teeth I1-3, C1, P1-4, M1-2	11.81
NRM	Sweden	1908	1	A589199	M	<i>C. lupus</i>	L+R mand+cranium. L mand I1-3, C1, P1-4, M1-3	11.56

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/sex	Species	Material	m2L
NRM	Luktjomtjuolta, Vilhelmina	15.1.1937	1	A590009	M	<i>C. lupus</i>	L+R mand+cranium. L mand I1-3, C1, P2-4, M1-2	10.31
NRM	Lina alv station	25.12.1977	1	A775097	M	<i>C. lupus</i>	L+R mand+cranium. L mand I1, I3, C1, P1-4, M1-3	13.04
NRM	Atran, Ogardet	1984.09.12	1	A845131	M	<i>C. lupus</i>	L+R mand+cranium. R mand I1-3, C1, P1-4, M1-3	11.81
NRM	Hede, 3 mil NV, Norrstadjan	1989.04.17	1	A895039	M	<i>C. lupus</i>	L+R mand+cranium. R mand I1-3, P1-4, M1-3	12.45
NRM	Kiruna-Gallivare, Gaddmyr, Jvg	1992.08.24	1	A925106	M	<i>C. lupus</i>	L+R mand+cranium. R mand, I1-3, P2-4, M1-3	12.53
NRM	Boras	1996.01.04	1	A965002	M	<i>C. lupus</i>	L+R mand+cranium. L teeth I1-3, C1, P1-4, M1-2	13.13
NRM	Jarna, Flaten, Dalarna	1999.2.6	1	A995016	M	<i>C. lupus</i>	L+R mand+cranium. R mand, I1-2, P1-4, M1-3	13.59
NRM	Varmland, Eksharad, Halgan; Kolarkojan	1999.06.04	1	995230	M	<i>C. lupus</i>	L+R mand+cranium. R mand, I3, C1, P1-4, M1-3	12.86

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/sex	Species	Material	m2L
NRM	Jumkil kyrka, Uppsala	2000.11.19	1	20005365	M	<i>C. lupus</i>	L+R mand+cranium. L mand I1-3, C1, P1-4, M1-3	12.58
NRM	Uddalen, Ed, Dalsland	2003.05.12	1	20035114	M	<i>C. lupus</i>	L+R mand+cranium. R mand I1-3, C1. extra P1?	12.33
NRM	Ostermoren, Smedjebacken, Dalarna	2004.12.09	1	20045305	M	<i>C. lupus</i>	P1, P2-3 broken, P4, M1-3 L+R mand+cranium. R mand I1-3, C1, P1-4, M1-2, M3 alv	11.36
NRM	Dala Floda, Borlange, Dalarna	2003.03.09	1	20035024	M	<i>C. lupus</i>	IV 225 (road?), Osmo, L+R mand+cranium. R mand I1-3, C1, P1 alv, P2-4, M1-3	11.79
NRM	Sodermanland Lanasberget, Grundsjo,	2005.11.26	1	20065027	M	<i>C. lupus</i>	L+broken R mand+cranium. L mand I1-2, C1, P1-4, M1- 2, M3 alv	12.89
NRM	Ljungaverk,	2005.09.02	1	20055287	M	<i>C. lupus</i>	L+R mand+cranium. L mand I1-3, C1, P1-4, M1-3	11.47
NRM	Mullhyttan, Orebro, Narke	2006.09.15	1	20065414	M	<i>C. lupus</i>	L+R mand+cranium. R mand I1-3, C1, P1-4, M1-2, M3 alv	12.03
NRM	Avik, Laxa, Narke	2007.04.27	1	20075186	M	<i>C. lupus</i>	L+R mand + cranium. L mand I1-3, C1, P1 alv, P2-4, M1-2, M3 alv	12.42

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/sex	Species	Material	m2L
NRM	Malung-Appelbo, Dalarna, Torsby, Ostmark; Sojensoasen Stormosse, Piro, Bjerneborg, Kristinehamn,	2007.12	1	20085027	M	<i>C. lupus</i>	L+R mand +cranium. L mand, I1-3, C1, P1-4, M1-3	12.82
NRM		2007.09.15	1	20075373	M	<i>C. lupus</i>	L+R mand+cranium. R mand I1-3, C1, P1-4, M1-3	12.86
NRM		2007.12.27	1	20085036	M	<i>C. lupus</i>	L+R mand+cranium. L mand I1-3, C1, P1-4, M1-3	12.44
SMES bay 4, iv 266 drw	Black Rock quarries, Tenby		3	D2610	Pres by T Roberts, 1882	<i>C. lupus</i>	Back portion of R mand, M1-2	10.89
SMES bay 4, iv 266 drw	Black Rock quarries, Tenby		3	D2605	Pres by T Roberts, 1882	<i>C. lupus</i>	R mand, I2-3, C1, P2, P4, M1-2	11.3
NHM 43 C	Kents Cavern		3	15636	McEnery clln	<i>C. lupus</i>	R ramus mand, C1, P1-4, M1-2	12.03
TM G/B1/B209	Kents Cavern	Cave Earth	3	P12405	W. Pengelly	<i>C. lupus</i>	R mand frag, M1 post, M2	12.36
NHM 43 E drw 24	Oreston Cave	Pres type 2	3	46981	Purch 1876	<i>C. lupus</i>	2). L ramus, C1, P1-4, M1-2	11.88

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/sex	Species	Material	m2L
WH	Oreston Cave		3	1989 G 140 1.1 (FS04323)		<i>C. lupus</i>	L mand ramus, P2-4, M1-2	11.56
WH	Oreston Cave		3	1989 G 140 1.6	TC	<i>C. lupus</i>	L mand ramus, M2	11.45
WH	Oreston Cave		3	1989 G 140 1.8	TC	<i>C. lupus</i>	L mand frag, M1-2	12.55
BC	Oreston Cave		3	Cd2937	J. Cottle cIn 1830	<i>C. lupus</i>	L lower M2	11.45
BC	Oreston Cave		3	Cd2943	J. Cottle cIn 1830	<i>C. lupus</i>	L lower M2	10.25
BC, lower drw	Oreston Cave		3	Cd3256	J. Cottle cIn 1830	<i>C. lupus</i>	L mand frag, M2	11.24
SM Blue boxes	Paviland		3	SM.1836.6.1 45.1		<i>C. lupus</i>	L mand P1-4, M1-2	11.15
SM Blue boxes	Paviland		3	SM.1836.6.3 05.1		<i>C. lupus</i>	L mand ramus, P2-4, M1-2	11.22

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/sex	Species	Material	m2L
SM Blue boxes	Paviland		3	SM.1836.6.3 05.2		<i>C. lupus</i>	L mand ramus, P3, M1-2	11.78
MM R4 ColE D 1	Pin Hole	PH (F)	3	LL.1995		<i>C. lupus</i>	L mand ramus, P1-4, M1-2	11.24
MM Gallery	Pin Hole		3	LL11898 TTNCM		<i>C. lupus</i>	L mand, I2-3, C1, post P2, P3-4, M1-3	11.93
SHC D27/3	Sandford Hill	Cave or fissure deps	3	44/1995/61/ 3	Rev'd. D. Williams & Beard clln	<i>C. lupus</i>	L mand ramus, P4, M1-2	12.19
NHM 45D drw 13	Banwell Bone Cave		5a	M404d	Egerton clln, 1882	<i>C. lupus</i>	R mand ramus, C1, P2- M2.	11.8
NHM 45D drw 13	Banwell Bone Cave		5a	M223	Enniskillen clln	<i>C. lupus</i>	R mand ramus, P3-4, M1-2	10.21
NHM Andy's office	Banwell Bone Cave	Entrance to Baker's Pit extension, 1950's	5a	M84868	Percy Baker clln	<i>C. lupus</i>	R mand, P1-4, M1-2	11.85
SHC D19/4	Banwell Bone Cave	Cave dep	5a	TTNCM 40/1995/61	William Beard clln	<i>C. lupus</i>	R mand ramus, post P3, P4, M1-3	11.11

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/sex	Species	Material	m2L
SHC D19/4	Banwell Bone Cave		5a	TTNCM 40/1995/58	William Beard clln	<i>C. lupus</i>	R mand ramus, P1-4, M1-2	10.62
SHC D19/4	Banwell Bone Cave		5a	TTNCM 40/1995/60	William Beard clln	<i>C. lupus</i>	R mand ramus, P4, M1-3	11.46
SHC D19/3	Banwell Bone Cave	Cave dep	5a	TTNCM 40/1995/51	William Beard clln	<i>C. lupus</i>	R post mand frag, M2	11.7
SHC D19/3	Banwell Bone Cave		5a	TTNCM 40/1995/59	William Beard clln	<i>C. lupus</i>	R post mand frag, M1-3	11.12
SHC D19/3	Banwell Bone Cave		5a	TTNCM 40/1995/57	William Beard clln	<i>C. lupus</i>	R mand ramus, M1-3	11.62
SHC D19/2	Banwell Bone Cave		5a	TTNCM 40/1995/53	William Beard clln	<i>C. lupus</i>	R mand frag, M1-2	12.47
SHC D19/2	Banwell Bone Cave		5a	TTNCM 40/1995/31/ 35	William Beard clln	<i>C. lupus</i>	R lower M2	10.16
SHC Display	Banwell Bone Cave		5a	45/1995/634		<i>C. lupus</i>	R mand, C1, P2-4, M1.	12.36

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/sex	Species	Material	m2L
MM R5 colK D14	Windy Knoll		5a	P2496		<i>C. lupus</i>	L mand frag, M1-3	10.66
MM R5 ColK D15	Windy Knoll		5a	P2496a-j	Dawkins	<i>C. lupus</i>	L mand ramus, C1, M1-2	12.77
NHM 53A, 2nd drw from bottom	Stump Cross Cave		5a	M43234	Stump cross cave 1980 III c	<i>C. lupus</i>	R ramus, P1, frag P2, frag P3, P4, M1-2	11.55
UMZC	Wretton, Norfolk		5a	Wr4		<i>C. lupus</i>	R mand frag, M2	11.7
UMZC	Wretton, Norfolk		5a	Wr1a		<i>C. lupus</i>	R mand C1, P1-4, M1-2, M3 alv	13.17
SM On display	Bacon Hole		5c	SM. 850:2.166		<i>C. lupus</i>	L mand, C1, P1-4, M1-2 M3 lv	11.4
NHM 43 B drw 19	Joint Mitnor Cave		5e	none	JM U 1960	<i>C. lupus</i>	R mand frag, M2	12.87
TM G/B6/B109	Joint Mitnor Cave		5e	P35050		<i>C. lupus</i>	R lower M2	11.27

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/sex	Species	Material	m2L
TM G/B6/B112	Joint Mitnor Cave		5e	P35082	1940	<i>C. lupus</i>	R ramus, P1-4, M1-2	11.1
TM G/B6/B112	Joint Mitnor Cave		5e	P35085	1940	<i>C. lupus</i>	R ramus frag, P4, M1-2	10.72
BGS 483956	Clevedon Cave		6	16350		<i>C. lupus</i>	R mand, P2-4, M1-3	11.9
BC	Clevedon Cave		6	Ce15105	S.H. Reynolds	<i>C. lupus</i>	R lower M2	12.15
BC	Clevedon Cave		6	Ce15055- 15070	B. N. S. Soc	<i>C. lupus</i>	R lower M2	12.02
SHC D46/1	Bleadon Cave	Fissure in Bleadon quarry, Bleadon, Soms, 1872.	7	TTNCM 41/1995/12	W. Beard clln Pres'd by Rev.	<i>C. lupus</i>	R mand, P1-4, M1-2	9.23
SHC D65/3	Bleadon Cave		7	TTNCM 41/1995/300 1	Wadham Pigott Williams, 1878	<i>C. lupus</i>	R mand, P4, M1-2	11.76
BGS 483890	Crayford		7	5112b	Spurrell clln	<i>C. lupus</i>	R lower M2	10.27

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/sex	Species	Material	m2L
NHM 44 D drw 7	Hutton Cave	none	7	44739a	none	<i>C. lupus</i>	R+L mand frags. LC1, P4, M1-2	9.95
SHC D40/2	Hutton Cave		7	TTNCM 42/1995/44	Rev D Williams and W Beard clln	<i>C. lupus</i>	R and L mand assoc - L mand, P2, P4, M1-2	12.21
BGS 483847 BCM Touch of Bucks & fossils & ice	Ilford		7	204	Dr RP Cotton clln, pres by Cotton, 1878	<i>C. lupus</i>	R mand ramus frag, C1, P2- 4, M1-2	11.33
	Marsworth	Pitstone no 3 quarry	7	1980.544.L6/ 2		<i>C. lupus</i>	L lower mand frag, half M1, M2	10.33
BCM 6, 7, box 123	Marsworth	Horizon 3	7	E11/3		<i>C. lupus</i>	L lower M2	11.2
NMW Box 2.20	Pontnewydd Cave	LB	7	89.168H/3 D5369	Given by Major David William Wynn	<i>C. lupus</i>	L lower M2	12.4
NMW Box 2.20	Pontnewydd Cave	LB (d)	7	84.70H/2 D3765	Given by Major David William Wynn	<i>C. lupus</i>	L lower M2	11.32
SIW	Ranis		2.4	1988/22377 (Ranis 21896)		<i>C. lupus</i>	L mand ramus, M1-2	11.64

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/sex	Species	Material	m2L
NHM 36 E d 36/E/19	Perick Cave	none	2.4	28571	see notes	<i>C. lupus</i>	L mand, I2-3, P1-4, M1-3	11.84
NHM 36 E d 36/E/19	Perick Cave	none	2.4	M436	Enniskillen cIn 1882	<i>C. lupus</i>	L mand ramus, P2, P4, M1-2	11.1
NHM 36 E d 36/E/19	Perick Cave	none	2.4	28573	Purchd 1853	<i>C. lupus</i>	L ramus, P3-4, M1-2	12.39
NHM 36 E d 36/E/19	Perick Cave	Cavern	2.4	28572	none	<i>C. lupus</i>	L and R fused mands. L mand, M2	11.48
SIW 3 d 9	Taubach		2.8	1968/10851 (Taub 12245)		<i>C. lupus</i>	R lower M2	10.9
NHM APC Office	Cudmore Grove	Detrital shell bed in estuarine channel filling Project A, Q1, area TP4, Unit 4c-	9		John Claydon 1985-6	<i>C. mosbachensis</i>	L mand ramus frag, M2. With broken mand frags in box	11.65
NHM 25 E d 14	Boxgrove	surface, Field no (2+3)	13	F2+3/2		<i>C. mosbachensis</i>	L mand ramus, I3, C1, P1-4, M1-2, frag M3	9.74
NHM 25 F d 25	Boxgrove	Project A, Q2, area 17, unit 4c surface, field no F9 (part)	13	F9/3		<i>C. mosbachensis</i>	L mand, C1 frag, P3-4, M1-2	10.22

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/sex	Species	Material	m2L
NHM 44D 3rd drw from top	Westbury	Bed 3	13	M33940	M Bishop 1974	<i>C. mosbachensis</i>	L mand ramus, P2-4, M1-3	10.66
NHM 44D 3rd drw from top	Westbury	Bed 3	13	M33937	M Bishop 1974	<i>C. mosbachensis</i>	Left mand ramus, P4, M1-2	9.73
NHM 44 E 4th drw	Westbury	Calcareous memb Bed 3	13	47429	MJ Bishop	<i>C. mosbachensis</i>	L mand frag, M2	10.79
NHM 44 E drw 10	Westbury	Bed 3	13	47515	Bishop 1973	<i>C. mosbachensis</i>	R mand frag, M2	9.5
NHM 44 E drw 10	Westbury	Bed 3	13	47521	Bishop 1973	<i>C. mosbachensis</i>	L lower M2	9.8
NHM 44 F drw 1	Westbury	Calc memb W1A	13	none	NHM excav 1976	<i>C. mosbachensis</i>	L lower M2	9.35
NHM 44 G d 26	Westbury	W2, C-2m, 2m from cave wall Site W 5/W10. 19/10. Yellow breccia on d.	13	M47668	none	<i>C. mosbachensis</i>	L ramus frag, M2.	10.19
NHM 3 A d 8	Westbury	breccia on d.	13	none	none	<i>C. mosbachensis</i>	L lower M2	10.55

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/sex	Species	Material	m2L
UBSS	Westbury		13	M38.22 19		<i>C. mosbachensis</i>	L lower M2	11.35
NHM 47 B	West Runton	Upper freshwater bed	17	M17927	AC Savin clln, 1946. Cat 566. Cl'd 1908	<i>C. mosbachensis</i>	L lower M2	8.96
NHM 47 B	West Runton	Upper freshwater bed	17	M17928	AC Savin clln, 1946. Cat 1130. cl'd 1922	<i>C. mosbachensis</i>	L ramus fragment, M2 present	7.82
VER 00441,	Cengelle II		3.4	V10138		<i>C. mosbachensis</i>	R mand frag, M2, M3 alv	10.86
VER 00441	Monte Zoppega		3.4	V10918		<i>C. mosbachensis</i>	R mand ramus, M1-2	9.43
VER 00441	Viatelle, Soave, Italy		4	V10936		<i>C. mosbachensis</i>	L lower M2	10.27
VER 00441	Viatelle, Soave, Italy		4			<i>C. mosbachensis</i>	L lower M2	9.57
SIW 1 d 4	UMF		4	1980/15309 (Mei 14821)		<i>C. mosbachensis</i>	L mand, C1, P1, P3-4, M1-2	10.83

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/sex	Species	Material	m2L
SIW 1 d 5	Untermassfeld, Germany		4	1980/17152 (mei 16673)		<i>C. mosbachensis</i>	L mand ramus, C1, P2-3, M1-2	10.83
SIW 1 d 5	Untermassfeld, Germany		4	1986/21596 (mei 21115)		<i>C. mosbachensis</i>	L mand ramus, C1, P1-2, P4, M1-2	10.39
SIW 1 d 5	Untermassfeld, Germany		4	1986/21084 (mei 20603)		<i>C. mosbachensis</i>	L mand ramus, C1, P1-3, M1-2	10.9
SIW 1 d 5	Untermassfeld, Germany		4	1983/19213 (mei 18733)		<i>C. mosbachensis</i>	L mand ramus, P2-4, M1-3	8.69
SIW 1 d 5	Untermassfeld, Germany		4	1982/18592 (mei 18112)		<i>C. mosbachensis</i>	L mand ramus, P3, ant root P4, M1-2	10.62
SIW 1 d 5	Untermassfeld, Germany		4	1982/18013 (mei 17533)		<i>C. mosbachensis</i>	L mand ramus, P1-4, M1 ant, M2-3	11.9
SIW 1 d 5	Untermassfeld, Germany		4	1980/15753 (mei 15265)		<i>C. mosbachensis</i>	L mand frag, P4, M1-2	10.78
SIW 1 d 5	Untermassfeld, Germany		4	1980/15920 (mei 15431)		<i>C. mosbachensis</i>	L lower M1-2 in mand frag	10.02

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/sex	Species	Material	m2L
SIW 1 d 5	Untermassfeld, Germany		4	1987/22277 (mei 21796)		<i>C. mosbachensis</i>	L lower M2	10.22
FLO 0/02/013/01 (d1)	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF868		<i>C. arnensis</i>	R mand, I1-3, C1, P1-4, M1-3	9.7
FLO 0/02/013/04 (d4)	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF876		<i>C. arnensis</i>	R mand, I1-2, P2-3, post P4, M1-3	10.01
FLO 0/02/013/04 (d4)	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF878		<i>C. arnensis</i>	With cranial frag, PAIR. R mand, P3-4, M1-3	9.6
FLO 0/02/013/04 (d4)	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF884		<i>C. arnensis</i>	R mand ramus frag, P4, M1-2	9.78
FLO 0/02/013/04 (d4)	Il Tasso, Italy	Upper Valdarno	4.4	IGF887		<i>C. arnensis</i>	In box with max. R mand, P1-4, M1-3	10.5
FLO Strozzi Sala	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF11800		<i>C. arnensis</i>	R mand ramus, P1-4, M1-2, M3 alv	10.52
FLO 0/02/013/05	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF12967		<i>C. arnensis</i>	R mand ramus, P1-4, M1-2	11.41

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/sex	Species	Material	m2L
FLO 0/02/013/05	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF877		<i>C. arnensis</i>	With upper palate, L+R mands. R mand ramus, P2-4, M1-3	10.63
FLO Gallery	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF869		<i>C. arnensis</i>	With cranium, L+R mands. R mand, C1, P1-4, M1-3	9.05
FLO Gallery	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF867		<i>C. arnensis</i>	With cranium, L+R mand. R mand, P4, M1-2	10.26
FLO 0/02/013/01 (d1)	Upper Valdarno, Italy	Upper Valdarno (Valdarno superiore)	4.4	IGF888		<i>C. etruscus</i>	L and R mands connected by 2 metal posts. L mand ramus, P2-4, M1-2	10.93
FLO 0/02/013/01 (d1)	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF866		<i>C. etruscus</i>	L mand ramus, P2-4, M1-3	11.92
FLO 0/02/013/01 (d1)	Montecarlo, Italy	Upper Valdarno	4.4	IGF862		<i>C. etruscus</i>	L post mand frag, post M1, M2, M3 alv	10.9
FLO 0/02/013/01 (d1)	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF872		<i>Canis majori</i>	L mand, C1, P2-4, M1-2, M3 alv	10.51
FLO 0/02/013/02 (d2)	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF11781		<i>C. etruscus</i>	L mand, I3, C1, P1-4, M1-2. Broken in half at M1.	11.35

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/sex	Species	Material	m2L
FLO 0/02/013/02 (d2)	Upper Valdarno, Italy	Upper Valdarno	4.4	11792		<i>C. etruscus</i>	L lower M1 in mand frag with M2 broken off it	10.95
FLO 0/02/013/03 (d3)	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF1253V		<i>C. etruscus</i>	L lower M2 in mand frag	10.38
FLO Strozzi Sala	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF12469		<i>C. etruscus</i>	L mand, P2-4, M1-2, M3 alv	12.72
FLO Strozzi Sala	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF11791		<i>C. etruscus</i>	L mand, I3, C1, P1-4, 1-3	11.12
FLO 0/02/013/05	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF864		<i>C. majori</i> (<i>etruscus</i>)	L mand ramus, P3-4, M1-2, M3 alv	10.96
NHM 35 L d 23	Olivola	Olivola	4.4	M5680	Forsyth Major, Oct 1895	<i>C. etruscus</i>	L ramus, P4, M1-2	10.95
FLO 0/02/013/07 (d7)	Val di Magna, Italy	Olivola	4.4	IGF4474		<i>C. etruscus</i>	L mand ramus, P1, post P3, P4, M1-2, alv M3	10.4
FLO 0/02/013/07 (d7)	Val di Magna, Italy	Olivola	4.4	IGF4473		<i>C. etruscus</i>	L mand ramus, P2? P4, M1, M2	11.96

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/sex	Species	Material	m2L
FLO 0/02/013/07 (d7)	Val di Magna, Italy	Olivola	4.4	IGF4471		<i>C. etruscus</i>	L mand, C1 root, frag P2, frag P4, M1-2	9.76
FLO 0/02/013/07 (d7)	Val di Magna, Italy	Olivola	4.4	IGF4470		<i>C. etruscus</i>	L mand, I2-3 roots, C1 root, P1-2 roots, M1, M2 frags. M3 infilled alv	10.76

8. m2W

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection	Species	Material	m2W
NHM 1	France		1	1843.12.29.7	F	<i>C. lupus</i>	L mand, I1-3, C1, P2-4, M1-2	8.63
NHM 2	Pyrenees Nr Abrantos, S of the Tagus, Portugal	Parzudacki clln	1	44.1.18.1	F	<i>C. lupus</i>	L mand, I1-3, C1, P1-4, M1-3	8.29
NHM 3		WC Tait clln.	1	1938.12.7.1	F	<i>C. lupus</i>	R mand, I1-3, C1, P1-4, M1-2	7.57
NHM 5	Riocalado, Burgos, Spain		1	11.10.5.2	F	<i>C. lupus</i>	L mand, I1-3, C1, P1-4, M1-3	8.74
NHM 8	Kocane, Macedonia		1	47.1121.a	F	<i>C. lupus</i>	L mand, I1-3, C1, P1-4, M1-2	8.71
NRM	Korvijaure, 7 miles N Kiruna	15.4.1959	1	A58 0112	F	<i>C. lupus</i>	L+R mand + cranium. R mand I1-3, C1, P1, P2 loose, P3-4, M1-3	9.98
NRM	Kiruna	14.4.1908	1	A581198	F	<i>C. lupus</i>	L+R mand + cranium extreme tooth wear down to bone. L teeth I1-	9.04
NRM	S Finnskoga, Skrackarberget	1985.07.29	1	A865126	F	<i>C. lupus</i>	L+R mand+cranium. R mand, I1-3, P1-4, M1-3	9.06

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection	Species	Material	m2W
NRM	Vastra Amtervik, Hensgard	1993.02.24	1	A935024	F	<i>C. lupus</i>	L+R mand+cranium. L mand, I1-3, C1, P2-4, M1- 2	8.46
NRM	Nas-snoan, v71/jvg	1993.08.18	1	A935178	F	<i>C. lupus</i>	L+R mand+cranium. L mand I1-3, C1, P1-4, M1- 3	9.61
NRM	Nyskoga, Kringsberg, Bontjarn	1994.01.19	1	A945045	F	<i>C. lupus</i>	L+R mand+cranium. R mand, I1-3, P1-4, M1-3 L+R mand+cranium. R	9.49
NRM	Vastmandland, Grythyttan	1999.12.17	1	20005111	F	<i>C. lupus</i>	mand I2-3, C1, P2-4, M1- 3	9.54
NRM	Narke, Degerfors, Atorp	2001.12.26	1	20025005	F	<i>C. lupus</i>	L+R mand+cranium. L mand I1-3, P1-4, M1-3	8.42
NRM	Atorp 3.5 km NW, Degerfors, Varmland	2002.03.05	1	20035026	F	<i>C. lupus</i>	L+R mand+cranium. L mand I1-3, C1, P1-4, M1- 3	8.48
NRM	Odlingen, Sillerud, Arjang, Varmland	2004.02.07	1	20045040	F	<i>C. lupus</i>	L+R mand+cranium. R mand I1-3, C1, P1-4, M1- 3	9.02
NRM	Ovre Hurr, Tocksfors, Varmland	2006.05.30	1	20065236	F	<i>C. lupus</i>	L+R mand+cranium. L mand, I1-2, C1, P1-4, M1- 3	9.08

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection	Species	Material	m2W
NRM	Rickebo, Hallbo, Bollnas, Halsingland	2006.03.14	1	20065047	F	<i>C. lupus</i>	L+R mand+cranium. R mand I1-3, C1, P1-4, M1-3	8.98
NRM	Ronnas, Ostra, Leksand, Dalarna	2007.10.09	1	20075381	F	<i>C. lupus</i>	L+R mand+cranium. R mand I1-3, C1, P1-4, M1-3	8.79
NRM	Jarbo, Backefors, Dalsland Varmland, Nordmark,	2007.?	1	20075314	F	<i>C. lupus</i>	L+R mand+cranium. L mand I1-3, C1, P1-4, M1-3	8.78
NRM	Algsjion 2 km S Halsingland,	2009.01.25	1	20095063	F	<i>C. lupus</i>	L+R mand+cranium. R mand I1-3, C1, P1 alv, P1-4, M1-3	8.87
NRM	Bollnas, Lottefors; Rv 83 Vastmanland, Hallefors,	2007.08.19	1	20075312	F	<i>C. lupus</i>	L+R mand + cranium. R mand I1-3, C1, P1-4, M1-3	8.79
NRM	Ornviken,	2010.01.02	1	20105028	F	<i>C. lupus</i>	L+R mand+cranium. L mand I1-3, C1, P1-4, M1-3	8.34
NHM 4	Riocalado, Burgos, Spain		1	11.10.5.1	M	<i>C. lupus</i>	L mand, I1-3, C1, P1-4, M1-3	9.09
NHM 6	Seville, Spain	On note '2 carnassials in tooth case'	1	95.3.3.6	M	<i>C. lupus</i>	R mand, I1-3, C1, P2-4, M1-3. No P1 or alv	7.85

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection	Species	Material	m2W
NHM 7	Ukraine on modern ticket, on skull and original Norbotten, N Sweden (in arctic circle).		1	34.6.28.47	M	<i>C. lupus</i>	L mand, I1-3, C1, P3-4, M1-3	8.62
NHM 9			1	28.5.4.1	M	<i>C. lupus</i>	L mand, I1-3, C1, P1-4, M1-3	8.78
NHM 11			Moscow district, Russia	1	82.9.18.2	M	<i>C. lupus</i>	L mand, I1-3, C1 fract, P1-4, M1-3
NHM Ost	Abrantos, S of Tagus, Portugal		1	1937.2.10.2	M	<i>C. lupus</i>	R mand, I2, C1, P4, M1-3	8.54
NHM Ost	Bosnia, Yugoslavia		1	1935.8.5.1	M	<i>C. lupus</i>	R mand, I1-3, C1, P1-4, M1-2	9.35
NRM	Ljusdal, Ramsjo (s:n)	12.2.1926	1	A580255	M	<i>C. lupus</i>	L+R mand + fract cranium. L mand, I1-3, C1, P1-4, M1-3	8.91
NRM	Jokkmokk	11.02.1852	1	A583532	M	<i>C. lupus</i>	L+R mand + cranium. R mand I1-3, C1, P1-4, M1-3	9.39
NRM	Orebro	1852	1	A583547	M	<i>C. lupus</i>	L+R mand+cranium. R mand I1-3, C1, P1-4, M1-3	9

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection	Species	Material	m2W
NRM	Sweden	1907	1	A589147	M	<i>C. lupus</i>	L+R mand + cranium. R teeth I1-3, C1, P1-4, M1-2	8.61
NRM	Sweden	1908	1	A589199	M	<i>C. lupus</i>	L+R mand+cranium. L mand I1-3, C1, P1-4, M1-3	8.93
NRM	Luktjomtjuolta, Vilhelmina	15.1.1937	1	A590009	M	<i>C. lupus</i>	L+R mand+cranium. L mand I1-3, C1, P2-4, M1-2	8.64
NRM	Lina alv station	25.12.1977	1	A775097	M	<i>C. lupus</i>	L+R mand+cranium. L mand I1, I3, C1, P1-4, M1-3	9.53
NRM	Atran, Ogardet	1984.09.12	1	A845131	M	<i>C. lupus</i>	L+R mand+cranium. R mand I1-3, C1, P1-4, M1-3	9.23
NRM	Hede, 3 mil NV, Norrstadjan	1989.04.17	1	A895039	M	<i>C. lupus</i>	L+R mand+cranium. R mand I1-3, P1-4, M1-3	9.49
NRM	Kiruna-Gallivare, Gaddmyr, Jvg	1992.08.24	1	A925106	M	<i>C. lupus</i>	L+R mand+cranium. R mand, I1-3, P2-4, M1-3	9.47
NRM	Boras	1996.01.04	1	A965002	M	<i>C. lupus</i>	L+R mand+cranium. L teeth I1-3, C1, P1-4, M1-2	10.08

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection	Species	Material	m2W
NRM	Jarna, Flaten, Dalarna	1999.2.6	1	A995016	M	<i>C. lupus</i>	L+R mand+cranium. R mand, I1-2, P1-4, M1-3	9.44
NRM	Varmland, Eksharad, Halgan; Kolarkojan	1999.06.04	1	995230	M	<i>C. lupus</i>	L+R mand+cranium. R mand, I3, C1, P1-4, M1-3	9.18
NRM	Jumkil kyrka, Uppsala	2000.11.19	1	20005365	M	<i>C. lupus</i>	L+R mand+cranium. L mand I1-3, C1, P1-4, M1-3	9.78
NRM	Uddalen, Ed, Dalsland	2003.05.12	1	20035114	M	<i>C. lupus</i>	L+R mand+cranium. R mand I1-3, C1. extra P1? P1, P2-3 broken, P4, M1-	9.52
NRM	Ostermoren, Smedjebacken, Dalarna	2004.12.09	1	20045305	M	<i>C. lupus</i>	L+R mand+cranium. R mand I1-3, C1, P1-4, M1-2, M3 alv	9.71
NRM	Dala Floda, Borlange, Dalarna	2003.03.09	1	20035024	M	<i>C. lupus</i>	L+R mand+cranium. R mand I1-3, C1, P1 alv, P2-4, M1-3	9.31
NRM	IV 225 (road?), Osma, Sodermanland	2005.11.26	1	20065027	M	<i>C. lupus</i>	L+broken R mand+cranium. L mand I1-2, C1, P1-4, M1-2, M3	9.5
NRM	Lanasberget, Grundsjo, Ljungaverk,	2005.09.02	1	20055287	M	<i>C. lupus</i>	L+R mand+cranium. L mand I1-3, C1, P1-4, M1-3	9.08

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection	Species	Material	m2W
NRM	Mullhyttan, Orebro, Narke	2006.09.15	1	20065414	M	<i>C. lupus</i>	L+R mand+cranium. R mand I1-3, C1, P1-4, M1-2, M3 alv	8.92
NRM	Avik, Laxa, Narke	2007.04.27	1	20075186	M	<i>C. lupus</i>	L+R mand + cranium. L mand I1-3, C1, P1 alv, P2-4, M1-2, M3 alv	9.67
NRM	Malung-Appelbo, Dalarna	2007.12	1	20085027	M	<i>C. lupus</i>	L+R mand +cranium. L mand, I1-3, C1, P1-4, M1-3	9.74
NRM	Dalarna, Torsby, Ostmark; Sojensoasen	2007.09.15	1	20075373	M	<i>C. lupus</i>	R mand I1-3, C1, P1-4, M1-3	9.31
NRM	Stormosse, Piro, Bjorneborg, Kristinehamn,	2007.12.27	1	20085036	M	<i>C. lupus</i>	L+R mand+cranium. L mand I1-3, C1, P1-4, M1-3	9.02
SMES bay 4, iv 266 drw	Black Rock quarries, Tenby		3	D2610	Pres by T Roberts, 1882	<i>C. lupus</i>	Back portion of R mand, M1-2	8.53
SMES bay 4, iv 266 drw	Black Rock quarries, Tenby		3	D2605	Pres by T Roberts, 1882	<i>C. lupus</i>	R mand, I2-3, C1, P2, P4, M1-2	8.37
NHM 43 C	Kents Cavern		3	15636	McEnergy clln	<i>C. lupus</i>	R ramus mand, C1, P1-4, M1-2	8.62

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection	Species	Material	m2W
TM G/B1/B209	Kents Cavern	Cave Earth	3	P12405	W. Pengelly	<i>C. lupus</i>	R mand frag, M1 post, M2	8.77
NHM 43 E drw 24	Oreston Cave	Pres type 2	3	46981 1989 G 140 1.1	Purch 1876	<i>C. lupus</i>	2). L ramus, C1, P1-4, M1-2	9.23
WH	Oreston Cave		3	(FS04323) 1989 G 140		<i>C. lupus</i>	L mand ramus, P2-4, M1-2	8.8
WH	Oreston Cave		3	1.6 1989 G 140	TC	<i>C. lupus</i>	L mand ramus, M2	7.87
WH	Oreston Cave		3	1.8	TC	<i>C. lupus</i>	L mand frag, M1-2	8.79
BC	Oreston Cave		3	Cd2937	J. Cottle clln 1830	<i>C. lupus</i>	L lower M2	9.39
BC	Oreston Cave		3	Cd2943	J. Cottle clln 1830	<i>C. lupus</i>	L lower M2	8
BC, lower drw	Oreston Cave		3	Cd3256	J. Cottle clln 1830	<i>C. lupus</i>	L mand frag, M2	8.14

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection	Species	Material	m2W
SM Blue boxes	Paviland		3	SM.1836.6.1 45.1		<i>C. lupus</i>	L mand P1-4, M1-2	9.02
SM Blue boxes	Paviland		3	SM.1836.6.3 05.1		<i>C. lupus</i>	L mand ramus, P2-4, M1-2	8.53
SM Blue boxes	Paviland		3	SM.1836.6.3 05.2		<i>C. lupus</i>	L mand ramus, P3, M1-2	9.84
MM R4 CoE D 1	Pin Hole	PH (F)	3	LL.1995 TTNCM 44/1995/61/	Rev'd. D. Williams & Beard clln	<i>C. lupus</i>	L mand ramus, P1-4, M1-2	8.38
SHC D27/3	Sandford Hill	Cave or fissure depts	3	3		<i>C. lupus</i>	L mand ramus, P4, M1-2	8.58
NHM 45D drw 13	Banwell Bone Cave		5a	M404d	Egerton clln, 1882	<i>C. lupus</i>	R mand ramus, C1, P2-M2.	9
NHM 45D drw 13	Banwell Bone Cave		5a	M223	Enniskillen clln	<i>C. lupus</i>	R mand ramus, P3-4, M1-2	8.1
NHM Andy's office	Banwell Bone Cave	Entrance to Baker's Pit extension, 1950's	5a	M84868	Percy Baker clln	<i>C. lupus</i>	R mand, P1-4, M1-2	8.98

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection	Species	Material	m2W
SHC D19/4	Banwell Bone Cave	Cave dep	5a	TTNCM 40/1995/61	William Beard clln	<i>C. lupus</i>	R mand ramus, post P3, P4, M1-3	8.74
SHC D19/4	Banwell Bone Cave		5a	TTNCM 40/1995/58	William Beard clln	<i>C. lupus</i>	R mand ramus, P1-4, M1- 2	9.08
SHC D19/4	Banwell Bone Cave		5a	TTNCM 40/1995/60	William Beard clln	<i>C. lupus</i>	R mand ramus, P4, M1-3	9.45
SHC D19/3	Banwell Bone Cave	Cave dep	5a	TTNCM 40/1995/51	William Beard clln	<i>C. lupus</i>	R post mand frag, M2	8.15
SHC D19/3	Banwell Bone Cave		5a	TTNCM 40/1995/59	William Beard clln	<i>C. lupus</i>	R post mand frag, M1-3	8.36
SHC D19/3	Banwell Bone Cave		5a	TTNCM 40/1995/57	William Beard clln	<i>C. lupus</i>	R mand ramus, M1-3	8.32
SHC D19/2	Banwell Bone Cave		5a	TTNCM 40/1995/53	William Beard clln	<i>C. lupus</i>	R mand frag, M1-2	10.12
SHC D19/2	Banwell Bone Cave		5a	TTNCM 40/1995/31/ 35	William Beard clln	<i>C. lupus</i>	R lower M2	7.73

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection	Species	Material	m2W
SHC Display NHM 53A, 2nd drw from bottom	Banwell Bone Cave		5a	45/1995/634		<i>C. lupus</i>	R mand, C1, P2-4, M1.	9.92
	Stump Cross Cave		5a	M43234	Stump cross cave 1980 III c	<i>C. lupus</i>	R ramus, P1, frag P2, frag P3, P4, M1-2	11.93
MM R5 colK D14	Windy Knoll		5a	P2496		<i>C. lupus</i>	L mand frag, M1-3	9.2
MM R5 ColK D15	Windy Knoll		5a	P2496a-j	Dawkins	<i>C. lupus</i>	L mand ramus, C1, M1-2	8.87
UMZC	Wretton, Norfolk		5a	Wr4		<i>C. lupus</i>	R mand frag, M2	8.48
UMZC	Wretton, Norfolk		5a	Wr1a		<i>C. lupus</i>	R mand C1, P1-4, M1-2, M3 alv	10.03
SM On display	Bacon Hole		5c	SM. 850:2.166		<i>C. lupus</i>	L mand, C1, P1-4, M1-2 M3 lv	8.46
NHM 43 B drw 19	Joint Mitnor Cave		5e	none	JM U 1960	<i>C. lupus</i>	R mand frag, M2	9.61

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection	Species	Material	m2W
TM G/B6/B109	Joint Mitnor Cave		5e	P35050		<i>C. lupus</i>	R lower M2	7.94
TM G/B6/B112	Joint Mitnor Cave		5e	P35082	1940	<i>C. lupus</i>	R ramus, P1-4, M1-2	8.11
TM G/B6/B112	Joint Mitnor Cave		5e	P35085	1940	<i>C. lupus</i>	R ramus frag, P4, M1-2	9.09
BGS 483956	Clevedon Cave		6	16350		<i>C. lupus</i>	R mand, P2-4, M1-3	9.33
BC	Clevedon Cave		6	Ce15105	S.H. Reynolds	<i>C. lupus</i>	R lower M2	9.12
BC	Clevedon Cave		6	Ce15055-15070	B. N. S. Soc	<i>C. lupus</i>	R lower M2	8.28
SHC D46/1	Bleadon Cave		7	TTNCM 41/1995/12	W. Beard clln Pres'd by Rev.	<i>C. lupus</i>	R mand, P1-4, M1-2	7.73
SHC D65/3	Bleadon Cave	Fissure in Bleadon quarry, Bleadon, Soms, 1872.	7	TTNCM 41/1995/300 1	Wadham Pigott Williams, 1878	<i>C. lupus</i>	R mand, P4, M1-2	9.47

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection	Species	Material	m2W
BGS 483890	Crayford		7	5112b	Spurrell clln	<i>C. lupus</i>	R lower M2	8.14
NHM 44 D drw 7	Hutton Cave	none	7	44739a	none	<i>C. lupus</i>	R+L mand frags. LC1, P4, M1-2	7.18
SHC D40/2	Hutton Cave		7	TTNCM 42/1995/44	Rev D Williams and W Beard clln Dr RP Cotton clln, pres by Cotton, 1878	<i>C. lupus</i>	R and L mand assoc - L mand, P2, P4, M1-2	8.28
BGS 483847 BCM Touch of Bucks & fossils & ice	Ilford		7	204		<i>C. lupus</i>	R mand ramus frag, C1, P2-4, M1-2	7.75
BCM 6, 7, box 123	Marsworth	Pitstone no 3 quarry	7	1980.544.L6/ 2		<i>C. lupus</i>	L lower mand frag, half M1, M2	7.45
NMW Box 2.20	Marsworth	Horizon 3	7	E11/3		<i>C. lupus</i>	L lower M2	9.17
NMW Box 2.20	Pontnewydd Cave	LB	7	89.168H/3 D5369	Given by Major David William Wynn	<i>C. lupus</i>	L lower M2	9.9
NMW Box 2.20	Pontnewydd Cave	LB (d)	7	84.70H/2 D3765	Given by Major David William Wynn	<i>C. lupus</i>	L lower M2	8.01

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection	Species	Material	m2W
SIW	Ranis		2.4	1988/22377 (Ranis 21896)		<i>C. lupus</i>	L mand ramus, M1-2	9.02
NHM 36 E d 36/E/19	Perick Cave	none	2.4	28571	see notes	<i>C. lupus</i>	L mand, I2-3, P1-4, M1-3	9.66
NHM 36 E d 36/E/19	Perick Cave	none	2.4	M436	Enniskillen clln 1882	<i>C. lupus</i>	L mand ramus, P2, P4, M1-2	8.45
NHM 36 E d 36/E/19	Perick Cave	none	2.4	28573	Purchd 1853	<i>C. lupus</i>	L ramus, P3-4, M1-2	9.38
NHM 36 E d 36/E/19	Perick Cave	Cavern	2.4	28572	none	<i>C. lupus</i>	L and R fused mands. L mand, M2	8.38
SIW 3 d 9	Taubach		2.8	1968/10851 (Taub 12245)		<i>C. lupus</i>	R lower M2	7.96
NHM APC Office	Cudmore Grove	Detrital shell bed in estuarine channel filling Project A, Q1, area TP4, Unit 4c- surface, Field no (2+3)	9		John Claydon 1985- 6	<i>C. mosbachensis</i>	L mand ramus frag, M2. With broken mand frags in box	9.19
NHM 25 E d 14	Boxgrove		13	F2+3/2		<i>C. mosbachensis</i>	L mand ramus, I3, C1, P1- 4, M1-2, frag M3	7.4

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection	Species	Material	m2W
NHM 25 F d 25	Boxgrove	Project A, Q2, area 17, unit 4c surface, field no F9 (part)	13	F9/3		<i>C. mosbachensis</i>	L mand, C1 frag, P3-4, M1-2	7.07
NHM 44D 3rd drw from top	Westbury	Bed 3	13	M33940	M Bishop 1974	<i>C. mosbachensis</i>	L mand ramus, P2-4, M1-3	8.11
NHM 44D 3rd drw from top	Westbury	Bed 3	13	M33937	M Bishop 1974	<i>C. mosbachensis</i>	Left mand ramus, P4, M1-2	8.15
NHM 44 E 4th drw	Westbury	Calcareous memb Bed 3	13	47429	MJ Bishop	<i>C. mosbachensis</i>	L mand frag, M2	8.1
NHM 44 E drw 10	Westbury	Bed 3	13	47521	Bishop 1973	<i>C. mosbachensis</i>	L lower M2	6.84
NHM 44 F drw 1	Westbury	Calc memb W1A	13	none	NHM excav 1976	<i>C. mosbachensis</i>	L lower M2	7.12
NHM 44 G d 26	Westbury	W2, C-2m, 2m from cave wall Site W 5/W10. 19/10. Yellow breccia on d.	13	M47668	none	<i>C. mosbachensis</i>	L ramus frag, M2.	7.6
NHM 3 A d 8	Westbury		13	none	none	<i>C. mosbachensis</i>	L lower M2	7.33

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection	Species	Material	m2W
UBSS	Westbury		13	M38.22 19		<i>C. mosbachensis</i>	L lower M2	8.01
NHM 47 B	West Runton	Upper freshwater bed	17	M17927	AC Savin clln, 1946. Cat 566. Cll'd 1908	<i>C. mosbachensis</i>	L lower M2	5.93
NHM 47 B	West Runton	Upper freshwater bed	17	M17928	AC Savin clln, 1946. Cat 1130. cll'd 1922	<i>C. mosbachensis</i>	L ramus fragment, M2 present	6.62
VER 00441,	Cengelle II		3.4	V10138		<i>C. mosbachensis</i>	R mand frag, M2, M3 alv	7.6
VER 00441	Monte Zoppega		3.4	V10918		<i>C. mosbachensis</i>	R mand ramus, M1-2	6.88
VER 00441	Viatelle, Soave, Italy		4	V10936		<i>C. mosbachensis</i>	L lower M2	7.39
VER 00441	Viatelle, Soave, Italy		4			<i>C. mosbachensis</i>	L lower M2	7.16
SIW 1 d 4	Untermassfeld, Germany		4	1980/15309 (Mei 14821)		<i>C. mosbachensis</i>	L mand, C1, P1, P3-4, M1-2	7.88

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection	Species	Material	m2W
SIW 1 d 5	Untermassfeld, Germany		4	1980/17152 (mei 16673)		<i>C. mosbachensis</i>	L mand ramus, C1, P2-3, M1-2	7.99
SIW 1 d 5	Untermassfeld, Germany		4	1986/21596 (mei 21115)		<i>C. mosbachensis</i>	L mand ramus, C1, P1-2, P4, M1-2	8.16
SIW 1 d 5	Untermassfeld, Germany		4	1986/21084 (mei 20603)		<i>C. mosbachensis</i>	L mand ramus, C1, P1-3, M1-2	8.12
SIW 1 d 5	Untermassfeld, Germany		4	1983/19213 (mei 18733)		<i>C. mosbachensis</i>	L mand ramus, P2-4, M1-3	7.37
SIW 1 d 5	Untermassfeld, Germany		4	1980/15753 (mei 15265)		<i>C. mosbachensis</i>	L mand frag, P4, M1-2	8.6
SIW 1 d 5	Untermassfeld, Germany		4	1980/15920 (mei 15431)		<i>C. mosbachensis</i>	L lower M1-2 in mand frag	7.55
SIW 1 d 5	Untermassfeld, Germany		4	1987/22277 (mei 21796)		<i>C. mosbachensis</i>	L lower M2	7.09
FLO 0/02/013/04 (d4)	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF878		<i>C. arnensis</i>	R mand, P3-4, M1-3	7.43

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection	Species	Material	m2W
FLO 0/02/013/04 (d4)	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF884		<i>C. arnensis</i>	R mand ramus frag, P4, M1-2	6.82
FLO 0/02/013/04 (d4)	Il Tasso, Italy	Upper Valdarno	4.4	IGF887		<i>C. arnensis</i>	In box with max. R mand, P1-4, M1-3	7.14
FLO Strozzi Sala	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF11800		<i>C. arnensis</i>	R mand ramus, P1-4, M1- 2, M3 alv	7.32
FLO 0/02/013/05	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF12967		<i>C. arnensis</i>	R mand ramus, P1-4, M1- 2	7.99
FLO 0/02/013/05	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF877		<i>C. arnensis</i>	With upper palate, L+R mands. R mand ramus, P2-4, M1-3	7.07
FLO Gallery	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF869		<i>C. arnensis</i>	With cranium, L+R mands. R mand, C1, P1- 4, M1-3	6.26
FLO Gallery	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF867		<i>C. arnensis</i>	With cranium, L+R mand. R mand, P4, M1-2	6.58
FLO 0/02/013/01 (d1)	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF888		<i>C. etruscus</i>	L mand ramus, P2-4, M1- 2	8.15

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection	Species	Material	m2W
FLO 0/02/013/01 (d1)	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF866		<i>C. etruscus</i>	L mand ramus, P2-4, M1-3	8.66
FLO 0/02/013/01 (d1)	Montecarlo, Italy	Upper Valdarno	4.4	IGF862		<i>C. etruscus</i>	L post mand frag, post M1, M2, M3 alv	8.19
FLO 0/02/013/01 (d1)	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF872		<i>Canis majori</i>	L mand, C1, P2-4, M1-2, M3 alv	7.83
FLO 0/02/013/02 (d2)	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF11781		<i>C. etruscus</i>	L mand, I3, C1, P1-4, M1-2. Broken in half at M1.	7.67
FLO 0/02/013/02 (d2)	Upper Valdarno, Italy	Upper Valdarno	4.4	11792		<i>C. etruscus</i>	L lower M1 in mand frag with M2 broken off it	8.12
FLO Strozzi Sala	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF11791		<i>C. etruscus</i>	L mand, I3, C1, P1-4, 1-3	7.33
FLO 0/02/013/05 NHM 35 L d	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF864		<i>C. majori (etruscus)</i>	L mand ramus, P3-4, M1-2, M3 alv	7.69
23 FLO	Olivola	Olivola	4.4	M5680	Forsyth Major, Oct 1895	<i>C. etruscus</i>	L ramus, P4, M1-2	8.01
FLO 0/02/013/07 (d7)	Val di Magna, Italy	Olivola	4.4	IGF4474		<i>C. etruscus</i>	L mand ramus, P1, post P3, P4, M1-2, alv M3	7.63

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection	Species	Material	m2W
FLO 0/02/013/07 (d7)	Val di Magna, Italy	Olivola	4.4	IGF4473		<i>C. etruscus</i>	L mand ramus, P2? P4, M1, M2	8.12
FLO 0/02/013/07 (d7)	Val di Magna, Italy	Olivola	4.4	IGF4471		<i>C. etruscus</i>	L mand, C1 root, frag P2, frag P4, M1-2	7.06

9. P3L

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	P3L
NHM 1	France		1	1843.12.29.7	F	<i>C. lupus</i>	Cranium, L teeth I1-3, C1, P1, 3-4, M1-2	13.86
NHM 2	Pyrenees	Parzudacki clln	1	44.1.18.1	F	<i>C. lupus</i>	Cranium, L teeth I2-3, C1, P1-4, M1-2	15.14
NHM 3	Nr Abrantos, S of the Tagus, Portugal	WC Tait clln.	1	1938.12.7.1	F	<i>C. lupus</i>	Cranium, R teeth I1-3, C1, P1-4, M1-2	13.86
NHM 5	Riocalado, Burgos, Spain		1	11.10.5.2	F	<i>C. lupus</i>	Cranium, L teeth I1-3, C1, P1-4, M1-2	15.41
NHM 8	Kocane, Macedonia		1	47.1121.a	F	<i>C. lupus</i>	Cranium, L teeth I1-3, C1, P1-4, M1-2	14.66
NRM	Korvijaure, 7 miles N Kiruna	15.4.1959	1	A58 0112	F	<i>C. lupus</i>	L+R mand + cranium. Cranium-fract basicranium. L teeth, I1-3, C1, P1-4, M1-2	16.61
NRM	S Finnskoga, Skrackerberget	1985.07.29	1	A865126	F	<i>C. lupus</i>	L+R mand+cranium. R teeth, I1-3, P1-4, M1-3	15.81
NRM	Vastra Amtervik, Hensgard	1993.02.24	1	A935024	F	<i>C. lupus</i>	L+R mand+cranium. L mand, I1-3, C1, P2-4, M1-2	15.6

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	P3L
NRM	Nas-snoan, v71/jvg	1993.08.18	1	A935178	F	<i>C. lupus</i>	L+R mand+cranium. L teeth I1-3, C1, P1-4, M1-2	15.66
NRM	Nyskoga, Kringsberg, Bontjarn	1994.01.19	1	A945045	F	<i>C. lupus</i>	L+R mand+cranium. R teeth, I1-3, C1, P1-4, M1-2	16.05
NRM	Vastmandland, Grythyttan	1999.12.17	1	20005111	F	<i>C. lupus</i>	L+R mand+cranium. R mand I2-3, C1, P2-4, M1-3	16
NRM	Narke, Degerfors, Atorp	2001.12.26	1	20025005	F	<i>C. lupus</i>	L+R mand+cranium. L teeth I1-3, P1-4, M1-2	15.27
NRM	Atorp 3.5 km NW, Degerfors, Varmland	2002.03.05	1	20035026	F	<i>C. lupus</i>	L+R mand+cranium. R teeth I1-3, C1, P1-4, M1-2	15.58
NRM	Odlingen, Sillerud, Arjang, Varmland	2004.02.07	1	20045040	F	<i>C. lupus</i>	L+R mand+cranium. R teeth I1-3, C1, P1-4, M1-2	14.63
NRM	Ovre Hurr, Tocksfors, Varmland	2006.05.30	1	20065236	F	<i>C. lupus</i>	L+R mand+cranium. L teeth, I1, I3, C1, P1-4, M1-2	14.76
NRM	Rickebo, Hallbo, Bollnas, Halsingland	2006.03.14	1	20065047	F	<i>C. lupus</i>	L+R mand+cranium. R teeth I1-3, C1, P1-4, M1-2	15.76
NRM	Ronnas, Ostra, Leksand, Dalarna	2007.10.09	1	20075381	F	<i>C. lupus</i>	L+R mand+cranium. R teeth I1-3, C1, P1-4, M1-2	15.86

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	P3L
NRM	Jarbo, Backefors, Dalsland	C. lupus	1	20075314	F	<i>C. lupus</i>	L+R mand+cranium. R teeth I1-3, C1, P1-4, M1-2	15.03
NRM	Varmland, Nordmark, Algsjion 2 km S	2009.01.25	1	20095063	F	<i>C. lupus</i>	L+R mand+cranium. L teeth I1-3, C1, P1-4, M1-2	15.5
NRM	Halsingland, Bollnas, Lottefors; Rv 83	2007.08.19	1	20075312	F	<i>C. lupus</i>	L+R mand + cranium. L teeth I1-3, C1, P1-4, M1-2	15.77
NRM	Vastmanland, Hallefors, Ornviken,	2010.01.02	1	20105028	F	<i>C. lupus</i>	L+R mand+cranium. R teeth I1-3, C1, P1-4, M1-2	14.39
NHM 4	Riocalado, Burgos, Spain	On note '2 carnassials in tooth case'	1	11.10.5.1	M	<i>C. lupus</i>	Cranium, L teeth I1-3, C1, P1-4, M1-2	16.6
NHM 6	Seville, Spain		1	95.3.3.6	M	<i>C. lupus</i>	Cranium, R teeth I1-3, C1, P1-4, M1-2	14.6
NHM 7	Ukraine on modern ticket, on skull and original		1	34.6.28.47	M	<i>C. lupus</i>	Cranium, L teeth I1-3, C1, post P1, post P2, P3-4, M1-2	15.21
NHM 9	Norbotten, N Sweden (in arctic circle).		1	28.5.4.1	M	<i>C. lupus</i>	Cranium, l teeth I1-3, C1, P1, P3-4, M1-2	15.06
NHM 11	Moscow district, Russia		1	82.9.18.2	M	<i>C. lupus</i>	Cranium, L teeth I1-3, C1, P1-4, M1-2	16.36

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	P3L
Ost NHM	Abrantos, S of Tagus, Portugal		1	1937.2.10.2	M	<i>C. lupus</i>	Cranium, R teeth I1-3, C1, P1-4, M1-2	14.21
Ost NHM	Bosnia, Yugoslavia		1	1935.8.5.1	M	<i>C. lupus</i>	Cranium, R teeth I1-3, C1, P1-3 P4 roots, M1-2	14.35
NRM	Ljusdal, Ramsjo (s:n)	12.2.1926	1	A580255	M	<i>C. lupus</i>	L+R mand + fract cranium, palate/ant cranium. L teeth I1-3, C1, P1-4, M1-2	16.07
NRM	Jokkmokk	11.02.1852	1	A583532	M	<i>C. lupus</i>	L+R mand + cranium. R teeth I1-3, C1, P1-4, M1-2	14.4
NRM	Orebro	1852	1	A583547	M	<i>C. lupus</i>	L+R mand+cranium. R teeth I1-3, C1, P1-4, M1-3	15.77
NRM	Sweden	1907	1	A589147	M	<i>C. lupus</i>	L+R mand + cranium. R teeth I1-3, C1, P1-4, M1-2	18.62
NRM	Sweden	1908	1	A589199	M	<i>C. lupus</i>	L+R mand+cranium. L teeth I1-3, C1, P1-4, M1-2	15.77
NRM	Luktjomtjuolta, Vilhelmina	15.1.1937	1	A590009	M	<i>C. lupus</i>	L+R mand+cranium. R teeth I1-3, C1, P2-4, M1-2	15.04
NRM	Lina alv station	25.12.1977	1	A775097	M	<i>C. lupus</i>	L+R mand+cranium. L teeth I1, I3, C1, P1-4, M1-2	16.46

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	P3L
NRM	Atran, Ogardet	1984.09.12	1	A845131	M	<i>C. lupus</i>	L+R mand+cranium. R teeth I1-3, C1, P1-4, M1-2	17.09
NRM	Hede, 3 mil NV, Norrstadjan	1989.04.17	1	A895039	M	<i>C. lupus</i>	L+R mand+cranium. R teeth I2 from L though-3, P2-4, M1-2	17.03
NRM	Kiruna-Gällivare, Gaddmyr, Jvg	1992.08.24	1	A925106	M	<i>C. lupus</i>	L+R mand+cranium. R mand, I1-3, P2-4, M1-3	14.9
NRM	Boras	1996.01.04	1	A965002	M	<i>C. lupus</i>	L+R mand+cranium. L teeth I1-3, C1, P1-4, M1-2	16.44
NRM	Jarna, Flaten, Dalarna	1999.2.6	1	A995016	M	<i>C. lupus</i>	L+R mand+cranium. R teeth, I1-2, P1-4, M1-2	16.39
NRM	Varmland, Eksharad, Halgan; Kolarkojan	1999.06.04	1	995230	M	<i>C. lupus</i>	L+R mand+cranium. R teeth, I1-I3, C1, P1-4, M1-2	16.02
NRM	Jumkil kyrka, Uppsala	2000.11.19	1	20005365	M	<i>C. lupus</i>	L+R mand+cranium. L mand I1-3, C1, P1-4, M1-3	15.92
NRM	Uddalen, Ed, Dalsland	2003.05.12	1	20035114	M	<i>C. lupus</i>	L+R mand+cranium. R teeth I1-3, C1. P1-4, M1-2	16.84
NRM	Ostermoren, Smedjebacken, Dalarna	2004.12.09	1	20045305	M	<i>C. lupus</i>	L+R mand+cranium. R teeth I1-3, C1, P1-4, M1-2	17

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	P3L
NRM	Dala Floda, Borlange, Dalarna IV 225 (road?), Osma,	2003.03.09	1	20035024	M	<i>C. lupus</i>	L+R mand+cranium. L teeth, I1-3, C1, P1-4, M1-2	16.44
NRM	Sodermanland Lanasberget, Grundsjo,	2005.11.26	1	20065027	M	<i>C. lupus</i>	L+broken R mand+cranium. L teeth I1-3, C1, P1-4, M1-2	16.61
NRM	Ljungaverk,	2005.09.02	1	20055287	M	<i>C. lupus</i>	L+R mand+cranium. L teeth I1- 3, C1, P1-4, M1-2	16.22
NRM	Mullhyttan, Orebro, Narke	2006.09.15	1	20065414	M	<i>C. lupus</i>	L+R mand+cranium. R teeth I1- 3, C1, P1-4, M1-2	16.96
NRM	Avik, Laxa, Narke	2007.04.27	1	20075186	M	<i>C. lupus</i>	L+R mand + cranium. L teeth I2-3, C1, P1-4, M1-2	16.44
NRM	Malung-Appelbo, Dalarna Dalarna, Torsby, Ostmark;	2007.12	1	20085027	M	<i>C. lupus</i>	L+R mand +cranium. L teeth, I1-3, C1, P1-4, M1-2	16.81
NRM	Sojensoasen Stormosse, Piro, Bjorneborg,	2007.09.15	1	20075373	M	<i>C. lupus</i>	L+R mand+cranium. R teeth I1- 3, C1, P1-4, M1-2	17.58
NRM	Kristinehamn,	2007.12.27	1	20085036	M	<i>C. lupus</i>	L+R mand+cranium. L teeth I1- 3, C1, P1-4, M1-2	16.78
NHM 23 K	Cae Gywn Cave		2	M2613	H Hicks and E Bouwerie Luxmoore	<i>C. lupus</i>	R upper max frag, P3-4, M1-2	14.09

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	P3L
SMES IV 266	Black Rock Quarries, Tenby		3	D2597		<i>C. lupus</i>	R maxilla frag, P3-4, M1-2	17.94
SMES bay 4, iv 266 drw	Black Rock Quarries, Tenby		3	none	none	<i>C. lupus</i>	In same box found wolf teeth x5. 3x upper teeth. R upper P3	16.15
SMES bay 4, iv 266 drw	Black Rock Quarries, Tenby		3	none	none	<i>C. lupus</i>	R upper P3	16.17
SMES bay 4, iv 266 drw	Black Rock Quarries, Tenby		3	none	none	<i>C. lupus</i>	In same box found wolf teeth x5. 3x upper teeth. R upper P3	16.15
SMES bay 4, iv 266 drw	Black Rock Quarries, Tenby		3	none	none	<i>C. lupus</i>	R upper P3	16.17
TM Gallery	Kents Cavern		3			<i>C. lupus</i>	R teeth, C1 frag, P2-4, M1-2	15.68
TM G/B1/217	Kents Cavern	unknown	3	P12678		<i>C. lupus</i>	R upper P3	15.54
BC	Oreston Cave		3	Cd2925	J. Cottle cIn 1830	<i>C. lupus</i>	L upper P3	16.47
BC	Oreston Cave		3	Cd2934	J. Cottle cIn 1830	<i>C. lupus</i>	L upper P3	17.81

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	P3L
BC	Oreston Cave		3	Cd2935	J. Cottle clln 1830	<i>C. lupus</i>	L upper P3	15.71
MM R4 CoLE D 1	Pin Hole Cave	PH (F)	3	LL.1986		<i>C. lupus</i>	R max half, C1, P1-4, M1-2	13.11
NHM 45 D d13	Banwell Bone Cave		5a	44648	Pres Benj Bright 1873	<i>C. lupus</i>	21). R upper P3	15.63
UBSS	Banwell Bone Cave		5a	none TTNCM 40/1995/31		<i>C. lupus</i>	R upper P3	15.95
SHC D19/2	Banwell Bone Cave		5a	/30 TTNCM 40/1995/31	William Beard clln	<i>C. lupus</i>	R upper P3	15.61
SHC D19/2	Banwell Bone Cave		5a	/16 TTNCM 40/1995/31	William Beard clln	<i>C. lupus</i>	R upper P3	15.03
SHC D19/2	Banwell Bone Cave		5a	/26 TTNCM 40/1995/31	William Beard clln	<i>C. lupus</i>	R upper P3	16.47
SHC D19/2	Banwell Bone Cave		5a	/34 TTNCM 40/1995/31	William Beard clln	<i>C. lupus</i>	R upper P3	17.26
SHC D19/2	Banwell Bone Cave		5a	/20	William Beard clln	<i>C. lupus</i>	R upper P3	15.69

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	P3L
SHC D19/2	Banwell Bone Cave		5a	TTNCM 40/1995/31 /24	William Beard clln	<i>C. lupus</i>	R upper P3	18.6, 10.77
SHC D19/2	Banwell Bone Cave		5a	TTNCM 40/1995/31 /25	William Beard clln	<i>C. lupus</i>	R upper P3	18.6
SHC D19/1 SM From fox & wolf box in display	Banwell Bone Cave		5a	TTNCM 40/1995/18	William Beard clln	<i>C. lupus</i>	R max, P2-4	17.71
SM From fox & wolf box in display	Bosco's Den		5a	SM. 1858.1.148		<i>C. lupus</i>	L upper P3 in max frag	17.26
SM From fox & wolf box in display case 9	Bosco's Den		5a	SM. 1858.1.58		<i>C. lupus</i>	L upper P3	16.31
MM R5 ColK D15	Windy Knoll		5a	P2496a-j	Dawkins	<i>C. lupus</i>	R upper max frag, P2-3	17.74
MM Gallery	Windy Knoll		5a	LL12009		<i>C. lupus</i>	With above. Cranium, R I1-2, I3 root, C1, P2-4, M1-2	15.03
BC NHM 44 D	Clevedon Cave		6	Ce15103	S.H. Reynolds	<i>C. lupus</i>	R upper P3	13.85
drw 7	Hutton Cave	none	7	44739a	Bright?	<i>C. lupus</i>	From above, R half of RP2 in P1 socket!, P2-4, M1-2	15.91

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	P3L
SHC D40/2	Hutton Cave	Cave dep	7	TTNCM 42/1995/46	Rev D Williams and W Beard clln	<i>C. lupus</i>	R upper P3	17.01
SHC D40/2	Hutton Cave		7	TTNCM 42/1995/62	Rev D Williams and W Beard clln	<i>C. lupus</i>	R upper P3	16.11
BCM 6, 7, box 123	Marsworth		7	o15/7 89.168H/3	Given by Major David William Wynn	<i>C. lupus</i>	R upper P3. DCS ID L upper P3	14.78
NMW Box 2.20	Pontnewydd Cave	LB	7	F2354 + F2370		<i>C. lupus</i>	L upper P3	16.39
StM 80	Villa Seckendorf, Bad Canstatt, Germany	Stuttgart Travertine	2.8	31297 or SE.21.2.57/ 10		<i>C. lupus</i>	R upper max, post root P2, P3- 4, M1	17.53
StM 80	Villa Seckendorf, Bad Canstatt, Germany	Stuttgart Travertine	2.8	31296 or SE.21.2.57/ 10		<i>C. lupus</i>	R upper max, P2-4, M2	17.79
NHM 25 F d 3	Boxgrove	Project A, Q2, area GTP4, unit 6, field no F1	13	F1/3		<i>C. mosbachensis</i>	R upper max, C1, P2-4, M1	13.75
NHM 25 F d 3	Boxgrove	Project A, Q2, area GTP4, unit 6, field no F1	13	F1/5		<i>C. mosbachensis</i>	R upper max, P1-3, frag ant P4	14.35
NHM 25 E d 14	Boxgrove	Project A, Q1, area TP4, no unit, field no 1 (28)	13	F1 (28)		<i>C. mosbachensis</i>	R teeth P2-4, M1-2	13.23

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	P3L
NHM 25 G d 24	Boxgrove	Project A, Q1, Area A, unit 4b, field no. F3445	13	F2445		<i>C. mosbachensis</i>	R teeth I1-3, C1, P1-4, M1-2	12.35
NHM 44 E drw 18	Westbury	Unsrat. Calc memb	13	none	Bishop, 1974	<i>C. mosbachensis</i>	R upper P3	14.87
NHM 35 H d 3	Westbury	Grey-green silt, W9	13	M34219	NHM excav'78	<i>C. mosbachensis</i>	R upper max frag, P3-4, M1-2	14.16
NHM 35 F Westbury drw	Westbury	Bed 4b?	13	M33950	Bishop	<i>C. mosbachensis</i>	R upper P3	13.65
SIW 1 d 1	Untermassfeld, Germany		4	1982/18249 (Mei 17769)		<i>C. mosbachensis</i>	R max, I1-3, C1, P1-4, I M1-2	12.37
SIW 1 d 1	Untermassfeld, Germany		4	1982/18052		<i>C. mosbachensis</i>	Cranium, R teeth I1-3, C1, P1-4, M1-2	13.34
SIW 1 d2	Untermassfeld, Germany		4	1984/20275 (Mei 19795)		<i>C. mosbachensis</i>	R upper P3 in max frag	14.19
SIW 1d4	Untermassfeld, Germany		4	1983/18681 (mei 182201)		<i>C. mosbachensis</i>	R upper P3	12.76
FLO 0/02/013/01 (d1)	Il Tasso, Italy	Upper Valdarno	4.4	IGF868		<i>C. arnensis</i>	Max, snout and basicranium. L max, I1-2, C1, P1-4, M1-2	12.57

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	P3L
FLO Gallery	il tasso, Italy	Upper Valdarno	4.4	IGF869		<i>C. arnensis</i>	Squashed cranium, L teeth, I1-3, C1, P1-4, M1-2	11.61
FLO Gallery	near le strette al tasso, Italy	Upper Valdarno	4.4	IGF867		<i>C. arnensis</i>	Squashed cranium, L side better than R, not much. L teeth, I1-3, C1, P1-4, M1-2	12.33
FLO 0/02/013/04 (d4)	Se Ville, Italy	Upper Valdarno	4.4	IGF885		<i>C. etruscus</i>	R max, P2-4, M1	14.31
FLO 0/02/013/05	Upper Valdarno, Italy	Upper Valdarno	4.4			<i>C. etruscus</i>	R upper P3	14.25
FLO 0/02/013/05	Upper Valdarno, Italy	Upper Valdarno	4.4			<i>C. etruscus</i>	R upper P3 in max frag	14.31
FLO 0/02/013/07 (d7)	Val di Magna, Italy	Olivola	4.4	IGF4486		<i>C. etruscus</i>	R upper max, more ling than buc frag, P3-4, M1-2	14.38
FLO Gallery	Olivola, Italy	Olivola	4.4	IGF4407		<i>C. etruscus</i>	R teeth, C1, P3-4, M1-2	14.03

10. P4L

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	P4L
NHM 1	France		1	1843.12.29.7	F	<i>C. lupus</i>	Cranium, L teeth I1-3, C1, P1, 3-4, M1-2	24.15
NHM 2	Pyrenees	Parzudacki clln	1	44.1.18.1	F	<i>C. lupus</i>	Cranium, L teeth I2-3, C1, P1-4, M1-2	24.16
NHM 3	Nr Abrantos, S of the Tagus, Portugal	WC Tait clln.	1	1938.12.7.1	F	<i>C. lupus</i>	Cranium, R teeth I1-3, C1, P1-4, M1-2	22.99
NHM 5	Riocalado, Burgos, Spain		1	11.10.5.2	F	<i>C. lupus</i>	Cranium, L teeth I1-3, C1, P1-4, M1-2	25.99
NHM 8	Kocane, Macedonia		1	47.1121.a	F	<i>C. lupus</i>	Cranium, L teeth I1-3, C1, P1-4, M1-2	25.26
NRM	Korvijaure, 7 miles N Kiruna	15.4.1959	1	A58 0112	F	<i>C. lupus</i>	L+R mand + cranium. Cranium-fract basicranium. L teeth, I1-3, C1, P1-4, M1-2	25.24
NRM	S Finnskoga, Skrackerberget	1985.07.29	1	A865126	F	<i>C. lupus</i>	L+R mand+cranium. R teeth, I1-3, P1-4, M1-3	25.95
NRM	Jadraas, 5km N	1991.06.14	1	A915068	F	<i>C. lupus</i>	L+R mand+cranium. R teeth P4, M1-2	25.48

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	P4L
NRM	Vastra Amtervik, Hensgard	1993.02.24	1	A935024	F	<i>C. lupus</i>	L+R mand+cranium. L mand, I1-3, C1, P2-4, M1-2	26.05
NRM	Nas-snoan, v71/jvg Nyskoga, Kringsberg, Bontjarn	1993.08.18	1	A935178	F	<i>C. lupus</i>	L+R mand+cranium. L teeth I1-3, C1, P1-4, M1-2	25.54
NRM		1994.01.19	1	A945045	F	<i>C. lupus</i>	L+R mand+cranium. R teeth, I1-3, C1, P1-4, M1-2	25.72
NRM	Vastmandland, Grythyttan	1999.12.17	1	20005111	F	<i>C. lupus</i>	L+R mand+cranium. R mand I2-3, C1, P2-4, M1-3	25.95
NRM	Narke, Degerfors, Atorp	2001.12.26	1	20025005	F	<i>C. lupus</i>	L+R mand+cranium. L teeth I1-3, P1-4, M1-2	26.89
NRM	Atorp 3.5 km NW, Degerfors, Varmland	2002.03.05	1	20035026	F	<i>C. lupus</i>	L+R mand+cranium. R teeth I1-3, C1, P1-4, M1-2	26.19
NRM	Odlingen, Sillerud, Arjang, Varmland	2004.02.07	1	20045040	F	<i>C. lupus</i>	L+R mand+cranium. R teeth I1-3, C1, P1-4, M1-2	24.63
NRM	Ovre Hurr, Tocksfors, Varmland	2006.05.30	1	20065236	F	<i>C. lupus</i>	L+R mand+cranium. L teeth, I1, I3, C1, P1-4, M1-2	25.55

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	P4L
NRM	Rickebo, Hallbo, Bollnas, Halsingland	2006.03.14	1	20065047	F	<i>C. lupus</i>	L+R mand+cranium. R teeth I1-3, C1, P1-4, M1-2	25.74
NRM	Ronnas, Ostra, Leksand, Dalarna	2007.10.09	1	20075381	F	<i>C. lupus</i>	L+R mand+cranium. R teeth I1-3, C1, P1-4, M1-2	24.96
NRM	Jarbo, Backefors, Dalsland Varmland, Nordmark, Algsjion	<i>C. lupus</i>	1	20075314	F	<i>C. lupus</i>	L+R mand+cranium. R teeth I1-3, C1, P1-4, M1-2	25.09
NRM	2 km S Halsingland, Bollnas, Lottefors;	2009.01.25	1	20095063	F	<i>C. lupus</i>	L+R mand+cranium. L teeth I1-3, C1, P1-4, M1-2	26.2
NRM	Rv 83 Vastmanland, Hallefors, Ornviken,	2007.08.19	1	20075312	F	<i>C. lupus</i>	L+R mand + cranium. L teeth I1-3, C1, P1-4, M1-2	25.45
NRM		2010.01.02	1	20105028	F	<i>C. lupus</i>	L+R mand+cranium. R teeth I1-3, C1, P1-4, M1-2	25.04
NHM 4	Riocalado, Burgos, Spain		1	11.10.5.1	M	<i>C. lupus</i>	Cranium, L teeth I1-3, C1, P1-4, M1-2	27.45
NHM 6	Seville, Spain	On note '2 carnassials in tooth case'	1	95.3.3.6	M	<i>C. lupus</i>	Cranium, R teeth I1-3, C1, P1-4, M1-2	26.01

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	P4L
NHM 7	Ukraine on modern ticket, on skull and original Norbotten, N Sweden (in arctic circle).		1	34.6.28.47	M	<i>C. lupus</i>	Cranium, L teeth I1-3, C1, post P1, post P2, P3-4, M1-2	27.16
NHM 9			1	28.5.4.1	M	<i>C. lupus</i>	Cranium, I teeth I1-3, C1, P1, P3-4, M1-2	26.06
NHM 11			Moscow district, Russia	1	82.9.18.2	M	<i>C. lupus</i>	Cranium, L teeth I1-3, C1, P1-4, M1-2
Ost NHM	Abrantos, S of Tagus, Portugal		1	1937.2.10.2	M	<i>C. lupus</i>	Cranium, R teeth I1-3, C1, P1-4, M1-2	25.14
NRM	Ljusdal, Ramsjo (s:n)	12.2.1926	1	A580255	M	<i>C. lupus</i>	L+R mand + fract cranium, palate/ant cranium. L teeth I1-3, C1, P1-4, M1-2	27
NRM	Jokkmokk	11.02.1852	1	A583532	M	<i>C. lupus</i>	L+R mand + cranium. R teeth I1-3, C1, P1-4, M1-2	27.59
NRM	Orebro	1852	1	A583547	M	<i>C. lupus</i>	L+R mand+cranium. R teeth I1-3, C1, P1-4, M1-3	26.08
NRM	Sweden	1907	1	A589147	M	<i>C. lupus</i>	L+R mand + cranium. R teeth I1-3, C1, P1-4, M1-2	27.78

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	P4L
NRM	Sweden	1908	1	A589199	M	<i>C. lupus</i>	L+R mand+cranium. L teeth I1-3, C1, P1-4, M1-2	26.73
NRM	Luktjomtjuolta, Vilhelmina	15.1.1937	1	A590009	M	<i>C. lupus</i>	L+R mand+cranium. R teeth I1-3, C1, P2-4, M1-2	25.61
NRM	Lina alv station	25.12.1977	1	A775097	M	<i>C. lupus</i>	L+R mand+cranium. L teeth I1, I3, C1, P1-4, M1-2	28.63
NRM	Atran, Ogardet	1984.09.12	1	A845131	M	<i>C. lupus</i>	L+R mand+cranium. R teeth I1-3, C1, P1-4, M1-2	27.29
NRM	Hede, 3 mil NV, Norrstadjan	1989.04.17	1	A895039	M	<i>C. lupus</i>	L+R mand+cranium. R teeth I2 from L though-3, P2-4, M1-2	28.15
NRM	Kiruna-Gallivare, Gaddmyr, Jvg	1992.08.24	1	A925106	M	<i>C. lupus</i>	L+R mand+cranium. R mand, I1-3, P2-4, M1-3	26.35
NRM	Boras	1996.01.04	1	A965002	M	<i>C. lupus</i>	L+R mand+cranium. L teeth I1-3, C1, P1-4, M1-2	27.08
NRM	Jarna, Flaten, Dalarna	1999.2.6	1	A995016	M	<i>C. lupus</i>	L+R mand+cranium. R teeth, I1-2, P1-4, M1-2	28.56

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	P4L
NRM	Varmland, Eksharad, Halgan; Kolarkojan	1999.06.04	1	995230	M	<i>C. lupus</i>	L+R mand+cranium. R teeth, I1-I3, C1, P1-4, M1-2	27.53
NRM	Jumkil kyrka, Uppsala	2000.11.19	1	20005365	M	<i>C. lupus</i>	L+R mand+cranium. L mand I1-3, C1, P1-4, M1-3	27.86
NRM	Uddalen, Ed, Dalsland	2003.05.12	1	20035114	M	<i>C. lupus</i>	L+R mand+cranium. R teeth I1-3, C1. P1-4, M1-2	28.34
NRM	Ostermören, Smedjebacken, Dalarna	2004.12.09	1	20045305	M	<i>C. lupus</i>	L+R mand+cranium. R teeth I1-3, C1, P1-4, M1-2	27.2
NRM	Dala Floda, Borlange, Dalarna IV 225 (road?), Osma,	2003.03.09	1	20035024	M	<i>C. lupus</i>	L+R mand+cranium. L teeth, I1-3, C1, P1-4, M1-2	26.77
NRM	Sodermanland Lanasberget, Grundsjo,	2005.11.26	1	20065027	M	<i>C. lupus</i>	L+broken R mand+cranium. L teeth I1-3, C1, P1-4, M1-2	26.83
NRM	Ljungaverk,	2005.09.02	1	20055287	M	<i>C. lupus</i>	L+R mand+cranium. L teeth I1-3, C1, P1-4, M1-2	25.48
NRM	Mullhyttan, Orebro, Narke	2006.09.15	1	20065414	M	<i>C. lupus</i>	L+R mand+cranium. R teeth I1-3, C1, P1-4, M1-2	26.6

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	P4L
NRM	Avik, Laxa, Narke	2007.04.27	1	20075186	M	<i>C. lupus</i>	L+R mand + cranium. L teeth I2-3, C1, P1-4, M1-2	28.54
NRM	Malung-Appelbo, Dalarna	2007.12	1	20085027	M	<i>C. lupus</i>	L+R mand +cranium. L teeth, I1-3, C1, P1-4, M1-2	27.1
NRM	Dalarna, Torsby, Ostmark; Sojensoasen	2007.09.15	1	20075373	M	<i>C. lupus</i>	L+R mand+cranium. R teeth I1-3, C1, P1-4, M1-2	28.73
NRM	Stormosse, Piro, Bjorneborg, Kristinehamn,	2007.12.27	1	20085036	M	<i>C. lupus</i>	L+R mand+cranium. L teeth I1-3, C1, P1-4, M1-2	28.24
NHM 23 K	Cae Gywn Cave		2	M2613	Pres by H Hicks and E Bouwerie Luxmoore	<i>C. lupus</i>	R upper max frag, P3-4, M1-2	28.07
SMES IV 266	Black Rock Quarries, Tenby		3	D2600		<i>C.lupus</i>	R maxilla frag, P4, M1-2	25.04
SMES IV 266	Black Rock Quarries, Tenby		3	D2597		<i>C.lupus</i>	R maxilla frag, P3-4, M1-2	26.91
NHM 43 C	Kents Cavern		3	M5599	Purch 1895	<i>C.lupus</i>	In box, 1). L upper P4 in max frag	24.83

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	P4L
TM Gallery	Kents Cavern		3	P30686?	MacEnery?	<i>C. lupus</i>	Cranium, L teeth I3, C1, P2-4, M1-2	26.07
BC	Oreston Cave		3	Cd2919	J. Cottle clln 1830	<i>C. lupus</i>	L upper P4	25.79
SM blue boxes	Paviland		3	Z 836.6.1006		<i>C. lupus</i>	L upper max frag, P4	24.77
NHM 45 D d13	Banwell Bone Cave		5a	M223 with M223a (L teeth)	Enniskillen clln	<i>C. lupus</i>	L maxilla, upper P3-4, M1-2	26.37
NHM 45 D d12	Banwell Bone Cave		5a	M404	Egerton Clln, 1882	<i>C. lupus</i>	Fract crania, LP3-4, M1-2	27.69
NHM 45 D d12	Banwell Bone Cave		5a	44640	Pres by B. Bright, 1873	<i>C. lupus</i>	Crania, LP3-4, M1	24.53
SHC D19/1	Banwell Bone Cave	Cave dep	5a	TTNCM 40/1995/15	William Beard clln	<i>C. lupus</i>	L upper max frag, P3-4, M1	25.33
SHC D19/1	Banwell Bone Cave		5a	TTNCM 40/1995/16	William Beard clln	<i>C. lupus</i>	L upper max frag, P4, M1-2	25.37

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	P4L
SHC D19/1	Banwell Bone Cave		5a	TTNCM 40/1995/17	William Beard clln	<i>C. lupus</i>	L max, P4, M1-2	26.16
MM R5 colK d14	Windy Knoll		5a	P2497	Dawkins	<i>C. lupus</i>	R max frag, P4, M1-2	27.8
MM Gallery SM From fox & wolf box in display	Windy Knoll		5a	LL12009		<i>C. lupus</i>	With above. Cranium, R I1- 2, I3 root, C1, P2-4, M1-2	23.25
SM From fox & wolf box in display	Bosco's Den		5a	SM. 1858.1.63		<i>C. lupus</i>	R upper max frag, P4, M1	26.99
SM From fox & wolf box in display	Bosco's Den		5a	SM. 1858.1.48		<i>C. lupus</i>	R upper max frag, P4, M1-2	28.66
TM G/B6/B112	Joint Mitnor Cave		5e	P35116	none	<i>C. lupus</i>	L upper P4	26.26
TM G/B6/B112	Joint Mitnor Cave		5e	P35118	none	<i>C. lupus</i>	L upper P4	27.49
BC	Clevedon Cave		6	Ce15096	S.H. Reynolds	<i>C. lupus</i>	L upper max, P4, M1	25.53

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	P4L
BC	Walton Bone Cave, Clevedon		6	Ce12521	B.N.S. Soc	<i>C. lupus</i>	L upper max, P4, M2	25.05
NHM 44 D drw 7	Hutton Cave	none	7	44739a TTNCM	Bright?	<i>C. lupus</i>	Cranium, L I3, (R) C1, half P2, P3-4, M1-2	23.19
SHC D40/2	Hutton Cave		7	42/1995/68 8	Rev D Williams and W Beard clln	<i>C.lupus</i>	L upper max and partial palate frag, P2, P4, M2	26.6
NHM 36 E d 36/E/19	Perick Cave, Westphalia, Germany	Cavern	2.4	28582	none	<i>C. lupus</i>	R max frag, P4, M2	26.51
StM 80	Villa Seckendorf, Bad Canstatt, Germany	Stuttgart Travertine	2.8	31297 or SE.21.2.57/ 10		<i>C. lupus</i>	R upper max, post root P2, P3-4, M1	28.36
StM 80	Villa Seckendorf, Bad Canstatt, Germany	Stuttgart Travertine	2.8	31296 or SE.21.2.57/ 10		<i>C. lupus</i>	R upper max, P2-4, M2	27.82
SIW	Weimar- Ehringsdorf, Germany		3	1966/5569 (Ehr 10878)		<i>C. lupus</i>	L upper P4	25.33
NHM 25 F d 3	Boxgrove	Project A, Q2, area GTP13, unit 4c surface, field no F7 (1)	12.9	F7 (1)/1		<i>C. mosbachensis</i>	R upper P4	21.68

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	P4L
NHM 25 F d 3	Boxgrove	Project A, Q2, area GTP4, unit 6, field no F1	12.9	F1/3		<i>C. mosbachensis</i>	R upper max, C1, P2-4, M1	22.56
NHM 25 G d 24	Boxgrove	Project A, Q1, Area A, unit 4b, field no. F3445	12.9	F2445		<i>C. mosbachensis</i>	R teeth I1-3, C1, P1-4, M1-2	20.23
NHM 44 E drw 18	Westbury	Unstrat. Calc memb	13	none	Bishop, 1974	<i>C. mosbachensis</i>	R upper P4	24.13
NHM 35 H d 11	Westbury	Unstrat. W10? Lower Yellow breccia. 19/15.	13	none	none	<i>C. mosbachensis</i>	R upper P4	22.95
NHM 35 H d 23	Westbury	Site W5 west	13	none	none	<i>C. mosbachensis</i>	R upper P4	23.36
NHM 3 A d 8	Westbury	19/7 3 M E	13	none	Excav 1984	<i>C. mosbachensis</i>	R upper P4 in max frag	24.15
NHM 3 A d 10	Westbury	Grey breccia	13	none	Excav 1980	<i>C. mosbachensis</i>	R upper P4 in 2 frags	24.09
NHM 47 B	West Runton	Upper freshwater bed	17	M17934	AC Savin CIn, 1946. CII'd 1908	<i>C. mosbachensis</i>	R upper P4 and M1 in assoc. 1). R P4	21.49

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	P4L
VER 00441	Cengelle II, Soave, Italy		3.4	V10112		<i>C. mosbachensis</i>	L upper P4	23.21
SIW 1 d 1	Untermassfeld, Germany		4	1982/1824 9 (Mei 17769)		<i>C. mosbachensis</i>	R max, I1-3, C1, P1-4, I M1-2	21.46
SIW 1 d 1	Untermassfeld, Germany		4	1982/1805 2		<i>C. mosbachensis</i>	Cranium, R teeth I1-3, C1, P1-4, M1-2	22.61
SIW 1 d 2	Untermassfeld, Germany		4	1984/2027 5 (Mei 19795)		<i>C. mosbachensis</i>	R upper P4 in max frag	23.97
SIW 1 d 3	Untermassfeld, Germany		4	1980/1532 8 (Mei 14840)		<i>C. mosbachensis</i>	R upper max frag, P4, M1-2	21.06
FLO 0/02/013/04 (d4)	il tasso, Italy	Upper Valdarno	4.4	IGF887		<i>C. arnensis</i>	R upper max, P2-4, M1-2. in bix with R mand	20.45
FLO Gallery	il tasso, Italy	Upper Valdarno	4.4	IGF869		<i>C. arnensis</i>	Squashed cranium, L teeth, I1-3, C1, P1-4, M1-2	20.15
FLO Gallery	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF869		<i>C. arnensis</i>	Squashed cranium cont. R teeth, I1-2, C1, P1-4, M1-2	19.74

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	P4L
FLO Gallery	near le strette al tasso, Italy	Upper Valdarno	4.4	IGF867		<i>C. arnensis</i>	Squashed cranium, pair R teeth, I1-3, C1, P1-4, M1-2	20.32
FLO 0/02/013/02 (d2)	Figline, Italy	Upper Valdarno	4.4	11780		<i>C. majori (etruscus)</i>	R upper max frag, P4, M1	22.14
FLO 0/02/013/04 (d4)	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF861		<i>C. majori (etruscus)</i>	R upper max frag, roots P3, P4, M1-frag M2	22.36
FLO 0/02/013/03 (d3)	Upper Valdarno, Italy	Upper Valdarno	4.4			<i>C. etruscus</i>	R upper P4	24.61
FLO 0/02/013/06 (d6)	Olivola, Italy	Olivola	4.4	IGF4412		<i>C. etruscus</i>	Cont from above...R P4-M2	20.97
FLO 0/02/013/06 (d6)	Olivola, Italy	Olivola	4.4	IGF4411		<i>C. etruscus</i>	cont from above...R teeth, P4, M1-2	21.41
FLO 0/02/013/07 (d7)	Val di Magna, Italy	Olivola	4.4	IGF4486		<i>C. etruscus</i>	R upper max, more ling than buc frag, P3-4, M1-2	22.81
FLO Gallery	Olivola, Italy	Olivola	4.4	IGF4407		<i>C. etruscus</i>	R teeth, C1, P3-4, M1-2	23.5

11. P4W

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection	Species	Material	P4W
NHM 1	France		1	1843.12.29.7	F	<i>C. lupus</i>	Cranium, L teeth I1-3, C1, P1, 3-4, M1-2	12.94
NHM 2	Pyrenees	Parzudacki clln	1	44.1.18.1	F	<i>C. lupus</i>	Cranium, L teeth I2-3, C1, P1-4, M1-2	12.44
NHM 3	Nr Abrantos, S of the Tagus, Portugal	WC Tait clln.	1	1938.12.7.1	F	<i>C. lupus</i>	Cranium, R teeth I1-3, C1, P1-4, M1-2	12.49
NHM 5	Riocalado, Burgos, Spain		1	11.10.5.2	F	<i>C. lupus</i>	Cranium, L teeth I1-3, C1, P1-4, M1-2	13.59
NHM 8	Kocane, Macedonia		1	47.1121.a	F	<i>C. lupus</i>	Cranium, L teeth I1-3, C1, P1-4, M1-2	12.78
NRM	Korvijaure, 7 miles N Kiruna	15.4.1959	1	A58 0112	F	<i>C. lupus</i>	L+R mand + cranium. Cranium-fract basicranium. L teeth, I1-3, C1, P1-4, M1-2	12.73
NRM	S Finnskoga, Skrackarberget	1985.07.29	1	A865126	F	<i>C. lupus</i>	L+R mand+cranium. R teeth, I1-3, P1-4, M1-3	13.35
NRM	Jadraas, 5km N	1991.06.14	1	A915068	F	<i>C. lupus</i>	L+R mand+cranium. R teeth P4, M1-2	13.03

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection	Species	Material	P4W
NRM	Vastra Amtervik, Hensgard	1993.02.24	1	A935024	F	<i>C. lupus</i>	L+R mand+cranium. L mand, I1-3, C1, P2-4, M1-2	15.25
NRM	Nas-snoan, v71/jvg	1993.08.18	1	A935178	F	<i>C. lupus</i>	L+R mand+cranium. L teeth I1-3, C1, P1-4, M1-2	15.01
NRM	Nyskoga, Kringsberg, Bontjarn	1994.01.19	1	A945045	F	<i>C. lupus</i>	L+R mand+cranium. R teeth, I1-3, C1, P1-4, M1-2	13.11
NRM	Vastmandland, Grythyttan	1999.12.17	1	20005111	F	<i>C. lupus</i>	L+R mand+cranium. R mand I2-3, C1, P2-4, M1-3	14.35
NRM	Narke, Degerfors, Atorp	2001.12.26	1	20025005	F	<i>C. lupus</i>	L+R mand+cranium. L teeth I1-3, P1-4, M1-2	13.61
NRM	Atorp 3.5 km NW, Degerfors, Varmland	2002.03.05	1	20035026	F	<i>C. lupus</i>	L+R mand+cranium. R teeth I1-3, C1, P1-4, M1-2	13.22
NRM	Odlingen, Sillerud, Arjang, Varmland	2004.02.07	1	20045040	F	<i>C. lupus</i>	L+R mand+cranium. R teeth I1-3, C1, P1-4, M1-2	14.06
NRM	Ovre Hurr, Tocksfors, Varmland	2006.05.30	1	20065236	F	<i>C. lupus</i>	L+R mand+cranium. L teeth, I1, I3, C1, P1-4, M1-2	13.15
NRM	Rickebo, Hallbo, Bollnas, Halsingland	2006.03.14	1	20065047	F	<i>C. lupus</i>	L+R mand+cranium. R teeth I1-3, C1, P1-4, M1-2	14.11

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection	Species	Material	P4W
NRM	Ronnas, Ostra, Leksand, Dalarna	2007.10.09	1	20075381	F	<i>C. lupus</i>	L+R mand+cranium. R teeth I1-3, C1, P1-4, M1-2	14.27
NRM	Jarbo, Backefors, Dalsland Varmland, Nordmark, Algsjion	C. lupus	1	20075314	F	<i>C. lupus</i>	L+R mand+cranium. R teeth I1-3, C1, P1-4, M1-2	13.39
NRM	2 km S Halsingland, Bollnas, Lottefors;	2009.01.25	1	20095063	F	<i>C. lupus</i>	L+R mand+cranium. L teeth I1-3, C1, P1-4, M1-2	14.66
NRM	Rv 83 Vastmanland, Hallefors,	2007.08.19	1	20075312	F	<i>C. lupus</i>	L+R mand + cranium. L teeth I1-3, C1, P1-4, M1-2	14.83
NRM	Ornviken,	2010.01.02	1	20105028	F	<i>C. lupus</i>	L+R mand+cranium. R teeth I1-3, C1, P1-4, M1-2	13.43
NHM 4	Riocalado, Burgos, Spain	On note '2 carnassials in tooth case'	1	11.10.5.1	M	<i>C. lupus</i>	Cranium, L teeth I1-3, C1, P1-4, M1-2	14.25
NHM 6	Seville, Spain		1	95.3.3.6	M	<i>C. lupus</i>	Cranium, R teeth I1-3, C1, P1-4, M1-2	13.49
NHM 7	Ukraine on modern ticket, on skull and original		1	34.6.28.47	M	<i>C. lupus</i>	Cranium, L teeth I1-3, C1, post P1, post P2, P3-4, M1-2	13.85
NHM 9	Norbotten, N Sweden (in arctic circle).		1	28.5.4.1	M	<i>C. lupus</i>	Cranium, I teeth I1-3, C1, P1, P3-4, M1-2	14.15

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection	Species	Material	P4W
NHM 11	Moscow district, Russia		1	82.9.18.2	M	<i>C. lupus</i>	Cranium, L teeth I1-3, C1, P1-4, M1-2	14.09
Ost NHM	Abrantos, S of Tagus, Portugal		1	1937.2.10.2	M	<i>C. lupus</i>	Cranium, R teeth I1-3, C1, P1-4, M1-2	13.24
NRM	Ljusdal, Ramsjo (s:n)	12.2.1926	1	A580255	M	<i>C. lupus</i>	L+R mand + fract cranium, palate/ant cranium. L teeth I1-3, C1, P1-4, M1-2	13.35
NRM	Jokkmokk	11.02.1852	1	A583532	M	<i>C. lupus</i>	L+R mand + cranium. R teeth I1-3, C1, P1-4, M1-2	14.05
NRM	Orebro	1852	1	A583547	M	<i>C. lupus</i>	L+R mand+cranium. R teeth I1-3, C1, P1-4, M1-3	13.56
NRM	Sweden	1907	1	A589147	M	<i>C. lupus</i>	L+R mand + cranium. R teeth I1-3, C1, P1-4, M1-2	15.57
NRM	Sweden	1908	1	A589199	M	<i>C. lupus</i>	L+R mand+cranium. L teeth I1-3, C1, P1-4, M1-2	14.62
NRM	Luktjomtjuolta, Vilhelmina	15.1.1937	1	A590009	M	<i>C. lupus</i>	L+R mand+cranium. R teeth I1-3, C1, P2-4, M1-2	13.75
NRM	Lina alv station	25.12.1977	1	A775097	M	<i>C. lupus</i>	L+R mand+cranium. L teeth I1, I3, C1, P1-4, M1-2	15.66

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection	Species	Material	P4W
NRM	Atran, Ogardet	1984.09.12	1	A845131	M	<i>C. lupus</i>	L+R mand+cranium. R teeth I1-3, C1, P1-4, M1-2	13.9
NRM	Hede, 3 mil NV, Norrstadjan	1989.04.17	1	A895039	M	<i>C. lupus</i>	L+R mand+cranium. R teeth I2 from L though-3, P2-4, M1-2	16.46
NRM	Kiruna-Gallivare, Gaddmyr, Jvg	1992.08.24	1	A925106	M	<i>C. lupus</i>	L+R mand+cranium. R mand, I1-3, P2-4, M1-3	14.06
NRM	Boras	1996.01.04	1	A965002	M	<i>C. lupus</i>	L+R mand+cranium. L teeth I1-3, C1, P1-4, M1-2	14.47
NRM	Jarna, Flaten, Dalarna	1999.2.6	1	A995016	M	<i>C. lupus</i>	L+R mand+cranium. R teeth, I1-2, P1-4, M1-2	13.8
NRM	Varmland, Eksharad, Halgan; Kolarkojan	1999.06.04	1	995230	M	<i>C. lupus</i>	L+R mand+cranium. R teeth, I1-I3, C1, P1-4, M1-2	15.45
NRM	Jumkil kyrka, Uppsala	2000.11.19	1	20005365	M	<i>C. lupus</i>	L+R mand+cranium. L mand I1-3, C1, P1-4, M1-3	14.97
NRM	Uddalen, Ed, Dalsland	2003.05.12	1	20035114	M	<i>C. lupus</i>	L+R mand+cranium. R teeth I1-3, C1. P1-4, M1-2	14.48
NRM	Ostermoren, Smedjebacken, Dalarna	2004.12.09	1	20045305	M	<i>C. lupus</i>	L+R mand+cranium. R teeth I1-3, C1, P1-4, M1-2	16.63

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection	Species	Material	P4W
NRM	Dala Floda, Borlange, Dalarna IV 225 (road?), Osma,	2003.03.09	1	20035024	M	<i>C. lupus</i>	L+R mand+cranium. L teeth, I1-3, C1, P1-4, M1-2	15.82
NRM	Sodermanland Lanasberget, Grundsjo,	2005.11.26	1	20065027	M	<i>C. lupus</i>	L+broken R mand+cranium. L teeth I1-3, C1, P1-4, M1-2	15.16
NRM	Ljungaverk,	2005.09.02	1	20055287	M	<i>C. lupus</i>	L+R mand+cranium. L teeth I1-3, C1, P1-4, M1-2	15.76
NRM	Mullhyttan, Orebro, Narke	2006.09.15	1	20065414	M	<i>C. lupus</i>	L+R mand+cranium. R teeth I1-3, C1, P1-4, M1-2	15.42
NRM	Avik, Laxa, Narke	2007.04.27	1	20075186	M	<i>C. lupus</i>	L+R mand + cranium. L teeth I2-3, C1, P1-4, M1-2	14.78
NRM	Malung-Appelbo, Dalarna Dalarna, Torsby, Ostmark;	2007.12	1	20085027	M	<i>C. lupus</i>	L+R mand +cranium. L teeth, I1-3, C1, P1-4, M1-2	14.88
NRM	Sojensoasen Stormosse, Piro, Bjorneborg,	2007.09.15	1	20075373	M	<i>C. lupus</i>	L+R mand+cranium. R teeth I1-3, C1, P1-4, M1-2	14.86
NRM	Kristinehamn,	2007.12.27	1	20085036	M	<i>C. lupus</i>	L+R mand+cranium. L teeth I1-3, C1, P1-4, M1-2	15.74
NHM 23 K	Cae Gywn Cave		2	M2613	Pres by H Hicks and E Bouwerie Luxmoore	<i>C. lupus</i>	R upper max frag, P3-4, M1- 2	13.32

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection	Species	Material	P4W
SMES IV 266	Black Rock Quarries, Tenby		3	D2600		<i>C. lupus</i>	R maxilla frag, P4, M1-2	11.39
SMES IV 266	Black Rock Quarries, Tenby		3	D2597		<i>C. lupus</i>	R maxilla frag, P3-4, M1-2	14.45
NHM 43 C	Kents Cavern	none	3	M5599	Purch 1895	<i>C. lupus</i>	In box, 1). L upper P4 in max frag	14.17
BC	Oreston Cave		3	Cd2919	J. Cottle clln 1830	<i>C. lupus</i>	L upper P4	15.74
SM blue boxes	Paviland		3	Z 836.6.1006		<i>C. lupus</i>	L upper max frag, P4	13.69
MM R4 ColE D 1	Pin Hole Cave	PH (F)	3	LL.1986 M223 with M223a (L teeth)		<i>C. lupus</i>	R max half, C1, P1-4, M1-2	11.08
NHM 45 D d13	Banwell Bone Cave		5a		Enniskillen clln	<i>C. lupus</i>	L maxilla, upper P3-4, M1-2	11.61
NHM 45 D d 12	Banwell Bone Cave		5a	M404	Egerton Clln, 1882	<i>C. lupus</i>	Fract crania, LP3-4, M1-2	12.85
NHM 45 D d 12	Banwell Bone Cave		5a	44640	Pres by B. Bright, 1873	<i>C. lupus</i>	Crania, LP3-4, M1	14.45

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection	Species	Material	P4W
SHC D19/1	Banwell Bone Cave	Cave dep	5a	TTNCM 40/1995/15	William Beard clln	<i>C. lupus</i>	L upper max frag, P3-4, M1	13.61
SHC D19/1	Banwell Bone Cave		5a	TTNCM 40/1995/16	William Beard clln	<i>C. lupus</i>	L upper max frag, P4, M1-2	11.84
SHC D19/1	Banwell Bone Cave		5a	TTNCM 40/1995/17	William Beard clln	<i>C. lupus</i>	L max, P4, M1-2	13.79
MM R5 colK d14	Windy Knoll		5a	P2497	Dawkins	<i>C. lupus</i>	R max frag, P4, M1-2	13.03
MM Gallery SM From fox & wolf box in display	Windy Knoll		5a	LL12009		<i>C. lupus</i>	With above. Cranium, R I1-2, I3 root, C1, P2-4, M1-2	12.73
SM From fox & wolf box in display	Bosco's Den		5a	SM. 1858.1.63		<i>C. lupus</i>	R upper max frag, P4, M1	14.22
SM From fox & wolf box in display	Bosco's Den		5a	SM. 1858.1.48		<i>C. lupus</i>	R upper max frag, P4, M1-2	15.37
TM G/B6/B112	Joint Mitnor Cave		5e	P35116	none	<i>C. lupus</i>	L upper P4	14.7
TM G/B6/B112	Joint Mitnor Cave		5e	P35118	none	<i>C. lupus</i>	L upper P4	14.12

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection	Species	Material	P4W
BC	Clevedon Cave		6	Ce15096	S.H. Reynolds	<i>C. lupus</i>	L upper max, P4, M1	13.95
BC	Clevedon Cave		6	Ce12521	B.N.S. Soc	<i>C. lupus</i>	L upper max, P4, M2	12.93
NHM 44 D drw 7	Hutton Cave	none	7	44739a TTNCM	Bright?	<i>C. lupus</i>	Cranium, L I3, (R) C1, half P2, P3-4, M1-2	15.02
SHC D40/2	Hutton Cave		7	42/1995/68 8	Rev D Williams and W Beard clln	<i>C. lupus</i>	L upper max and partial palate frag, P2, P4, M2	13.56
StM 80	Villa Seckendorf, Bad Canstatt, Germany	Stuttgart Travertine	2.8	31297 or SE.21.2.57/10		<i>C. lupus</i>	R upper max, post root P2, P3-4, M1	15.19
StM 80	Villa Seckendorf, Bad Canstatt, Germany	Stuttgart Travertine	2.8	31296 or SE.21.2.57/10		<i>C. lupus</i>	R upper max, P2-4, M2	13.38
NHM 36 E d 36/E/19	Perick Cave	Cavern	2.4	28582	none	<i>C. lupus</i>	R max frag, P4, M2	14.32
NHM 25 F d 3	Boxgrove	Project A, Q2, area GTP13, unit 4c surface, field no F7 (1)	12.9	F7 (1)/1		<i>C. mosbachensis</i>	R upper P4	10.47
NHM 25 F d 3	Boxgrove	Project A, Q2, area GTP4, unit 6, field no F1	12.9	F1/3		<i>C. mosbachensis</i>	R upper max, C1, P2-4, M1	10.35

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection	Species	Material	P4W
NHM 25 G d 24	Boxgrove	Project A, Q1, Area A, unit 4b, field no. F3445	12.9	F2445		<i>C. mosbachensis</i>	Cont...R teeth I1-3, C1, P1-4, M1-2	9.89
NHM 44 E drw 18	Westbury	Unstrat. Calc memb	13	none	Bishop, 1974	<i>C. mosbachensis</i>	R upper P4	10.63
NHM 35 H d 11	Westbury	Unstrat. W10? Lower Yellow breccia. 19/15.	13	none	none	<i>C. mosbachensis</i>	R upper P4	12.6
NHM 35 H d 23	Westbury	Site W5 west	13	none	none	<i>C. mosbachensis</i>	R upper P4	11.5
NHM 3 A d 8	Westbury	19/7 3 M E	13	none	Excav 1984	<i>C. mosbachensis</i>	R upper P4 in max frag	9.86
NHM 3 A d 10	Westbury	Grey breccia	13	none	Excav 1980	<i>C. mosbachensis</i>	R upper P4 in 2 frags	11.51
NHM 47 B	West Runton	Upper freshwater bed	17	M17934	AC Savin Clln, 1946. Cll'd 1908	<i>C. mosbachensis</i>	R upper P4 and M1 in assoc. 1). R P4	11.03
VER 00441	Cengelle II, Soave, Italy		3.4	V10112 1982/1824		<i>C. mosbachensis</i>	L upper P4	11.49
SIW 1 d 1	Untermassfeld, Germany		4	9 (Mei 17769)		<i>C. mosbachensis</i>	R max, I1-3, C1, P1-4, I M1-2	10.23

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection	Species	Material	P4W
SIW 1 d 1	Untermassfeld, Germany		4	1982/1805 2		<i>C. mosbachensis</i>	Cranium, R teeth I1-3, C1, P1-4, M1-2	11.89
SIW 1 d 2	Untermassfeld, Germany		4	1984/2027 5 (Mei 19795)		<i>C. mosbachensis</i>	R upper P4 in max frag	11.07
SIW 1 d 3	Untermassfeld, Germany		4	1980/1532 8 (Mei 14840)		<i>C. mosbachensis</i>	R upper max frag, P4, M1-2	11.41
FLO 0/02/013/04 (d4)	il tasso, Italy	Upper Valdarno	4.4	IGF887		<i>C. arnensis</i>	R upper max, P2-4, M1-2. in bix with R mand	9.38
FLO 0/02/013/05	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF877		<i>C. arnensis</i>	With lower mands, part snout - R teeth, P2-4, M1-2	10.54
FLO Gallery	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF869		<i>C. arnensis</i>	Squashed cranium. R teeth, I1-2, C1, P1-4, M1-2	8.86
FLO Gallery	near le strette al tasso, Italy	Upper Valdarno	4.4	IGF867		<i>C. arnensis</i>	Squashed cranium, pair R teeth, I1-3, C1, P1-4, M1-2	9.65
FLO 0/02/013/02 (d2)	Figline, Italy	Upper Valdarno	4.4	11780		<i>C. majori (etruscus)</i>	R upper max frag, P4, M1	12.09
FLO 0/02/013/04 (d4)	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF861		<i>C. majori (etruscus)</i>	R upper max frag, roots P3, P4, M1-frag M2	11.4

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection	Species	Material	P4W
FLO 0/02/013/03 (d3)	Upper Valdarno, Italy	Upper Valdarno	4.4	none		<i>C. etruscus</i>	In bag. R upper P4, in max frag	10.54
FLO 0/02/013/03 (d3)	Upper Valdarno, Italy	Upper Valdarno	4.4			<i>C. etruscus</i>	R upper P4	13
FLO 0/02/013/06 (d6)	Olivola, Italy	Olivola	4.4	IGF4408		<i>C. etruscus</i>	Cont from above...R upper C1, P4, part M1, M2	11.06
FLO 0/02/013/06 (d6)	Olivola, Italy	Olivola	4.4	IGF4411		<i>C. etruscus</i>	cont from above...R teeth, P4, M1-2	10.54
FLO 0/02/013/07 (d7)	Val di Magna, Italy	Olivola	4.4	IGF4486		<i>C. etruscus</i>	R upper max, more ling than buc frag, P3-4, M1-2	10.81
FLO Gallery	Olivola, Italy	Olivola	4.4	IGF4407		<i>C. etruscus</i>	R teeth, C1, P3-4, M1-2	11.93

12. M1L

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	M1L
NHM 1	France		1	1843.12.29. 7	F	<i>C. lupus</i>	Cranium, L teeth I1-3, C1, P1, 3-4, M1-2	15.78
NHM 2	Pyrenees	Parzudacki clln	1	44.1.18.1	F	<i>C. lupus</i>	Cranium, L teeth I2-3, C1, P1-4, M1-2	15.7
NHM 3	Nr Abrantos, S of the Tagus, Portugal	WC Tait clln.	1	1938.12.7.1	F	<i>C. lupus</i>	Cranium, L teeth I2-3, C1, P1-4, M1-2	14.62
NHM 5	Riocalado, Burgos, Spain		1	11.10.5.2	F	<i>C. lupus</i>	Cranium, L teeth I1-3, C1, P1-4, M1-2	15.58
NHM 8	Kocane, Macedonia		1	47.1121.a	F	<i>C. lupus</i>	Cranium, L teeth I1-3, C1, P1-4, M1-2	15.36
NRM	Korvijaure, 7 miles N Kiruna	15.4.1959	1	A58 0112	F	<i>C. lupus</i>	L+R mand + cranium. Cranium-fract basicranium. L teeth, I1-3, C1, P1-4, M1-2	16.71
NRM	Kiruna	14.4.1908	1	A581198	F	<i>C. lupus</i>	L+R mand + cranium extreme tooth wear down to bone. L teeth I1-3, M1-2	15.52
NRM	S Finnskoga, Skrackerberget	1985.07.29	1	A865126	F	<i>C. lupus</i>	L+R mand+cranium. R teeth, I1-3, P1-4, M1-3	16.13

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	M1L
NRM	Jadraas, 5km N	1991.06.14	1	A915068	F	<i>C. lupus</i>	L+R mand+cranium. R teeth P4, M1-2	17.08
NRM	Vastra Amtervik, Hensgard	1993.02.24	1	A935024	F	<i>C. lupus</i>	L+R mand+cranium. L mand, I1-3, C1, P2-4, M1-2	16.61
NRM	Nas-snoan, v71/jvg Nyskoga, Kringsberg,	1993.08.18	1	A935178	F	<i>C. lupus</i>	L+R mand+cranium. L teeth I1-3, C1, P1-4, M1-2	17
NRM	Bontjarn	1994.01.19	1	A945045	F	<i>C. lupus</i>	L+R mand+cranium. R teeth, I1-3, C1, P1-4, M1-2	17.18
NRM	Vastmandland, Grythyttan	1999.12.17	1	20005111	F	<i>C. lupus</i>	L+R mand+cranium. R mand I2-3, C1, P2-4, M1-3	17.25
NRM	Narke, Degerfors, Atorp	2001.12.26	1	20025005	F	<i>C. lupus</i>	L+R mand+cranium. L teeth I1-3, P1-4, M1-2	17.6
NRM	Atorp 3.5 km NW, Degerfors,	2002.03.05	1	20035026	F	<i>C. lupus</i>	L+R mand+cranium. R teeth I1-3, C1, P1-4, M1-2	17.68
NRM	Varmland	2002.03.05	1	20035026	F	<i>C. lupus</i>	L+R mand+cranium. R teeth I1-3, C1, P1-4, M1-2	17.68
NRM	Odlingen, Sillerud, Arjang, Varmland	2004.02.07	1	20045040	F	<i>C. lupus</i>	L+R mand+cranium. R teeth I1-3, C1, P1-4, M1-2	16.74
NRM	Ovre Hurr, Tocksfors, Varmland	2006.05.30	1	20065236	F	<i>C. lupus</i>	L+R mand+cranium. L teeth, I1, I3, C1, P1-4, M1-2	15.83

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	M1L
NRM	Rickebo, Hallbo, Bollnas, Halsingland	2006.03.14	1	20065047	F	<i>C. lupus</i>	L+R mand+cranium. R teeth I1-3, C1, P1-4, M1-2	17.65
NRM	Ronnas, Ostra, Leksand, Dalarna	2007.10.09	1	20075381	F	<i>C. lupus</i>	L+R mand+cranium. R teeth I1-3, C1, P1-4, M1-2	17.49
NRM	Jarbo, Backefors, Dalsland Varmland, Nordmark, Algsjion	C. lupus	1	20075314	F	<i>C. lupus</i>	L+R mand+cranium. R teeth I1-3, C1, P1-4, M1-2	16.2
NRM	2 km S Halsingland, Bollnas, Lottefors;	2009.01.25	1	20095063	F	<i>C. lupus</i>	L+R mand+cranium. L teeth I1-3, C1, P1-4, M1-2	16.98
NRM	Rv 83 Vastmanland, Hallefors, Ornviken,	2007.08.19	1	20075312	F	<i>C. lupus</i>	L+R mand + cranium. L teeth I1-3, C1, P1-4, M1-2	16.68
NRM		2010.01.02	1	20105028	F	<i>C. lupus</i>	L+R mand+cranium. R teeth I1-3, C1, P1-4, M1-2	17.09
NHM 4	Riocalado, Burgos, Spain		1	11.10.5.1	M	<i>C. lupus</i>	Cranium, L teeth I1-3, C1, P1-4, M1-2	16.64
NHM 6	Seville, Spain	On note '2 carnassials in tooth case'	1	95.3.3.6	M	<i>C. lupus</i>	Cranium, R teeth I1-3, C1, P1-4, M1-2	16.21
NHM 7	Ukraine on modern ticket, on skull and original		1	34.6.28.47	M	<i>C. lupus</i>	Cranium, L teeth I1-3, C1, post P1, post P2, P3-4, M1-2	16.15

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	M1L
NHM 9	Norbotten, N Sweden (in arctic circle).		1	28.5.4.1	M	<i>C. lupus</i>	Cranium, I teeth I1-3, C1, P1, P3-4, M1-2	16.92
NHM 11	Moscow district, Russia		1	82.9.18.2	M	<i>C. lupus</i>	Cranium, L teeth I1-3, C1, P1-4, M1-2	17.66
Ost NHM	Abrantos, S of Tagus, Portugal		1	1937.2.10.2	M	<i>C. lupus</i>	Cranium, R teeth I1-3, C1, P1-4, M1-2	15.65
Ost NHM	Bosnia, Yugoslavia		1	1935.8.5.1	M	<i>C. lupus</i>	Cranium, R teeth I1-3, C1, P1-3 P4 roots, M1-2	15.54
NRM	Ljusdal, Ramsjo (s:n)	12.2.1926	1	A580255	M	<i>C. lupus</i>	L+R mand + fract cranium, palate/ant cranium. L teeth I1-3, C1, P1-4, M1-2	17.57
NRM	Jokkmokk	11.02.1852	1	A583532	M	<i>C. lupus</i>	L+R mand + cranium. R teeth I1-3, C1, P1-4, M1-2	16.95
NRM	Orebro	1852	1	A583547	M	<i>C. lupus</i>	L+R mand+cranium. R teeth I1-3, C1, P1-4, M1-3	16.22
NRM	Sweden	1907	1	A589147	M	<i>C. lupus</i>	L+R mand + cranium. R teeth I1-3, C1, P1-4, M1-2	17.63
NRM	Sweden	1908	1	A589199	M	<i>C. lupus</i>	L+R mand+cranium. L teeth I1-3, C1, P1-4, M1-2	16.89

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	M1L
NRM	Luktjomtjuolta, Vilhelmina	15.1.1937	1	A590009	M	<i>C. lupus</i>	L+R mand+cranium. R teeth I1-3, C1, P2-4, M1-2	16.22
NRM	Lina alv station	25.12.1977	1	A775097	M	<i>C. lupus</i>	L+R mand+cranium. L teeth I1, I3, C1, P1-4, M1-2	17.97
NRM	Atran, Ogardet	1984.09.12	1	A845131	M	<i>C. lupus</i>	L+R mand+cranium. R teeth I1-3, C1, P1-4, M1-2	17.84
NRM	Hede, 3 mil NV, Norrstadjan	1989.04.17	1	A895039	M	<i>C. lupus</i>	L+R mand+cranium. R teeth I2 from L though-3, P2-4, M1-2	18.45
NRM	Kiruna-Gallivare, Gaddmyr, Jvg	1992.08.24	1	A925106	M	<i>C. lupus</i>	L+R mand+cranium. R mand, I1-3, P2-4, M1-3	17.59
NRM	Boras	1996.01.04	1	A965002	M	<i>C. lupus</i>	L+R mand+cranium. L teeth I1-3, C1, P1-4, M1-2	16.55
NRM	Jarna, Flaten, Dalarna	1999.2.6	1	A995016	M	<i>C. lupus</i>	L+R mand+cranium. R teeth, I1-2, P1-4, M1-2	18.84
NRM	Varmland, Eksharad, Halgan; Kolarkojan	1999.06.04	1	995230	M	<i>C. lupus</i>	L+R mand+cranium. R teeth, I1-I3, C1, P1-4, M1-2	17
NRM	Jumkil kyrka, Uppsala	2000.11.19	1	20005365	M	<i>C. lupus</i>	L+R mand+cranium. L mand I1-3, C1, P1-4, M1-3	17.83

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	M1L
NRM	Uddalen, Ed, Dalsland	2003.05.12	1	20035114	M	<i>C. lupus</i>	L+R mand+cranium. R teeth I1-3, C1, P1-4, M1-2	17.54
NRM	Ostermoren, Smedjebacken, Dalarna	2004.12.09	1	20045305	M	<i>C. lupus</i>	L+R mand+cranium. R teeth I1-3, C1, P1-4, M1-2	18.18
NRM	Dala Floda, Borlange, Dalarna IV 225 (road?), Osmo,	2003.03.09	1	20035024	M	<i>C. lupus</i>	L+R mand+cranium. L teeth, I1-3, C1, P1-4, M1-2	17.67
NRM	Sodermanland Lanaberget, Grundsjo,	2005.11.26	1	20065027	M	<i>C. lupus</i>	L+broken R mand+cranium. L teeth I1-3, C1, P1-4, M1-2	16.99
NRM	Ljungaverk,	2005.09.02	1	20055287	M	<i>C. lupus</i>	L+R mand+cranium. L teeth I1-3, C1, P1-4, M1-2	16.87
NRM	Mullhyttan, Orebro, Narke	2006.09.15	1	20065414	M	<i>C. lupus</i>	L+R mand+cranium. R teeth I1-3, C1, P1-4, M1-2	17.9
NRM	Avik, Laxa, Narke	2007.04.27	1	20075186	M	<i>C. lupus</i>	L+R mand + cranium. L teeth I2-3, C1, P1-4, M1-2	17.73
NRM	Malung-Appelbo, Dalarna	2007.12	1	20085027	M	<i>C. lupus</i>	L+R mand +cranium. L teeth, I1-3, C1, P1-4, M1-2	18.35
NRM	Dalarna, Torsby, Ostmark; Sojensoasen	2007.09.15	1	20075373	M	<i>C. lupus</i>	L+R mand+cranium. R teeth I1-3, C1, P1-4, M1-2	19.29

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	M1L
NRM	Stormosse, Piro, Bjerneborg, Kristinehamn,	2007.12.27	1	20085036	M	<i>C. lupus</i>	L+R mand+cranium. L teeth I1-3, C1, P1-4, M1-2	18.11
NHM 23 K	Cae Gywn Cave		2	M2613	Pres by H Hicks and E Bouwerie Luxmoore	<i>C. lupus</i>	R upper max frag, P3-4, M1-2	15.92
NHM 23 K	Ffynnon Beuno		2	M2584	Pres by Dr Hicks, 1885	<i>C. lupus</i>	On pin board 2). L upper M1 frag	17.37
SMES IV 266	Black Rock Quarries, Tenby		3	D2600		<i>C. lupus</i>	R maxilla frag, P4, M1-2	15.91
SMES IV 266	Black Rock Quarries, Tenby		3	D2597		<i>C. lupus</i>	R maxilla frag, P3-4, M1-2	16.59
NHM 43 C	Kent's Cavern	none	3	M734	Pres by Lord Haldon, July 1883	<i>C. lupus</i>	L upper M1	17.17
TM Gallery	Kents Cavern	Unknown	3	P30686?	MacEnery	<i>C. lupus</i>	Cranium, L teeth I3, C1, P2-4, M1-2	15.27
BC	Oreston Cave		3	Cd2918	J. Cottle c1n 1830	<i>C. lupus</i>	R upper M1	15.62
BC	Oreston Cave		3	Cd2916	J. Cottle c1n 1830	<i>C. lupus</i>	R upper M1	16.05

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	M1L
NMW PH1.91	Paviland		3	24.94/240		<i>C. lupus</i>	L upper max frag, P4 fract, M1	16.28
SM blue boxes	Paviland		3	SM.1836.6.205		<i>C. lupus</i>	L upper M1	18.34
MM R4 CoE D 1	Pin Hole Cave	PH (F)	3	LL.1982		<i>C. lupus</i>	R max frag, M1	16.59
MM R4 CoE D 1	Pin Hole Cave	PH (F)	3	LL.1990		<i>C. lupus</i>	R max frag, M1	15.72
MM R4 CoE D 1	Pin Hole Cave	PH (F)	3	LL.1989		<i>C. lupus</i>	R max frag around roots, M1	14.7
MM R4 CoE D 1	Pin Hole Cave	PH (F)	3	LL.1986 TTNCM		<i>C. lupus</i>	R max half, C1, P1-4, M1-2	13.01
SHC D27/3	Sandford Hill		3	44/1995/61/2	? Rev'd. D. Williams & Beard clln	<i>C. lupus</i>	R upper M1 in max frag	16.4
NHM 45 D d13	Banwell Bone Cave		5a	44648	Pres Benj Bright 1873	<i>C. lupus</i>	23). L upper M1 para/meta	15.65
NHM 45 D d13	Banwell Bone Cave		5a	44648	Pres Benj Bright 1873	<i>C. lupus</i>	24). L upper M1	16.2

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	M1L
NHM 45 D d13	Banwell Bone Cave		5a	M223 with M223a (L teeth)	Enniskillen clln	<i>C. lupus</i>	L maxilla, upper P3-4, M1-2	17.62
NHM 45 D d12	Banwell Bone Cave		5a	M404 TTNCM 40/1995/31	Egerton Clln, 1882	<i>C. lupus</i>	Fract crania, LP3-4, M1-2	16.03
SHC D19/2	Banwell Bone Cave		5a	/1 TTNCM 40/1995/31	William Beard clln	<i>C. lupus</i>	L upper M1	15.54
SHC D19/2	Banwell Bone Cave		5a	/4 TTNCM 40/1995/31	William Beard clln	<i>C. lupus</i>	L upper M1	17.12
SHC D19/2	Banwell Bone Cave		5a	/2 TTNCM 40/1995/31	William Beard clln	<i>C. lupus</i>	L upper M1	17.9
SHC D19/2	Banwell Bone Cave		5a	/9 TTNCM 40/1995/31	William Beard clln	<i>C. lupus</i>	L upper M1	16.34
SHC D19/2	Banwell Bone Cave		5a	/39 TTNCM 40/1995/31	William Beard clln	<i>C. lupus</i>	L upper M1	15.3
SHC D19/1	Banwell Bone Cave	Cave dep	5a	TTNCM 40/1995/15	William Beard clln	<i>C. lupus</i>	L upper max frag, P3-4, M1	15.28
SHC D19/1	Banwell Bone Cave		5a	TTNCM 40/1995/16	William Beard clln	<i>C. lupus</i>	L upper max frag, P4, M1-2	15.17

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	M1L
SHC D19/1 SM From fox & wolf box in display	Banwell Bone Cave		5a	TTNCM 40/1995/17	William Beard clln	<i>C. lupus</i>	L max, P4, M1-2	15.57
SM From fox & wolf box in display	Bosco's Den		5a	SM. 1858.1.58		<i>C. lupus</i>	R upper max frag, M1-2	16.6
SM From fox & wolf box in display	Bosco's Den		5a	SM. 1858.1.75		<i>C. lupus</i>	R upper max frag, M1, M2 alv.	16.34
SM From fox & wolf box in display	Bosco's Den		5a	SM. 1858.1.63		<i>C. lupus</i>	R upper max frag, P4, M1	16.53
SM From fox & wolf box in display	Bosco's Den		5a	SM. 1858.1.48		<i>C. lupus</i>	R upper max frag, P4, M1-2	17.92
MM R5 colK d14	Windy Knoll		5a	P2497	Dawkins	<i>C. lupus</i>	R max frag, P4, M1-2	16.01
MM Gallery	Windy Knoll		5a	LL12009		<i>C. lupus</i>	With above. Cranium, R I1-2, I3 root, C1, P2-4, M1-2	15.27
NHM 25 K	Bacon Hole	Upper cave earth. Area 8E, field no 200, Apr 1980. C. Stringer excav	5c	M49708	Pres National Trust for Wales.	<i>C. lupus</i>	L upper M1	17.03

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	M1L
SMES 3A Display	Barrington		5e			<i>C. lupus</i>	R upper M1	16.88
NHM 43 B	Joint Mitnor Cave		5e	none	JM III A 1963	<i>C. lupus</i>	R max frag, M1-2	15.8
TM G/B6/114	Joint Mitnor Cave		5e	P35213	none	<i>C. lupus</i>	R upper M1	15.84
TM G/B6/114	Joint Mitnor Cave		5e	P35214	none	<i>C. lupus</i>	R upper M1	17.85
TM G/B6/114	Joint Mitnor Cave		5e	P35216	1940	<i>C. lupus</i>	R upper M1	17.36
BC	Clevedon Cave		6	Ce15093	S.H. Reynolds	<i>C. lupus</i>	R max, P4, M1	16.94
BC	Clevedon Cave		6	Ce15095	S.H. Reynolds	<i>C. lupus</i>	R upper max frag, P4, M1-2	16.45
SHC D46/1	Bleadon Cave	Cave dep	7	TTNCM 41/1995/23	W. Beard clln	<i>C. lupus</i>	L upper max frag, M1-2	15.82
NHM 44 D drw 7	Hutton Cave	none	7	44739	Pres by B Bright, Aug 1878	<i>C. lupus</i>	Ant cranium, part upper palate and max, L M1-2	15.85

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	M1L
NHM 44 D drw 7	Hutton Cave	none	7	44739a	Bright?	<i>C. lupus</i>	Cranium, L I3, (R) C1, half P2, P3-4, M1-2	14.02
SHC D40/2	Hutton Cave		7	TTNCM 42/1995/55	Rev D Williams and W Beard cln	<i>C. lupus</i>	L upper M1 buc cusps frag	16.9
BCM 6, 7, box 123	Marsworth	Pitstone no 3 quarry	7	1980.544.n 14/3		<i>C. lupus</i>	R upper M1	15.68
NMW Box 2.19	Pontnewydd Cave	Buff intermed	7	83.107H/8 D1682		<i>C. lupus</i>	R upper M1	16.4
NMW Box 2.19	Pontnewydd Cave	Orange interm	7	83.107H/8 D1787		<i>C. lupus</i>	R upper M1	16.21
NMW Box 2.20	Pontnewydd Cave	LB	7	83.107H/8 D2700	Given by Major David William Wynn	<i>C. lupus</i>	R upper M1 p/m frag	15.79
StM 80	Villa Seckendorf, Bad Canstatt, Germany	Stuttgart Travertine	2.8	31297 or SE.21.2.57/ 10 1968/9826 (Taub 2750)		<i>C. lupus</i>	R upper max, post root P2, P3-4, M1	17.84
SIW 3 d 9	Taubach, Germany		2.8			<i>C. lupus</i>	L upper max frag, M1-2	16.96
SIW	Weimar- Ehringsdorf, Germany		3	1966/5569 (Ehr 10878)		<i>C. lupus</i>	L upper M1	15.44

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	M1L
SIW	Weimar-Ehringsdorf, Germany		3	1968/9659 (Ehr 3880)		<i>C. lupus</i>	Cranium, L teeth P4, M1-2	15.98
NHM 25 F d 3	Boxgrove	Project A, Q2, area GTP4, unit 6, field no F1	13	F1/3		<i>C. mosbachensis</i>	R upper max, C1, P2-4, M1	13.54
NHM 25 F d 3	Boxgrove	Project A, Q2, area GTP4, unit 6, field no F1	13	F1/4		<i>C. mosbachensis</i>	R upper maxilla, P4, M1-M2	13.52
NHM 25 E d 14	Boxgrove	Project A, Q1, area TP4, no unit, field no 1	13	F1 (28)		<i>C. mosbachensis</i>	R teeth P2-4, M1-2	13.33
NHM 25 G d 24	Boxgrove	Project A, Q1, Area A, unit 4b, field no. F3445	13	F2445		<i>C. mosbachensis</i>	R teeth I1-3, C1, P1-4, M1-2	13.03
NHM 44 E drw 4	Westbury	Calcareous memb Bed 3	13	47430	MJ Bishop cIn	<i>C. mosbachensis</i>	R upper M1	13.77
NHM 44 E drw 12	Westbury	Bed 3	13	47526	Bishop 1974	<i>C. mosbachensis</i>	R upper M1	13.68
NHM 44 E drw 15	Westbury	Bed 5	13	M33954	Bishop, 1974	<i>C. mosbachensis</i>	R upper M1	14.3
NHM 44 E drw 18	Westbury	Unstrat. Calc memb	13	none	Bishop, 1974	<i>C. mosbachensis</i>	R upper M1	13.61

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	M1L
NHM 44 E drw 18	Westbury	Unstrat. Calc memb	13	none		<i>C. mosbachensis</i>	R upper M1	12.72
NHM 44 E drw 18	Westbury	Unstrat. Calc memb	13	none	Bishop, 1974	<i>C. mosbachensis</i>	R upper M1	12.12
NHM 44 F drw 1	Westbury	Calc memb. Site W1A	13	none	NHM excav 1976	<i>C. mosbachensis</i>	R upper M1	14.24
NHM 44 F drw 1	Westbury	Calc memb. Site W1B	13	none	NHM excav 1976	<i>C. mosbachensis</i>	R upper M1	12.71
NHM 44 F drw 25	Westbury	19/14 Rodent breccia, W5	13	none	Post 1977	<i>C. mosbachensis</i>	R upper M1	12.87
NHM 35 H d 3	Westbury	Grey-green silt, W9	13	M34219	NHM excav'78	<i>C. mosbachensis</i>	R upper max frag, P3-4, M1-2	14.94
NHM 3 A d 10	Westbury	Grey breccia	13	none	Excav 1980	<i>C. mosbachensis</i>	R upper M1 in 2 frags	14.52
NHM 47 B	West Runton	Upper freshwater bed	17	M17934	AC Savin ClIn, 1946. Cat. 574. ClI'd 1908	<i>C. mosbachensis</i>	2). R M1, with bone/cement? Stuck to roots	12.63
VER 00441	Cengelle II, Soave, Italy		3.4	V10114		<i>C. mosbachensis</i>	R upper M1	14.46

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	M1L
StM 159 (143 on cab label)	Mosbach, Hessen, Germany	Mosbacher sande	4	328591	Meurer clln	<i>C. mosbachensis</i>	R upper M1	14.42
SIW 1 d 1	Untermassfeld, Germany		4	1982/1824 9 (Mei 17769)		<i>C. mosbachensis</i>	R max, I1-3, C1, P1-4, I M1-2	13.45
SIW 1 d 1	Untermassfeld, Germany		4	1982/1805 2		<i>C. mosbachensis</i>	Cranium, R teeth I1-3, C1, P1-4, M1-2	13.5
SIW 1 d2	Untermassfeld, Germany		4	1984/2027 5 (Mei 19795)		<i>C. mosbachensis</i>	R upper M1 in max frag	14.18
SIW 1 d 3	Untermassfeld, Germany		4	1980/1532 8 (Mei 14840)		<i>C. mosbachensis</i>	R upper max frag, P4, M1-2	13.76
FLO 0/02/013/01 (d1)	Il Tasso, Italy	Upper Valdarno	4.4	IGF868		<i>C. arnensis</i>	With 2 mands. Max, snout and basicranium. L max, I1-2, C1, P1-4, M1-2	13.58
FLO 0/02/013/04 (d4)	il tasso, Italy	Upper Valdarno	4.4	IGF878	<i>C. arnensis</i>	Squashed base, with L cranial frag, slight zyg arch, M1-2.	12.67	
FLO 0/02/013/05	il tasso, Italy	Upper Valdarno	4.4	IGF877	<i>C. arnensis</i>	Partial snout and L snout side, upper palatte, L teeth P3-4, M1 frag M2	14.38	
FLO Gallery	il tasso, Italy	Upper Valdarno	4.4	IGF869	<i>C. arnensis</i>	Squashed cranium. L teeth, I1-3, C1, P1-4, M1-2	12.48	

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	M1L
FLO Gallery	near le strette al tasso, Italy	Upper Valdarno	4.4	IGF867		<i>C. arnensis</i>	Squashed cranium. L teeth, I1-3, C1, P1-4, M1-2	12.37
FLO 0/02/013/02 (d2)	Figline, Italy	Upper Valdarno	4.4	11780		<i>C. majori (etruscus)</i>	R upper max frag, P4, M1	15.24
FLO 0/02/013/03 (d3)	Upper Valdarno, Italy	Upper Valdarno	4.4	1246V		<i>C. etruscus</i>	R upper M1	15.57
FLO 0/02/013/04 (d4)	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF861		<i>C. majori (etruscus)</i>	R upper max frag, roots P3, P4, M1-frag M2	15.5
FLO 0/02/013/04 (d4)	Se Ville, Italy	Upper Valdarno	4.4	IGF885		<i>C. etruscus</i>	R max, P2-4, M1	15.93
FLO 0/02/013/06 (d6)	Olivola, Italy		4.4	IGF4411		<i>C. etruscus</i>	R teeth, P4, M1-2	15.11
FLO 0/02/013/07 (d7)	Val di Magna, Italy	Olivola	4.4	IGF4486		<i>C. etruscus</i>	R upper max, more ling than buc frag, P3-4, M1-2	16.06
FLO 0/02/013/07 (d7)	Val di Era, Italy	Olivola	4.4	11782		<i>C. etruscus</i>	R upper M1	15.03
FLO 0/02/013/08 (d8)	Val di Magna, Italy	Olivola	4.4	IGF4515		<i>C. etruscus</i>	R upper M1	16.89

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	M1L
FLO Gallery	Olivola, Italy	Olivola	4.4	IGF4407		<i>C.etruscus</i>	R teeth, C1, P3-4, M1-2	14.75

13. M1W

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	M1W
NHM 1	France		1	1843.12.29.7	F	<i>C. lupus</i>	Cranium, L teeth I1-3, C1, P1, 3-4, M1-2	19.78
NHM 2	Pyrenees	Parzudacki clln	1	44.1.18.1	F	<i>C. lupus</i>	Cranium, L teeth I2-3, C1, P1-4, M1-2	20.22
NHM 3	Nr Abrantos, S of the Tagus, Portugal	WC Tait clln.	1	1938.12.7.1	F	<i>C. lupus</i>	Cranium, L teeth I2-3, C1, P1-4, M1-2	19.15
NHM 5	Riocalado, Burgos, Spain		1	11.10.5.2	F	<i>C. lupus</i>	Cranium, L teeth I1-3, C1, P1-4, M1-2	20.81
NHM 8	Kocane, Macedonia		1	47.1121.a	F	<i>C. lupus</i>	Cranium, L teeth I1-3, C1, P1-4, M1-2	20.67
NRM	Korvijaure, 7 miles N Kiruna	15.4.1959	1	A58 0112	F	<i>C. lupus</i>	L+R mand + cranium. Cranium-fract basicranium. L teeth, I1-3, C1, P1-4, M1-2	21.24
NRM	Kiruna	14.4.1908	1	A581198	F	<i>C. lupus</i>	L+R mand + cranium extreme tooth wear down to bone. L teeth I1-3, M1-2	20.82
NRM	S Finnskoga, Skrackerberget	1985.07.29	1	A865126	F	<i>C. lupus</i>	L+R mand+cranium. R teeth, I1-3, P1-4, M1-3	22.29

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	M1W
NRM	Jadraas, 5km N	1991.06.14	1	A915068	F	<i>C. lupus</i>	L+R mand+cranium. R teeth P4, M1-2	21.42
NRM	Vastra Amtervik, Hensgard	1993.02.24	1	A935024	F	<i>C. lupus</i>	L+R mand+cranium. L mand, I1-3, C1, P2-4, M1-2	22.4
NRM	Nas-snoan, v71/jvg	1993.08.18	1	A935178	F	<i>C. lupus</i>	L+R mand+cranium. L teeth I1-3, C1, P1-4, M1-2	21.92
NRM	Nyskoga, Kringsberg, Bontjarn	1994.01.19	1	A945045	F	<i>C. lupus</i>	L+R mand+cranium. R teeth, I1-3, C1, P1-4, M1-2	22.29
NRM	Vastmandland, Grythyttan	1999.12.17	1	20005111	F	<i>C. lupus</i>	L+R mand+cranium. R mand I2-3, C1, P2-4, M1-3	23.68
NRM	Narke, Degerfors, Atorp	2001.12.26	1	20025005	F	<i>C. lupus</i>	L+R mand+cranium. L teeth I1-3, P1-4, M1-2	22.26
NRM	Atorp 3.5 km NW, Degerfors, Varmland	2002.03.05	1	20035026	F	<i>C. lupus</i>	L+R mand+cranium. R teeth I1-3, C1, P1-4, M1-2	23.15
NRM	Odlingen, Sillerud, Arjang, Varmland	2004.02.07	1	20045040	F	<i>C. lupus</i>	L+R mand+cranium. R teeth I1-3, C1, P1-4, M1-2	21.33

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	M1W
NRM	Ovre Hurr, Tocksfors, Varmland	2006.05.30	1	20065236	F	<i>C. lupus</i>	L+R mand+cranium. L teeth, I1, I3, C1, P1-4, M1-2	22.18
NRM	Rickebo, Hallbo, Bollnas, Halsingland	2006.03.14	1	20065047	F	<i>C. lupus</i>	L+R mand+cranium. R teeth I1-3, C1, P1-4, M1-2	24.15
NRM	Ronnas, Ostra, Leksand, Dalarna	2007.10.09	1	20075381	F	<i>C. lupus</i>	L+R mand+cranium. R teeth I1-3, C1, P1-4, M1-2	23.71
NRM	Jarbo, Backefors, Dalsland	<i>C. lupus</i>	1	20075314	F	<i>C. lupus</i>	L+R mand+cranium. R teeth I1-3, C1, P1-4, M1-2	21.79
NRM	Varmland, Nordmark, Algsjion 2 km S	2009.01.25	1	20095063	F	<i>C. lupus</i>	L+R mand+cranium. L teeth I1-3, C1, P1-4, M1-2	23.53
NRM	Halsingland, Bollnas, Lottefors; Rv 83	2007.08.19	1	20075312	F	<i>C. lupus</i>	L+R mand + cranium. L teeth I1-3, C1, P1-4, M1-2	23.72
NRM	Vastmanland, Hallefors, Ornviken,	2010.01.02	1	20105028	F	<i>C. lupus</i>	L+R mand+cranium. R teeth I1-3, C1, P1-4, M1-2	21.69
NHM 4	Riocalado, Burgos, Spain		1	11.10.5.1	M	<i>C. lupus</i>	Cranium, L teeth I1-3, C1, P1- 4, M1-2	22.53

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	M1W	
NHM 6	Seville, Spain	On note '2 carnassials in tooth case'	1	95.3.3.6	M	<i>C. lupus</i>	Cranium, R teeth I1-3, C1, P1-4, M1-2	20.15	
NHM 7	Ukraine on modern ticket, on skull and original Norbotten, N Sweden (in arctic circle).		1	34.6.28.47	M	<i>C. lupus</i>	Cranium, L teeth I1-3, C1, post P1, post P2, P3-4, M1-2	21.27	
NHM 9			1	28.5.4.1	M	<i>C. lupus</i>	Cranium, I teeth I1-3, C1, P1, P3-4, M1-2	21.57	
NHM 11	Moscow district, Russia		1	82.9.18.2	M	<i>C. lupus</i>	Cranium, L teeth I1-3, C1, P1-4, M1-2	23.9	
Ost NHM	Abrantos, S of Tagus, Portugal		1	1937.2.10.2	M	<i>C. lupus</i>	Cranium, R teeth I1-3, C1, P1-4, M1-2	19.41	
Ost NHM	Bosnia, Yugoslavia		1	1935.8.5.1	M	<i>C. lupus</i>	Cranium, R teeth I1-3, C1, P1-3 P4 roots, M1-2	21.66	
NRM	Ljusdal, Ramsjo (s:n)		12.2.1926	1	A580255	M	<i>C. lupus</i>	L+R mand + fract cranium, palate/ant cranium. L teeth I1-3, C1, P1-4, M1-2	22.24
NRM	Jokkmokk		11.02.1852	1	A583532	M	<i>C. lupus</i>	L+R mand + cranium. R teeth I1-3, C1, P1-4, M1-2	23.69

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	M1W
NRM	Orebro	1852	1	A583547	M	<i>C. lupus</i>	L+R mand+cranium. R teeth I1-3, C1, P1-4, M1-3	23.45
NRM	Sweden	1907	1	A589147	M	<i>C. lupus</i>	L+R mand + cranium. R teeth I1-3, C1, P1-4, M1-2	23.72
NRM	Sweden	1908	1	A589199	M	<i>C. lupus</i>	L+R mand+cranium. L teeth I1-3, C1, P1-4, M1-2	22.75
NRM	Luktjomtjuolta, Vilhelmina	15.1.1937	1	A590009	M	<i>C. lupus</i>	L+R mand+cranium. R teeth I1-3, C1, P2-4, M1-2	22.39
NRM	Lina alv station	25.12.1977	1	A775097	M	<i>C. lupus</i>	L+R mand+cranium. L teeth I1, I3, C1, P1-4, M1-2	23.87
NRM	Atran, Ogardet	1984.09.12	1	A845131	M	<i>C. lupus</i>	L+R mand+cranium. R teeth I1-3, C1, P1-4, M1-2	23.67
NRM	Hede, 3 mil NV, Norrstadjan	1989.04.17	1	A895039	M	<i>C. lupus</i>	L+R mand+cranium. R teeth I2 from L though-3, P2-4, M1-2	23.51
NRM	Kiruna-Gallivare, Gaddmyr, Jvg	1992.08.24	1	A925106	M	<i>C. lupus</i>	L+R mand+cranium. R mand, I1-3, P2-4, M1-3	23.56

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	M1W
NRM	Boras	1996.01.04	1	A965002	M	<i>C. lupus</i>	L+R mand+cranium. L teeth I1-3, C1, P1-4, M1-2	24.69
NRM	Jarna, Flaten, Dalarna	1999.2.6	1	A995016	M	<i>C. lupus</i>	L+R mand+cranium. R teeth, I1-2, P1-4, M1-2	24.37
NRM	Varmland, Eksharad, Halgan; Kolarkojan	1999.06.04	1	995230	M	<i>C. lupus</i>	L+R mand+cranium. R teeth, I1-I3, C1, P1-4, M1-2	24.42
NRM	Jumkil kyrka, Uppsala	2000.11.19	1	20005365	M	<i>C. lupus</i>	L+R mand+cranium. L mand I1-3, C1, P1-4, M1-3	23.7
NRM	Uddalen, Ed, Dalsland	2003.05.12	1	20035114	M	<i>C. lupus</i>	L+R mand+cranium. R teeth I1-3, C1. P1-4, M1-2	24.03
NRM	Ostermoren, Smedjebacken, Dalarna	2004.12.09	1	20045305	M	<i>C. lupus</i>	L+R mand+cranium. R teeth I1-3, C1, P1-4, M1-2	25.29
NRM	Dala Floda, Borlange, Dalarna	2003.03.09	1	20035024	M	<i>C. lupus</i>	L+R mand+cranium. L teeth, I1-3, C1, P1-4, M1-2	25.85
NRM	IV 225 (road?), Osmo, Sodermanland	2005.11.26	1	20065027	M	<i>C. lupus</i>	L+broken R mand+cranium. L teeth I1-3, C1, P1-4, M1-2	24.21

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	M1W
NRM	Lanasberget, Grundsjo, Ljungaverk,	2005.09.02	1	20055287	M	<i>C. lupus</i>	L+R mand+cranium. L teeth I1-3, C1, P1-4, M1-2	22.39
NRM	Mullhyttan, Orebro, Narke	2006.09.15	1	20065414	M	<i>C. lupus</i>	L+R mand+cranium. R teeth I1-3, C1, P1-4, M1-2	23.71
NRM	Avik, Laxa, Narke	2007.04.27	1	20075186	M	<i>C. lupus</i>	L+R mand + cranium. L teeth I2-3, C1, P1-4, M1-2	24.12
NRM	Malung-Appelbo, Dalarna	2007.12	1	20085027	M	<i>C. lupus</i>	L+R mand +cranium. L teeth, I1-3, C1, P1-4, M1-2	24.5
NRM	Dalarna, Torsby, Ostmark; Sojensoasen	2007.09.15	1	20075373	M	<i>C. lupus</i>	L+R mand+cranium. R teeth I1-3, C1, P1-4, M1-2	25.12
NRM	Stormosse, Piro, Bjorneborg, Kristinehamn,	2007.12.27	1	20085036	M	<i>C. lupus</i>	L+R mand+cranium. L teeth I1-3, C1, P1-4, M1-2	24.3
NHM 23 K	Cae Gywn Cave		2	M2613	Pres by H Hicks and E Bouwerie Luxmoore	<i>C. lupus</i>	R upper max frag, P3-4, M1-2	21.42
SMES IV 266	Black Rock Quarries, Tenby		3	D2600		<i>C. lupus</i>	R maxilla frag, P4, M1-2	22.7

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	M1W
SMES IV 266	Black Rock Quarries, Tenby		3	D2597		<i>C. lupus</i>	R maxilla frag, P3-4, M1-2	22.55
NHM 43 C	Kent's Cavern	none	3	M734	Pres by Lord Haldon, July 1883	<i>C. lupus</i>	L upper M1	23.25
BC	Oreston Cave		3	Cd2918	J. Cottle c1n 1830	<i>C. lupus</i>	R upper M1	22.07
BC	Oreston Cave		3	Cd2916	J. Cottle c1n 1830	<i>C. lupus</i>	R upper M1	23.67
NMW PH1.91	Paviland		3	24.94/240		<i>C. lupus</i>	L upper max frag, P4 fract, M1	22.68
SM blue boxes	Paviland		3	SM.1836.6.205		<i>C. lupus</i>	L upper M1	26.29
MM R4 ColE D 1	Pin Hole Cave	PH (F)	3	LL.1982		<i>C. lupus</i>	R max frag, M1	23.95
MM R4 ColE D 1	Pin Hole Cave	PH (F)	3	LL.1990		<i>C. lupus</i>	R max frag, M1	19.6

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	M1W
MM R4 CoE D 1	Pin Hole Cave	PH (F)	3	LL.1989		<i>C. lupus</i>	R max frag around roots, M1	22.08
MM R4 CoE D 1	Pin Hole Cave	PH (F)	3	LL.1986 TTNCM 44/1995/61	? Rev'd. D. Williams & Beard clln	<i>C. lupus</i>	R max half, C1, P1-4, M1-2	18.67
SHC D27/3	Sandford Hill		3	/2		<i>C. lupus</i>	R upper M1 in max frag	23.46
NHM 45 D d13	Banwell Bone Cave		5a	44648 M223 with M223a (L teeth)	Pres Benj Bright 1873	<i>C. lupus</i>	24). L upper M1	20.97
NHM 45 D d13	Banwell Bone Cave		5a		Enniskillen clln	<i>C. lupus</i>	L maxilla, upper P3-4, M1-2	23.03
NHM 45 D d 12	Banwell Bone Cave		5a	M404 TTNCM 40/1995/31	Egerton Clln, 1882	<i>C. lupus</i>	Fract crania, LP3-4, M1-2	19.88
SHC D19/2	Banwell Bone Cave		5a	/1 TTNCM 40/1995/31	William Beard clln	<i>C. lupus</i>	L upper M1	20.57
SHC D19/2	Banwell Bone Cave		5a	/4	William Beard clln	<i>C. lupus</i>	L upper M1	22.71

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	M1W
SHC D19/2	Banwell Bone Cave		5a	TTNCM 40/1995/31 /2	William Beard clln	<i>C. lupus</i>	L upper M1	22.71
SHC D19/2	Banwell Bone Cave		5a	TTNCM 40/1995/31 /9	William Beard clln	<i>C. lupus</i>	L upper M1	20.38
SHC D19/2	Banwell Bone Cave		5a	TTNCM 40/1995/31 /39	William Beard clln	<i>C. lupus</i>	L upper M1	20.21
SHC D19/1	Banwell Bone Cave	Cave dep	5a	TTNCM 40/1995/15	William Beard clln	<i>C. lupus</i>	L upper max frag, P3-4, M1	20.42
SHC D19/1	Banwell Bone Cave		5a	TTNCM 40/1995/16	William Beard clln	<i>C. lupus</i>	L upper max frag, P4, M1-2	21.28
SHC D19/1	Banwell Bone Cave		5a	TTNCM 40/1995/17	William Beard clln	<i>C. lupus</i>	L max, P4, M1-2	20.92
SM From fox & wolf box in display	Bosco's Den		5a	SM. 1858.1.54		<i>C. lupus</i>	R upper M1	20.84
SM From fox & wolf box in display	Bosco's Den		5a	SM. 1858.1.58		<i>C. lupus</i>	R upper max frag, M1-2	22.2

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	M1W
SM From fox & wolf box in display	Bosco's Den		5a	SM. 1858.1.75		<i>C. lupus</i>	R upper max frag, M1, M2 alv.	21
SM From fox & wolf box in display	Bosco's Den		5a	SM. 1858.1.63		<i>C. lupus</i>	R upper max frag, P4, M1	22.03
SM From fox & wolf box in display	Bosco's Den		5a	SM. 1858.1.48		<i>C. lupus</i>	R upper max frag, P4, M1-2	22.22
MM R5 colK d14	Windy Knoll		5a	P2497	Dawkins	<i>C. lupus</i>	R max frag, P4, M1-2	21.61
MM Gallery	Windy Knoll		5a	LL12009		<i>C. lupus</i>	With above. Cranium, R I1-2, I3 root, C1, P2-4, M1-2	20.85
NHM 25 K	Bacon Hole	Upper cave earth. Area 8E, field no 200, Apr 1980. C. Stringer excav	5c	M49708	Pres National Trust for Wales.	<i>C. lupus</i>	L upper M1	22.56
SMES 3A Display	Barrington		5e			<i>C. lupus</i>	R upper M1	20.63
TM G/B6/114	Joint Mitnor Cave		5e	P35213	none	<i>C. lupus</i>	R upper M1	20.73

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	M1W
TM G/B6/114	Joint Mitnor Cave		5e	P35214	none	<i>C. lupus</i>	R upper M1	25.09
TM G/B6/114	Joint Mitnor Cave		5e	P35216	1940	<i>C. lupus</i>	R upper M1	22.8
BC	Clevedon Cave		6	Ce15093	S.H. Reynolds	<i>C. lupus</i>	R max, P4, M1	22.15
BC	Clevedon Cave		6	Ce15095	S.H. Reynolds	<i>C. lupus</i>	R upper max frag, P4, M1-2	20.94
SHC D46/1	Bleaddon Cave	Cave dep	7	TTNCM 41/1995/23	W. Beard clln	<i>C. lupus</i>	L upper max frag, M1-2	22.07
NHM 44 D drw 7	Hutton Cave	none	7	44739	Pres by B Bright, Aug 1878	<i>C. lupus</i>	Ant cranium, part upper palate and max, L M1-2	21.74
NHM 44 D drw 7	Hutton Cave	none	7	44739a	Bright?	<i>C. lupus</i>	Cranium, L I3, (R) C1, half P2, P3-4, M1-2	20.1
BCM 6, 7, box 123	Marsworth	Pitstone no 3 quarry	7	1980.544.n 14/3		<i>C. lupus</i>	R upper M1	22

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	M1W
NMW Box 2.19	Pontnewydd Cave	Buff intermed	7	83.107H/8 D1682		<i>C. lupus</i>	R upper M1	21.25
NMW Box 2.19	Pontnewydd Cave	Orange interm	7	83.107H/8 D1787		<i>C. lupus</i>	R upper M1	22.05
StM 80	Villa Seckendorf, Bad Canstatt, Germany	Stuttgart Travertine	2.8	31297 or SE.21.2.57/10		<i>C. lupus</i>	R upper max, post root P2, P3-4, M1	24.51
SIW 3 d 9	Taubach, Germany		2.8	1968/9826 (Taub 2750)		<i>C. lupus</i>	L upper max frag, M1-2	23.54
NHM 25 F d 3	Boxgrove	Project A, Q2, area GTP4, unit 6, field no F1	13	F1/3		<i>C. mosbachensis</i>	R upper max, C1, P2-4, M1	18.61
NHM 25 F d 3	Boxgrove	Project A, Q2, area GTP4, unit 6, field no F1	13	F1/4		<i>C. mosbachensis</i>	R upper maxilla, P4, M1-M2	19.13
NHM 25 G d 24	Boxgrove	Project A, Q1, Area A, unit 4b, field no. F3445	13	F2445		<i>C. mosbachensis</i>	Cont...R teeth I1-3, C1, P1-4, M1-2	16.76
NHM 44 E drw 4	Westbury	Calcareous memb Bed 3	13	47430	MJ Bishop clln	<i>C. mosbachensis</i>	R upper M1	17.68

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	M1W
NHM 44 E drw 12	Westbury	Bed 3	13	47526	Bishop 1974	<i>C. mosbachensis</i>	R upper M1	18.76
NHM 44 E drw 15	Westbury	Bed 5	13	M33954	Bishop, 1974	<i>C. mosbachensis</i>	R upper M1	20.18
NHM 44 E drw 18	Westbury	Unstrat. Calc memb	13	none	Bishop, 1974	<i>C. mosbachensis</i>	R upper M1	18.75
NHM 44 E drw 18	Westbury	Unstrat. Calc memb	13	none		<i>C. mosbachensis</i>	R upper M1	16.96
NHM 44 E drw 18	Westbury	Unstrat. Calc memb	13	none	Bishop, 1974	<i>C. mosbachensis</i>	R upper M1	17.82
NHM 44 F drw 1	Westbury	Calc memb. Site W1A	13	none	NHM excav 1976	<i>C. mosbachensis</i>	R upper M1	19.65
NHM 44 F drw 1	Westbury	Calc memb. Site W1B	13	none	NHM excav 1976	<i>C. mosbachensis</i>	R upper M1	17.68
NHM 44 F drw 25	Westbury	19/14 Rodent breccia, W5	13	none	Post 1977	<i>C. mosbachensis</i>	R upper M1	18.9

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	M1W
NHM 35 H d 3	Westbury	Grey-green silt, W9	13	M34219	NHM excav'78	<i>C. mosbachensis</i>	R upper max frag, P3-4, M1-2	20.49
NHM 47 B	West Runton	Upper freshwater bed	17	M17934	AC Savin Clln, 1946. Cat. 574. Cll'd 1908	<i>C. mosbachensis</i>	2). R M1, with bone/cement? Stuck to roots	16.86
VER 00441 StM 159 (143 on cab label)	Cengelle II, Soave, Italy	Mosbacher sande	3.4	V10114	Meurer clln	<i>C. mosbachensis</i>	R upper M1	19.38
	Mosbach, Hessen, Germany		4	328591 1982/1824		<i>C. mosbachensis</i>	R upper M1	19.28
SIW 1 d 1	Untermassfeld, Germany		4	9 (Mei 17769)		<i>C. mosbachensis</i>	R max, I1-3, C1, P1-4, I M1-2	18.03
SIW 1 d 1	Untermassfeld, Germany		4	1982/1805 2		<i>C. mosbachensis</i>	Cranium, R teeth I1-3, C1, P1-4, M1-2	20.2
SIW 1 d 3	Untermassfeld, Germany		4	1980/1532 8 (Mei 14840)		<i>C. mosbachensis</i>	R upper max frag, P4, M1-2	19.51
FLO 0/02/013/01 (d1)	Il Tasso, Italy	Upper Valdarno	4.4	IGF868		<i>C. arnensis</i>	Max, snout and basicranium. L max, I1-2, C1, P1-4, M1-2	17.89

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	M1W
FLO 0/02/013/04 (d4)	il tasso, Italy	Upper Valdarno	4.4	IGF878		<i>C. arnensis</i>	Squashed BC, with L cranial frag, slight zyg arch, M1-2, also occip cond.	16.92
FLO 0/02/013/05	il tasso, Italy	Upper Valdarno	4.4	IGF877		<i>C. arnensis</i>	part snout and L snout side, upper palatte, L teeth P3-4, M1 frag M2	19.15
FLO Gallery	il tasso, Italy	Upper Valdarno	4.4	IGF869		<i>C. arnensis</i>	Squashed cranium, L teeth, I1-3, C1, P1-4, M1-2	16.89
FLO Gallery	near le strette al tasso, Italy	Upper Valdarno	4.4	IGF867		<i>C. arnensis</i>	Squashed cranium, L teeth, I1-3, C1, P1-4, M1-2	17.84
FLO 0/02/013/02 (d2)	Figline, Italy	Upper Valdarno	4.4	11780		<i>C. majori (etruscus)</i>	R upper max frag, P4, M1	19.77
FLO 0/02/013/03 (d3)	Upper Valdarno, Italy	Upper Valdarno	4.4	1246V		<i>C. etruscus</i>	R upper M1	20.82
FLO 0/02/013/04 (d4)	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF861		<i>C. majori (etruscus)</i>	R upper max frag, roots P3, P4, M1-frag M2	20.3
FLO 0/02/013/04 (d4)	Se Ville, Italy	Upper Valdarno	4.4	IGF885		<i>C. etruscus</i>	R max, P2-4, M1	19.99

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	M1W
FLO 0/02/013/06 (d6)	Olivola, Italy		4.4	IGF4411		<i>C. etruscus</i>	R teeth, P4, M1-2	18.53
FLO 0/02/013/07 (d7)	Val di Magna, Italy	Olivola	4.4	IGF4486		<i>C. etruscus</i>	R upper max, more ling than buc frag, P3-4, M1-2	21.01
FLO 0/02/013/07 (d7)	Val di Era, Italy	Olivola	4.4	11782		<i>C. etruscus</i>	R upper M1	19.71
FLO 0/02/013/08 (d8)	Val di Magna, Italy	Olivola	4.4	IGF4515		<i>C. etruscus</i>	R upper M1	21.98
FLO Gallery	Olivola, Italy	Olivola	4.4	IGF4407		<i>C. etruscus</i>	R teeth, C1, P3-4, M1-2	20.86

14. M2W

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Se x	Species	Material	M2W
NHM 1	France		1	1843.12.29. 7	F	<i>C. lupus</i>	Cranium, L teeth I1-3, C1, P1, 3-4, M1-2	12.16
NHM 2	Pyrenees	Parzudacki clln	1	44.1.18.1	F	<i>C. lupus</i>	Cranium, L teeth I2-3, C1, P1-4, M1-2	13.52
NHM 3	Nr Abrantos, S of the Tagus, Portugal	WC Tait clln.	1	1938.12.7.1	F	<i>C. lupus</i>	Cranium, R teeth I1-3, C1, P1-4, M1-2	11.51
NHM 5	Riocalado, Burgos, Spain		1	11.10.5.2	F	<i>C. lupus</i>	Cranium, L teeth I1-3, C1, P1-4, M1-2	12.65
NHM 8	Kocane, Macedonia		1	47.1121.a	F	<i>C. lupus</i>	Cranium, L teeth I1-3, C1, P1-4, M1-2 L+R mand + cranium.	14.76
NRM	Korvijaure, 7 miles N Kiruna	15.4.1959	1	A58 0112	F	<i>C. lupus</i>	Cranium-fract basicranium. L teeth, I1- L+R mand + cranium	13.9
NRM	Kiruna	14.4.1908	1	A581198	F	<i>C. lupus</i>	extreme tooth wear down to bone. L teeth	13.76
NRM	S Finnskoga, Skrackarberget	1985.07.29	1	A865126	F	<i>C. lupus</i>	L+R mand+cranium. R teeth, I1-3, P1-4, M1-3	14.74

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Se x	Species	Material	M2W
NRM	Jadraas, 5km N	1991.06.14	1	A915068	F	<i>C. lupus</i>	L+R mand+cranium. R teeth P4, M1-2	13.5
NRM	Vastra Amtervik, Hensgard	1993.02.24	1	A935024	F	<i>C. lupus</i>	L+R mand+cranium. L mand, I1-3, C1, P2-4, M1-2	14.57
NRM	Nas-snoan, v71/jvg	1993.08.18	1	A935178	F	<i>C. lupus</i>	L+R mand+cranium. L teeth I1-3, C1, P1-4, M1-2	14.2
NRM	Nyskoga, Kringsberg, Bontjarn	1994.01.19	1	A945045	F	<i>C. lupus</i>	L+R mand+cranium. R teeth, I1-3, C1, P1-4, M1-2	14.76
NRM	Vastmandland, Grythyttan	1999.12.17	1	20005111	F	<i>C. lupus</i>	L+R mand+cranium. R mand I2-3, C1, P2-4, M1-3	15.23
NRM	Narke, Degerfors, Atorp	2001.12.26	1	20025005	F	<i>C. lupus</i>	L+R mand+cranium. L teeth I1-3, P1-4, M1-2	13.55
NRM	Atorp 3.5 km NW, Degerfors, Varmland	2002.03.05	1	20035026	F	<i>C. lupus</i>	L+R mand+cranium. R teeth I1-3, C1, P1-4, M1-2	14.13
NRM	Odlingen, Sillerud, Arjang, Varmland	2004.02.07	1	20045040	F	<i>C. lupus</i>	L+R mand+cranium. R teeth I1-3, C1, P1-4, M1-2	13.21
NRM	Ovre Hurr, Tocksfors, Varmland	2006.05.30	1	20065236	F	<i>C. lupus</i>	L+R mand+cranium. L teeth, I1, I3, C1, P1-4, M1-2	14.05

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Se x	Species	Material	M2W
NRM	Rickebo, Hallbo, Bollnas, Halsingland	2006.03.14	1	20065047	F	<i>C. lupus</i>	L+R mand+cranium. R teeth I1-3, C1, P1-4, M1- 2	14.53
NRM	Ronnas, Ostra, Leksand, Dalarna	2007.10.09	1	20075381	F	<i>C. lupus</i>	L+R mand+cranium. R teeth I1-3, C1, P1-4, M1- 2	15.57
NRM	Jarbo, Backefors, Dalsland Varmland, Nordmark, Algsjion	<i>C. lupus</i>	1	20075314	F	<i>C. lupus</i>	L+R mand+cranium. R teeth I1-3, C1, P1-4, M1- 2	14.16
NRM	2 km S Halsingland, Bollnas, Lottefors;	2009.01.25	1	20095063	F	<i>C. lupus</i>	L+R mand+cranium. L teeth I1-3, C1, P1-4, M1- 2	13.77
NRM	Rv 83 Vastmanland, Hallefors, Ornviken,	2007.08.19	1	20075312	F	<i>C. lupus</i>	L+R mand + cranium. L teeth I1-3, C1, P1-4, M1- 2	14.95
NRM		2010.01.02 On note '2 carnassials in tooth case'	1	20105028	F	<i>C. lupus</i>	L+R mand+cranium. R teeth I1-3, C1, P1-4, M1- 2	13.29
NHM 6	Seville, Spain Ukraine on modern ticket, on skull and original		1	95.3.3.6	M	<i>C. lupus</i>	Cranium, R teeth I1-3, C1, P1-4, M1-2	13.88
NHM 7			1	34.6.28.47	M	<i>C. lupus</i>	Cranium, L teeth I1-3, C1, post P1, post P2, P3- 4, M1-2	13.75
NHM 11	Moscow district, Russia		1	82.9.18.2	M	<i>C. lupus</i>	Cranium, L teeth I1-3, C1, P1-4, M1-2	15.44

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Se x	Species	Material	M2W
Ost NHM	Bosnia, Yugoslavia		1	1935.8.5.1	M	<i>C. lupus</i>	Cranium, R teeth I1-3, C1, P1-3 P4 roots, M1-2	14.32
NRM	Ljusdal, Ramsjo (s:n)	12.2.1926	1	A580255	M	<i>C. lupus</i>	L+R mand + fract cranium, palate/ant cranium. L teeth I1-3, L+R mand + cranium. R teeth I1-3, C1, P1-4, M1-2	13.94
NRM	Jokkmokk	11.02.1852	1	A583532	M	<i>C. lupus</i>	L+R mand+cranium. R teeth I1-3, C1, P1-4, M1-2	14.96
NRM	Orebro	1852	1	A583547	M	<i>C. lupus</i>	L+R mand + cranium. R teeth I1-3, C1, P1-4, M1-2	13.94
NRM	Sweden	1907	1	A589147	M	<i>C. lupus</i>	L+R mand+cranium. L teeth I1-3, C1, P1-4, M1-2	14.28
NRM	Sweden	1908	1	A589199	M	<i>C. lupus</i>	L+R mand+cranium. R teeth I1-3, C1, P2-4, M1-2	15.27
NRM	Luktjomtjuolta, Vilhelmina	15.1.1937	1	A590009	M	<i>C. lupus</i>	L+R mand+cranium. L teeth I1, I3, C1, P1-4, M1-2	13.86
NRM	Lina alv station	25.12.1977	1	A775097	M	<i>C. lupus</i>	L+R mand+cranium. R teeth I1-3, C1, P1-4, M1-2	13.78
NRM	Atran, Ogardet	1984.09.12	1	A845131	M	<i>C. lupus</i>		14.63

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Se x	Species	Material	M2W
NRM	Hede, 3 mil NV, Norrstadjan	1989.04.17	1	A895039	M	<i>C. lupus</i>	L+R mand+cranium. R teeth I2 from L though- 3, P2-4, M1-2	14.13
NRM	Kiruna-Gallivare, Gaddmyr, Jvg	1992.08.24	1	A925106	M	<i>C. lupus</i>	L+R mand+cranium. R mand, I1-3, P2-4, M1-3 L+R mand+cranium. L teeth I1-3, C1, P1-4, M1-	14.94
NRM	Boras	1996.01.04	1	A965002	M	<i>C. lupus</i>	2	15.64
NRM	Jarna, Flaten, Dalarna	1999.2.6	1	A995016	M	<i>C. lupus</i>	L+R mand+cranium. R teeth, I1-2, P1-4, M1-2	15.06
NRM	Varmland, Eksharad, Halgan; Kolarkojan	1999.06.04	1	995230	M	<i>C. lupus</i>	L+R mand+cranium. R teeth, I1-I3, C1, P1-4, M1-2	15.01
NRM	Jumkil kyrka, Uppsala	2000.11.19	1	20005365	M	<i>C. lupus</i>	L+R mand+cranium. L mand I1-3, C1, P1-4, M1-3	15.16
NRM	Uddalen, Ed, Dalsland	2003.05.12	1	20035114	M	<i>C. lupus</i>	L+R mand+cranium. R teeth I1-3, C1. P1-4, M1- 2	15.69
NRM	Ostermoren, Smedjebacken, Dalarna	2004.12.09	1	20045305	M	<i>C. lupus</i>	L+R mand+cranium. R teeth I1-3, C1, P1-4, M1- 2	15.31
NRM	Dala Floda, Borlange, Dalarna	2003.03.09	1	20035024	M	<i>C. lupus</i>	L+R mand+cranium. L teeth, I1-3, C1, P1-4, M1-2	14.93

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Se x	Species	Material	M2W
NRM	IV 225 (road?), Osma, Sodermanland	2005.11.26	1	20065027	M	<i>C. lupus</i>	L+broken R mand+cranium. L teeth I1-3, C1, P1-4, M1-2	15.38
NRM	Lanasberget, Grundsjo, Ljungaverk,	2005.09.02	1	20055287	M	<i>C. lupus</i>	L+R mand+cranium. L teeth I1-3, C1, P1-4, M1- 2	13.28
NRM	Mullhyttan, Orebro, Narke	2006.09.15	1	20065414	M	<i>C. lupus</i>	L+R mand+cranium. R teeth I1-3, C1, P1-4, M1- 2	14.58
NRM	Avik, Laxa, Narke	2007.04.27	1	20075186	M	<i>C. lupus</i>	L+R mand + cranium. L teeth I2-3, C1, P1-4, M1- 2	14.61
NRM	Malung-Appelbo, Dalarna	2007.12	1	20085027	M	<i>C. lupus</i>	L+R mand +cranium. L teeth, I1-3, C1, P1-4, M1-2	15.14
NRM	Dalarna, Torsby, Ostmark; Sojensoasen	2007.09.15	1	20075373	M	<i>C. lupus</i>	L+R mand+cranium. R teeth I1-3, C1, P1-4, M1- 2	15.2
NRM	Stormosse, Piro, Bjorneborg, Kristinehamn,	2007.12.27	1	20085036	M	<i>C. lupus</i>	L+R mand+cranium. L teeth I1-3, C1, P1-4, M1- 2	13.73
NHM 23 K	Cae Gywn Cave		2	M2613	Pres by H Hicks and E Bouwerie Luxmoore	<i>C. lupus</i>	R upper max frag, P3-4, M1-2	13.71
BC	Oreston Cave		3	Cd2944	J. Cottle cIn 1830	<i>C. lupus</i>	R upper M2	14.83

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Se x	Species	Material	M2W
MM Gallery	Pin Hole Cave		3	LL11899		<i>C. lupus</i>	Cranium, L I1-3, P1-2, post P3, ant P4, M2	12.92
SMES IV 266	Black Rock Quarries, Tenby		3	D2600		<i>C. lupus</i>	R maxilla frag, P4, M1-2	13.88
SMES IV 266	Black Rock Quarries, Tenby		3	D2597		<i>C. lupus</i>	R maxilla frag, P3-4, M1-2	13.63
NHM 45 D d 12	Banwell Bone Cave		5a	M404		<i>C. lupus</i>	From above, R P1-2, fract P3, P4, M1-2	13.32
NHM 45 D d 12	Banwell Bone Cave		5a	44640		<i>C. lupus</i>	From above, R P4, M1-2	13.5
UBSS	Banwell Bone Cave		5a	none TTNCM 40/1995/31		<i>C. lupus</i>	R upper M2	12.65
SHC D19/2	Banwell Bone Cave		5a	/38 TTNCM 40/1995/31	William Beard clln	<i>C. lupus</i>	R upper M2	15.25
SHC D19/2	Banwell Bone Cave		5a	/36	William Beard clln	<i>C. lupus</i>	R upper M2	13.73
MM R5 colK d14	Windy Knoll		5a	P2497	Dawkins	<i>C. lupus</i>	R max frag, P4, M1-2	14.56

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Se x	Species	Material	M2W
MM Gallery SM From fox & wolf box in display	Windy Knoll		5a	LL12009		<i>C. lupus</i>	With above. Cranium, R I1-2, I3 root, C1, P2-4, M1-2	12.98
SM From fox & wolf box in display	Bosco's Den		5a	SM. 1858.1.58		<i>C. lupus</i>	R upper max frag, M1-2	13.16
SM From fox & wolf box in display	Bosco's Den		5a	SM. 1858.1.48		<i>C. lupus</i>	R upper max frag, P4, M1-2	13.02
TM G/B6/B109	Joint Mitnor Cave		5e	P35049	1940	<i>C. lupus</i>	R upper M2	12.68
BC	Clevedon Cave		6	Ce15095	S.H. Reynolds	<i>C. lupus</i>	R upper max frag, P4, M1-2	13.92
SHC D46/1	Bleadon Cave	Cave dep	7	TTNCM 41/1995/23	W. Beard clln	<i>C. lupus</i>	L upper max frag, M1-2 Ant cranium, part upper palate and max, L M1-2	13.36
NHM 44 D drw 7	Hutton Cave	none	7	44739	Pres by B Bright, Aug 1878	<i>C. lupus</i>		12.7
NHM 44 D drw 7	Hutton Cave	none	7	44739a TTNCM	Bright?	<i>C. lupus</i>	Cranium, L I3, (R) C1, half P2, P3-4, M1-2	12.42
SHC D40/2	Hutton Cave		7	42/1995/68 8	Rev D Williams and W Beard clln	<i>C. lupus</i>	L upper max and partial palate frag, P2, P4, M2	14

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Source	Species	Material	M2W
NMW Box 2.20	Pontnewydd Cave	LB	7	86.31H/3 D46440	Given by Major David William Wynn	<i>C. lupus</i>	R upper M2	14.48
NHM 36 E d 36/E/19	Perick Cave Villa Seckendorf, Bad Canstatt, Germany	Cavern	2.4	28582	none	<i>C. lupus</i>	R max frag, P4, M2	14.03
StM 80		Stuttgart Travertine	2.8	31296 or SE.21.2.57/ 10 zu 1969/1187		<i>C. lupus</i>	R upper max, P2-4, M2	14.95
SIW 3 d 9	Taubach, Germany		2.8	8		<i>C. lupus</i>	R upper M2	13.35
SIW	Weimar- Ehringsdorf, Germany		3	1968/9659 (Ehr 3880)		<i>C. lupus</i>	Cranium, L teeth P4, M1-2	14.29
NHM 25 F d 3	Boxgrove	Project A, Q2, area GTP13, unit 4c surface, field no F6 (10)	13	F6 (10)/1		<i>C. mosbachensis</i>	R upper M2	12.28
NHM 25 F d 3	Boxgrove	Project A, Q2, area GTP4, unit 6, field no F1	13	F1/4		<i>C. mosbachensis</i>	R upper maxilla, P4, M1- M2	12.23
NHM 25 E d 14	Boxgrove	Project A, Q1, area TP4, no unit, field no 1 (28)	13	F1 (28)		<i>C. mosbachensis</i>	Cont...R teeth P2-4, M1- 2	11.77

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Se x	Species	Material	M2W
NHM 25 G d 24	Boxgrove	Project A, Q1, Area A, unit 4b, field no. F3445	13	F2445		<i>C. mosbachensis</i>	Cont...R teeth I1-3, C1, P1-4, M1-2	10
NHM 44 E drw 15	Westbury	Bed 5	13	M33959	Bishop, 1974	<i>C. mosbachensis</i>	L upper M2	13.14
NHM 44 E drw 15	Westbury	Bed 5c	13	M33958	Bishop, 1974	<i>C. mosbachensis</i>	L upper M2	13.33
NHM 44 F drw 1	Westbury	Calc memb. Site W1A	13	none	NHM excav 1976	<i>C. mosbachensis</i>	L upper M2	10.47
NHM 44 F drw 25	Westbury	19/14 Rodent breccia, site W5E. calcareous member	13	none	Post 1977	<i>C. mosbachensis</i>	L upper M2	12.8
NHM 35 H d 25	Westbury	19/14. Site W5 east	13	none	NHM excav '82	<i>C. mosbachensis</i>	L upper M2	12.06
NHM 35 H d 28	Westbury	18/6 grey silty conglom, W5W	13	none	none	<i>C. mosbachensis</i>	L upper M2	10.96
NHM 3 A d 8	Westbury	Site W 5/W10. 19/10	13	none	Excav 1984	<i>C. mosbachensis</i>	L upper M2	12.41

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Se x	Species	Material	M2W
SIW 1 d 1	Untermassfeld, Germany		4	1982/1824 9 (Mei 17769)		<i>C. mosbachensis</i>	R max, I1-3, C1, P1-4, I M1-2	12.54
SIW 1 d 1	Untermassfeld, Germany		4	1982/1805 2		<i>C. mosbachensis</i>	Cranium, R teeth I1-3, C1, P1-4, M1-2	13.89
SIW 1 d 3	Untermassfeld, Germany		4	1980/1532 8 (Mei 14840)		<i>C. mosbachensis</i>	R upper max frag, P4, M1-2	12.92
SIW 2 d 1	Untermassfeld, Germany		4	none?		<i>C. mosbachensis</i>	R upper M2 in max frag	11.14
FLO 0/02/013/01 (d1)	Il Tasso, Italy	Upper Valdarno	4.4	IGF868		<i>C. arnensis</i>	Max, snout and basicranium. L max, I1- 2, C1, P1-4, M1-2	11.99
FLO 0/02/013/04 (d4)	il tasso, Italy	Upper Valdarno	4.4	IGF878		<i>C. arnensis</i>	Squashed BC, with L cranial frag, slight zyg arch, M1-2, also occip	12.03
FLO Gallery	il tasso, Italy	Upper Valdarno	4.4	IGF869		<i>C. arnensis</i>	Squashed cranium, L teeth, I1-3, C1, P1-4, M1-2	10.96
FLO Gallery	near le strette al tasso, Italy	Upper Valdarno	4.4	IGF867		<i>C. arnensis</i>	Squashed cranium, L teeth, I1-3, C1, P1-4, M1-2	11.06
FLO 0/02/013/02 (d2)	Upper Valdarno, Italy	Upper Valdarno	4.4	11779		<i>C. majori (etruscus)</i>	L upper max frag, P4, M1-2	13.34

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Se x	Species	Material	M2W
FLO 0/02/013/06 (d6) FLO 0/02/013/06 (d6) FLO 0/02/013/06 (d6)	Val di Magna, Italy	Olivola	4.4	IGF4408		<i>C. etruscus</i>	Upper palatte and max, and snout. L upper I2-3, P3-4, M1-2	12.59
	Val di Magna, Italy	Olivola	4.4	IGF4481		<i>C. etruscus</i>	Max and basicranium frag, L upper M2	12.23
	Val di Magna, Italy	Olivola	4.4	IGF4411		<i>C. etruscus</i>	Snout with max and teeth. L teeth, P4, M1-2 Frontal cranium and partial snout. Upper max and palatte. L	11.27
FLO Gallery	Olivola, Italy	Olivola	4.4	IGF4407		<i>C. etruscus</i>	teeth, P3-4, M1-2	12.31

15. p1p4L

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	p1p4L
NHM 1	France		1	1843.12.29.7	F	<i>C. lupus</i>	L mand, I1-3, C1, P2-4, M1-2	47.48
NHM 2	Pyrenees Nr Abrantos, S of the Tagus,	Parzudacki clln	1	44.1.18.1	F	<i>C. lupus</i>	L mand, I1-3, C1, P1-4, M1-3	49.01
NHM 3	Portugal	WC Tait clln.	1	1938.12.7.1	F	<i>C. lupus</i>	R mand, I1-3, C1, P1-4, M1-2	44.21
NHM 5	Riocalado, Burgos, Spain		1	11.10.5.2	F	<i>C. lupus</i>	L mand, I1-3, C1, P1-4, M1-3	52.9
NHM 8	Kocane, Macedonia		1	47.1121.a	F	<i>C. lupus</i>	L mand, I1-3, C1, P1-4, M1-2	46.75
NRM	Korvijaure, 7 miles N Kiruna	15.4.1959	1	A58 0112	F	<i>C. lupus</i>	L+R mand + cranium. R mand I1-3, C1, P1, P2 loose, P3-4, M1-3	52.07
NRM	S Finnskoga, Skrackarberget	1985.07.29	1	A865126	F	<i>C. lupus</i>	L+R mand+cranium. R mand, I1-3, P1-4, M1-3	50.51
NRM	Jadraas, 5km N	1991.06.14	1	A915068	F	<i>C. lupus</i>	L+R mand+cranium. R teeth P4, M1-2	50.9

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	p1p4L
NRM	Vastra Amtervik, Hensgard	1993.02.24	1	A935024	F	<i>C. lupus</i>	L+R mand+cranium. L mand, I1-3, C1, P2-4, M1-2	48.23
NRM	Nas-snoan, v71/jvg	1993.08.18	1	A935178	F	<i>C. lupus</i>	L+R mand+cranium. L mand I1-3, C1, P1-4, M1-3	46.91
NRM	Nyskoga, Kringsberg, Bontjarn	1994.01.19	1	A945045	F	<i>C. lupus</i>	L+R mand+cranium. R mand, I1-3, P1-4, M1-3	50.6
NRM	Vastmandland, Grythyttan	1999.12.17	1	20005111	F	<i>C. lupus</i>	L+R mand+cranium. R mand I2-3, C1, P2-4, M1-3	49.74
NRM	Narke, Degerfors, Atorp	2001.12.26	1	20025005	F	<i>C. lupus</i>	L+R mand+cranium. L mand I1-3, P1-4, M1-3	40.56
NRM	Atorp 3.5 km NW, Degerfors, Varmland	2002.03.05	1	20035026	F	<i>C. lupus</i>	L+R mand+cranium. L mand I1-3, C1, P1-4, M1-3	47.48
NRM	Odlingen, Sillerud, Arjang, Varmland	2004.02.07	1	20045040	F	<i>C. lupus</i>	L+R mand+cranium. R mand I1-3, C1, P1-4, M1-3	49.15
NRM	Ovre Hurr, Tocksfors, Varmland	2006.05.30	1	20065236	F	<i>C. lupus</i>	L+R mand+cranium. L mand, I1-2, C1, P1-4, M1-3	48.85
NRM	Rickebo, Hallbo, Bollnas, Halsingland	2006.03.14	1	20065047	F	<i>C. lupus</i>	L+R mand+cranium. R mand I1-3, C1, P1-4, M1-3	49.36

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	p1p4L
NRM	Ronnas, Ostra, Leksand, Dalarna	2007.10.09	1	20075381	F	<i>C. lupus</i>	L+R mand+cranium. R mand I1-3, C1, P1-4, M1-3	49.16
NRM	Jarbo, Backefors, Dalsland	2007.?	1	20075314	F	<i>C. lupus</i>	L+R mand+cranium. L mand I1-3, C1, P1-4, M1-3	46.91
NRM	Varmland, Nordmark, Algsjion 2 km S	2009.01.25	1	20095063	F	<i>C. lupus</i>	L+R mand+cranium. R mand I1-3, C1, P1 alv, P1-4, M1-3	46.82
NRM	Halsingland, Bollnas, Lottefors; Rv 83	2007.08.19	1	20075312	F	<i>C. lupus</i>	L+R mand + cranium. R mand I1-3, C1, P1-4, M1-3	47.38
NRM	Vastmanland, Hallefors, Ornviken,	2010.01.02	1	20105028	F	<i>C. lupus</i>	L+R mand+cranium. L mand I1-3, C1, P1-4, M1-3	51.24
NHM 4	Riocalado, Burgos, Spain		1	11.10.5.1	M	<i>C. lupus</i>	L mand, I1-3, C1, P1-4, M1-3	53.14
NHM 9	Norbotten, N Sweden (in arctic circle).		1	28.5.4.1	M	<i>C. lupus</i>	L mand, I1-3, C1, P1-4, M1-3	51.78
NHM 7	Ukraine on modern ticket, on skull and original		1	34.6.28.47	M	<i>C. lupus</i>	L mand, I1-3, C1, P3-4, M1-3	51.8
NHM 11	Moscow district, Russia		1	82.9.18.2	M	<i>C. lupus</i>	L mand, I1-3, C1 fract, P1-4, M1-3	56.5

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	p1p4L
NHM Ost	Abrantos, S of Tagus, Portugal		1	1937.2.10.2	M	<i>C. lupus</i>	R mand, I2, C1, P4, M1-3	46.41
NHM Ost	Bosnia, Yugoslavia		1	1935.8.5.1	M	<i>C. lupus</i>	R mand, I1-3, C1, P1-4, M1-2	48.65
NRM	Ljusdal, Ramsjo (s:n)	12.2.1926	1	A580255	M	<i>C. lupus</i>	L+R mand + fract cranium. L mand, I1-3, C1, P1-4, M1-3	52.68
NRM	Jokkmokk	11.02.1852	1	A583532	M	<i>C. lupus</i>	L+R mand + cranium. R mand I1-3, C1, P1-4, M1-3	49.63
NRM	Orebro	1852	1	A583547	M	<i>C. lupus</i>	L+R mand+cranium. R mand I1-3, C1, P1-4, M1-3	50.27
NRM	Sweden	1907	1	A589147	M	<i>C. lupus</i>	L+R mand + cranium. R teeth I1-3, C1, P1-4, M1-2	50.42
NRM	Sweden	1908	1	A589199	M	<i>C. lupus</i>	L+R mand+cranium. L mand I1-3, C1, P1-4, M1-3	51.1
NRM	Luktjomtjuolta, Vilhelmina	15.1.1937	1	A590009	M	<i>C. lupus</i>	L+R mand+cranium. L mand I1-3, C1, P2-4, M1-2	50.89
NRM	Lina alv station	25.12.1977	1	A775097	M	<i>C. lupus</i>	L+R mand+cranium. L mand I1, I3, C1, P1-4, M1-3	52.03

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	p1p4L
NRM	Atran, Ogardet	1984.09.12	1	A845131	M	<i>C. lupus</i>	L+R mand+cranium. R mand I1-3, C1, P1-4, M1-3	52.05
NRM	Hede, 3 mil NV, Norrstadjan	1989.04.17	1	A895039	M	<i>C. lupus</i>	L+R mand+cranium. R mand I1-3, P1-4, M1-3	51.71
NRM	Kiruna-Gallivare, Gaddmyr, Jvg	1992.08.24	1	A925106	M	<i>C. lupus</i>	L+R mand+cranium. R mand, I1-3, P2-4, M1-3	51.52
NRM	Boras	1996.01.04	1	A965002	M	<i>C. lupus</i>	L+R mand+cranium. L teeth I1-3, C1, P1-4, M1-2	52.23
NRM	Jarna, Flaten, Dalarna	1999.2.6	1	A995016	M	<i>C. lupus</i>	L+R mand+cranium. R mand, I1-2, P1-4, M1-3	53.77
NRM	Varmland, Eksharad, Halgan; Kolarkojan	1999.06.04	1	995230	M	<i>C. lupus</i>	L+R mand+cranium. R mand, I3, C1, P1-4, M1-3	51.57
NRM	Jumkil kyrka, Uppsala	2000.11.19	1	20005365	M	<i>C. lupus</i>	L+R mand+cranium. L mand I1-3, C1, P1-4, M1-3	51.26
NRM	Ostermoren, Smedjebacken, Dalarna	2004.12.09	1	20045305	M	<i>C. lupus</i>	L+R mand+cranium. R mand I1-3, C1, P1-4, M1-2, M3 alv	50.63
NRM	Dala Floda, Borlange, Dalarna	2003.03.09	1	20035024	M	<i>C. lupus</i>	L+R mand+cranium. R mand I1-3, C1, P1 alv, P2-4, M1-3	49.05

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	p1p4L
NRM	IV 225 (road?), Osmo, Sodermanland Lanasberget, Grundsjö,	2005.11.26	1	20065027	M	<i>C. lupus</i>	L+broken R mand+cranium. L mand I1- 2, C1, P1-4, M1-2, M3 alv	52.15
NRM	Ljungaverk,	2005.09.02	1	20055287	M	<i>C. lupus</i>	L+R mand+cranium. L mand I1-3, C1, P1-4, M1-3	53.9
NRM	Mullhyttan, Orebro, Narke	2006.09.15	1	20065414	M	<i>C. lupus</i>	L+R mand+cranium. R mand I1-3, C1, P1-4, M1-2, M3 alv	50.25
NRM	Avik, Laxa, Narke	2007.04.27	1	20075186	M	<i>C. lupus</i>	L+R mand + cranium. L mand I1-3, C1, P1 alv, P2-4, M1-2, M3 alv	52.67
NRM	Malung-Appelbo, Dalarna Dalarna, Torsby, Ostmark;	2007.12	1	20085027	M	<i>C. lupus</i>	L+R mand +cranium. L mand, I1-3, C1, P1-4, M1-3	50.17
NRM	Sojensoasen Stormosse, Piro, Bjorneborg,	2007.09.15	1	20075373	M	<i>C. lupus</i>	L+R mand+cranium. R mand I1-3, C1, P1-4, M1-3	51.1
NRM	Kristinehamn,	2007.12.27	1	20085036	M	<i>C. lupus</i>	L+R mand+cranium. L mand I1-3, C1, P1-4, M1-3	52.75
NMW PH1.147	Ogof yr Ychen	Abyss chamber 3	2	864		<i>C. lupus</i>	L mand, C1, P1-4, M1-2	53.34
SMES bay 4, iv 266 drw	Black Rock Quarry		3	D2605	Pres by T Roberts, 1882	<i>C. lupus</i>	R mand, I2-3, C1, P2, P4, M1-2	46.92

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	p1p4L
NHM 43 E drw 24	Oreston Cave	Pres type 2	3	46981		<i>C. lupus</i>	R ramus frag, P2-P4, M1-2	47.26
SM Blue boxes	Paviland		3	SM.1836.6.3 03		<i>C. lupus</i>	R mand ramus, P2-4, M1	53.46
SM Blue boxes	Paviland		3	SM.1836.6.3 07	Excav 1823	<i>C. lupus</i>	R ant mand frag, P1-4	49.92
SM Blue boxes	Paviland		3	SM.1836.6.3 06		<i>C. lupus</i>	R mand ramus, P2-4	55.79
MM R4 ColE D 1	Pin Hole Cave	PH (F)	3	LL.1995		<i>C. lupus</i>	L mand ramus, P1-4, M1-2	49.37
MM Gallery	Pin Hole		3	LL11898 TTNCM		<i>C. lupus</i>	L mand, I2-3, C1, post P2, P3-4, M1-3	49.11
SHC D27/3	Sandford Hill, Soms		3	44/1995/61/ 4	Rev'd. D. Williams & Beard clln	<i>C. lupus</i>	R mand ramus, P4, M1-2	50.49
NHM 43 C	Kents Cavern		3	15636	McEnergy clln	<i>C. lupus</i>	R ramus mand, C1, P1-4, M1-2	53.31
TM Gallery	Kents Cavern	Unknown	3	P30687	MacEnergy?	<i>C. lupus</i>	Fitted with cranium. R ramus (art with L), C1, P2-4	47.24

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	p1p4L	
TM G/B2/189	Kent's Cavern	Trench B, 8' - 3"	3	P17647	4th June 1926	<i>C. lupus</i>	R ramus, M1. Alvs P1-4, ant M2	55.26	
NHM 45D drw 13	Banwell Bone Cave	Entrance to Baker's Pit extension, 1950's	5a	M404d	Egerton clln, 1882	<i>C. lupus</i>	R mannd ramus, C1, P2-M2.	48.48	
NHM Andy's office	BWL only		5a	M84868	Percy Baker clln	<i>C. lupus</i>	R mand, P1-4, M1-2	53.26	
SHC D19/4	Banwell Bone Cave		5a	TTNCM 40/1995/58	William Beard clln	<i>C. lupus</i>	R mand ramus, P1-4, M1-2	47.36	
SHC D19/3	Banwell Bone Cave		5a	TTNCM 40/1995/63	William Beard clln	<i>C. lupus</i>	R mand ramus, C1, P4, M1	51.04	
SHC D19/3	Banwell Bone Cave		5a	TTNCM 40/1995/54	William Beard clln	<i>C. lupus</i>	R mand ramus, C1, P1-4, M1	52.41	
SHC D19/2	Banwell Bone Cave		Cave dep	5a	TTNCM 40/1995/50	William Beard clln	<i>C. lupus</i>	R mand ramus, P1-4	49.32
SHC D19/2	Banwell Bone Cave		5a	TTNCM 40/1995/52	William Beard clln	<i>C. lupus</i>	R mand ramus, P2-4	50.65	
SHC D19/2	Banwell Bone Cave		5a	TTNCM 40/1995/49	William Beard clln	<i>C. lupus</i>	R mand ramus, P2-4	52.58	

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	p1p4L
SHC Display	Banwell Bone Cave		5a	45/1995/634		<i>C. lupus</i>	R mand, C1, P2-4, M1.	48.97
UMZC NHM 53A, 2nd drw from bottom	Wretton Stump Cross Cave	Note in drawer 'A few extra specimens from	5a 5a	Wr1a M43234	Stump cross cave 1980 III c	<i>C. lupus</i> <i>C. lupus</i>	R mand C1, P1-4, M1-2, M3 alv R ramus, P1, frag P2, frag P3, P4, M1-2	52.79 52.18
NMW PH1.191 SM From fox & wolf box in display case 9	Bosco's Den, Gower Bosco's Den		5a 5a	2001.6H/4 SM. 1858.1.20		<i>C. lupus</i> <i>C. lupus</i>	L ramus frag, P1, post P2, post P4 L mand ramus, C1, P1-4, ant M1	48.61 54.05
SM On display	Bacon Hole		5c	SM. 850:2.166		<i>C. lupus</i>	L mand, C1, P1-4, M1-2 M3 lv	45.61
TM G/B6/B112	Joint Mitnor Cave		5e	P35082	1940	<i>C. lupus</i>	R ramus, P1-4, M1-2	52.02
BGS 483956	Clevedon Cave		6	16350		<i>C. lupus</i>	R mand, P2-4, M1-3	49.58
BC	Clevedon Cave		6	Ce15089	S.H. Reynolds	<i>C. lupus</i>	R ant ramus, post P2, P3 and P4 roots	50.24

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	p1p4L
BC	Clevedon Cave		6	Ce12520	B. N. S. Soc	<i>C. lupus</i>	R mand ramus, C1, P2-4, M1	44.95
SHC D46/1	Bleadon Cave		7	TTNCM 41/1995/12	W. Beard clln	<i>C. lupus</i>	R mand, P1-4, M1-2	49.33
NHM 44 D drw 7	Hutton Cave	none	7	44739a	none	<i>C. lupus</i>	From above, RP2-4, M1 tal	49.97
SHC D40/2	Hutton Cave		7	TTNCM 42/1995/738	Rev D Williams and W Beard clln	<i>C. lupus</i>	R mand, P2-4, M1-2	52.42
SHC D40/2	Hutton Cave		7	TTNCM 42/1995/44	Rev D Williams and W Beard clln	<i>C. lupus</i>	From above, R mand, C1, P1-2	48.94
BGS 483847	Ilford		7	204	Dr RP Cotton clln, pres by Cotton, 1878	<i>C. lupus</i>	R mand ramus frag, C1, P2- 4, M1-2	51.06
VER 108	Paglicci	Str VI	2	V5767 1988/22377		<i>C. lupus</i>	L mand, C1, P4, M1	50.81
SIW NHM 36 E d	Ranis		2.4	(Ranis 21896)		<i>C. lupus</i>	L mand ramus, M1-2	49.95
36/E/19 NHM 36 E d	Perick Cave	none	2.4	28571	see notes	<i>C. lupus</i>	L mand, l2-3, P1-4, M1-3	50.1
36/E/19	Perick Cave	none	2.4	M436	Enniskillen clln 1882	<i>C. lupus</i>	L mand ramus, P2, P4, M1- 2	48.47

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	p1p4L
NHM 36 E d 36/E/19	Perick Cave	Cavern	2.4	28572	none	<i>C. lupus</i>	L and R fused mands. L mand, M2	53.98
StM 80	Villa Seckendorf, Bad Canstatt, Germany	Stuttgart Travertine	2.8	37300 (12.2.57.o.f)	in Ziegler, 1996 fig'rd	<i>C. lupus</i>	L + R mand ramii. L mand ramus I3, C1, P1-4	47.71
StM 80	Villa Seckendorf, Bad Canstatt, Germany	Stuttgart Travertine	2.8	31302 (21.2.57/10)		<i>C. lupus</i>	L mand ramus, C1, P2-4, M1	57.72
StM 80	Villa Seckendorf, Bad Canstatt, Germany	Stuttgart Travertine	2.8	31397 (SE.26.2.57/1)		<i>C. lupus</i>	L mand ramus, P1-4, M1	50.84
StM 80	Villa Seckendorf, Bad Canstatt, Germany	Stuttgart Travertine	2.8	31301 (21.2.57/10)		<i>C. lupus</i>	L mand ramus, P1-4, M1, alvs i1-3, C1.	51.24
NHM 25 E d 14	Boxgrove	Project A, Q1, area TP4, Unit 4c-surface, Field no (2+3)	13	F2+3/1		<i>C. mosbachensis</i>	R mand ramus, I3, C1, P1-4, M1-3	43.02
NHM 44D 3rd drw from top	Westbury	Unstrat-from fallen breccia Calc memb. W5.	13	M33640	M Bishop 1974	<i>C. mosbachensis</i>	Right ramus frag, P3-4, M1	40.86
NHM 44 F drw 31	Westbury	Unstrat. Surface below site W5	13	none		<i>C. mosbachensis</i>	R ramus mand, alvs P1-4, ant M1	42.24
NHM 35 H d 24	Westbury	Rodent breccia 19/14. Site W5 east	13	none	NHM excav '1982	<i>C. mosbachensis</i>	R mand ramus, P3-4, M1	45.04

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	p1p4L
VER 00441	Monte Zoppega		3.4	V10919		<i>C. mosbachensis</i>	R mand ramus, P1-4, M1	43.56
SIW 1 d 4	Untermassfeld, Germany		4	1980/15308 (Mei 14820)		<i>C. mosbachensis</i>	R mand, C1, P1-4, M1-3	43.85
SIW 1 d 4	Untermassfeld, Germany		4	1984/20111 (Mei 19631)		<i>C. mosbachensis</i>	R mand ramus, C1, P2-4, ant M1	43.33
SIW 1 d 4	Untermassfeld, Germany		4	1986/21085 (Mei 20604)		<i>C. mosbachensis</i>	R mand ramus, P2-4, M1-2	45.26
SIW 1 d 4	Untermassfeld, Germany		4	1980/17151 (Mei 16672)		<i>C. mosbachensis</i>	R mand ramus, C1, P1-4, M1-2	44.64
SIW 1 d 4	Untermassfeld, Germany		4	1980/16553 (Mei 16074)		<i>C. mosbachensis</i>	R mand, C1, P2-4, M1-2	39
SIW 1 d 4	Untermassfeld, Germany		4	1982/17995 (Mei 17515)		<i>C. mosbachensis</i>	R mand, P1-4, M1-3	43.86
SIW 1 d 5	Untermassfeld, Germany		4	1980/15357 (mei 14869)		<i>C. mosbachensis</i>	R mand, I3, C1, P1, post P2, P3-4, M1-2	43.4
FLO 0/02/013/01 (d1)	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF868		<i>C. arnensis</i>	with max and basicranium. L and R mands, glued close together. L mand, I1-3, C1, P1-4, M1-3	45.34

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	p1p4L
FLO 0/02/013/02 (d2)	Upper Valdarno, Italy		4.4	IGF2802V		<i>C. arnensis</i>	L ant mand, P1-3, P4 alv	41.36
FLO 0/02/013/05 (d5)	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF857		<i>C. arnensis</i>	L mand ramus, P2-4, M1-3	45.72
FLO Gallery	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF869		<i>C. arnensis</i>	With cranium, L+R mand, L mand, I1-3, C1, P1-4, M1-3	43.54
FLO Gallery	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF869		<i>C. arnensis</i>	With cranium, L+R mands. R mand, C1, P1-4, M1-3	42.67
FLO Gallery	le strette al tasso, Italy	Upper Valdarno	4.4	IGF867		<i>C. arnensis</i>	With cranium. L+R mand, connected. L mand, I3, C1, P2-4, M1-2	44.78
FLO 0/02/013/01 (d1)	Upper Valdarno, Italy		4.4	IGF888		<i>C. etruscus</i>	L+ R mands PAIR. R mand ramus, P2-4, M1	45.28
FLO 0/02/013/01 (d1)	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF856		<i>C. etruscus</i>	R mand, C1, P1-4, M1-3	51.5
FLO 0/02/013/02 (d2)	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF880		<i>C. majori</i> (<i>etruscus</i>)	R mand ramus, C1, P1-2, P4, M1	48.17
FLO 0/02/013/02 (d2)	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF859		<i>C. etruscus</i>	R mand ramus, C1, P2-4, M1	49.5

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	p1p4L
FLO Strozzi Sala	Upper Valdarno, Italy	Upper Valdarno	4.4	871		<i>C. etruscus</i>	R mand, I2-3, C1, P1-4, M1-2	50.19
FLO 0/02/013/05	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF12868		<i>C. etruscus</i>	R mand ramus, P2, M1	49.31
FLO 0/02/013/05	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF873		<i>C. majori (etruscus)</i>	R mand, I3, C1, P2-4, M1-3	44.18
FLO 0/02/013/07 (d7)	Olivola	Olivola	4.4	IGF4474		<i>C. etruscus</i>	L mand ramus, P1, post P3, P4, M1-2, alv M3	49.98
FLO 0/02/013/07 (d7)	Val di Magna, Italy	Olivola	4.4	IGF4413		<i>C. etruscus</i>	L mand, I2-3, C1, P1, P3-4, M1, def M2??	45.38
FLO 0/02/013/07 (d7)	Val di Magna, Italy	Olivola	4.4	IGF4471		<i>C. etruscus</i>	L mand, C1 root, frag P2, frag P4, M1-2	49.43
FLO 0/02/013/07 (d7)	Val di Magna, Italy	Olivola	4.4	IGF4470		<i>C. etruscus</i>	L mand, I2-3 roots, C1 root, P1-2 roots, M1, M2 frags. M3 infilled alv	48.4

16. p2p4L

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	p2p4L
NHM 1	France		1	1843.12.29.7	F	<i>C. lupus</i>	L mand, I1-3, C1, P2-4, M1-2	40.11
NHM 2	Pyrenees Nr Abrantos, S of the Tagus,	Parzudacki clln	1	44.1.18.1	F	<i>C. lupus</i>	L mand, I1-3, C1, P1-4, M1-3	43.29
NHM 3	Portugal	WC Tait clln.	1	1938.12.7.1	F	<i>C. lupus</i>	R mand, I1-3, C1, P1-4, M1-2	39.06
NHM 5	Riocalado, Burgos, Spain		1	11.10.5.2	F	<i>C. lupus</i>	L mand, I1-3, C1, P1-4, M1-3	46.54
NHM 8	Kocane, Macedonia		1	47.1121.a	F	<i>C. lupus</i>	L mand, I1-3, C1, P1-4, M1-2	40.87
NRM	Korvijaure, 7 miles N Kiruna		1	A58 0112	F	<i>C. lupus</i>	L+R mand + cranium. R mand I1-3, C1, P1, P2 loose, P3-4, M1-3	45.38
NRM	S Finnskoga, Skrackarberget		1	A865126	F	<i>C. lupus</i>	L+R mand+cranium. R mand, I1-3, P1-4, M1-3	43.29
NRM	Jadraas, 5km N		1	A915068	F	<i>C. lupus</i>	L+R mand+cranium. R teeth P4, M1-2	43.65

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	p2p4L
NRM	Vastra Amtervik, Hensgard		1	A935024	F	<i>C. lupus</i>	L+R mand+cranium. L mand, I1-3, C1, P2-4, M1-2	42.49
NRM	Nas-snoan, v71/jvg		1	A935178	F	<i>C. lupus</i>	L+R mand+cranium. L mand I1-3, C1, P1-4, M1-3	39.84
NRM	Nyskoga, Kringsberg, Bontjarn		1	A945045	F	<i>C. lupus</i>	L+R mand+cranium. R mand, I1-3, P1-4, M1-3	43.99
NRM	Vastmandland, Grythyttan		1	20005111	F	<i>C. lupus</i>	L+R mand+cranium. R mand I2-3, C1, P2-4, M1-3	42.44
NRM	Narke, Degerfors, Atorp		1	20025005	F	<i>C. lupus</i>	L+R mand+cranium. L mand I1-3, P1-4, M1-3	42.62
NRM	Atorp 3.5 km NW, Degerfors, Varmland		1	20035026	F	<i>C. lupus</i>	L+R mand+cranium. L mand I1-3, C1, P1-4, M1-3	40.51
NRM	Odlingen, Sillerud, Arjang, Varmland		1	20045040	F	<i>C. lupus</i>	L+R mand+cranium. R mand I1-3, C1, P1-4, M1-3	42.1
NRM	Ovre Hurr, Tocksfors, Varmland		1	20065236	F	<i>C. lupus</i>	L+R mand+cranium. L mand, I1-2, C1, P1-4, M1-3	41.55
NRM	Rickebo, Hallbo, Bollnas, Halsingland		1	20065047	F	<i>C. lupus</i>	L+R mand+cranium. R mand I1-3, C1, P1-4, M1-3	42.46

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	p2p4L
NRM	Ronnas, Ostra, Leksand, Dalarna		1	20075381	F	<i>C. lupus</i>	L+R mand+cranium. R mand I1-3, C1, P1-4, M1-3	41.63
NRM	Jarbo, Backefors, Dalsland		1	20075314	F	<i>C. lupus</i>	L+R mand+cranium. L mand I1-3, C1, P1-4, M1-3	39.65
NRM	Varmland, Nordmark, Algsjion 2 km S		1	20095063	F	<i>C. lupus</i>	L+R mand+cranium. R mand I1-3, C1, P1 alv, P1-4, M1-3	40.58
NRM	Halsingland, Bollnas, Lottefors; Rv 83		1	20075312	F	<i>C. lupus</i>	L+R mand + cranium. R mand I1-3, C1, P1-4, M1-3	40.78
NRM	Vastmanland, Hallefors, Ornviken,		1	20105028	F	<i>C. lupus</i>	L+R mand+cranium. L mand I1-3, C1, P1-4, M1-3	43.47
NHM 4	Riocalado, Burgos, Spain		1	11.10.5.1	M	<i>C. lupus</i>	L mand, I1-3, C1, P1-4, M1-3	46.64
NHM 9	Norbotten, N Sweden (in arctic circle).		1	28.5.4.1	M	<i>C. lupus</i>	L mand, I1-3, C1, P1-4, M1-3	44.95
NHM 6	Seville, Spain		1	95.3.3.6	M	<i>C. lupus</i>	R mand, I1-3, C1, P2-4, M1-3. No P1 or alv	45.26
NHM 7	Ukraine on modern ticket, on skull and original		1	34.6.28.47	M	<i>C. lupus</i>	L mand, I1-3, C1, P3-4, M1-3	45.47

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	p2p4L
NHM 11	Moscow district, Russia		1	82.9.18.2	M	<i>C. lupus</i>	L mand, I1-3, C1 fract, P1-4, M1-3	49.79
NHM Ost	Abrantos, S of Tagus, Portugal		1	1937.2.10.2	M	<i>C. lupus</i>	R mand, I2, C1, P4, M1-3	40.67
NHM Ost	Bosnia, Yugoslavia		1	1935.8.5.1	M	<i>C. lupus</i>	R mand, I1-3, C1, P1-4, M1-2	42.59
NRM	Ljusdal, Ramsjo (s:n)		1	A580255	M	<i>C. lupus</i>	L+R mand + fract cranium. L mand, I1-3, C1, P1-4, M1-3	45.36
NRM	Jokkmokk		1	A583532	M	<i>C. lupus</i>	L+R mand + cranium. R mand I1-3, C1, P1-4, M1-3	42.44
NRM	Orebro		1	A583547	M	<i>C. lupus</i>	L+R mand+cranium. R mand I1-3, C1, P1-4, M1-3	43.9
NRM	Sweden		1	A589147	M	<i>C. lupus</i>	L+R mand + cranium. R teeth I1-3, C1, P1-4, M1-2	44.53
NRM	Sweden		1	A589199	M	<i>C. lupus</i>	L+R mand+cranium. L mand I1-3, C1, P1-4, M1-3	44.41
NRM	Luktjomtjuolta, Vilhelmina		1	A590009	M	<i>C. lupus</i>	L+R mand+cranium. L mand I1-3, C1, P2-4, M1-2	44.93

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	p2p4L
NRM	Lina alv station		1	A775097	M	<i>C. lupus</i>	L+R mand+cranium. L mand I1, I3, C1, P1-4, M1-3	44.76
NRM	Atran, Ogardet		1	A845131	M	<i>C. lupus</i>	L+R mand+cranium. R mand I1-3, C1, P1-4, M1-3	45.07
NRM	Hede, 3 mil NV, Norrstadjan		1	A895039	M	<i>C. lupus</i>	L+R mand+cranium. R mand I1-3, P1-4, M1-3	44.74
NRM	Kiruna-Gallivare, Gaddmyr, Jvg		1	A925106	M	<i>C. lupus</i>	L+R mand+cranium. R mand, I1-3, P2-4, M1-3	44.24
NRM	Boras		1	A965002	M	<i>C. lupus</i>	L+R mand+cranium. L teeth I1-3, C1, P1-4, M1-2	44.71
NRM	Jarna, Flaten, Dalarna		1	A995016	M	<i>C. lupus</i>	L+R mand+cranium. R mand, I1-2, P1-4, M1-3	46.37
NRM	Varmland, Eksharad, Halgan; Kolarkojan		1	995230	M	<i>C. lupus</i>	L+R mand+cranium. R mand, I3, C1, P1-4, M1-3	44.48
NRM	Jumkil kyrka, Uppsala		1	20005365	M	<i>C. lupus</i>	L+R mand+cranium. L mand I1-3, C1, P1-4, M1-3	43.68
NRM	Uddalen, Ed, Dalsland		1	20035114	M	<i>C. lupus</i>	L+R mand+cranium. R mand I1-3, C1. extra P1? P1, P2-3 broken,	41.07

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	p2p4L
NRM	Ostermoren, Smedjebacken, Dalarna		1	20045305	M	<i>C. lupus</i>	L+R mand+cranium. R mand I1-3, C1, P1-4, M1-2, M3 alv	44.49
NRM	Dala Floda, Borlange, Dalarna IV 225 (road?), Osmo,		1	20035024	M	<i>C. lupus</i>	L+R mand+cranium. R mand I1-3, C1, P1 alv, P2-4, M1-3	41.02
NRM	Sodermanland Lanasberget, Grundsjö,		1	20065027	M	<i>C. lupus</i>	L+broken R mand+cranium. L mand I1-2, C1, P1-4, L+R mand+cranium. L	45.73
NRM	Ljungaverk,		1	20055287	M	<i>C. lupus</i>	mand I1-3, C1, P1-4, M1-3	46.37
NRM	Mullhyttan, Orebro, Narke		1	20065414	M	<i>C. lupus</i>	L+R mand+cranium. R mand I1-3, C1, P1-4, M1-2, M3 alv	42.61
NRM	Avik, Laxa, Narke		1	20075186	M	<i>C. lupus</i>	L+R mand + cranium. L mand I1-3, C1, P1 alv, P2-4, M1-2, M3	44.57
NRM	Malung-Appelbo, Dalarna		1	20085027	M	<i>C. lupus</i>	L+R mand +cranium. L mand, I1-3, C1, P1-4, M1-3	43.31
NRM	Dalarna, Torsby, Ostmark;		1	20075373	M	<i>C. lupus</i>	L+R mand+cranium. R mand I1-3, C1, P1-4, M1-3	44.33
NRM	Sojensoasen Stormosse, Piro, Bjorneborg, Kristinehamn,		1	20085036	M	<i>C. lupus</i>	L+R mand+cranium. L mand I1-3, C1, P1-4, M1-3	44.19

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	p2p4L
NMW PH1.147	Ogof yr Ychen	Abyss chamber 3	2	864		<i>C. lupus</i>	L mand, C1, P1-4, M1-2	47.52
NMW From gallery	Paviland	none	3	24.94/46		<i>C. lupus</i>	R mand ramus, P1, P3-4, M1	45.52
SM Blue boxes	Paviland		3	SM.1836.6.303		<i>C. lupus</i>	R mand ramus, P2-4, M1	46.65
SM Blue boxes	Paviland		3	SM.1836.6.307	Excav 1823	<i>C. lupus</i>	R ant mand frag, P1-4	42.93
SM Blue boxes	Paviland		3	SM.1836.6.306		<i>C. lupus</i>	R mand ramus, P2-4	49.13
MM R4 CoLE D 1	Pin Hole	PH (F)	3	LL.1995 TTNCM		<i>C. lupus</i>	L mand ramus, P1-4, M1-2	43.06
SHC D27/3	Sandford Hill		3	44/1995/61/4	Rev'd. D. Williams & Beard clln	<i>C. lupus</i>	R mand ramus, P4, M1-2	44.56
SMES bay 4, iv 266 drw	Black Rock Quarry		3	D2605	Pres by T Roberts, 1882	<i>C. lupus</i>	R mand, I2-3, C1, P2, P4, M1-2	39.91
NHM 43 C	Kents Cavern		3	15636	McEnery clln	<i>C. lupus</i>	R ramus mand, C1, P1-4, M1-2	46.31

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	p2p4L
TM Gallery	Kents Cavern	Unknown	3	P30687	MacEnery?	<i>C. lupus</i>	Fitted with cranium. R ramus (art with L), C1, P2-4	41.4
TM G/B2/189	Kent's Cavern	Trench B, 8' - 3"	3	P17647	4th June 1926	<i>C. lupus</i>	R ramus, M1. Alvs P1-4, ant M2	49.39
NHM 43 E drw 24	Oreston Cave	Pres type 2	3	46981 1989 G 140 1.1	Purch 1876	<i>C. lupus</i>	2). L ramus, C1, P1-4, M1-2	43.06
WH	Oreston Cave		3	(FS04323)		<i>C. lupus</i>	L mand ramus, P2-4, M1-2	46.39
NHM 45D drw 13	Banwell Bone Cave		5a	M404d	Egerton clln, 1882	<i>C. lupus</i>	R mannd ramus, C1, P2-M2.	41.98
NHM Andy's office	Banwell Bone Cave	Entrance to Baker's Pit extension, 1950's	5a	M84868	Percy Baker clln	<i>C. lupus</i>	R mand, P1-4, M1-2	46.14
SHC D19/4	Banwell Bone Cave		5a	TTNCM 40/1995/58	William Beard clln	<i>C. lupus</i>	R mand ramus, P1-4, M1-2	41.63
SHC D19/3	Banwell Bone Cave		5a	TTNCM 40/1995/63	William Beard clln	<i>C. lupus</i>	R mand ramus, C1, P4, M1	43.68
SHC D19/3	Banwell Bone Cave		5a	TTNCM 40/1995/47	William Beard clln	<i>C. lupus</i>	R mand ramus, P2-3, M1	41.71

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	p2p4L
SHC D19/3	Banwell Bone Cave		5a	TTNCM 40/1995/54	William Beard clln	<i>C. lupus</i>	R mand ramus, C1, P1-4, M1	46.1
SHC D19/2	Banwell Bone Cave	Cave dep	5a	TTNCM 40/1995/50	William Beard clln	<i>C. lupus</i>	R mand ramus, P1-4	43.57
SHC D19/2	Banwell Bone Cave		5a	TTNCM 40/1995/52	William Beard clln	<i>C. lupus</i>	R mand ramus, P2-4	44.31
SHC D19/2	Banwell Bone Cave		5a	TTNCM 40/1995/49	William Beard clln	<i>C. lupus</i>	R mand ramus, P2-4	45.9
SHC Display	Banwell Bone Cave		5a	45/1995/634		<i>C. lupus</i>	R mand, C1, P2-4, M1.	44.12
UMZC NHM 53A, 2nd drw from bottom	Wretton Stump Cross Cave		5a	Wr1a	Stump cross cave	<i>C. lupus</i>	R mand C1, P1-4, M1-2, M3 alv	45.67
			5a	M43234	1980 III c	<i>C. lupus</i>	R ramus, P1, frag P2, frag P3, P4, M1-2	47.54
NMW PH1.191 SM From fox & wolf box in display case 9	Bosco's Den Bosco's Den		5a	2001.6H/4		<i>C. lupus</i>	L ramus frag, P1, post P2, post P4	42.02
			5a	SM. 1858.1.20		<i>C. lupus</i>	L mand ramus, C1, P1-4, ant M1	46.81

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	p2p4L
SM On display	Bacon Hole		5c	SM. 850:2.166		<i>C. lupus</i>	L mand, C1, P1-4, M1-2 M3 lv	39.27
TM G/B6/B112	Joint Mitnor Cave		5e	P35082	1940	<i>C. lupus</i>	R ramus, P1-4, M1-2	45.31
BGS 483956	Clevedon Cave		6	16350		<i>C. lupus</i>	R mand, P2-4, M1-3	42.07
BC	Clevedon Cave		6	Ce15089	S.H. Reynolds	<i>C. lupus</i>	R ant ramus, post P2, P3 and P4 roots	43.99
BC	Clevedon Cave		6	Ce15088	S.H. Reynolds	<i>C. lupus</i>	R ramus, P2, M1 roots	41.9
BC	Clevedon Cave		6	Ce12520	B. N. S. Soc	<i>C. lupus</i>	R mand ramus, C1, P2-4, M1	39.88
SHC D46/1	Bleadon Cave		7	TTNCM 41/1995/12	W. Beard clln	<i>C. lupus</i>	R mand, P1-4, M1-2	43.89
NHM 44 D drw 7	Hutton Cave	none	7	44739a	none	<i>C. lupus</i>	From above, RP2-4, M1 tal	42.85
SHC D40/2	Hutton Cave		7	TTNCM 42/1995/738	Rev D Williams and W Beard clln	<i>C. lupus</i>	R mand, P2-4, M1-2	43.71

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	p2p4L
SHC D40/2	Hutton Cave		7	TTNCM 42/1995/44	Rev D Williams and W Beard clln	<i>C. lupus</i>	From above, R mand, C1, P1-2	42.47
BGS 483847	Ilford		7	204	Dr RP Cotton clln, pres by Cotton, 1878	<i>C. lupus</i>	R mand ramus frag, C1, P2-4, M1-2	45.24
VER 108	Paglicci	Str VI	2	V5767 1988/22377 (Ranis 21896)		<i>C. lupus</i>	L mand, C1, P4, M1	44.43
SIW NHM 36 E d 36/E/19	Ranis		2.4	21896		<i>C. lupus</i>	L mand ramus, M1-2 L mand, I2-3, P1-4,	42.88
NHM 36 E d 36/E/19	Perick Cave	none	2.4	28571	see notes	<i>C. lupus</i>	M1-3 L mand ramus, P2, P4,	43.6
NHM 36 E d 36/E/19	Perick Cave	none	2.4	M436	Enniskillen clln 1882	<i>C. lupus</i>	M1-2 L and R fused mands.	42.78
StM 80	Perick Cave Villa Seckendorf, Bad Canstatt, Germany	Cavern Stuttgart Travertine	2.4	28572 37300 (12.2.57.o.f)	none in Ziegler, 1996 fig'rd	<i>C. lupus</i>	L mand, M2 L + R mand ramii. L mand ramus I3, C1, P1-4	47.62 41.62
StM 80	Perick Cave Villa Seckendorf, Bad Canstatt, Germany	Stuttgart Travertine	2.8	31302 (21.2.57/10) 31397		<i>C. lupus</i>	L mand ramus, C1, P2- 4, M1	49.39
StM 80	Perick Cave Villa Seckendorf, Bad Canstatt, Germany	Stuttgart Travertine	2.8	31397 (SE.26.2.57/ 1)		<i>C. lupus</i>	L mand ramus, P1-4, M1	45.31

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	p2p4L
StM 80	Villa Seckendorf, Bad Canstatt, Germany	Stuttgart Travertine	2.8	31301 (21.2.57/10)		<i>C. lupus</i>	L mand ramus, P1-4, M1, alvs i1-3, C1.	44.82
SIW 3 d 9	Taubach		2.8	1968/10851 (Taub 12243)		<i>C. lupus</i>	R mand ramus	43.28
NHM 52 B	Grays Thurrock	Project A, Q1, area TP4, Unit 4c- surface, Field no (2+3)	9	23140	purch'd 1849	<i>C. mosbachensis</i>	L ramus portion, P2-4, M1 root	43.75
NHM 25 E d 14	Boxgrove	Project A, Q2, area 17, unit 4c surface, field no F9 (part)	13	F2+3/1		<i>C. mosbachensis</i>	R mand ramus, I3, C1, P1-4, M1-3	37.65
NHM 25 F d 25	Boxgrove	Unstrat-from fallen breccia Calc memb. W5. Unstrat. Surface below site W5	13	F9/2		<i>C. mosbachensis</i>	R mand, C1, P2-4, M1	42.04
NHM 44D 3rd drw from top	Westbury	Rodent breccia 19/14. Site W5 east	13	M33640	M Bishop 1974	<i>C. mosbachensis</i>	Right ramus frag, P3- 4, M1	34.59
NHM 44 F drw 31	Westbury		13	none		<i>C. mosbachensis</i>	R ramus mand, alvs P1-4, ant M1	37.62
NHM 35 H d 24	Westbury		13	none	NHM excav '1982	<i>C. mosbachensis</i>	R mand ramus, P3-4, M1	39.9

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	p2p4L
NHM 55 E	Sidestrand	Forest bed - clay in depression, N of old tower. Sandy clay in 'low depression opposite Target Hill'	13	M6169	A.C. Savin 1897	<i>C. mosbachensis</i>	R mandible ramus P2-M1	42.08
NHM 55 D d 14	Overstrand		15	M17932	A.C. Savin 1946	<i>C. mosbachensis</i>	L ramus, P2, ant P4	41.4
VER 00441	Monte Zoppega		3.4	V10919		<i>C. mosbachensis</i>	R mand ramus, P1-4, M1	36.87
SIW 1 d 4	Untermassfeld, Germany		4	1980/15308 (Mei 14820)		<i>C. mosbachensis</i>	R mand, C1, P1-4, M1-3	37.79
SIW 1 d 4	Untermassfeld, Germany		4	1980/15919 (Mei 15430)		<i>C. mosbachensis</i>	R mand ramus, C1, P3-4, M1	37.19
SIW 1 d 4	Untermassfeld, Germany		4	1984/20111 (Mei 19631)		<i>C. mosbachensis</i>	R mand ramus, C1, P2-4, ant M1	38.93
SIW 1 d 4	Untermassfeld, Germany		4	1980/16969 (Mei 16460)		<i>C. mosbachensis</i>	R mand ramus, C1, P2-4, M1-2	35.34
SIW 1 d 4	Untermassfeld, Germany		4	1986/21085 (Mei 20604)		<i>C. mosbachensis</i>	R mand ramus, P2-4, M1-2	38.7
SIW 1 d 4	Untermassfeld, Germany		4	1980/17151 (Mei 16672)		<i>C. mosbachensis</i>	R mand ramus, C1, P1-4, M1-2	37.46

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	p2p4L
SIW 1 d 4	Untermassfeld, Germany		4	1980/16553 (Mei 16074)		<i>C. mosbachensis</i>	R mand, C1, P2-4, M1-2	32.06
SIW 1 d 4	Untermassfeld, Germany		4	1982/17995 (Mei 17515)		<i>C. mosbachensis</i>	R mand, P1-4, M1-3	37.79
SIW 1 d 5	Untermassfeld, Germany		4	1980/15357 (mei 14869)		<i>C. mosbachensis</i>	R mand, I3, C1, P1, post P2, P3-4, M1-2	36.8
FLO 0/02/013/01 (d1)	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF868		<i>C. arnensis</i>	With max and basicranium, PAIR. R mand, I1-3, C1, P1-4, M1-3	39.67
FLO 0/02/013/04 (d4)	Upper Valdarno, Italy	Upper Valdarno	4.4			<i>C. arnensis</i>	R mand, I1-2, P2-3, post P4, M1-3	36.89
FLO 0/02/013/04 (d4)	Il Tasso, Italy	Upper Valdarno	4.4	IGF887		<i>C. arnensis</i>	In box with max. R mand, P1-4, M1-3	35.15
FLO Strozzi Sala	Upper Valdarno, Italy	Upper Valdarno	4.4	11800		<i>C. arnensis</i>	R mand ramus, P1-4, M1-2, M3 alv	39.53
FLO 0/02/013/05	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF12967		<i>C. arnensis</i>	R mand ramus, P1-4, M1-2	39.47
FLO 0/02/013/05	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF877		<i>C. arnensis</i>	With upper palate, L+R mands. R mand ramus, P2-4, M1-3	38.13

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	p2p4L
FLO Gallery	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF869		<i>C. arnensis</i>	With cranium, L+R mands. R mand, C1, P1-4, M1-3	36.48
FLO 0/02/013/01 (d1)	Upper Valdarno, Italy		4.4	IGF888		<i>C. etruscus</i>	L+ R mands PAIR. R mand ramus, P2-4, M1	39.3
FLO 0/02/013/01 (d1)	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF856		<i>C. etruscus</i>	R mand, C1, P1-4, M1-3	42.75
FLO 0/02/013/02 (d2)	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF880		<i>C. majori (etruscus)</i>	R mand ramus, C1, P1-2, P4, M1	42.77
FLO 0/02/013/02 (d2)	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF859		<i>C. etruscus</i>	R mand ramus, C1, P2-4, M1	43.26
FLO Strozzi Sala	Upper Valdarno, Italy	Upper Valdarno	4.4	871		<i>C. etruscus</i>	R mand, I2-3, C1, P1-4, M1-2	42.09
FLO 0/02/013/05	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF12868		<i>C. etruscus</i>	R mand ramus, P2, M1	41.56
FLO 0/02/013/05	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF873		<i>C. majori (etruscus)</i>	R mand, I3, C1, P2-4, M1-3	37.5
FLO 0/02/013/07 (d7)	Olivola	Olivola	4.4	IGF4474		<i>C. etruscus</i>	L mand ramus, P1, post P3, P4, M1-2, alv M3	43.86

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	p2p4L
FLO 0/02/013/07 (d7)	Val di Magna, Italy	Olivola	4.4	IGF4473		<i>C. etruscus</i>	L mand ramus, P2? P4, M1, M2	41.05
FLO 0/02/013/07 (d7)	Val di Magna, Italy	Olivola	4.4	IGF4413		<i>C. etruscus</i>	L mand, I2-3, C1, P1, P3-4, M1, def M2??	38.62
FLO 0/02/013/07 (d7)	Val di Magna, Italy	Olivola	4.4	IGF4471		<i>C. etruscus</i>	L mand, C1 root, frag P2, frag P4, M1-2	42.12
FLO 0/02/013/07 (d7)	Val di Magna, Italy	Olivola	4.4	IGF4470		<i>C. etruscus</i>	L mand, I2-3 roots, C1 root, P1-2 roots, M1, M2 frags. M3 infilled alv	39.81

17. p1m3L

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	p1m3L
NHM 1	France		1	1843.12.29.7	F	<i>C. lupus</i>	L mand, I1-3, C1, P2-4, M1-2	90.39
NHM 2	Pyrenees	Parzudacki clln	1	44.1.18.1	F	<i>C. lupus</i>	L mand, I1-3, C1, P1-4, M1-3	90.2
NHM 5	Riocalado, Burgos, Spain		1	11.10.5.2	F	<i>C. lupus</i>	L mand, I1-3, C1, P1-4, M1-3	95.75
NHM 8	Kocane, Macedonia		1	47.1121.a	F	<i>C. lupus</i>	L mand, I1-3, C1, P1-4, M1-2	89.05
NRM	Korvijaure, 7 miles N Kiruna	15.4.1959	1	A58 0112	F	<i>C. lupus</i>	L+R mand + cranium. R mand I1-3, C1, P1, P2 loose, P3-4, M1-3	95.54
NRM	S Finnskoga, Skrackarberget	1985.07.29	1	A865126	F	<i>C. lupus</i>	L+R mand+cranium. R mand, I1-3, P1-4, M1-3	95.78
NRM	Jadraas, 5km N	1991.06.14	1	A915068	F	<i>C. lupus</i>	L+R mand+cranium. R teeth P4, M1-2	95.45
NRM	Vastra Amtervik, Hensgard	1993.02.24	1	A935024	F	<i>C. lupus</i>	L+R mand+cranium. L mand, I1-3, C1, P2-4, M1-2	92.38

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	p1m3L
NRM	Nas-snoan, v71/jvg	1993.08.18	1	A935178	F	<i>C. lupus</i>	L+R mand+cranium. L mand I1-3, C1, P1-4, M1-3	92.29
NRM	Nyskoga, Kringsberg, Bontjarn	1994.01.19	1	A945045	F	<i>C. lupus</i>	L+R mand+cranium. R mand, I1-3, P1-4, M1-3	96.78
NRM	Vastmandland, Grythyttan	1999.12.17	1	20005111	F	<i>C. lupus</i>	L+R mand+cranium. R mand I2-3, C1, P2-4, M1-3	96.86
NRM	Narke, Degerfors, Atorp	2001.12.26	1	20025005	F	<i>C. lupus</i>	L+R mand+cranium. L mand I1-3, P1-4, M1-3	95.12
NRM	Atorp 3.5 km NW, Degerfors, Varmland	2002.03.05	1	20035026	F	<i>C. lupus</i>	L+R mand+cranium. L mand I1-3, C1, P1-4, M1-3	92.78
NRM	Odlingen, Sillerud, Arjang, Varmland	2004.02.07	1	20045040	F	<i>C. lupus</i>	L+R mand+cranium. R mand I1-3, C1, P1-4, M1-3	92.72
NRM	Ovre Hurr, Tocksfors, Varmland	2006.05.30	1	20065236	F	<i>C. lupus</i>	L+R mand+cranium. L mand, I1-2, C1, P1-4, M1-3	92.95
NRM	Rickebo, Hallbo, Bollnas, Halsingland	2006.03.14	1	20065047	F	<i>C. lupus</i>	L+R mand+cranium. R mand I1-3, C1, P1-4, M1-3	94.77
NRM	Ronnas, Ostra, Leksand, Dalarna	2007.10.09	1	20075381	F	<i>C. lupus</i>	L+R mand+cranium. R mand I1-3, C1, P1-4, M1-3	93.83

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	p1m3L
NRM	Jarbo, Backefors, Dalsland Varmland, Nordmark,	2007.?	1	20075314	F	<i>C. lupus</i>	L+R mand+cranium. L mand I1-3, C1, P1-4, M1-3	90.98
NRM	Algsjion 2 km S Halsingland, Bollnas, Lottefors;	2009.01.25	1	20095063	F	<i>C. lupus</i>	L+R mand+cranium. R mand I1-3, C1, P1 alv, P1-4, M1-3	92.25
NRM	Rv 83 Vastmanland, Hallefors,	2007.08.19	1	20075312	F	<i>C. lupus</i>	L+R mand + cranium. R mand I1-3, C1, P1-4, M1-3	91.84
NRM	Ornviken,	2010.01.02 On note 'C. l.	1	20105028	F	<i>C. lupus</i>	L+R mand+cranium. L mand I1-3, C1, P1-4, M1-3	95.18
NHM 4	Riocalado, Burgos, Spain	signatus doubtfully	1	11.10.5.1	M	<i>C. lupus</i>	L mand, I1-3, C1, P1-4, M1-3	98.71
NHM 9	Norbotten, N Sweden (in arctic circle). Ukraine on modern ticket, on skull and original		1	28.5.4.1	M	<i>C. lupus</i>	L mand, I1-3, C1, P1-4, M1-3	95.9
NHM 7			1	34.6.28.47	M	<i>C. lupus</i>	L mand, I1-3, C1, P3-4, M1-3	95.25
NHM 11	Moscow district, Russia		1	82.9.18.2	M	<i>C. lupus</i>	L mand, I1-3, C1 fract, P1-4, M1-3	106.18
NHM Ost	Abrantos, S of Tagus, Portugal		1	1937.2.10.2	M	<i>C. lupus</i>	R mand, I2, C1, P4, M1-3	88.82

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	p1m3L
NHM Ost	Bosnia, Yugoslavia		1	1935.8.5.1	M	<i>C. lupus</i>	R mand, I1-3, C1, P1-4, M1-2	93.54
NRM	Ljusdal, Ramsjo (s:n)	12.2.1926	1	A580255	M	<i>C. lupus</i>	L+R mand + fract cranium. L mand, I1-3, C1, P1-4, M1-3	96.26
NRM	Jokkmokk	11.02.1852	1	A583532	M	<i>C. lupus</i>	L+R mand + cranium. R mand I1-3, C1, P1-4, M1-3	94.29
NRM	Orebro	1852	1	A583547	M	<i>C. lupus</i>	L+R mand+cranium. R mand I1-3, C1, P1-4, M1-3	94.3
NRM	Sweden	1907	1	A589147	M	<i>C. lupus</i>	L+R mand + cranium. R teeth I1-3, C1, P1-4, M1-2	95.66
NRM	Sweden	1908	1	A589199	M	<i>C. lupus</i>	L+R mand+cranium. L mand I1-3, C1, P1-4, M1-3	96.92
NRM	Luktjomtjuolta, Vilhelmina	15.1.1937	1	A590009	M	<i>C. lupus</i>	L+R mand+cranium. L mand I1-3, C1, P2-4, M1-2	93.21
NRM	Lina alv station	25.12.1977	1	A775097	M	<i>C. lupus</i>	L+R mand+cranium. L mand I1, I3, C1, P1-4, M1-3	97.78
NRM	Atran, Ogardet	1984.09.12	1	A845131	M	<i>C. lupus</i>	L+R mand+cranium. R mand I1-3, C1, P1-4, M1-3	99.16

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	p1m3L
NRM	Hede, 3 mil NV, Norrstadjan	1989.04.17	1	A895039	M	<i>C. lupus</i>	L+R mand+cranium. R mand I1-3, P1-4, M1-3	99.38
NRM	Kiruna-Gallivare, Gaddmyr, Jvg	1992.08.24	1	A925106	M	<i>C. lupus</i>	L+R mand+cranium. R mand, I1-3, P2-4, M1-3	98.37
NRM	Boras	1996.01.04	1	A965002	M	<i>C. lupus</i>	L+R mand+cranium. L teeth I1-3, C1, P1-4, M1-2	99.75
NRM	Jarna, Flaten, Dalarna	1999.2.6	1	A995016	M	<i>C. lupus</i>	L+R mand+cranium. R mand, I1-2, P1-4, M1-3	102.37
NRM	Varmland, Eksharad, Halgan; Kolarkojar	1999.06.04	1	995230	M	<i>C. lupus</i>	L+R mand+cranium. R mand, I3, C1, P1-4, M1-3	98.95
NRM	Jumkil kyrka, Uppsala	2000.11.19	1	20005365	M	<i>C. lupus</i>	L+R mand+cranium. L mand I1-3, C1, P1-4, M1-3	99.22
NRM	Uddalen, Ed, Dalsland	2003.05.12	1	20035114	M	<i>C. lupus</i>	L+R mand+cranium. R mand I1-3, C1. extra P1? P1, P2-3 broken, P4, M1-3	94.12
NRM	Ostermoren, Smedjebacken, Dalarna	2004.12.09	1	20045305	M	<i>C. lupus</i>	L+R mand+cranium. R mand I1-3, C1, P1-4, M1-2, M3 alv	96.41
NRM	Dala Floda, Borlange, Dalarna	2003.03.09	1	20035024	M	<i>C. lupus</i>	L+R mand+cranium. R mand I1-3, C1, P1 alv, P2-4, M1-3	95.51

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	p1m3L
NRM	IV 225 (road?), Osma, Sodermanland Lanasberget, Grundsjo,	2005.11.26	1	20065027	M	<i>C. lupus</i>	L+broken R mand+cranium. L mand I1- 2, C1, P1-4, M1-2, M3 alv	99.23
NRM	Ljungaverk,	2005.09.02	1	20055287	M	<i>C. lupus</i>	L+R mand+cranium. L mand I1-3, C1, P1-4, M1-3	99.04
NRM	Mullhyttan, Orebro, Narke	2006.09.15	1	20065414	M	<i>C. lupus</i>	L+R mand+cranium. R mand I1-3, C1, P1-4, M1-2, M3 alv	97.37
NRM	Avik, Laxa, Narke	2007.04.27	1	20075186	M	<i>C. lupus</i>	L+R mand + cranium. L mand I1-3, C1, P1 alv, P2-4, M1-2, M3 alv	99.8
NRM	Malung-Appelbo, Dalarna	2007.12	1	20085027	M	<i>C. lupus</i>	L+R mand +cranium. L mand, I1-3, C1, P1-4, M1-3	95.5
NRM	Dalarna, Torsby, Ostmark; Sojensoasen Stormosse, Piro, Bjorneborg,	2007.09.15	1	20075373	M	<i>C. lupus</i>	L+R mand+cranium. R mand I1-3, C1, P1-4, M1-3	98.03
NRM	Kristinehamn,	2007.12.27	1	20085036	M	<i>C. lupus</i>	L+R mand+cranium. L mand I1-3, C1, P1-4, M1-3	101.32
NMW PH1.147 SMES bay 4, iv 266 drw NHM 43 E drw 24	Ogof yr Ychen Black Rock Quarry Oreston Cave	Abyss chamber 3 Pres type 2	2 3 3	864 D2605 46981	Pres by T Roberts, 1882 none listed	<i>C. lupus</i> <i>C. lupus</i> <i>C. lupus</i>	L mand, C1, P1-4, M1-2 R mand, I2-3, C1, P2, P4, M1-2 R ramus frag, P2-P4, M1-2	98.36 91.41 92.54

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	p1m3L
NHM 43 C	Kent's Cavern		3	15636	McEnergy clln	<i>C. lupus</i>	R ramus mand, C1, P1-4, M1-2	101.27
SM Blue boxes	Paviland		3	SM.1836.6.1		<i>C. lupus</i>	L mand P1-4, M1-2	101.49
SM Blue boxes	Paviland		3	SM.1836.6.3		<i>C. lupus</i>	L mand ramus, P2-4, M1-2	97.97
MM Gallery	Pin Hole		3	05.1		<i>C. lupus</i>	R mand, I2-3, C1, P2-3, M1-3	94.95
SHC D27/3	Sandford Hill, Soms		3	LL11897 TTNCM	Rev'd. D. Williams & Beard clln	<i>C. lupus</i>	R mand ramus, P4, M1-2	96.51
NHM 45D drw 13	Banwell Bone Cave		5a	44/1995/61/4 M223a with M223 (U teeth)	Enniskillen Clln	<i>C. lupus</i>	L ramus mand, C1 alveolus, P1-4, M1 and alveoli	88.99
SHC D19/3	Banwell Bone Cave		5a	TTNCM 40/1995/46	William Beard clln	<i>C. lupus</i>	L mand, P2-4, M1-3	97.04
SHC Display 2nd drw from bottom	Banwell Bone Cave		5a	40/1995/47		<i>C. lupus</i>	L mand, C1, P1-4, M1-3	94.17
MM R5 ColK D15	Stump Cross Cave		5a	M43234	Stump cross cave 1980 III c	<i>C. lupus</i>	R ramus, P1, frag P2, frag P3, P4, M1-2	98.95
	Windy Knoll		5a	P2496a-j	Dawkins	<i>C. lupus</i>	L mand ramus, C1, M1-2 R mand C1, P1-4, M1-2,	101.61
UMZC SM On display	Wretton, Norfolk		5a	Wr1a SM.		<i>C. lupus</i>	M3 alv L mand, C1, P1-4, M1-2 M3	99.1
	Bacon Hole		5c	850:2.166		<i>C. lupus</i>	lv	89.28

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	p1m3L
TM G/B6/B112	Joint Mitnor Cave Clevedon Cave, Soms		5e	P35082	1940	<i>C. lupus</i>	R ramus, P1-4, M1-2	95.91
BGS 483956			6	16350		<i>C. lupus</i>	R mand, P2-4, M1-3	88.74
SHC D46/1 NHM 44 D drw 7	Bleadon Cave	none	7	TTNCM 41/1995/12	W. Beard clln	<i>C. lupus</i>	R mand, P1-4, M1-2	89.79
	Hutton Cave		7	44739a	none	<i>C. lupus</i>	R+L mand From above, R mand P2-4, M1 tal	92.45
SHC D40/2	Hutton Cave		7	TTNCM 42/1995/738	Rev D Williams and W Beard clln	<i>C.lupus</i>	R mand, P2-4, M1-2	95.23
SHC D40/2	Hutton Cave		7	TTNCM 42/1995/44	Rev D Williams and W Beard clln	<i>C.lupus</i>	From above, R mand, C1, P1-2	95.25
VER 108	Grotta di Paglicci, Italy	Str VI	2	V5767 1988/22377 (Ranis 21896)		<i>C. lupus</i>	L mand, C1, P4, M1	93.48
SIW NHM 36 E d 36/E/19	Ranis		2.4	21896)		<i>C. lupus</i>	L mand ramus, M1-2	94.08
NHM 36 E d 36/E/19	Perick Cave	none	2.4	28571	see notes	<i>C. lupus</i>	L mand, I2-3, P1-4, M1-3 L and R fused mands. L	96.19
NHM 36 E d 36/E/19	Perick Cave	Cavern	2.4	28572	none	<i>C. lupus</i>	mand, M2 PAIR, L and R fused mands.	98.52
36/E/19	Perick Cave		2.4	28572		<i>C. lupus</i>	R mand, M1-2	99.55

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	p1m3L
NHM 25 E d 14	Boxgrove	Project A, Q1, area TP4, Unit 4c-surface, Field no (2+3)	13	F2+3/1		<i>C. mosbachensis</i>	R mand ramus, I3, C1, P1-4, M1-3	79.96
NHM 44D 3rd drw from top	Westbury	no strat info	13	M33942	Bishop clln	<i>C. mosbachensis</i>	L mand, M1	82.36
NHM 44D 3rd drw from top	Westbury	Bed 3	13	M33940	M Bishop 1974	<i>C. mosbachensis</i>	L mand ramus, P2-4, M1-3	86.63
SIW 1 d 4	Untermassfeld, Germany		4	1980/15308 (Mei 14820)		<i>C. mosbachensis</i>	R mand, C1, P1-4, M1-3	81.18
SIW 1 d 4	Untermassfeld, Germany		4	1984/20111 (Mei 19631)		<i>C. mosbachensis</i>	R mand ramus, C1, P2-4, ant M1	84.3
SIW 1 d 4	Untermassfeld, Germany		4	1980/17151 (Mei 16672)		<i>C. mosbachensis</i>	R mand ramus, C1, P1-4, M1-2	82.7
SIW 1 d 4	Untermassfeld, Germany		4	1980/16553 (Mei 16074)		<i>C. mosbachensis</i>	R mand, C1, P2-4, M1-2	78.05
SIW 1 d 4	Untermassfeld, Germany		4	1982/17995 (Mei 17515)		<i>C. mosbachensis</i>	R mand, P1-4, M1-3	84.8

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	p1m3L
SIW 1 d 5	Untermassfeld, Germany		4	1980/15357 (mei 14869)		<i>C. mosbachensis</i>	R mand, I3, C1, P1, post P2, P3-4, M1-2	80.71
FLO 0/02/013/01 (d1)	Upper Valdarno	Upper Valdarno	4.4	IGF868		<i>C. arnensis</i>	With max and basicranium, PAIR. R mand, I1-3, C1, P1-4, M1-3	80.43
FLO 0/02/013/04 (d4)	Il Tasso, Italy	Upper Valdarno	4.4	IGF887		<i>C. arnensis</i>	In box with max. R mand, P1-4, M1-3	77.19
FLO Strozzi Sala	Upper Valdarno, Italy	Upper Valdarno	4.4	11800		<i>C. arnensis</i>	R mand ramus, P1-4, M1-2, M3 alv	83.74
FLO Gallery	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF869		<i>C. arnensis</i>	With cranium, L+R mands. R mand, C1, P1-4, M1-3	76.98
FLO 0/02/013/01 (d1)	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF856		<i>C. etruscus</i>	R mand, C1, P1-4, M1-3	91.21
FLO Strozzi Sala	Upper Valdarno, Italy	Upper Valdarno	4.4	871		<i>C. etruscus</i>	R mand, I2-3, C1, P1-4, M1-2	93.54
FLO 0/02/013/05	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF12868		<i>C. etruscus</i>	R mand ramus, P2, M1	90.04
FLO 0/02/013/05	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF873		<i>C. majori (etruscus)</i>	R mand, I3, C1, P2-4, M1-3	79.85

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	p1m3L
FLO 0/02/013/07 (d7)	Val di Magna, Italy	Olivola	4.4	IGF4474		<i>C. etruscus</i>	L mand ramus, P1, post P3, P4, M1-2, alv M3	88.6
FLO 0/02/013/07 (d7)	Val di Magna, Italy	Olivola	4.4	IGF4413		<i>C. etruscus</i>	L mand, I2-3, C1, P1, P3-4, M1, def M2??	86.6
FLO 0/02/013/07 (d7)	Val di Magna, Italy	Olivola	4.4	IGF4471		<i>C. etruscus</i>	L mand, C1 root, frag P2, frag P4, M1-2	89.08
FLO 0/02/013/07 (d7)	Val di Magna, Italy	Olivola	4.4	IGF4470		<i>C. etruscus</i>	L mand, I2-3 roots, C1 root, P1-2 roots, M1, M2 frags. M3 infilled alv	90.47

18. p2m3L

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	p2m3L
NHM 1	France		1	1843.12.29.7	F	<i>C. lupus</i>	L mand, I1-3, C1, P2-4, M1-2	82.36
NHM 2	Pyrenees	Parzudacki clln	1	44.1.18.1	F	<i>C. lupus</i>	L mand, I1-3, C1, P1-4, M1-3	84.14
NHM 5	Riocalado, Burgos, Spain		1	11.10.5.2	F	<i>C. lupus</i>	L mand, I1-3, C1, P1-4, M1-3	89.22
NHM 8	Kocane, Macedonia		1	47.1121.a	F	<i>C. lupus</i>	L mand, I1-3, C1, P1-4, M1-2	83.01
NRM	Korvijaure, 7 miles N Kiruna	15.4.1959	1	A58 0112	F	<i>C. lupus</i>	L+R mand + cranium. R mand I1-3, C1, P1, P2 loose, P3-4, M1-3	88.91
NRM	S Finnskoga, Skrackarberget	1985.07.29	1	A865126	F	<i>C. lupus</i>	L+R mand+cranium. R mand, I1-3, P1-4, M1-3	89.26
NRM	Jadraas, 5km N	1991.06.14	1	A915068	F	<i>C. lupus</i>	L+R mand+cranium. R teeth P4, M1-2	89.64
NRM	Vastra Amtervik, Hensgard	1993.02.24	1	A935024	F	<i>C. lupus</i>	L+R mand+cranium. L mand, I1-3, C1, P2-4, M1-2	87.32

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	p2m3L
NRM	Nas-snoan, v71/jvg	1993.08.18	1	A935178	F	<i>C. lupus</i>	L+R mand+cranium. L mand I1-3, C1, P1-4, M1-3	85.27
NRM	Nyskoga, Kringsberg, Bontjarn	1994.01.19	1	A945045	F	<i>C. lupus</i>	L+R mand+cranium. R mand, I1-3, P1-4, M1-3	89.99
NRM	Vastmandland, Grythyttan	1999.12.17	1	20005111	F	<i>C. lupus</i>	L+R mand+cranium. R mand I2-3, C1, P2-4, M1-3	89.61
NRM	Narke, Degerfors, Atorp	2001.12.26	1	20025005	F	<i>C. lupus</i>	L+R mand+cranium. L mand I1-3, P1-4, M1-3	87.48
NRM	Atorp 3.5 km NW, Degerfors, Varmland	2002.03.05	1	20035026	F	<i>C. lupus</i>	L+R mand+cranium. L mand I1-3, C1, P1-4, M1-3	86.42
NRM	Odlingen, Sillerud, Arjang, Varmland	2004.02.07	1	20045040	F	<i>C. lupus</i>	L+R mand+cranium. R mand I1-3, C1, P1-4, M1-3	86.38
NRM	Ovre Hurr, Tocksfors, Varmland	2006.05.30	1	20065236	F	<i>C. lupus</i>	L+R mand+cranium. L mand, I1-2, C1, P1-4, M1-3	84.74
NRM	Rickebo, Hallbo, Bollnas, Halsingland	2006.03.14	1	20065047	F	<i>C. lupus</i>	L+R mand+cranium. R mand I1-3, C1, P1-4, M1-3	88.73
NRM	Ronnas, Ostra, Leksand, Dalarna	2007.10.09	1	20075381	F	<i>C. lupus</i>	L+R mand+cranium. R mand I1-3, C1, P1-4, M1-3	87.13

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	p2m3L
NRM	Jarbo, Backefors, Dalsland Varmland, Nordmark,	2007.?	1	20075314	F	<i>C. lupus</i>	L+R mand+cranium. L mand I1-3, C1, P1-4, M1-3	84.32
NRM	Algsjion 2 km S Halsingland, Bollnas, Lottefors;	2009.01.25	1	20095063	F	<i>C. lupus</i>	L+R mand+cranium. R mand I1-3, C1, P1 alv, P1-4, M1-3	86.95
NRM	Rv 83 Vastmanland, Hallefors,	2007.08.19	1	20075312	F	<i>C. lupus</i>	L+R mand + cranium. R mand I1-3, C1, P1-4, M1-3	85.76
NRM	Ornviken,	2010.01.02 On note 'C. l.	1	20105028	F	<i>C. lupus</i>	L+R mand+cranium. L mand I1-3, C1, P1-4, M1-3	87.79
NHM 4	Riocalado, Burgos, Spain	signatus doubtfully distinct	1	11.10.5.1	M	<i>C. lupus</i>	L mand, I1-3, C1, P1-4, M1-3	91.26
NHM 9	Norbotten, N Sweden (in arctic circle).		1	28.5.4.1	M	<i>C. lupus</i>	L mand, I1-3, C1, P1-4, M1-3	89.72
NHM 6	Seville, Spain	On note '2 carnassials in tooth case'	1	95.3.3.6	M	<i>C. lupus</i>	R mand, I1-3, C1, P2-4, M1-3. No P1 or alv	88.7
NHM 7	Ukraine on modern ticket, on skull and original		1	34.6.28.47	M	<i>C. lupus</i>	L mand, I1-3, C1, P3-4, M1-3	88.33
NHM 11	Moscow district, Russia		1	82.9.18.2	M	<i>C. lupus</i>	L mand, I1-3, C1 fract, P1-4, M1-3	98.85

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	p2m3L
NHM Ost	Abrantos, S of Tagus, Portugal		1	1937.2.10.2	M	<i>C. lupus</i>	R mand, I2, C1, P4, M1-3	82.98
NHM Ost	Bosnia, Yugoslavia		1	1935.8.5.1	M	<i>C. lupus</i>	R mand, I1-3, C1, P1-4, M1-2	88.05
NRM	Ljusdal, Ramsjo (s:n)	12.2.1926	1	A580255	M	<i>C. lupus</i>	L+R mand + fract cranium. L mand, I1-3, C1, P1-4, M1-3	89.03
NRM	Jokkmokk	11.02.1852	1	A583532	M	<i>C. lupus</i>	L+R mand + cranium. R mand I1-3, C1, P1-4, M1-3	86.73
NRM	Orebro	1852	1	A583547	M	<i>C. lupus</i>	L+R mand+cranium. R mand I1-3, C1, P1-4, M1-3	87.83
NRM	Sweden	1907	1	A589147	M	<i>C. lupus</i>	L+R mand + cranium. R teeth I1-3, C1, P1-4, M1-2	90.05
NRM	Sweden	1908	1	A589199	M	<i>C. lupus</i>	L+R mand+cranium. L mand I1-3, C1, P1-4, M1-3	90.48
NRM	Luktjomtjuolta, Vilhelmina	15.1.1937	1	A590009	M	<i>C. lupus</i>	L+R mand+cranium. L mand I1-3, C1, P2-4, M1-2	88.11
NRM	Lina alv station	25.12.1977	1	A775097	M	<i>C. lupus</i>	L+R mand+cranium. L mand I1, I3, C1, P1-4, M1-3	91.91

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	p2m3L
NRM	Atran, Ogardet	1984.09.12	1	A845131	M	<i>C. lupus</i>	L+R mand+cranium. R mand I1-3, C1, P1-4, M1-3	92.36
NRM	Hede, 3 mil NV, Norrstadjan	1989.04.17	1	A895039	M	<i>C. lupus</i>	L+R mand+cranium. R mand I1-3, P1-4, M1-3	92.06
NRM	Kiruna-Gallivare, Gaddmyr, Jvg	1992.08.24	1	A925106	M	<i>C. lupus</i>	L+R mand+cranium. R mand, I1-3, P2-4, M1-3	90.95
NRM	Boras	1996.01.04	1	A965002	M	<i>C. lupus</i>	L+R mand+cranium. L teeth I1-3, C1, P1-4, M1-2	92.34
NRM	Jarna, Flaten, Dalarna	1999.2.6	1	A995016	M	<i>C. lupus</i>	L+R mand+cranium. R mand, I1-2, P1-4, M1-3	97.77
NRM	Varmland, Eksharad, Halgan; Kolarkojan	1999.06.04	1	995230	M	<i>C. lupus</i>	L+R mand+cranium. R mand, I3, C1, P1-4, M1-3	92.58
NRM	Jumkil kyrka, Uppsala	2000.11.19	1	20005365	M	<i>C. lupus</i>	L+R mand+cranium. L mand I1-3, C1, P1-4, M1-3	91.26
NRM	Uddalen, Ed, Dalsland	2003.05.12	1	20035114	M	<i>C. lupus</i>	L+R mand+cranium. R mand I1-3, C1. extra P1? P1, P2-3 broken, P4, M1-3	89.42
NRM	Ostermoren, Smedjebacken, Dalarna	2004.12.09	1	20045305	M	<i>C. lupus</i>	L+R mand+cranium. R mand I1-3, C1, P1-4, M1-2, M3 alv	90.46

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	p2m3L
NRM	Dala Floda, Borlange, Dalarna IV 225 (road?), Osma,	2003.03.09	1	20035024	M	<i>C. lupus</i>	L+R mand+cranium. R mand I1-3, C1, P1 alv, P2- 4, M1-3	87.91
NRM	Sodermanland Lanasberget, Grundsjo,	2005.11.26	1	20065027	M	<i>C. lupus</i>	L+broken R mand+cranium. L mand I1- 2, C1, P1-4, M1-2, M3 alv	92.98
NRM	Ljungaverk,	2005.09.02	1	20055287	M	<i>C. lupus</i>	L+R mand+cranium. L mand I1-3, C1, P1-4, M1-3	91.43
NRM	Mullhyttan, Orebro, Narke	2006.09.15	1	20065414	M	<i>C. lupus</i>	L+R mand+cranium. R mand I1-3, C1, P1-4, M1- 2, M3 alv	90.5
NRM	Avik, Laxa, Narke	2007.04.27	1	20075186	M	<i>C. lupus</i>	L+R mand + cranium. L mand I1-3, C1, P1 alv, P2- 4, M1-2, M3 alv	91.69
NRM	Malung-Appelbo, Dalarna Dalarna, Torsby, Ostmark;	2007.12	1	20085027	M	<i>C. lupus</i>	L+R mand + cranium. L mand, I1-3, C1, P1-4, M1- 3	89.04
NRM	Sojensoasen Stormosse, Piro, Bjorneborg,	2007.09.15	1	20075373	M	<i>C. lupus</i>	L+R mand+cranium. R mand I1-3, C1, P1-4, M1-3	91.48
NRM	Kristinehamn,	2007.12.27	1	20085036	M	<i>C. lupus</i>	L+R mand+cranium. L mand I1-3, C1, P1-4, M1-3	93.19
NMW PH1.147	Ogof yr Ychen	Abyss chamber 3	2	864		<i>C. lupus</i>	L mand, C1, P1-4, M1-2	91.35

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	p2m3L
NHM 43 E drw 24	Oreston Cave	Pres type 2	3	46981 1989 G 140 1.1	none listed	<i>C. lupus</i>	R ramus frag, P2-P4, M1-2	83.86
WH SMES bay 4, iv 266 drw	Oreston Cave Black Rock quarries		3	(FS04323)	Pres by T Roberts, 1882	<i>C. lupus</i>	L mand ramus, P2-4, M1-2	93.46
			3	D2605		<i>C. lupus</i>	R mand, I2-3, C1, P2, P4, M1-2	84.79
NHM 43 C SM Blue boxes	Kent's Cavern Paviland		3	15636 SM.1836.6.1	McEnery clln	<i>C. lupus</i>	R ramus mand, C1, P1-4, M1-2	94.97
SM Blue boxes	Paviland		3	45.1 SM.1836.6.3		<i>C. lupus</i>	L mand P1-4, M1-2	93.35
	Paviland		3	05.1		<i>C. lupus</i>	L mand ramus, P2-4, M1-2 R mand, I2-3, C1, P2-3,	91.29
MM Gallery	Pin Hole		3	LL11897 TTNCM	Rev'd. D. Williams & Beard clln	<i>C. lupus</i>	M1-3	88.68
SHC D27/3	Sandford Hill, Soms		3	44/1995/61/ 4 M223a with M223 (U teeth)		<i>C. lupus</i>	R mand ramus, P4, M1-2 L ramus mand, C1 alveolus, P1-4, M1 and alveoli	91.02
NHM 45D drw 13	Banwell Bone Cave		5a	TTNCM 40/1995/46	Enniskillen Clln William Beard clln	<i>C. lupus</i>	L mand, P2-4, M1-3	83.83
SHC D19/3	Banwell Bone Cave		5a	40/1995/47		<i>C. lupus</i>	L mand, P2-4, M1-3	90.72
SHC Display	Banwell Bone Cave		5a	40/1995/47		<i>C. lupus</i>	L mand, C1, P1-4, M1-3	87.72

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	p2m3L
NHM 53A, 2nd drw from bottom MM R5 ColK D15	Stump Cross Cave		5a	M43234	Stump cross cave 1980 III c	<i>C. lupus</i>	R ramus, P1, frag P2, frag P3, P4, M1-2	92.87
	Windy Knoll		5a	P2496a-j	Dawkins	<i>C. lupus</i>	L mand ramus, C1, M1-2 R mand C1, P1-4, M1-2,	94.15
UMZC SM On display TM	Wretton, Norfolk		5a	Wr1a SM.		<i>C. lupus</i>	M3 alv L mand, C1, P1-4, M1-2	92.52
G/B6/B112	Bacon Hole		5c	850:2.166		<i>C. lupus</i>	M3 lv	82.19
BGS 483956	Joint Mitnor Cave Clevedon Cave, Soms		5e	P35082	1940	<i>C. lupus</i>	R ramus, P1-4, M1-2	89.27
			6	16350		<i>C. lupus</i>	R mand, P2-4, M1-3	82.68
SHC D46/1 NHM 44 D drw 7	Bleadon Cave		7	TTNCM 41/1995/12	W. Beard clln	<i>C. lupus</i>	R mand, P1-4, M1-2 From above, RP2-4, M1	84.43
	Hutton Cave	none	7	44739a	none Rev D Williams and W Beard	<i>C. lupus</i>	tal	86.15
SHC D40/2	Hutton Cave		7	TTNCM 42/1995/738	clln Rev D Williams and W Beard	<i>C. lupus</i>	R mand, P2-4, M1-2	86.96
SHC D40/2	Hutton Cave		7	TTNCM 42/1995/44	clln	<i>C. lupus</i>	From above, R mand, C1, P1-2	95.12
VER 108	Grotta di Paglicci, Italy	Str VI	2	V5767		<i>C. lupus</i>	L mand, C1, P4, M1	87.55

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	p2m3L
SIW NHM 36 E d 36/E/19	Ranis		2.4	1988/22377 (Ranis 21896)		<i>C. lupus</i>	L mand ramus, M1-2	87.16
NHM 36 E d 36/E/19	Perick Cave		2.4	28570		<i>C. lupus</i>	From above, R mand, P3-4, M1-3	92.32
NHM 36 E d 36/E/19	Perick Cave		2.4	28572		<i>C. lupus</i>	PAIR, L and R fused mands. R mand, M1-2	92.87
NHM 25 E d 14	Boxgrove	Project A, Q1, area TP4, Unit 4c- surface, Field no (2+3)	13	F2+3/1		<i>C. mosbachensis</i>	R mand ramus, I3, C1, P1-4, M1-3	74.11
NHM 25 F d 25	Boxgrove	Project A, Q2, area 17, unit 4c surface, field no F9 (part)	13	F9/2		<i>C. mosbachensis</i>	R mand, C1, P2-4, M1	77.15
NHM 44D 3rd drw from top	Westbury	no strat info	13	M33942	Bishop clln	<i>C. mosbachensis</i>	L mand, M1	76.54
NHM 44D 3rd drw from top	Westbury	Bed 3 Forest bed - clay in depression, N of old tower.	13	M33940	M Bishop 1974	<i>C. mosbachensis</i>	L mand ramus, P2-4, M1-3	81.17
NHM 55 E	Sidestrand		13	M6169	A.C. Savin 1897	<i>C. mosbachensis</i>	R mandible ramus P2-M1	84.05
SIW 1 d 4	Untermassfeld, Germany		4	1980/15308 (Mei 14820)		<i>C. mosbachensis</i>	R mand, C1, P1-4, M1-3	75.22

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	p2m3L
SIW 1 d 4	Untermassfeld, Germany		4	1980/15919 (Mei 15430)		<i>C. mosbachensis</i>	R mand ramus, C1, P3-4, M1	76.49
SIW 1 d 4	Untermassfeld, Germany		4	1984/20111 (Mei 19631)		<i>C. mosbachensis</i>	R mand ramus, C1, P2-4, ant M1	78.7
SIW 1 d 4	Untermassfeld, Germany		4	1980/17151 (Mei 16672)		<i>C. mosbachensis</i>	R mand ramus, C1, P1-4, M1-2	75.71
SIW 1 d 4	Untermassfeld, Germany		4	1980/16553 (Mei 16074)		<i>C. mosbachensis</i>	R mand, C1, P2-4, M1-2	73.26
SIW 1 d 4	Untermassfeld, Germany		4	1982/17995 (Mei 17515)		<i>C. mosbachensis</i>	R mand, P1-4, M1-3	78.36
SIW 1 d 5	Untermassfeld, Germany		4	1980/15357 (mei 14869)		<i>C. mosbachensis</i>	R mand, I3, C1, P1, post P2, P3-4, M1-2	75.66
FLO 0/02/013/01 (d1)	Upper Valdarno	Upper Valdarno	4.4	IGF868		<i>C. arnensis</i>	With max and basicranium, PAIR. R mand, I1-3, C1, P1-4, M1-3	74.25
FLO 0/02/013/04 (d4)	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF876		<i>C. arnensis</i>	R mand, I1-2, P2-3, post P4, M1-3	72.02
FLO 0/02/013/04 (d4)	Il Tasso, Italy	Upper Valdarno	4.4	IGF887		<i>C. arnensis</i>	In box with max. R mand, P1-4, M1-3	70.74

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	p2m3L
FLO Strozzi Sala	Upper Valdarno, Italy	Upper Valdarno	4.4	11800		<i>C. arnensis</i>	R mand ramus, P1-4, M1-2, M3 alv With upper palate, L+R	77.32
FLO 0/02/013/05	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF877		<i>C. arnensis</i>	mands. R mand ramus, P2-4, M1-3	78.42
FLO Gallery	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF869		<i>C. arnensis</i>	With cranium, L+R mand. R mand, C1, P1-4, M1-3	70.45
FLO 0/02/013/01 (d1)	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF856		<i>C. etruscus</i>	R mand, C1, P1-4, M1-3	82.35
FLO Strozzi Sala	Upper Valdarno, Italy	Upper Valdarno	4.4	871		<i>C. etruscus</i>	R mand, I2-3, C1, P1-4, M1-2	86.02
FLO 0/02/013/05	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF12868		<i>C. etruscus</i>	R mand ramus, P2, M1	82.1
FLO 0/02/013/05	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF873		<i>C. majori (etruscus)</i>	R mand, I3, C1, P2-4, M1-3	74.5
FLO 0/02/013/07 (d7)	Val di Magna, Italy	Olivola	4.4	IGF4474		<i>C. etruscus</i>	L mand ramus, P1, post P3, P4, M1-2, alv M3	82.5
FLO 0/02/013/07 (d7)	Val di Magna, Italy	Olivola	4.4	IGF4473		<i>C. etruscus</i>	L mand ramus, P2? P4, M1, M2	89.04
FLO 0/02/013/07 (d7)	Val di Magna, Italy	Olivola	4.4	IGF4413		<i>C. etruscus</i>	L mand, I2-3, C1, P1, P3-4, M1, def M2??	79.6

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	p2m3L
FLO 0/02/013/07 (d7)	Val di Magna, Italy	Olivola	4.4	IGF4471		<i>C. etruscus</i>	L mand, C1 root, frag P2, frag P4, M1-2	83.17
FLO 0/02/013/07 (d7)	Val di Magna, Italy	Olivola	4.4	IGF4470		<i>C. etruscus</i>	L mand, I2-3 roots, C1 root, P1-2 roots, M1, M2 frags. M3 infilled alv	82.42

19. DentaryL

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	Dentary L
NHM 1	France		1	1843.12.29.7	F	<i>C. lupus</i>	L mand, I1-3, C1, P2-4, M1-2	159
NHM 2	Pyrenees Nr Abrantos, S of the Tagus, Portugal	Parzudacki clln	1	44.1.18.1	F	<i>C. lupus</i>	L mand, I1-3, C1, P1-4, M1-3	165
NHM 3		WC Tait clln.	1	1938.12.7.1	F	<i>C. lupus</i>	R mand, I1-3, C1, P1-4, M1-2	159
NHM 5	Riocalado, Burgos, Spain		1	11.10.5.2	F	<i>C. lupus</i>	L mand, I1-3, C1, P1-4, M1-3	166
NHM 8	Kocane, Macedonia		1	47.1121.a	F	<i>C. lupus</i>	L mand, I1-3, C1, P1-4, M1-2	163
NRM	Korvijaure, 7 miles N Kiruna	15.4.1959	1	A58 0112	F	<i>C. lupus</i>	L+R mand + cranium. R mand I1-3, C1, P1, P2 loose, P3-4, M1-3	175
NRM	Kiruna	14.4.1908	1	A581198	F	<i>C. lupus</i>	L+R mand + cranium extreme tooth wear down to bone. L teeth I1-3, C1, M1	171
NRM	S Finnskoga, Skrackarberget	1985.07.29	1	A865126	F	<i>C. lupus</i>	L+R mand+cranium. R mand, I1-3, P1-4, M1-3	175

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	Dentary L
NRM	Jadraas, 5km N	1991.06.14	1	A915068	F	<i>C. lupus</i>	L+R mand+cranium. R teeth P4, M1-2	180
NRM	Vastra Amtervik, Hensgard	1993.02.24	1	A935024	F	<i>C. lupus</i>	L+R mand+cranium. L mand, I1-3, C1, P2-4, M1-2	179
NRM	Nas-snoan, v71/jvg	1993.08.18	1	A935178	F	<i>C. lupus</i>	L+R mand+cranium. L mand I1-3, C1, P1-4, M1-3	170
NRM	Nyskoga, Kringsberg, Bontjarn	1994.01.19	1	A945045	F	<i>C. lupus</i>	L+R mand+cranium. R mand, I1-3, P1-4, M1-3	174
NRM	Vastmandland, Grythyttan	1999.12.17	1	20005111	F	<i>C. lupus</i>	L+R mand+cranium. R mand I2-3, C1, P2-4, M1-3	179
NRM	Narke, Degerfors, Atorp	2001.12.26	1	20025005	F	<i>C. lupus</i>	L+R mand+cranium. L mand I1-3, P1-4, M1-3	176
NRM	Atorp 3.5 km NW, Degerfors, Varmland	2002.03.05	1	20035026	F	<i>C. lupus</i>	L+R mand+cranium. L mand I1-3, C1, P1-4, M1-3	172
NRM	Odlingen, Sillerud, Arjang, Varmland	2004.02.07	1	20045040	F	<i>C. lupus</i>	L+R mand+cranium. R mand I1-3, C1, P1-4, M1-3	175

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	Dentary L
NRM	Ovre Hurr, Tocksfors, Varmland	2006.05.30	1	20065236	F	<i>C. lupus</i>	L+R mand+cranium. L mand, I1-2, C1, P1-4, M1-3	176
NRM	Rickebo, Hallbo, Bollnas, Halsingland	2006.03.14	1	20065047	F	<i>C. lupus</i>	L+R mand+cranium. R mand I1-3, C1, P1-4, M1-3	181
NRM	Ronnas, Ostra, Leksand, Dalarna	2007.10.09	1	20075381	F	<i>C. lupus</i>	L+R mand+cranium. R mand I1-3, C1, P1-4, M1-3	172
NRM	Jarbo, Backefors, Dalsland	2007.?	1	20075314	F	<i>C. lupus</i>	L+R mand+cranium. L mand I1-3, C1, P1-4, M1-3	165
NRM	Varmland, Nordmark, Algsjion 2 km S	2009.01.25	1	20095063	F	<i>C. lupus</i>	L+R mand+cranium. R mand I1-3, C1, P1 alv, P1-4, M1-3	180
NRM	Halsingland, Bollnas, Lottefors; Rv 83	2007.08.19	1	20075312	F	<i>C. lupus</i>	L+R mand + cranium. R mand I1-3, C1, P1-4, M1-3	171
NRM	Vastmanland, Hallefors, Ornviken,	2010.01.02	1	20105028	F	<i>C. lupus</i>	L+R mand+cranium. L mand I1-3, C1, P1-4, M1-3	179
NHM 4	Riocalado, Burgos, Spain	On note 'C. l. signatus doubtfully	1	11.10.5.1	M	<i>C. lupus</i>	L mand, I1-3, C1, P1-4, M1-3	171

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	Dentary L	
NHM 9	Norbotten, N Sweden (in arctic circle).	On note '2 carnassials in tooth case'	1	28.5.4.1	M	<i>C. lupus</i>	L mand, I1-3, C1, P1-4, M1-3	180	
NHM 6	Seville, Spain		1	95.3.3.6	M	<i>C. lupus</i>	R mand, I1-3, C1, P2-4, M1-3. No P1 or alv	163	
NHM 7	Ukraine on modern ticket, on skull and original		1	34.6.28.47	M	<i>C. lupus</i>	L mand, I1-3, C1, P3-4, M1-3	188	
NHM 11	Moscow district, Russia		1	82.9.18.2	M	<i>C. lupus</i>	L mand, I1-3, C1 fract, P1-4, M1-3	187	
NHM Ost	Abrantos, S of Tagus, Portugal		1	1937.2.10.2	M	<i>C. lupus</i>	R mand, I2, C1, P4, M1-3	167	
NHM Ost	Bosnia, Yugoslavia		1	1935.8.5.1	M	<i>C. lupus</i>	R mand, I1-3, C1, P1-4, M1-2	172	
NRM	Ljusdal, Ramsjo (s:n)		12.2.1926	1	A580255	M	<i>C. lupus</i>	L+R mand + fract cranium. L mand, I1-3, C1, P1-4, M1-3	183
NRM	Jokkmokk		11.02.1852	1	A583532	M	<i>C. lupus</i>	L+R mand + cranium. R mand I1-3, C1, P1-4, M1-3	175

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	Dentary L
NRM	Orebro	1852	1	A583547	M	<i>C. lupus</i>	L+R mand+cranium. R mand I1-3, C1, P1-4, M1-3	155
NRM	Sweden	1907	1	A589147	M	<i>C. lupus</i>	L+R mand + cranium. R teeth I1-3, C1, P1-4, M1-2	170
NRM	Sweden	1908	1	A589199	M	<i>C. lupus</i>	L+R mand+cranium. L mand I1-3, C1, P1-4, M1-3	189
NRM	Luktjomtjuolta, Vilhelmina	15.1.1937	1	A590009	M	<i>C. lupus</i>	L+R mand+cranium. L mand I1-3, C1, P2-4, M1-2	170
NRM	Lina alv station	25.12.1977	1	A775097	M	<i>C. lupus</i>	L+R mand+cranium. L mand I1, I3, C1, P1-4, M1-3	165
NRM	Atran, Ogardet	1984.09.12	1	A845131	M	<i>C. lupus</i>	L+R mand+cranium. R mand I1-3, C1, P1-4, M1-3	190
NRM	Hede, 3 mil NV, Norrstadjan	1989.04.17	1	A895039	M	<i>C. lupus</i>	L+R mand+cranium. R mand I1-3, P1-4, M1-3	183
NRM	Kiruna-Gallivare, Gaddmyr, Jvg	1992.08.24	1	A925106	M	<i>C. lupus</i>	L+R mand+cranium. R mand, I1-3, P2-4, M1-3	186

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	Dentary L
NRM	Boras	1996.01.04	1	A965002	M	<i>C. lupus</i>	L+R mand+cranium. L teeth I1-3, C1, P1-4, M1-2	176
NRM	Jarna, Flaten, Dalarna	1999.2.6	1	A995016	M	<i>C. lupus</i>	L+R mand+cranium. R mand, I1-2, P1-4, M1-3	189
NRM	Varmland, Eksharad, Halgan; Kolarkojan	1999.06.04	1	995230	M	<i>C. lupus</i>	L+R mand+cranium. R mand, I3, C1, P1-4, M1-3	187
NRM	Jumkil kyrka, Uppsala	2000.11.19	1	20005365	M	<i>C. lupus</i>	L+R mand+cranium. L mand I1-3, C1, P1-4, M1-3	164
NRM	Uddalen, Ed, Dalsland	2003.05.12	1	20035114	M	<i>C. lupus</i>	L+R mand+cranium. R mand I1-3, C1. extra P1? P1, P2-3 broken, P4, M1-3	186
NRM	Ostermoren, Smedjebacken, Dalarna	2004.12.09	1	20045305	M	<i>C. lupus</i>	L+R mand+cranium. R mand I1-3, C1, P1-4, M1-2, M3 alv	180
NRM	Dala Floda, Borlange, Dalarna	2003.03.09	1	20035024	M	<i>C. lupus</i>	L+R mand+cranium. R mand I1-3, C1, P1 alv, P2-4, M1-3	173
NRM	IV 225 (road?), Osmo, Sodermanland	2005.11.26	1	20065027	M	<i>C. lupus</i>	L+broken R mand+cranium. L mand I1-2, C1, P1-4, M1-2, M3 alv	185

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	Dentary L
NRM	Lanasberget, Grundsjo, Ljungaverk,	2005.09.02	1	20055287	M	<i>C. lupus</i>	L+R mand+cranium. L mand I1-3, C1, P1-4, M1-3	194
NRM	Mullhyttan, Orebro, Narke	2006.09.15	1	20065414	M	<i>C. lupus</i>	L+R mand+cranium. R mand I1-3, C1, P1-4, M1-2, M3 alv L+R mand + cranium. L mand I1-3, C1, P1 alv, P2-4, M1-2, M3 alv	183
NRM	Avik, Laxa, Narke	2007.04.27	1	20075186	M	<i>C. lupus</i>	L+R mand +cranium. L mand, I1-3, C1, P1-4, M1-3	179
NRM	Malung-Appelbo, Dalarna	2007.12	1	20085027	M	<i>C. lupus</i>	L+R mand+cranium. R mand I1-3, C1, P1-4, M1-3	180
NRM	Dalarna, Torsby, Ostmark; Sojensoasen Stormosse, Piro, Bjorneborg,	2007.09.15	1	20075373	M	<i>C. lupus</i>	L+R mand+cranium. L mand I1-3, C1, P1-4, M1-3	193
NRM	Kristinehamn,	2007.12.27	1	20085036	M	<i>C. lupus</i>	L mand, C1, P1-4, M1-2	179
NMW PH1.147	Ogof yr Ychen	Abyss chamber 3	2	864		<i>C. lupus</i>	R mand, I2-3, C1, P2-3, M1-3	170
MM Gallery	Pin Hole		3	LL11897		<i>C. lupus</i>		

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	Dentary L
SHC D27/3	Sandford Hill, Soms		3	TTNCM 44/1995/61/ 4	Rev'd. D. Williams & Beard clln	<i>C. lupus</i>	R mand ramus, P4, M1-2	161
SHC Display	Banwell Bone Cave		5a	45/1995/634		<i>C. lupus</i>	R mand, C1, P2-4, M1.	161
UMZC	Wretton, Norfolk		5a	Wr1a		<i>C. lupus</i>	R mand C1, P1-4, M1-2, M3 alv	176
SM On display	Bacon Hole		5c	SM. 850:2.166		<i>C. lupus</i>	L mand, C1, P1-4, M1-2 M3 lv	159
NHM 44 D drw 7	Hutton Cave	none	7	44739a	none	<i>C. lupus</i>	From above, RP2-4, M1 tal	161
SHC D40/2	Hutton Cave		7	TTNCM 42/1995/44	Rev D Williams and W Beard clln	<i>C.lupus</i>	From above, R mand, C1, P1- 2	165
NHM 36 E d 36/E/19	Perick Cave	none	2.4	28571	see notes	<i>C. lupus</i>	L mand, I2-3, P1-4, M1-3	176
NHM 36 E d 36/E/19	Perick Cave	Cavern	2.4	28572	none	<i>C. lupus</i>	L and R fused mands. L mand, M2	163

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	Dentary L
NHM 25 F d 25	Boxgrove	Project A, QZ, area 17, unit 4c surface, field no F9 (part)	13	F9/2		<i>C. mosbachensis</i>	R mand, C1, P2-4, M1	129.06
SIW 1 d 4	Untermassfeld, Germany		4	1980/15308 (Mei 14820)		<i>C. mosbachensis</i>	R mand, C1, P1-4, M1-3	133.97
SIW 1 d 4	Untermassfeld, Germany		4	1980/16969 (Mei 16460)		<i>C. mosbachensis</i>	R mand ramus, C1, P2-4, M1-2	131.92
SIW 1 d 4	Untermassfeld, Germany		4	1980/16553 (Mei 16074)		<i>C. mosbachensis</i>	R mand, C1, P2-4, M1-2	127.71
SIW 1 d 5	Untermassfeld, Germany		4	1980/15357 (mei 14869)		<i>C. mosbachensis</i>	R mand, I3, C1, P1, post P2, P3-4, M1-2	137.54
FLO 0/02/013/01 (d1)	Il Tasso, Italy	Upper Valdarno	4.4	IGF868		<i>C. arnensis</i>	With max and basicranium. L and R mands, glued close together. L mand, I1-3, C1, P1-4, M1-3	136.14
FLO 0/02/013/01 (d1)	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF872		<i>Canis majori</i>	L mand, C1, P2-4, M1-2, M3 alv	126.97
FLO Strozzi Sala	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF11791		<i>C. etruscus</i>	L mand, I3, C1, P1-4, 1-3	150.68

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	Dentary L
FLO Gallery	Olivola, Italy	Olivola	4.4	IGF4414		<i>C. etruscus</i>	R mand, C1, P1-4, M1-2	149.18

20. p3p4D

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	p3p4D
NHM 1	France		1	1843.12.29.7	F	<i>C. lupus</i>	L mand, I1-3, C1, P2-4, M1-2	21.95
NHM 2	Pyrenees Nr Abrantos, S of the Tagus, Portugal	Parzudacki clln	1	44.1.18.1	F	<i>C. lupus</i>	L mand, I1-3, C1, P1-4, M1-3	27.26
NHM 3		WC Tait clln.	1	1938.12.7.1	F	<i>C. lupus</i>	R mand, I1-3, C1, P1-4, M1-2	22.09
NHM 5	Riocalado, Burgos, Spain		1	11.10.5.2	F	<i>C. lupus</i>	L mand, I1-3, C1, P1-4, M1-3	24.13
NHM 8	Kocane, Macedonia		1	47.1121.a	F	<i>C. lupus</i>	L mand, I1-3, C1, P1-4, M1-2	22.65
NRM	Korvijaure, 7 miles N Kiruna	15.4.1959	1	A58 0112	F	<i>C. lupus</i>	L+R mand + cranium. R mand I1-3, C1, P1, P2 loose, P3-4, M1-3	24.41
NRM	S Finnskoga, Skrackarberget	1985.07.29	1	A865126	F	<i>C. lupus</i>	L+R mand+cranium. R mand, I1-3, P1-4, M1-3	26.95
NRM	Jadraas, 5km N	1991.06.14	1	A915068	F	<i>C. lupus</i>	L+R mand+cranium. R teeth P4, M1-2	26.6

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	p3p4D
NRM	Vastra Amtervik, Hensgard	1993.02.24	1	A935024	F	<i>C. lupus</i>	L+R mand+cranium. L mand, I1-3, C1, P2-4, M1-2	26.87
NRM	Nas-snoan, v71/jvg	1993.08.18	1	A935178	F	<i>C. lupus</i>	L+R mand+cranium. L mand I1-3, C1, P1-4, M1-3	29.81
NRM	Nyskoga, Kringsberg, Bontjarn	1994.01.19	1	A945045	F	<i>C. lupus</i>	L+R mand+cranium. R mand, I1-3, P1-4, M1-3	29.16
NRM	Vastmandland, Grythyttan	1999.12.17	1	20005111	F	<i>C. lupus</i>	L+R mand+cranium. R mand I2-3, C1, P2-4, M1-3	28.9
NRM	Narke, Degerfors, Atorp	2001.12.26	1	20025005	F	<i>C. lupus</i>	L+R mand+cranium. L mand I1-3, P1-4, M1-3	26.27
NRM	Atorp 3.5 km NW, Degerfors, Varmland	2002.03.05	1	20035026	F	<i>C. lupus</i>	L+R mand+cranium. L mand I1-3, C1, P1-4, M1-3	28.51
NRM	Odlingen, Sillerud, Arjang, Varmland	2004.02.07	1	20045040	F	<i>C. lupus</i>	L+R mand+cranium. R mand I1-3, C1, P1-4, M1-3	26.22
NRM	Ovre Hurr, Tocksfors, Varmland	2006.05.30	1	20065236	F	<i>C. lupus</i>	L+R mand+cranium. L mand, I1-2, C1, P1-4, M1-3	27.03

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	p3p4D
NRM	Rickebo, Hallbo, Bollnas, Halsingland	2006.03.14	1	20065047	F	<i>C. lupus</i>	L+R mand+cranium. R mand I1-3, C1, P1-4, M1-3	31.53
NRM	Ronnas, Ostra, Leksand, Dalarna	2007.10.09	1	20075381	F	<i>C. lupus</i>	L+R mand+cranium. R mand I1-3, C1, P1-4, M1-3	25.87
NRM	Jarbo, Backefors, Dalsland	2007.?	1	20075314	F	<i>C. lupus</i>	L+R mand+cranium. L mand I1-3, C1, P1-4, M1-3	26.06
NRM	Varmland, Nordmark, Algsjion 2 km S Halsingland,	2009.01.25	1	20095063	F	<i>C. lupus</i>	L+R mand+cranium. R mand I1-3, C1, P1 alv, P1-4, M1-3	26.96
NRM	Bollnas, Lottefors; Rv 83	2007.08.19	1	20075312	F	<i>C. lupus</i>	L+R mand + cranium. R mand I1-3, C1, P1-4, M1-3	26.23
NRM	Vastmanland, Hallefors, Ornviken,	2010.01.02 On note 'C. l.	1	20105028	F	<i>C. lupus</i>	L+R mand+cranium. L mand I1-3, C1, P1-4, M1-3	28.97
NHM 4	Riocalado, Burgos, Spain	signatus doubtfully distinct from C. l.	1	11.10.5.1	M	<i>C. lupus</i>	L mand, I1-3, C1, P1-4, M1-3	25.21
NHM 9	Norbotten, N Sweden (in arctic circle).		1	28.5.4.1	M	<i>C. lupus</i>	L mand, I1-3, C1, P1-4, M1-3	25.74

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	p3p4D	
NHM 6	Seville, Spain	On note '2 carnassials in tooth case'	1	95.3.3.6	M	<i>C. lupus</i>	R mand, I1-3, C1, P2-4, M1-3. No P1 or alv	25.12	
NHM 7	Ukraine on modern ticket, on skull and original		1	34.6.28.47	M	<i>C. lupus</i>	L mand, I1-3, C1, P3-4, M1-3	25.46	
NHM 11	Moscow district, Russia		1	82.9.18.2	M	<i>C. lupus</i>	L mand, I1-3, C1 fract, P1-4, M1-3	25.82	
NHM Ost	Abrantos, S of Tagus, Portugal		1	1937.2.10.2	M	<i>C. lupus</i>	R mand, I2, C1, P4, M1-3	23.57	
NHM Ost	Bosnia, Yugoslavia		1	1935.8.5.1	M	<i>C. lupus</i>	R mand, I1-3, C1, P1-4, M1-2	23.42	
NRM	Ljusdal, Ramsjo (s:n)		12.2.1926	1	A580255	M	<i>C. lupus</i>	L+R mand + fract cranium. L mand, I1-3, C1, P1-4, M1-3	26.45
NRM	Jokkmokk		11.02.1852	1	A583532	M	<i>C. lupus</i>	L+R mand + cranium. R mand I1-3, C1, P1-4, M1-3	26.35
NRM	Orebro		1852	1	A583547	M	<i>C. lupus</i>	L+R mand+cranium. R mand I1-3, C1, P1-4, M1-3	26.11

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	p3p4D
NRM	Sweden	1907	1	A589147	M	<i>C. lupus</i>	L+R mand + cranium. R teeth I1-3, C1, P1-4, M1-2	27.32
NRM	Sweden	1908	1	A589199	M	<i>C. lupus</i>	L+R mand+cranium. L mand I1-3, C1, P1-4, M1-3	29.35
NRM	Luktjontjuolta, Vilhelmina	15.1.1937	1	A590009	M	<i>C. lupus</i>	L+R mand+cranium. L mand I1-3, C1, P2-4, M1-2	26.78
NRM	Lina alv station	25.12.1977	1	A775097	M	<i>C. lupus</i>	L+R mand+cranium. L mand I1, I3, C1, P1-4, M1-3	29.62
NRM	Atran, Ogardet	1984.09.12	1	A845131	M	<i>C. lupus</i>	L+R mand+cranium. R mand I1-3, C1, P1-4, M1-3	29.14
NRM	Hede, 3 mil NV, Norrstadjan	1989.04.17	1	A895039	M	<i>C. lupus</i>	L+R mand+cranium. R mand I1-3, P1-4, M1- 3	28.84
NRM	Kiruna-Gallivare, Gaddmyr, Jvg	1992.08.24	1	A925106	M	<i>C. lupus</i>	L+R mand+cranium. R mand, I1-3, P2-4, M1- 3	29.68
NRM	Boras	1996.01.04	1	A965002	M	<i>C. lupus</i>	L+R mand+cranium. L teeth I1-3, C1, P1-4, M1-2	32.15

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	p3p4D
NRM	Jarna, Flaten, Dalarna	1999.2.6	1	A995016	M	<i>C. lupus</i>	L+R mand+cranium. R mand, I1-2, P1-4, M1-3	32.03
NRM	Varmland, Eksharad, Halgan; Kolarkojan	1999.06.04	1	995230	M	<i>C. lupus</i>	L+R mand+cranium. R mand, I3, C1, P1-4, M1-3	30.01
NRM	Jumkil kyrka, Uppsala	2000.11.19	1	20005365	M	<i>C. lupus</i>	L+R mand+cranium. L mand I1-3, C1, P1-4, M1-3	31.21
NRM	Uddalen, Ed, Dalsland	2003.05.12	1	20035114	M	<i>C. lupus</i>	L+R mand+cranium. R mand I1-3, C1. extra P1? P1, P2-3 broken,	29.27
NRM	Ostermören, Smedjebacken, Dalarna	2004.12.09	1	20045305	M	<i>C. lupus</i>	L+R mand+cranium. R mand I1-3, C1, P1-4, M1-2, M3 alv	30.58
NRM	Dala Floda, Borlange, Dalarna IV 225 (road?), Osmo,	2003.03.09	1	20035024	M	<i>C. lupus</i>	L+R mand+cranium. R mand I1-3, C1, P1 alv, P2-4, M1-3	29.11
NRM	Sodermanland Lanaberget, Grundsjo,	2005.11.26	1	20065027	M	<i>C. lupus</i>	L+broken R mand+cranium. L mand I1-2, C1, P1-4,	29.06
NRM	Ljungaverk,	2005.09.02	1	20055287	M	<i>C. lupus</i>	L+R mand+cranium. L mand I1-3, C1, P1-4, M1-3	29.74

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	p3p4D
NRM	Mullhyttan, Orebro, Narke	2006.09.15	1	20065414	M	<i>C. lupus</i>	L+R mand+cranium. R mand I1-3, C1, P1-4, M1-2, M3 alv	32.45
NRM	Avik, Laxa, Narke	2007.04.27	1	20075186	M	<i>C. lupus</i>	L+R mand + cranium. L mand I1-3, C1, P1 alv, P2-4, M1-2, M3	31.74
NRM	Malung-Appelbo, Dalarna	2007.12	1	20085027	M	<i>C. lupus</i>	L+R mand +cranium. L mand, I1-3, C1, P1-4, M1-3	28.98
NRM	Dalarna, Torsby, Ostmark; Sojensoasen	2007.09.15	1	20075373	M	<i>C. lupus</i>	R mand I1-3, C1, P1-4, M1-3	29.56
NRM	Stormosse, Piro, Bjorneborg, Kristinehamn,	2007.12.27	1	20085036	M	<i>C. lupus</i>	L+R mand+cranium. L mand I1-3, C1, P1-4, M1-3	31.91
NMW PH1.147	Ogof yr Ychen	Abyss chamber 3	2	864		<i>C. lupus</i>	L mand, C1, P1-4, M1-2	28.46
SMES bay 4, iv 266 drw	Black Rock quarries, Tenby		3	D2604	Pres by T Roberts, 1882	<i>C. lupus</i>	L mand, P2-4, M1-2	28.89
NHM 43 C	Kents Cavern		3	15636	McEnergy clln	<i>C. lupus</i>	R ramus mand, C1, P1-4, M1-2	29.88

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	p3p4D
TM G/B2/189	Kents Cavern	Trench B, 8' - 3"	3	P17647	4th June 1926	<i>C. lupus</i>	R ramus, M1. Alvs P1-4, ant M2	27.78
NHM 43 E drw 24	Oreston Cave	Pres type 2	3	46981	Purch 1876	<i>C. lupus</i>	2). L ramus, C1, P1-4, M1-2	27.2
NHM 43 E drw 24	Oreston Cave	Pres type 2	3	46981 1989 G 140 1.1	Purch 1876	<i>C. lupus</i>	3). L ramus incl P3, P2, P1, C1	26.4
WH	Oreston Cave		3	(FS04323)		<i>C. lupus</i>	L mand ramus, P2-4, M1-2	28.34
SM Blue boxes	Paviland		3	SM.1836.6.1 45.1		<i>C. lupus</i>	L mand P1-4, M1-2	25.01
SM Blue boxes	Paviland		3	SM.1836.6.3 05.1		<i>C. lupus</i>	L mand ramus, P2-4, M1-2	28.76
SM Blue boxes	Paviland		3	SM.1836.6.3 11		<i>C. lupus</i>	L mand ramus, M1	28.71
MM R4 ColE D 1	Pin Hole Cave	PH (F)	3	LL.1995		<i>C. lupus</i>	L mand ramus, P1-4, M1-2	28.29

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	p3p4D
MM Gallery	Pin Hole		3	LL11898		<i>C. lupus</i>	L mand, I2-3, C1, post	28.23
SHC D27/3	Sandford Hill, Soms		3	TTNCM 44/1995/61/4	Rev'd. D. Williams & Beard clln	<i>C. lupus</i>	R mand ramus, P4, M1-2	26.4
NHM 45D drw 13	Banwell Bone Cave		5a	M404d	Egerton clln, 1882	<i>C. lupus</i>	R mand ramus, C1, P2-M2.	27.33
NHM 45D drw 13	Banwell Bone Cave		5a	M223	Enniskillen clln	<i>C. lupus</i>	R mand ramus, P3-4, M1-2	28.2
NHM Andy's office	Banwell Bone Cave	Entrance to Baker's Pit extension, 1950's	5a	M84868	Percy Baker clln	<i>C. lupus</i>	R mand, P1-4, M1-2	28.38
SHC D19/4	Banwell Bone Cave	Cave dep	5a	TTNCM 40/1995/61	William Beard clln	<i>C. lupus</i>	R mand ramus, post P3, P4, M1-3	29.9
SHC D19/4	Banwell Bone Cave		5a	TTNCM 40/1995/58	William Beard clln	<i>C. lupus</i>	R mand ramus, P1-4, M1-2	26.21
SHC D19/3	Banwell Bone Cave		5a	TTNCM 40/1995/55	William Beard clln	<i>C. lupus</i>	R mand ramus, P4, M1	25.82

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	p3p4D
SHC D19/3	Banwell Bone Cave		5a	TTNCM 40/1995/63	William Beard clln	<i>C. lupus</i>	R mand ramus, C1, P4, M1	29.53
SHC D19/2	Banwell Bone Cave	Cave dep	5a	TTNCM 40/1995/50	William Beard clln	<i>C. lupus</i>	R mand ramus, P1-4	26.62
SHC D19/2	Banwell Bone Cave		5a	TTNCM 40/1995/49	William Beard clln	<i>C. lupus</i>	R mand ramus, P2-4	27.89
SHC Display SM From fox & wolf box in display case 9	Banwell Bone Cave		5a	45/1995/634		<i>C. lupus</i>	R mand, C1, P2-4, M1.	24.9
	Bosco's Den		5a	SM. 1858.1.20		<i>C. lupus</i>	L mand ramus, C1, P1- 4, ant M1	29.55
WH	Steetley Quarry Cave, nr worksop, nots		5a	1989 G 141 88 (FS 04700)		<i>C. lupus</i>	R mand ramus, P3-4, M1	28.09
MM R5 ColK D15	Windy Knoll		5a	P2496a-j	Dawkins	<i>C. lupus</i>	L mand ramus, C1, M1-2	27.06
UMZC	Wretton, Norfolk		5a	Wr1a		<i>C. lupus</i>	R mand C1, P1-4, M1- 2, M3 alv	28.74

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	p3p4D
WH	Steetley Quarry Cave, nr worksop, nots		4.6	1989 G 14188 (FS 04700)		<i>C. lupus</i>	R mand ramus, P3-4, M1	28.09
NHM 23 K	Bacon Hole	Area 5, field no 145, 145a, 1977.	5	M43527	C. Stringer BMNH excav, pres Nat Trust Wales to	<i>C. lupus</i>	R mand ramus frag, P3, M1 post, M2	28.63
TM G/B6/B112	Joint Mitnor Cave		5.6	P35082	1940	<i>C. lupus</i>	R ramus, P1-4, M1-2	29.03
BGS 483956	Clevedon Cave, Soms		6	16350		<i>C. lupus</i>	R mand, P2-4, M1-3	26.38
BC	Clevedon Cave, Soms		6	Ce15089	S.H. Reynolds	<i>C. lupus</i>	R ant ramus, post P2, P3 and P4 roots	25.36
BC	Clevedon Cave, Soms		6	Ce12520	B. N. S. Soc	<i>C. lupus</i>	R mand ramus, C1, P2-4, M1	26.97
SHC D46/1	Bleadon Cavern		7	TTNCM 41/1995/12	W. Beard clln	<i>C. lupus</i>	R mand, P1-4, M1-2	27.94
NHM 44 D drw 7	Hutton Cave	none	7	44739a	none	<i>C. lupus</i>	From above, RP2-4, M1 tal	26.68

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	p3p4D
SHC D40/2	Hutton Cave		7	TTNCM 42/1995/738	Rev D Williams and W Beard clln	<i>C. lupus</i>	R mand, P2-4, M1-2	27.66
SHC D40/2	Hutton Cave		7	TTNCM 42/1995/44	Rev D Williams and W Beard clln Dr RP Cotton clln, pres by Cotton,	<i>C. lupus</i>	From above, R mand, C1, P1-2	26.24
BGS 483847	Ilford, Essex		7	204	1878	<i>C. lupus</i>	R mand ramus frag, C1, P2-4, M1-2	25.71
StM 70	Hohler fels im Achtal, Germany		2.4	none 1988/22377		<i>C. lupus</i>	L mand, P3-4, roots M1	24.49
SIW	Ranis, Thuringia, Germany		2.4	(Ranis 21896)		<i>C. lupus</i>	L mand ramus, M1-2	27.52
NHM 36 E d 36/E/19	Perick Cave	none	2.4	28571	see notes	<i>C. lupus</i>	L mand, I2-3, P1-4, M1-3	26.17
NHM 36 E d 36/E/19	Perick Cave	none	2.4	M436	Enniskillen clln 1882	<i>C. lupus</i>	L mand ramus, P2, P4, M1-2	27.16
NHM 36 E d 36/E/19	Perick Cave	none	2.4	28570	Purchd 1853	<i>C. lupus</i>	L and R fused mands. L ramus, P2-3, M2	27.96

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	p3p4D
NHM 36 E d 36/E/19	Perick Cave Villa Seckendorf, Bad Canstatt, Germany Villa Seckendorf, Bad Canstatt, Germany	Cavern	2.4	28572	none	<i>C. lupus</i>	L and R fused mands. L mand, M2	25.09
StM 80		Stuttgart Travertine	2.8	37300 (12.2.57.o.f)	in Ziegler, 1996 fig'rd	<i>C. lupus</i>	L + R mand ramii. L mand ramus I3, C1, P1-4	25.52
StM 80		Stuttgart Travertine	2.8	31397 (SE.26.2.57/ 1)		<i>C. lupus</i>	L mand ramus, P1-4, M1	32.17
NHM 52 B	Gray's Thurrock	Project A, Q1, area TP4, Unit 4c-	9	23140	purch'd 1849	<i>C. mosbachensis</i>	L ramus portion, P2-4, M1 root	27.27
NHM 25 E d 14	Boxgrove	surface, Field no (2+3)	13	F2+3/2		<i>C. mosbachensis</i>	L mand ramus, I3, C1, P1-4, M1-2, frag M3	18.13
NHM 25 F d 25	Boxgrove	Project A, Q2, area 17, unit 4c surface, field no F9 (part)	13	F9/3		<i>C. mosbachensis</i>	L mand, C1 frag, P3-4, M1-2	16.16
NHM 44D 3rd drw from top	WSM	Unstrat-from fallen breccia	13	M33640	M Bishop 1974	<i>C. mosbachensis</i>	Right ramus frag, P3- 4, M1	18.56
NHM 44 F drw 31	WSM	Calc memb. W5. Unstrat. Surface below site W5	13	none		<i>C. mosbachensis</i>	R ramus mand, alvs P1-4, ant M1	18.59

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	p3p4D
NHM 35 H d 24	WSM	Rodent breccia 19/14. Site W5 east	13	none	NHM excav '1982	<i>C. mosbachensis</i>	R mand ramus, P3-4, M1	21.36
NHM 55 E	Sidestrand	Forest bed - clay in depression, N of old tower.	13	M6169	A.C. Savin 1897	<i>C. mosbachensis</i>	R mandible ramus P2-M1	22.46
NHM 55 D d 14	Overstrand	Sandy clay in 'low depression opposite Target	15	M17932	A.C. Savin 1946	<i>C. mosbachensis</i>	L ramus, P2, ant P4	20.1
VER 00441	Monte Zoppega, Soave, Italy		3.4	V10919		<i>C. mosbachensis</i>	R mand ramus, P1-4, M1	19.35
SIW 1 d 4	Untermassfeld, Germany		4	1980/15308 (Mei 14820)		<i>C. mosbachensis</i>	R mand, C1, P1-4, M1-3	17.06
SIW 1 d 4	Untermassfeld, Germany		4	1980/15919 (Mei 15430)		<i>C. mosbachensis</i>	R mand ramus, C1, P3-4, M1	20.11
SIW 1 d 4	Untermassfeld, Germany		4	1984/20111 (Mei 19631)		<i>C. mosbachensis</i>	R mand ramus, C1, P2-4, ant M1	20.26
SIW 1 d 4	Untermassfeld, Germany		4	1980/16969 (Mei 16460)		<i>C. mosbachensis</i>	R mand ramus, C1, P2-4, M1-2	21.46

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	p3p4D
SIW 1 d 4	Untermassfeld, Germany		4	1986/21085 (Mei 20604)		<i>C. mosbachensis</i>	R mand ramus, P2-4, M1-2	19.65
SIW 1 d 4	Untermassfeld, Germany		4	1980/17151 (Mei 16672)		<i>C. mosbachensis</i>	R mand ramus, C1, P1-4, M1-2	17.78
SIW 1 d 4	Untermassfeld, Germany		4	1980/16553 (Mei 16074)		<i>C. mosbachensis</i>	R mand, C1, P2-4, M1-2	16.86
SIW 1 d 4	Untermassfeld, Germany		4	1982/17995 (Mei 17515)		<i>C. mosbachensis</i>	R mand, P1-4, M1-3	21.48
SIW 1 d 4	Untermassfeld, Germany		4	1982/17970 (mei 17490)		<i>C. mosbachensis</i>	R mand frag, P3-4	17.55
FLO 0/02/013/01 (d1)	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF868		<i>C. arnensis</i>	With max and basicranium, PAIR. R mand, I1-3, C1, P1-4,	19.3
FLO 0/02/013/04 (d4)	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF878		<i>C. arnensis</i>	With cranial frag, PAIR. R mand, P3-4, M1-3	17.69
FLO 0/02/013/04 (d4)	Il Tasso, Italy	Upper Valdarno	4.4	IGF887		<i>C. arnensis</i>	In box with max. R mand, P1-4, M1-3	17.51

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	p3p4D
FLO Strozzi Sala	Upper Valdarno, Italy	Upper Valdarno	4.4	11800		<i>C. arnensis</i>	R mand ramus, P1-4, M1-2, M3 alv	18.73
FLO 0/02/013/05	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF12967		<i>C. arnensis</i>	R mand ramus, P1-4, M1-2	22.16
FLO 0/02/013/05	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF877		<i>C. arnensis</i>	With upper palate, L+R mands. R mand ramus, P2-4, M1-3	17.67
FLO Gallery	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF869		<i>C. arnensis</i>	With cranium, L+R mands. R mand, C1, P1-4, M1-3	15.51
FLO 0/02/013/01 (d1)	Upper Valdarno, Italy		4.4	IGF888		<i>C. etruscus</i>	L+ R mands PAIR. R mand ramus, P2-4, M1	16.26
FLO 0/02/013/01 (d1)	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF856		<i>C. etruscus</i>	R mand, C1, P1-4, M1-3	23.53
FLO 0/02/013/02 (d2)	Se Ville, Italy	Upper Valdarno	4.4	IGF882		<i>C. etruscus</i>	R mand ramus, P4, M1-3	19.14
FLO 0/02/013/02 (d2)	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF880		<i>C. majori (etruscus)</i>	R mand ramus, C1, P1-2, P4, M1	23.99

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	p3p4D
FLO 0/02/013/02 (d2)	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF859		<i>C. etruscus</i>	R mand ramus, C1, P2-4, M1	25.03
FLO Strozzi Sala	Upper Valdarno, Italy	Upper Valdarno	4.4	871		<i>C. etruscus</i>	R mand, I2-3, C1, P1-4, M1-2	21.74
FLO 0/02/013/05	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF12868		<i>C. etruscus</i>	R mand ramus, P2, M1	21.77
FLO 0/02/013/05	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF873		<i>C. majori (etruscus)</i>	R mand, I3, C1, P2-4, M1-3	18.66
NHM 35 L d 23	Val di Magna, Olivola, Italy	Olivola	4.4	M5680	Forsyth Major, Oct 1895	<i>C. etruscus</i>	L ramus, P4, M1-2	21.86
FLO 0/02/013/07 (d7)	Val di Magna, Italy	Olivola	4.4	IGF4474		<i>C. etruscus</i>	L mand ramus, P1, post P3, P4, M1-2, alv M3	22.12
FLO 0/02/013/07 (d7)	Val di Magna, Italy	Olivola	4.4	IGF4473		<i>C. etruscus</i>	L mand ramus, P2? P4, M1, M2	21.93
FLO 0/02/013/07 (d7)	Val di Magna, Italy	Olivola	4.4	IGF4413		<i>C. etruscus</i>	L mand, I2-3, C1, P1, P3-4, M1, def M2??	19.08

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	p3p4D
FLO 0/02/013/07 (d7)	Val di Magna, Italy	Olivola	4.4	IGF4471		<i>C. etruscus</i>	L mand, C1 root, frag P2, frag P4, M1-2	22.47

21. p3p4B

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	p3p4B
NHM 1	France		1	1843.12.29.7	F	<i>C. lupus</i>	L mand, I1-3, C1, P2-4, M1-2	11.13
NHM 2	Pyrenees Nr Abrantos, S of the Tagus, Portugal	Parzudacki clln	1	44.1.18.1	F	<i>C. lupus</i>	L mand, I1-3, C1, P1-4, M1-3	11.29
NHM 3		WC Tait clln.	1	1938.12.7.1	F	<i>C. lupus</i>	R mand, I1-3, C1, P1-4, M1-2	12.68
NHM 5	Riocalado, Burgos, Spain		1	11.10.5.2	F	<i>C. lupus</i>	L mand, I1-3, C1, P1-4, M1-3	10.97
NHM 8	Kocane, Macedonia		1	47.1121.a	F	<i>C. lupus</i>	L mand, I1-3, C1, P1-4, M1-2	10.17
NRM	Korvijaure, 7 miles N Kiruna	15.4.1959	1	A58 0112	F	<i>C. lupus</i>	L+R mand + cranium. R mand I1-3, C1, P1, P2 loose, P3-4, M1-3	10.87
NRM	S Finnskoga, Skrackarberget	1985.07.29	1	A865126	F	<i>C. lupus</i>	L+R mand+cranium. R mand, I1-3, P1-4, M1-3	13.13
NRM	Jadraas, 5km N	1991.06.14	1	A915068	F	<i>C. lupus</i>	L+R mand+cranium. R teeth P4, M1-2	12.76

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	p3p4B
NRM	Vastra Amtervik, Hensgard	1993.02.24	1	A935024	F	<i>C. lupus</i>	L+R mand+cranium. L mand, I1-3, C1, P2-4, M1-2	13.21
NRM	Nas-snoan, v71/jvg	1993.08.18	1	A935178	F	<i>C. lupus</i>	L+R mand+cranium. L mand I1-3, C1, P1-4, M1-3	12.9
NRM	Nyskoga, Kringsberg, Bontjarn	1994.01.19	1	A945045	F	<i>C. lupus</i>	L+R mand+cranium. R mand, I1-3, P1-4, M1-3	11.35
NRM	Vastmandland, Grythyttan	1999.12.17	1	20005111	F	<i>C. lupus</i>	L+R mand+cranium. R mand I2-3, C1, P2-4, M1-3	12.68
NRM	Narke, Degerfors, Atorp	2001.12.26	1	20025005	F	<i>C. lupus</i>	L+R mand+cranium. L mand I1-3, P1-4, M1-3	12.25
NRM	Atorp 3.5 km NW, Degerfors, Varmland	2002.03.05	1	20035026	F	<i>C. lupus</i>	L+R mand+cranium. L mand I1-3, C1, P1-4, M1-3	12.59
NRM	Odlingen, Sillerud, Arjang, Varmland	2004.02.07	1	20045040	F	<i>C. lupus</i>	L+R mand+cranium. R mand I1-3, C1, P1-4, M1-3	11.52
NRM	Ovre Hurr, Tocksfors, Varmland	2006.05.30	1	20065236	F	<i>C. lupus</i>	L+R mand+cranium. L mand, I1-2, C1, P1-4, M1-3	12.48
NRM	Rickebo, Hallbo, Bollnas, Halsingland	2006.03.14	1	20065047	F	<i>C. lupus</i>	L+R mand+cranium. R mand I1-3, C1, P1-4, M1-3	14.34

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	p3p4B
NRM	Ronnas, Ostra, Leksand, Dalarna	2007.10.09	1	20075381	F	<i>C. lupus</i>	L+R mand+cranium. R mand I1-3, C1, P1-4, M1-3	12.32
NRM	Jarbo, Backefors, Dalsland	2007.?	1	20075314	F	<i>C. lupus</i>	L+R mand+cranium. L mand I1-3, C1, P1-4, M1-3	11.64
NRM	Varmland, Nordmark, Algsjion 2 km S Halsingland,	2009.01.25	1	20095063	F	<i>C. lupus</i>	L+R mand+cranium. R mand I1-3, C1, P1 alv, P1-4, M1-3	12.4
NRM	Bollnas, Lottefors; Rv 83	2007.08.19	1	20075312	F	<i>C. lupus</i>	L+R mand + cranium. R mand I1-3, C1, P1-4, M1-3	13.69
NRM	Vastmanland, Hallefors, Ornviken,	2010.01.02	1	20105028	F	<i>C. lupus</i>	L+R mand+cranium. L mand I1-3, C1, P1-4, M1-3	13.17
NHM 4	Riocalado, Burgos, Spain		1	11.10.5.1	M	<i>C. lupus</i>	L mand, I1-3, C1, P1-4, M1-3	12.46
NHM 9	Norbotten, N Sweden (in arctic circle).		1	28.5.4.1	M	<i>C. lupus</i>	L mand, I1-3, C1, P1-4, M1-3	12.43
NHM 6	Seville, Spain		1	95.3.3.6	M	<i>C. lupus</i>	R mand, I1-3, C1, P2-4, M1-3. No P1 or alv	11.17
NHM 7	Ukraine on modern ticket, on skull and original		1	34.6.28.47	M	<i>C. lupus</i>	L mand, I1-3, C1, P3-4, M1-3	13.64

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	p3p4B
NHM 11	Moscow district, Russia		1	82.9.18.2	M	<i>C. lupus</i>	L mand, I1-3, C1 fract, P1-4, M1-3	12.08
NHM Ost	Abrantos, S of Tagus, Portugal		1	1937.2.10.2	M	<i>C. lupus</i>	R mand, I2, C1, P4, M1-3	11.28
NHM Ost	Bosnia, Yugoslavia		1	1935.8.5.1	M	<i>C. lupus</i>	R mand, I1-3, C1, P1-4, M1-2	12.59
NRM	Ljusdal, Ramsjo (s:n)	12.2.1926	1	A580255	M	<i>C. lupus</i>	L+R mand + fract cranium. L mand, I1-3, C1, P1-4, M1-3	12.66
NRM	Jokkmokk	11.02.1852	1	A583532	M	<i>C. lupus</i>	L+R mand + cranium. R mand I1-3, C1, P1-4, M1-3	10.94
NRM	Orebro	1852	1	A583547	M	<i>C. lupus</i>	L+R mand+cranium. R mand I1-3, C1, P1-4, M1-3	11.12
NRM	Sweden	1907	1	A589147	M	<i>C. lupus</i>	L+R mand + cranium. R teeth I1-3, C1, P1-4, M1-2	13.46
NRM	Sweden	1908	1	A589199	M	<i>C. lupus</i>	L+R mand+cranium. L mand I1-3, C1, P1-4, M1-3	14.24
NRM	Luktjomtjuolta, Vilhelmina	15.1.1937	1	A590009	M	<i>C. lupus</i>	L+R mand+cranium. L mand I1-3, C1, P2-4, M1-2	12.37

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	p3p4B
NRM	Lina alv station	25.12.1977	1	A775097	M	<i>C. lupus</i>	L+R mand+cranium. L mand I1, I3, C1, P1-4, M1-3	15.08
NRM	Atran, Ogardet	1984.09.12	1	A845131	M	<i>C. lupus</i>	L+R mand+cranium. R mand I1-3, C1, P1-4, M1-3	13.25
NRM	Hede, 3 mil NV, Norrstadjan	1989.04.17	1	A895039	M	<i>C. lupus</i>	L+R mand+cranium. R mand I1-3, P1-4, M1-3	13.39
NRM	Kiruna-Gallivare, Gaddmyr, Jvg	1992.08.24	1	A925106	M	<i>C. lupus</i>	L+R mand+cranium. R mand, I1-3, P2-4, M1-3	12
NRM	Boras	1996.01.04	1	A965002	M	<i>C. lupus</i>	L+R mand+cranium. L teeth I1-3, C1, P1-4, M1-2	14.52
NRM	Jarna, Flaten, Dalarna Varmland, Eksharad, Halgan;	1999.2.6	1	A995016	M	<i>C. lupus</i>	L+R mand+cranium. R mand, I1-2, P1-4, M1-3	14.51
NRM	Kolarkojan	1999.06.04	1	995230	M	<i>C. lupus</i>	L+R mand+cranium. R mand, I3, C1, P1-4, M1-3	13.14
NRM	Jumkil kyrka, Uppsala	2000.11.19	1	20005365	M	<i>C. lupus</i>	L+R mand+cranium. L mand I1-3, C1, P1-4, M1-3	13.12
NRM	Uddalen, Ed, Dalsland	2003.05.12	1	20035114	M	<i>C. lupus</i>	L+R mand+cranium. R mand I1-3, C1. extra P1? P1, P2-3 broken, P4, M1-3	14.4

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	p3p4B
NRM	Ostermoren, Smedjebacken, Dalarna	2004.12.09	1	20045305	M	<i>C. lupus</i>	L+R mand+cranium. R mand I1-3, C1, P1-4, M1-2, M3 alv	13.86
NRM	Dala Floda, Borlange, Dalarna IV 225 (road?), Osma,	2003.03.09	1	20035024	M	<i>C. lupus</i>	L+R mand+cranium. R mand I1-3, C1, P1 alv, P2-4, M1-3	13.57
NRM	Sodermanland Lanasberget, Grundsjo,	2005.11.26	1	20065027	M	<i>C. lupus</i>	L+broken R mand+cranium. L mand I1-2, C1, P1-4, M1- 2, M3 alv	12.96
NRM	Ljungaverk,	2005.09.02	1	20055287	M	<i>C. lupus</i>	L+R mand+cranium. L mand I1-3, C1, P1-4, M1-3	14.33
NRM	Mullhyttan, Orebro, Narke	2006.09.15	1	20065414	M	<i>C. lupus</i>	L+R mand+cranium. R mand I1-3, C1, P1-4, M1-2, M3 alv	14.04
NRM	Avik, Laxa, Narke	2007.04.27	1	20075186	M	<i>C. lupus</i>	L+R mand + cranium. L mand I1-3, C1, P1 alv, P2-4, M1-2, M3 alv	15.38
NRM	Malung-Appelbo, Dalarna	2007.12	1	20085027	M	<i>C. lupus</i>	L+R mand +cranium. L mand, I1-3, C1, P1-4, M1-3	13.43
NRM	Dalarna, Torsby, Ostmark; Sojensoasen	2007.09.15	1	20075373	M	<i>C. lupus</i>	L+R mand+cranium. R mand I1-3, C1, P1-4, M1-3	14.76
NRM	Stormosse, Piro, Bjorneborg, Kristinehamn,	2007.12.27	1	20085036	M	<i>C. lupus</i>	L+R mand+cranium. L mand I1-3, C1, P1-4, M1-3	14.48

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	p3p4B
NMW PH1.147	Ogof yr Ychen	Abyss Chamber 3	2	864		<i>C. lupus</i>	L mand, C1, P1-4, M1-2	12.52
SMES bay 4, iv 266 drw	Black Rock Quarry		3	D2604	Pres by T Roberts, 1882	<i>C. lupus</i>	L mand, P2-4, M1-2	12.85
NHM 43 C	Kents Cavern		3	15636	McEnery clln	<i>C. lupus</i>	R ramus mand, C1, P1-4, M1-2	13.67
TM G/B2/189	Kents Cavern		3	P17647	4th June 1926	<i>C. lupus</i>	R ramus, M1. Alvs P1-4, ant M2	12.04
NHM 43 E drw 24	Oreston Cave		3	46981	Purch 1876	<i>C. lupus</i>	2). L ramus, C1, P1-4, M1-2	11.07
NHM 43 E drw 24	Oreston Cave		3	46981 1989 G 140 1.1	Purch 1876	<i>C. lupus</i>	3). L ramus incl P3, P2, P1, C1	13.61
WH	Oreston Cave		3	(FS04323)		<i>C. lupus</i>	L mand ramus, P2-4, M1-2	13.65
SM Blue boxes	Paviland		3	SM.1836.6.1 45.1		<i>C. lupus</i>	L mand P1-4, M1-2	12.35
SM Blue boxes	Paviland		3	SM.1836.6.3 05.1		<i>C. lupus</i>	L mand ramus, P2-4, M1-2	12.04

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	p3p4B
SM Blue boxes	Paviland		3	SM.1836.6.3 11		<i>C. lupus</i>	L mand ramus, M1	12.09
MM R4 CoIE D 1	Pin Hole		3	LL.1995		<i>C. lupus</i>	L mand ramus, P1-4, M1-2	12.07
MM Gallery	Pin Hole		3	LL11898 TTNCM		<i>C. lupus</i>	L mand, I2-3, C1, post P2, P3-4, M1-3	12.6
SHC D27/3	Sandford Hill		3	44/1995/61/ 4	Rev'd. D. Williams & Beard clln	<i>C. lupus</i>	R mand ramus, P4, M1-2	11.34
NHM 45D drw 13	Banwell Bone Cave		5a	M404d	Egerton clln, 1882	<i>C. lupus</i>	R mannd ramus, C1, P2-M2.	13.63
NHM Andy's office	Banwell Bone Cave		5a	M84868	Percy Baker clln	<i>C. lupus</i>	R mand, P1-4, M1-2	13.93
SHC D19/4	Banwell Bone Cave		5a	TTNCM 40/1995/61	William Beard clln	<i>C. lupus</i>	R mand ramus, post P3, P4, M1-3	16.01
SHC D19/4	Banwell Bone Cave		5a	TTNCM 40/1995/58	William Beard clln	<i>C. lupus</i>	R mand ramus, P1-4, M1-2	16.02
SHC D19/3	Banwell Bone Cave		5a	TTNCM 40/1995/55	William Beard clln	<i>C. lupus</i>	R mand ramus, P4, M1	13.58

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	p3p4B
SHC D19/2	Banwell Bone Cave		5a	TTNCM 40/1995/50	William Beard clln	<i>C. lupus</i>	R mand ramus, P1-4	11.51
SHC D19/2	Banwell Bone Cave		5a	TTNCM 40/1995/49	William Beard clln	<i>C. lupus</i>	R mand ramus, P2-4	14.62
SHC Display SM From fox & wolf box in display case 9	Banwell Bone Cave Bosco's Den		5a	45/1995/634 SM. 1858.1.60		<i>C. lupus</i>	R mand, C1, P2-4, M1. R mand ramus, P4, M1	13.72 10.5
MM R5 ColK D15	Windy Knoll		5a	P2496a-j	Dawkins	<i>C. lupus</i>	L mand ramus, C1, M1-2	12.03
UMZC	Wretton		5a	Wr1a 1989 G 141 88 (FS 04700)		<i>C. lupus</i>	R mand C1, P1-4, M1-2, M3 alv	12.92
WH	Steetley Quarry		5a		C. Stringer BMNH excav, pres Nat Trust Wales to	<i>C. lupus</i>	R mand ramus, P3-4, M1	13.21
NHM 23 K	Bacon Hole		5c	M43527		<i>C. lupus</i>	R mand ramus frag, P3, M1 post, M2	13.69
TM G/B6/B112	Joint Mitnor Cave		5e	P35082	1940	<i>C. lupus</i>	R ramus, P1-4, M1-2	12.84

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	p3p4B
BGS 483956	Clevedon Cave		6	16350		<i>C. lupus</i>	R mand, P2-4, M1-3	11.59
BC	Clevedon Cave		6	Ce15089	S.H. Reynolds	<i>C. lupus</i>	R ant ramus, post P2, P3 and P4 roots	11.29
BC	Clevedon Cave		6	Ce15088	S.H. Reynolds	<i>C. lupus</i>	R ramus, P2, M1 roots	13.89
BC	Clevedon Cave		6	Ce12520	B. N. S. Soc	<i>C. lupus</i>	R mand ramus, C1, P2-4, M1	14.32
SHC D46/1	Bleadon Cave		7	TTNCM 41/1995/12	W. Beard clln	<i>C. lupus</i>	R mand, P1-4, M1-2	12.64
NHM 48 C	Crayford		7	M5047a	pres by FCJ Spurrell esq, 1894	<i>C. lupus</i>	L mand ramus, C1 and fract M1	10.16
NHM 44 D drw 7	Hutton Cave		7	44739a	none	<i>C. lupus</i>	From above, RP2-4, M1 tal	11.79
SHC D40/2	Hutton Cave		7	TTNCM 42/1995/738	Rev D Williams and W Beard clln	<i>C. lupus</i>	R mand, P2-4, M1-2	11.05
SHC D40/2	Hutton Cave		7	TTNCM 42/1995/44	Rev D Williams and W Beard clln	<i>C. lupus</i>	From above, R mand, C1, P1-2	11.34

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	p3p4B
BGS 483847	Ilford		7	204	Dr RP Cotton clln, pres by Cotton, 1878	<i>C. lupus</i>	R mand ramus frag, C1, P2-4, M1-2	11
StM 70	Hohler fels im Achtal, Germany		2.4	none		<i>C. lupus</i>	L mand, P3-4, roots M1	12.65
SIW	Ranis, Thuringia, Germany		2.4	1988/22377 (Ranis 21896)		<i>C. lupus</i>	L mand ramus, M1-2	12.95
StM 80	Villa Seckendorf, Bad Canstatt, Germany	Stuttgart Travertine	2.8	37300 (12.2.57.o.f)	in Ziegler, 1996 fig'rd	<i>C. lupus</i>	L + R mand ramii. L mand ramus I3, C1, P1-4	11.61
StM 80	Villa Seckendorf, Bad Canstatt, Germany	Stuttgart Travertine	2.8	31397 (SE.26.2.57/1)		<i>C. lupus</i>	L mand ramus, P1-4, M1	14.89
NHM 52 B	Grays Thurrock		9	23140	purch'd 1849	<i>C. mosbachensis</i>	L ramus portion, P2-4, M1 root	12.27
NHM 25 E d 14	Boxgrove		13	F2+3/2		<i>C. mosbachensis</i>	L mand ramus, I3, C1, P1-4, M1-2, frag M3	7.86
NHM 25 F d 25	Boxgrove		13	F9/3		<i>C. mosbachensis</i>	L mand, C1 frag, P3-4, M1-2	7.98
NHM 44D 3rd drw from top	Westbury		13	M33942	Bishop clln	<i>C. mosbachensis</i>	L mand, M1	10.19

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	p3p4B
NHM 44D 3rd drw from top	Westbury		13	M33940	M Bishop 1974	<i>C. mosbachensis</i>	L mand ramus, P2-4, M1-3	9.28
NHM 44D 3rd drw from top	Westbury		13	M33937	M Bishop 1974	<i>C. mosbachensis</i>	Left mand ramus, P4, M1-2	8.7
NHM 55 D d 14	Overstrand		15	M17932	A.C. Savin 1946	<i>C. mosbachensis</i>	L ramus, P2, ant P4	8.92
NHM 55 E	Sidestrand		13	M6169	A.C. Savin 1897	<i>C. mosbachensis</i>	R mandible ramus P2-M1	11.47
VER 00441	Monte Zoppega, Soave, Italy		3.4	V10919		<i>C. mosbachensis</i>	R mand ramus, P1-4, M1	7.73
SIW 1 d 4	Untermassfeld, Germany		4	1980/15308 (Mei 14820)		<i>C. mosbachensis</i>	R mand, C1, P1-4, M1-3	8.85
SIW 1 d 4	Untermassfeld, Germany		4	1980/15919 (Mei 15430)		<i>C. mosbachensis</i>	R mand ramus, C1, P3-4, M1	9.69
SIW 1 d 4	Untermassfeld, Germany		4	1984/20111 (Mei 19631)		<i>C. mosbachensis</i>	R mand ramus, C1, P2-4, ant M1	10.28
SIW 1 d 4	Untermassfeld, Germany		4	1980/16969 (Mei 16460)		<i>C. mosbachensis</i>	R mand ramus, C1, P2-4, M1-2	9.65

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	p3p4B
SIW 1 d 4	Untermassfeld, Germany		4	1986/21085 (Mei 20604)		<i>C. mosbachensis</i>	R mand ramus, P2-4, M1-2	8.24
SIW 1 d 4	Untermassfeld, Germany		4	1980/17151 (Mei 16672)		<i>C. mosbachensis</i>	R mand ramus, C1, P1-4, M1-2	8.12
SIW 1 d 4	Untermassfeld, Germany		4	1980/16553 (Mei 16074)		<i>C. mosbachensis</i>	R mand, C1, P2-4, M1-2	8.38
SIW 1 d 4	Untermassfeld, Germany		4	1982/17995 (Mei 17515)		<i>C. mosbachensis</i>	R mand, P1-4, M1-3	9.32
SIW 1 d 4	Untermassfeld, Germany		4	1982/17970 (mei 17490)		<i>C. mosbachensis</i>	R mand frag, P3-4	8.48
FLO 0/02/013/04 (d4)	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF878		<i>C. arnensis</i>	With cranial frag, PAIR. R mand, P3-4, M1-3	8.04
FLO 0/02/013/04 (d4)	Il Tasso, Italy	Upper Valdarno	4.4	IGF887		<i>C. arnensis</i>	In box with max. R mand, P1-4, M1-3	8.09
FLO Strozzi Sala	Upper Valdarno, Italy	Upper Valdarno	4.4	11800		<i>C. arnensis</i>	R mand ramus, P1-4, M1-2, M3 alv	8.15
FLO 0/02/013/05	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF877		<i>C. arnensis</i>	upper palate, L+R mands. R mand ramus, P2-4, M1-3	7.88

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	p3p4B
FLO Gallery	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF869		<i>C. arnensis</i>	With cranium, L+R mands. R mand, C1, P1-4, M1-3	7.81
FLO 0/02/013/01 (d1)	Upper Valdarno, Italy		4.4	IGF888		<i>C. etruscus</i>	L+ R mands PAIR. R mand ramus, P2-4, M1	8.93
FLO 0/02/013/01 (d1)	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF856		<i>C. etruscus</i>	R mand, C1, P1-4, M1-3	10.31
FLO 0/02/013/02 (d2)	Se Ville, Italy	Upper Valdarno	4.4	IGF882		<i>C. etruscus</i>	R mand ramus, P4, M1-3	9.68
FLO 0/02/013/02 (d2)	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF880		<i>C. majori (etruscus)</i>	R mand ramus, C1, P1-2, P4, M1	12.03
FLO 0/02/013/02 (d2)	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF859		<i>C. etruscus</i>	R mand ramus, C1, P2-4, M1	10.69
FLO Strozzi Sala	Upper Valdarno, Italy	Upper Valdarno	4.4	871		<i>C. etruscus</i>	R mand, I2-3, C1, P1-4, M1-2	10.21
FLO 0/02/013/05	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF12868		<i>C. etruscus</i>	R mand ramus, P2, M1	10.3
FLO 0/02/013/05	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF873		<i>C. majori (etruscus)</i>	R mand, I3, C1, P2-4, M1-3	8.78

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	p3p4B
NHM 35 L d 23 FLO 0/02/013/07 (d7)	Val di Magna, Olivola, Italy	Olivola	4.4	M5680	Forsyth Major, Oct 1895	<i>C. etruscus</i>	L ramus, P4, M1-2	10.02
FLO 0/02/013/07 (d7)	Val di Magna, Italy	Olivola	4.4	IGF4473		<i>C. etruscus</i>	L mand ramus, P2? P4, M1, M2	8.4
FLO 0/02/013/07 (d7)	Val di Magna, Italy	Olivola	4.4	IGF4413		<i>C. etruscus</i>	L mand, I2-3, C1, P1, P3-4, M1, def M2??	9.09
FLO 0/02/013/07 (d7)	Val di Magna, Italy	Olivola	4.4	IGF4471		<i>C. etruscus</i>	L mand, C1 root, frag P2, frag P4, M1-2	10.88
FLO 0/02/013/07 (d7)	Val di Magna, Italy	Olivola	4.4	IGF4470		<i>C. etruscus</i>	L mand, I2-3 roots, C1 root, P1-2 roots, M1, M2 frags. M3 infilled alv	9.1

22. m1m2D

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	m1m2D
NHM 1	France		1	1843.12.29.7	F	<i>C. lupus</i>	L mand, I1-3, C1, P2-4, M1-2	26.99
NHM 2	Pyrenees Nr Abrantos, S of the Tagus, Portugal	Parzudacki clln	1	44.1.18.1	F	<i>C. lupus</i>	L mand, I1-3, C1, P1-4, M1-3	27.83
NHM 3		WC Tait clln.	1	1938.12.7.1	F	<i>C. lupus</i>	R mand, I1-3, C1, P1-4, M1-2	28.08
NHM 5	Riocalado, Burgos, Spain		1	11.10.5.2	F	<i>C. lupus</i>	L mand, I1-3, C1, P1-4, M1-3	24.62
NHM 8	Kocane, Macedonia		1	47.1121.a	F	<i>C. lupus</i>	L mand, I1-3, C1, P1-4, M1-2	26.06
NRM	Korvijaure, 7 miles N Kiruna	15.4.1959	1	A58 0112	F	<i>C. lupus</i>	L+R mand + cranium. R mand I1-3, C1, P1, P2 loose, P3-4, M1-3	28.53
NRM	S Finnskoga, Skrackarberget	1985.07.29	1	A865126	F	<i>C. lupus</i>	L+R mand+cranium. R mand, I1-3, P1-4, M1-3	31.37
NRM	Jadraas, 5km N	1991.06.14	1	A915068	F	<i>C. lupus</i>	L+R mand+cranium. R teeth P4, M1-2	33.43

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	m1m2D
NRM	Vastra Amtervik, Hensgard	1993.02.24	1	A935024	F	<i>C. lupus</i>	L+R mand+cranium. L mand, I1-3, C1, P2-4, M1-2	31.8
NRM	Nas-snoan, v71/jvg	1993.08.18	1	A935178	F	<i>C. lupus</i>	L+R mand+cranium. L mand I1-3, C1, P1-4, M1-3	32.92
NRM	Nyskoga, Kringsberg, Bontjarn	1994.01.19	1	A945045	F	<i>C. lupus</i>	L+R mand+cranium. R mand, I1-3, P1-4, M1-3	32.25
NRM	Vastmandland, Grythyttan	1999.12.17	1	20005111	F	<i>C. lupus</i>	L+R mand+cranium. R mand I2-3, C1, P2-4, M1-3	34.2
NRM	Narke, Degerfors, Atorp	2001.12.26	1	20025005	F	<i>C. lupus</i>	L+R mand+cranium. L mand I1-3, P1-4, M1-3	32.48
NRM	Atorp 3.5 km NW, Degerfors, Varmland	2002.03.05	1	20035026	F	<i>C. lupus</i>	L+R mand+cranium. L mand I1-3, C1, P1-4, M1-3	33.62
NRM	Odlingen, Sillerud, Arjang, Varmland	2004.02.07	1	20045040	F	<i>C. lupus</i>	L+R mand+cranium. R mand I1-3, C1, P1-4, M1-3	34.81
NRM	Ovre Hurr, Tocksfors, Varmland	2006.05.30	1	20065236	F	<i>C. lupus</i>	L+R mand+cranium. L mand, I1-2, C1, P1-4, M1-3	34.61
NRM	Rickebo, Hallbo, Bollnas, Halsingland	2006.03.14	1	20065047	F	<i>C. lupus</i>	L+R mand+cranium. R mand I1-3, C1, P1-4, M1-3	37.41

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	m1m2D
NRM	Ronnas, Ostra, Leksand, Dalarna	2007.10.09	1	20075381	F	<i>C. lupus</i>	L+R mand+cranium. R mand I1-3, C1, P1-4, M1-3	31.37
NRM	Jarbo, Backefors, Dalsland	2007.?	1	20075314	F	<i>C. lupus</i>	L+R mand+cranium. L mand I1-3, C1, P1-4, M1-3	31.29
NRM	Varmland, Nordmark, Algsjion 2 km S Halsingland,	2009.01.25	1	20095063	F	<i>C. lupus</i>	L+R mand+cranium. R mand I1-3, C1, P1 alv, P1-4, M1-3	31.5
NRM	Bollnas, Lottefors; Rv 83	2007.08.19	1	20075312	F	<i>C. lupus</i>	L+R mand + cranium. R mand I1-3, C1, P1-4, M1-3	34.4
NRM	Vastmanland, Hallefors, Ornviken,	2010.01.02 On note 'C. l.	1	20105028	F	<i>C. lupus</i>	L+R mand+cranium. L mand I1-3, C1, P1-4, M1-3	35.3
NHM 4	Riocalado, Burgos, Spain	signatus doubtfully distinct from C. l.	1	11.10.5.1	M	<i>C. lupus</i>	L mand, I1-3, C1, P1-4, M1-3	27.87
NHM 9	Norbotten, N Sweden (in arctic circle).	On note '2	1	28.5.4.1	M	<i>C. lupus</i>	L mand, I1-3, C1, P1-4, M1-3	30.22
NHM 6	Seville, Spain	carnassials in tooth case'	1	95.3.3.6	M	<i>C. lupus</i>	R mand, I1-3, C1, P2-4, M1-3. No P1 or alv	30.06
NHM 7	Ukraine on modern ticket, on skull and original		1	34.6.28.47	M	<i>C. lupus</i>	L mand, I1-3, C1, P3-4, M1-3	31.11

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	m1m2D
NHM 11	Moscow district, Russia		1	82.9.18.2	M	<i>C. lupus</i>	L mand, I1-3, C1 fract, P1-4, M1-3	31.87
NHM Ost	Abrantos, S of Tagus, Portugal		1	1937.2.10.2	M	<i>C. lupus</i>	R mand, I2, C1, P4, M1-3	28.58
NHM Ost	Bosnia, Yugoslavia		1	1935.8.5.1	M	<i>C. lupus</i>	R mand, I1-3, C1, P1-4, M1-2	28.18
NRM	Ljusdal, Ramsjo (s:n)	12.2.1926	1	A580255	M	<i>C. lupus</i>	L+R mand + fract cranium. L mand, I1-3, C1, P1-4, M1-3	31.81
NRM	Jokkmokk	11.02.1852	1	A583532	M	<i>C. lupus</i>	L+R mand + cranium. R mand I1-3, C1, P1-4, M1-3	30.59
NRM	Orebro	1852	1	A583547	M	<i>C. lupus</i>	L+R mand+cranium. R mand I1-3, C1, P1-4, M1-3	30.32
NRM	Sweden	1907	1	A589147	M	<i>C. lupus</i>	L+R mand + cranium. R teeth I1-3, C1, P1-4, M1-2	34.61
NRM	Sweden	1908	1	A589199	M	<i>C. lupus</i>	L+R mand+cranium. L mand I1-3, C1, P1-4, M1-3	33.1
NRM	Luktjomtjuolta, Vilhelmina	15.1.1937	1	A590009	M	<i>C. lupus</i>	L+R mand+cranium. L mand I1-3, C1, P2-4, M1-2	31.28

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	m1m2D
NRM	Lina alv station	25.12.1977	1	A775097	M	<i>C. lupus</i>	L+R mand+cranium. L mand I1, I3, C1, P1-4, M1-3	34.79
NRM	Atran, Ogardet	1984.09.12	1	A845131	M	<i>C. lupus</i>	L+R mand+cranium. R mand I1-3, C1, P1-4, M1-3	36.7
NRM	Hede, 3 mil NV, Norrstadjan	1989.04.17	1	A895039	M	<i>C. lupus</i>	L+R mand+cranium. R mand I1-3, P1-4, M1-3	34.38
NRM	Kiruna-Gallivare, Gaddmyr, Jvg	1992.08.24	1	A925106	M	<i>C. lupus</i>	L+R mand+cranium. R mand, I1-3, P2-4, M1-3	35.47
NRM	Boras	1996.01.04	1	A965002	M	<i>C. lupus</i>	L+R mand+cranium. L teeth I1-3, C1, P1-4, M1-2	36.57
NRM	Jarna, Flaten, Dalarna Varmland, Eksharad, Halgan;	1999.2.6	1	A995016	M	<i>C. lupus</i>	L+R mand+cranium. R mand, I1-2, P1-4, M1-3	37.76
NRM	Kolarkojan	1999.06.04	1	995230	M	<i>C. lupus</i>	L+R mand+cranium. R mand, I3, C1, P1-4, M1-3	36.09
NRM	Jumkil kyrka, Uppsala	2000.11.19	1	20005365	M	<i>C. lupus</i>	L+R mand+cranium. L mand I1-3, C1, P1-4, M1-3	36.74
NRM	Uddalen, Ed, Dalsland	2003.05.12	1	20035114	M	<i>C. lupus</i>	L+R mand+cranium. R mand I1-3, C1. extra P1? P1, P2-3 broken, P4, M1-3	35.24

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	m1m2D
NRM	Ostermoren, Smedjebacken, Dalarna	2004.12.09	1	20045305	M	<i>C. lupus</i>	L+R mand+cranium. R mand I1-3, C1, P1-4, M1-2, M3 alv	36.06
NRM	Dala Floda, Borlange, Dalarna IV 225 (road?), Osmo,	2003.03.09	1	20035024	M	<i>C. lupus</i>	L+R mand+cranium. R mand I1-3, C1, P1 alv, P2-4, M1-3	35.23
NRM	Sodermanland Lanasberget, Grundsjo,	2005.11.26	1	20065027	M	<i>C. lupus</i>	L+broken R mand+cranium. L mand I1-2, C1, P1-4, M1- 2, M3 alv	34.84
NRM	Ljungaverk,	2005.09.02	1	20055287	M	<i>C. lupus</i>	L+R mand+cranium. L mand I1-3, C1, P1-4, M1-3	35.8
NRM	Mullhyttan, Orebro, Narke	2006.09.15	1	20065414	M	<i>C. lupus</i>	L+R mand+cranium. R mand I1-3, C1, P1-4, M1-2, M3 alv	39.06
NRM	Avik, Laxa, Narke	2007.04.27	1	20075186	M	<i>C. lupus</i>	L+R mand + cranium. L mand I1-3, C1, P1 alv, P2-4, M1-2, M3 alv	38.28
NRM	Malung-Appelbo, Dalarna	2007.12	1	20085027	M	<i>C. lupus</i>	L+R mand +cranium. L mand, I1-3, C1, P1-4, M1-3	32.91
NRM	Dalarna, Torsby, Ostmark; Sojensoasen	2007.09.15	1	20075373	M	<i>C. lupus</i>	L+R mand+cranium. R mand I1-3, C1, P1-4, M1-3	35.01

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	m1m2D
NRM	Stormosse, Piro, Bjerneborg, Kristinehamn, Varmland	2007.12.27	1	20085036	M	<i>C. lupus</i>	L+R mand+cranium. L mand I1-3, C1, P1-4, M1-3	35.14
NMW PH1.147	Ogof yr Ychen	Abyss chamber 3	2	864		<i>C. lupus</i>	L mand, C1, P1-4, M1-2	29.81
SMES bay 4, iv 266 drw	Black Rock quarries, Tenby		3	D2610	Pres by T Roberts, 1882	<i>C. lupus</i>	Back portion of R mand, M1-2	31.82
SMES bay 4, iv 266 drw	Black Rock quarries, Tenby		3	D2605	Pres by T Roberts, 1882	<i>C. lupus</i>	R mand, I2-3, C1, P2, P4, M1-2	26.27
NHM 43 C	Kent's Cavern		3	15636	McEnergy clln	<i>C. lupus</i>	R ramus mand, C1, P1-4, M1-2	34.97
TM G/B1/B209	Kents Cavern	Cave Earth	3	P12405	W. Pengelly	<i>C. lupus</i>	R mand frag, M1 post, M2	28.98
NHM 43 E drw 24	Oreston Cave	Pres type 2	3	46981	none listed	<i>C. lupus</i>	R ramus frag, P2-P4, M1-2	31.39
SM Blue boxes	Paviland		3	SM.1836.6.3 04		<i>C. lupus</i>	R mand frag, M1-2	33.18

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	m1m2D
MM R4 CoE D 1	Pin Hole Cave	PH (F)	3	LL.1997		<i>C. lupus</i>	L mand ramus, M1	30.17
MM Gallery	Pin Hole		3	LL11898		<i>C. lupus</i>	L mand, I2-3, C1, post P2, P3-4, M1-3	30.42
SHC D27/3	Sandford Hill, Soms		3	TTNCM 44/1995/61/4	Rev'd. D. Williams & Beard clln	<i>C. lupus</i>	R mand ramus, P4, M1-2	29.72
NHM 45D drw 13	Banwell Bone Cave		5a	M404d	Egerton clln, 1882	<i>C. lupus</i>	R mand ramus, C1, P2-M2.	32.48
NHM 45D drw 13	Banwell Bone Cave		5a	M223	Enniskillen clln	<i>C. lupus</i>	R mand ramus, P3-4, M1-2	30.32
NHM 45D drw 13	Banwell Bone Cave		5a	44642	Pres Benj Bright esq, 1873	<i>C. lupus</i>	R mand frag, M1, P4.	35.01
NHM Andy's office	Banwell Bone Cave	Entrance to Baker's Pit extension, 1950's	5a	M84868	Percy Baker clln	<i>C. lupus</i>	R mand, P1-4, M1-2	30.74
SHC D19/4	Banwell Bone Cave	Cave dep	5a	TTNCM 40/1995/61	William Beard clln	<i>C. lupus</i>	R mand ramus, post P3, P4, M1-3	34.59
SHC D19/4	Banwell Bone Cave		5a	TTNCM 40/1995/58	William Beard clln	<i>C. lupus</i>	R mand ramus, P1-4, M1-2	32.76

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	m1m2D
SHC D19/4	Banwell Bone Cave		5a	TTNCM 40/1995/60	William Beard clln	<i>C. lupus</i>	R mand ramus, P4, M1-3	33.62
SHC D19/3	Banwell Bone Cave	Cave dep	5a	TTNCM 40/1995/51	William Beard clln	<i>C. lupus</i>	R post mand frag, M2	32.9
SHC D19/3	Banwell Bone Cave		5a	TTNCM 40/1995/59	William Beard clln	<i>C. lupus</i>	R post mand frag, M1-3	30.61
SHC D19/3	Banwell Bone Cave		5a	TTNCM 40/1995/55	William Beard clln	<i>C. lupus</i>	R mand ramus, P4, M1	28.79
SHC D19/3	Banwell Bone Cave		5a	TTNCM 40/1995/57	William Beard clln	<i>C. lupus</i>	R mand ramus, M1-3	30.47
SHC Display SM From fox & wolf box in display case 9	Banwell Bone Cave		5a	45/1995/634		<i>C. lupus</i>	R mand, C1, P2-4, M1.	30.46
	Bosco's Den		5a	SM. 1858.1.20		<i>C. lupus</i>	L mand ramus, C1, P1-4, ant M1	34.29
NHM 53A, 2nd drw btm	Stump Cross Cave		5a	M43234	Stump cross cave 1980 III c	<i>C. lupus</i>	R ramus, P1, frag P2, frag P3, P4, M1-2	35.52
MM R5 colK D14	Windy Knoll		5a	P2496		<i>C. lupus</i>	L mand frag, M1-3	29.9

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	m1m2D
MM R5 ColK D15	Windy Knoll		5a	P2496a-j	Dawkins	<i>C. lupus</i>	L mand ramus, C1, M1-2	28.6
UMZC	Wretton, Norfolk		5a	Wr1a		<i>C. lupus</i>	R mand C1, P1-4, M1-2, M3 alv	29.54
NHM 23 K	Bacon Hole	Area 5, field no 145, 145a, 1977.	5c	M43527	C. Stringer BMNH excav, pres Nat Trust Wales to	<i>C. lupus</i>	R mand ramus frag, P3, M1 post, M2	33.86
TM G/B6/B112	Joint Mitnor Cave		5e	P35082	1940	<i>C. lupus</i>	R ramus, P1-4, M1-2	31.83
TM G/B6/B112	Joint Mitnor Cave		5e	P35085	1940	<i>C. lupus</i>	R ramus frag, P4, M1-2	33.73
BGS 483956	Clevedon Cave, Soms		6	16350		<i>C. lupus</i>	R mand, P2-4, M1-3	30.1
SHC D46/1	Bleadon Cavern		7	TTNCM 41/1995/12	W. Beard clln Pres'd by Rev.	<i>C. lupus</i>	R mand, P1-4, M1-2	29.42
SHC D65/3	Bleadon		7	TTNCM 41/1995/300 1	Wadham Pigott Williams, 1878	<i>C. lupus</i>	R mand, P4, M1-2	27.3
NHM 48 C	Crayford		7	M5047b	Spurrell clln	<i>C. lupus</i>	L mand, P4, M1, fract M2	26.69

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	m1m2D
NHM 44 D drw 7	Hutton Cave	none	7	44739a	none	<i>C. lupus</i>	From above, RP2-4, M1 tal	29.29
SHC D40/2	Hutton Cave		7	TTNCM 42/1995/738	Rev D Williams and W Beard clln	<i>C. lupus</i>	R mand, P2-4, M1-2	31.35
SHC D40/2	Hutton Cave		7	TTNCM 42/1995/44	Rev D Williams and W Beard clln Dr RP Cotton clln, pres by Cotton,	<i>C. lupus</i>	From above, R mand, C1, P1-2	30.25
BGS 483847	Ilford, Essex		7	204	1878	<i>C. lupus</i>	R mand ramus frag, C1, P2- 4, M1-2	30.73
StM 70	Hohler fels im Achtal, Germany		2.4	none		<i>C. lupus</i>	L mand, P3-4, roots M1	28.3
SIW	Ranis, Thuringia, Germany		2.4	1988/22377 (Ranis 21896)		<i>C. lupus</i>	L mand ramus, M1-2	31.85
NHM Andy's Office	Cudmore Grove	Detrital shell bed in estuarine channel filling	9		John Claydon 1985- 6	<i>C. mosbachensis</i>	L mand ramus frag, M2. With broken mand frags in box	25.13
NHM 25 F d 25	Boxgrove	Project A, Q2, area 17, unit 4c surface, field no F9 (part)	13	F9/2		<i>C. mosbachensis</i>	R mand, C1, P2-4, M1	18.25

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	m1m2D
NHM 44D 3rd drw from top	Westbury	no strat info	13	M33942	Bishop clln	<i>C. mosbachensis</i>	L mand, M1	24.31
NHM 44D 3rd drw from top	Westbury	Bed 3	13	M33937	M Bishop 1974	<i>C. mosbachensis</i>	Left mand ramus, P4, M1-2	22.86
NHM 44 E drw 18	Westbury	Calcareous memb unstrat	13	M33642	Bishop, 1974 AC Savin clln, 1946. Cat 1654.	<i>C. mosbachensis</i>	L edentulate mand ramus	19.99
NHM 47 B	West Runton	Upper freshwater bed	17	M17936	cll'd 1931	<i>C. mosbachensis</i>	R ramus fragment, M2 present.	21.14
VER 00441	Cengelle II, Soave, Italy		3.4	V10138		<i>C. mosbachensis</i>	R mand post	24.3
VER 00441	Monte Zoppega, Soave, Italy		3.4	V10918		<i>C. mosbachensis</i>	R mand ramus, M1-2	19.91
SIW 1 d 4	Untermassfeld, Germany		4	1980/15308 (Mei 14820)		<i>C. mosbachensis</i>	R mand, C1, P1-4, M1-3	21.95
SIW 1 d 4	Untermassfeld, Germany		4	1984/20112 (Mei 19632)		<i>C. mosbachensis</i>	R mand ramus, P3-4, M1-3	20.36
SIW 1 d 4	Untermassfeld, Germany		4	1980/16969 (Mei 16460)		<i>C. mosbachensis</i>	R mand ramus, C1, P2-4, M1-2	24.01

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	m1m2D
SIW 1 d 4	Untermassfeld, Germany		4	1980/17151 (Mei 16672)		<i>C. mosbachensis</i>	R mand ramus, C1, P1-4, M1-2	20.25
SIW 1 d 4	Untermassfeld, Germany		4	1980/16553 (Mei 16074)		<i>C. mosbachensis</i>	R mand, C1, P2-4, M1-2	21.59
SIW 1 d 4	Untermassfeld, Germany		4	1982/17995 (Mei 17515)		<i>C. mosbachensis</i>	R mand, P1-4, M1-3	24.61
SIW 1 d 5	Untermassfeld, Germany		4	1980/15357 (mei 14869)		<i>C. mosbachensis</i>	R mand, I3, C1, P1, post P2, P3-4, M1-2	23.41
FLO 0/02/013/01 (d1)	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF868		<i>C. arnensis</i>	With max and basicranium, PAIR. R mand, I1-3, C1, P1-4, M1-3	21.14
FLO 0/02/013/04 (d4)	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF878		<i>C. arnensis</i>	With cranial frag, PAIR. R mand, P3-4, M1-3	21.31
FLO 0/02/013/04 (d4)	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF884		<i>C. arnensis</i>	R mand ramus frag, P4, M1-2	19.68
FLO 0/02/013/04 (d4)	Il Tasso, Italy	Upper Valdarno	4.4	IGF887		<i>C. arnensis</i>	In box with max. R mand, P1-4, M1-3	20.83
FLO Strozzi Sala	Upper Valdarno, Italy	Upper Valdarno	4.4	11800		<i>C. arnensis</i>	R mand ramus, P1-4, M1-2, M3 alv	22.29

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	m1m2D
FLO 0/02/013/05	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF12967		<i>C. arnensis</i>	R mand ramus, P1-4, M1-2	24.95
FLO Gallery	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF869		<i>C. arnensis</i>	With cranium, L+R mands. R mand, C1, P1-4, M1-3	19.18
FLO 0/02/013/01	Upper Valdarno, Italy	Upper Valdarno (Valdarno superiore)	4.4	IGF888		<i>C. etruscus</i>	L and R mands connected by 2 metal posts. L mand ramus, P2-4, M1-2	20.53
FLO 0/02/013/01	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF866		<i>C. etruscus</i>	L mand ramus, P2-4, M1-3	27.32
FLO 0/02/013/01	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF881		<i>C. etruscus</i>	L mand, P4, M1, M3.	22.57
FLO 0/02/013/01	Montecarlo, Italy	Upper Valdarno	4.4	IGF862		<i>C. etruscus</i>	L post mand frag, post M1, M2, M3 alv	23.9
FLO 0/02/013/01	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF886		<i>C. etruscus</i>	L mand ramus, P3 frag, P4, M1, M2 frag	25.86
FLO 0/02/013/01	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF872		<i>Canis majori</i>	L mand, C1, P2-4, M1-2, M3 alv	22.1
FLO Strozzi Sala	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF12469		<i>C. etruscus</i>	L mand, P2-4, M1-2, M3 alv	26.2

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	m1m2D
FLO Strozzi Sala	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF11791		<i>C. etruscus</i>	L mand, I3, C1, P1-4, 1-3	23.75
FLO 0/02/013/05	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF864		<i>C. majori (etruscus)</i>	L mand ramus, P3-4, M1-2, M3 alv	22.47
NHM 35 L d 23	Val di Magna, Olivola, Italy	Olivola	4.4	M5680	Forsyth Major, Oct 1895	<i>C. etruscus</i>	L ramus, P4, M1-2	26.62
FLO 0/02/013/07 (d7)	Val di Magna, Italy	Olivola	4.4	IGF4473		<i>C. etruscus</i>	L mand ramus, P2? P4, M1, M2	25.57
FLO 0/02/013/07 (d7)	Val di Magna, Italy	Olivola	4.4	IGF4413		<i>C. etruscus</i>	L mand, I2-3, C1, P1, P3-4, M1, def M2??	22.74
FLO 0/02/013/07 (d7)	Val di Magna, Italy	Olivola	4.4	IGF4471		<i>C. etruscus</i>	L mand, C1 root, frag P2, frag P4, M1-2	28.26
FLO 0/02/013/07 (d7)	Val di Magna, Italy	Olivola	4.4	IGF4470		<i>C. etruscus</i>	L mand, I2-3 roots, C1 root, P1-2 roots, M1, M2 frags. M3 infilled alv	26.01

23. m1m2B

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	m1m2B
NHM 1	France		1	1843.12.29.7	F	<i>C. lupus</i>	L mand, I1-3, C1, P2-4, M1-2	12.54
NHM 2	Pyrenees Nr Abrantos, S of the Tagus, Portugal	Parzudacki clln	1	44.1.18.1	F	<i>C. lupus</i>	L mand, I1-3, C1, P1-4, M1-3	12.16
NHM 3		WC Tait clln.	1	1938.12.7.1	F	<i>C. lupus</i>	R mand, I1-3, C1, P1-4, M1-2	12.62
NHM 5	Riocalado, Burgos, Spain		1	11.10.5.2	F	<i>C. lupus</i>	L mand, I1-3, C1, P1-4, M1-3	11.33
NHM 8	Kocane, Macedonia		1	47.1121.a	F	<i>C. lupus</i>	L mand, I1-3, C1, P1-4, M1-2	11.24
NRM	Korvijaure, 7 miles N Kiruna	15.4.1959	1	A58 0112	F	<i>C. lupus</i>	L+R mand + cranium. R mand I1-3, C1, P1, P2 loose, P3-4, M1-3	11.18
NRM	S Finnskoga, Skrackarberget	1985.07.29	1	A865126	F	<i>C. lupus</i>	L+R mand+cranium. R mand, I1-3, P1-4, M1-3	13.21
NRM	Jadraas, 5km N	1991.06.14	1	A915068	F	<i>C. lupus</i>	L+R mand+cranium. R teeth P4, M1-2	12.63

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	m1m2B
NRM	Vastra Amtervik, Hensgard	1993.02.24	1	A935024	F	<i>C. lupus</i>	L+R mand+cranium. L mand, I1-3, C1, P2-4, M1-2	14.62
NRM	Nas-snoan, v71/jvg	1993.08.18	1	A935178	F	<i>C. lupus</i>	L+R mand+cranium. L mand I1-3, C1, P1-4, M1-3	13.32
NRM	Nyskoga, Kringsberg, Bontjarn	1994.01.19	1	A945045	F	<i>C. lupus</i>	L+R mand+cranium. R mand, I1-3, P1-4, M1-3	11.25
NRM	Vastmandland, Grythyttan	1999.12.17	1	20005111	F	<i>C. lupus</i>	L+R mand+cranium. R mand I2-3, C1, P2-4, M1-3	12.94
NRM	Narke, Degerfors, Atorp	2001.12.26	1	20025005	F	<i>C. lupus</i>	L+R mand+cranium. L mand I1-3, P1-4, M1-3	11.41
NRM	Atorp 3.5 km NW, Degerfors, Varmland	2002.03.05	1	20035026	F	<i>C. lupus</i>	L+R mand+cranium. L mand I1-3, C1, P1-4, M1-3	11.47
NRM	Odlingen, Sillerud, Arjang, Varmland	2004.02.07	1	20045040	F	<i>C. lupus</i>	L+R mand+cranium. R mand I1-3, C1, P1-4, M1-3	11.55
NRM	Ovre Hurr, Tocksfors, Varmland	2006.05.30	1	20065236	F	<i>C. lupus</i>	L+R mand+cranium. L mand, I1-2, C1, P1-4, M1-3	12.98

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	m1m2B
NRM	Rickebo, Hallbo, Bollnas, Halsingland	2006.03.14	1	20065047	F	<i>C. lupus</i>	L+R mand+cranium. R mand I1-3, C1, P1-4, M1-3	13.4
NRM	Ronnas, Ostra, Leksand, Dalarna	2007.10.09	1	20075381	F	<i>C. lupus</i>	L+R mand+cranium. R mand I1-3, C1, P1-4, M1-3	11.86
NRM	Jarbo, Backefors, Dalsland Varmland, Nordmark,	2007.?	1	20075314	F	<i>C. lupus</i>	L+R mand+cranium. L mand I1-3, C1, P1-4, M1-3	11.22
NRM	Algsjion 2 km S Halsingland, Bollnas, Lottefors;	2009.01.25	1	20095063	F	<i>C. lupus</i>	L+R mand+cranium. R mand I1-3, C1, P1 alv, P1-4, M1-3	11.98
NRM	Rv 83 Vastmanland, Hallefors,	2007.08.19	1	20075312	F	<i>C. lupus</i>	L+R mand + cranium. R mand I1-3, C1, P1-4, M1-3	12.79
NRM	Ornviken,	2010.01.02	1	20105028	F	<i>C. lupus</i>	L+R mand+cranium. L mand I1-3, C1, P1-4, M1-3	12.21
NHM 4	Riocalado, Burgos, Spain		1	11.10.5.1	M	<i>C. lupus</i>	L mand, I1-3, C1, P1-4, M1-3	14.46
NHM 9	Norbotten, N Sweden (in arctic circle).		1	28.5.4.1	M	<i>C. lupus</i>	L mand, I1-3, C1, P1-4, M1-3	12.52

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	m1m2B
NHM 6	Seville, Spain	On note '2 carnassials in tooth case'	1	95.3.3.6	M	<i>C. lupus</i>	R mand, I1-3, C1, P2-4, M1-3. No P1 or alv	11.55
NHM 7	Ukraine on modern ticket, on skull and original		1	34.6.28.47	M	<i>C. lupus</i>	L mand, I1-3, C1, P3-4, M1-3	12.99
NHM 11	Moscow district, Russia		1	82.9.18.2	M	<i>C. lupus</i>	L mand, I1-3, C1 fract, P1-4, M1-3	13.35
NHM Ost	Abrantos, S of Tagus, Portugal		1	1937.2.10.2	M	<i>C. lupus</i>	R mand, I2, C1, P4, M1-3	11.91
NHM Ost	Bosnia, Yugoslavia		1	1935.8.5.1	M	<i>C. lupus</i>	R mand, I1-3, C1, P1-4, M1-2	13.7
NRM	Ljusdal, Ramsjo (s:n)	12.2.1926	1	A580255	M	<i>C. lupus</i>	L+R mand + fract cranium. L mand, I1-3, C1, P1-4, M1-3	12.96
NRM	Jokkmokk	11.02.1852	1	A583532	M	<i>C. lupus</i>	L+R mand + cranium. R mand I1-3, C1, P1-4, M1-3	12.45
NRM	Orebro	1852	1	A583547	M	<i>C. lupus</i>	L+R mand+cranium. R mand I1-3, C1, P1-4, M1-3	14.25

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	m1m2B
NRM	Sweden	1907	1	A589147	M	<i>C. lupus</i>	L+R mand + cranium. R teeth I1-3, C1, P1-4, M1-2	14.38
NRM	Sweden	1908	1	A589199	M	<i>C. lupus</i>	L+R mand+cranium. L mand I1-3, C1, P1-4, M1-3	13.97
NRM	Luktjomtjuolta, Vilhelmina	15.1.1937	1	A590009	M	<i>C. lupus</i>	L+R mand+cranium. L mand I1-3, C1, P2-4, M1-2	11.68
NRM	Lina alv station	25.12.1977	1	A775097	M	<i>C. lupus</i>	L+R mand+cranium. L mand I1, I3, C1, P1-4, M1-3	15.08
NRM	Atran, Ogardet	1984.09.12	1	A845131	M	<i>C. lupus</i>	L+R mand+cranium. R mand I1-3, C1, P1-4, M1-3	12.72
NRM	Hede, 3 mil NV, Norrstadsjan	1989.04.17	1	A895039	M	<i>C. lupus</i>	L+R mand+cranium. R mand I1-3, P1-4, M1-3	13.14
NRM	Kiruna-Gallivare, Gaddmyr, Jvg	1992.08.24	1	A925106	M	<i>C. lupus</i>	L+R mand+cranium. R mand, I1-3, P2-4, M1-3	12.2
NRM	Boras	1996.01.04	1	A965002	M	<i>C. lupus</i>	L+R mand+cranium. L teeth I1-3, C1, P1-4, M1-2	13.56

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	m1m2B
NRM	Jarna, Flaten, Dalarna	1999.2.6	1	A995016	M	<i>C. lupus</i>	L+R mand+cranium. R mand, I1-2, P1-4, M1-3	13.65
NRM	Varmland, Eksharad, Halgan; Kolarkojan	1999.06.04	1	995230	M	<i>C. lupus</i>	L+R mand+cranium. R mand, I3, C1, P1-4, M1-3	14.37
NRM	Jumkil kyrka, Uppsala	2000.11.19	1	20005365	M	<i>C. lupus</i>	L+R mand+cranium. L mand I1-3, C1, P1-4, M1-3	14.15
NRM	Uddalen, Ed, Dalsland	2003.05.12	1	20035114	M	<i>C. lupus</i>	L+R mand+cranium. R mand I1-3, C1. extra P1? P1, P2-3 broken, P4, M1-3	12.94
NRM	Ostermoren, Smedjebacken, Dalarna	2004.12.09	1	20045305	M	<i>C. lupus</i>	L+R mand+cranium. R mand I1-3, C1, P1-4, M1-2, M3 alv	13.9
NRM	Dala Floda, Borlange, Dalarna	2003.03.09	1	20035024	M	<i>C. lupus</i>	L+R mand+cranium. R mand I1-3, C1, P1 alv, P2-4, M1-3	15.18
NRM	IV 225 (road?), Osmo, Sodermanland	2005.11.26	1	20065027	M	<i>C. lupus</i>	L+broken R mand+cranium. L mand I1-2, C1, P1-4, M1-2, M3 alv	13.07
NRM	Lanasberget, Grundsjo, Ljungaverk,	2005.09.02	1	20055287	M	<i>C. lupus</i>	L+R mand+cranium. L mand I1-3, C1, P1-4, M1-3	14.79

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	m1m2B
NRM	Mullhyttan, Orebro, Narke	2006.09.15	1	20065414	M	<i>C. lupus</i>	L+R mand+cranium. R mand I1-3, C1, P1-4, M1-2, M3 alv	13.93
NRM	Avik, Laxa, Narke	2007.04.27	1	20075186	M	<i>C. lupus</i>	L+R mand + cranium. L mand I1-3, C1, P1 alv, P2-4, M1-2, M3 alv	15.37
NRM	Malung-Appelbo, Dalarna	2007.12	1	20085027	M	<i>C. lupus</i>	L+R mand +cranium. L mand, I1-3, C1, P1-4, M1-3	13.16
NRM	Dalarna, Torsby, Ostmark; Sojensoasen	2007.09.15	1	20075373	M	<i>C. lupus</i>	L+R mand+cranium. R mand I1-3, C1, P1-4, M1-3	14.35
NRM	Stormosse, Piro, Bjorneborg, Kristinehamn,	2007.12.27	1	20085036	M	<i>C. lupus</i>	L+R mand+cranium. L mand I1-3, C1, P1-4, M1-3	13.18
NMW PH1.147	Ogof yr Ychen	Abyss chamber 3	2	864		<i>C. lupus</i>	L mand, C1, P1-4, M1-2	12.94
SMES bay 4, iv 266 drw	Black Rock quarries, Tenby		3	D2610	Pres by T Roberts, 1882	<i>C. lupus</i>	Back portion of R mand, M1-2	14.02
SMES bay 4, iv 266 drw	Black Rock quarries, Tenby		3	D2605	Pres by T Roberts, 1882	<i>C. lupus</i>	R mand, I2-3, C1, P2, P4, M1-2	9.82

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	m1m2B
NHM 43 C	Kent's Cavern		3	15636	McEnergy clln	<i>C. lupus</i>	R ramus mand, C1, P1-4, M1-2	14.26
TM G/B1/B209	Kents Cavern	Cave Earth	3	P12405	W. Pengelly	<i>C. lupus</i>	R mand frag, M1 post, M2	12.75
NHM 43 E drw 24	Oreston Cave	Pres type 2	3	46981	none listed	<i>C. lupus</i>	R ramus frag, P2-P4, M1-2	14.84
SM Blue boxes	Paviland		3	SM.1836.6.3 04		<i>C. lupus</i>	R mand frag, M1-2	12.05
MM R4 CoIE D 1	Pin Hole Cave	PH (F)	3	LL.1997		<i>C. lupus</i>	L mand ramus, M1	13.93
MM Gallery	Pin Hole		3	LL11898 TTNCM		<i>C. lupus</i>	L mand, I2-3, C1, post P2, P3-4, M1-3	13.03
SHC D27/3	Sandford Hill, Soms		3	44/1995/61/ 4	Rev'd. D. Williams & Beard clln	<i>C. lupus</i>	R mand ramus, P4, M1-2	11.68
NHM 45D drw 13	Banwell Bone Cave		5a	M404d	Egerton clln, 1882	<i>C. lupus</i>	R mand ramus, C1, P2-M2.	14.71

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	m1m2B
NHM Andy's office	Banwell Bone Cave	Entrance to Baker's Pit extension, 1950's	5a	M84868	Percy Baker clln	<i>C. lupus</i>	R mand, P1-4, M1-2	14.58
SHC D19/4	Banwell Bone Cave	Cave dep	5a	TTNCM 40/1995/61	William Beard clln	<i>C. lupus</i>	R mand ramus, post P3, P4, M1-3	15.33
SHC D19/4	Banwell Bone Cave		5a	TTNCM 40/1995/60	William Beard clln	<i>C. lupus</i>	R mand ramus, P4, M1-3	14.66
SHC D19/3	Banwell Bone Cave	Cave dep	5a	TTNCM 40/1995/51	William Beard clln	<i>C. lupus</i>	R post mand frag, M2	13.78
SHC D19/3	Banwell Bone Cave		5a	TTNCM 40/1995/59	William Beard clln	<i>C. lupus</i>	R post mand frag, M1-3	12.55
SHC D19/3	Banwell Bone Cave		5a	TTNCM 40/1995/55	William Beard clln	<i>C. lupus</i>	R mand ramus, P4, M1	14.19
SHC D19/3	Banwell Bone Cave		5a	TTNCM 40/1995/57	William Beard clln	<i>C. lupus</i>	R mand ramus, M1-3	12.95
SHC Display	Banwell Bone Cave		5a	45/1995/634		<i>C. lupus</i>	R mand, C1, P2-4, M1.	14.65

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	m1m2B
SM From fox & wolf box in display case 9 NHM 53A, 2nd drw from bottom	Bosco's Den		5a	SM. 1858.1.20		<i>C. lupus</i>	L mand ramus, C1, P1-4, ant M1	15.56
	Stump Cross Cave		5a	M43234	Stump cross cave 1980 III c	<i>C. lupus</i>	R ramus, P1, frag P2, frag P3, P4, M1-2	13.73
MM R5 colK D14	Windy Knoll		5a	P2496		<i>C. lupus</i>	L mand frag, M1-3	12.08
MM R5 ColK D15	Windy Knoll		5a	P2496a-j	Dawkins	<i>C. lupus</i>	L mand ramus, C1, M1-2	12.78
UMZC	Wretton, Norfolk		5a	Wr1a		<i>C. lupus</i>	R mand C1, P1-4, M1-2, M3 alv	12.75
NHM 23 K	Bacon Hole	Area 5, field no 145, 145a, 1977.	5c	M43527	C. Stringer BMNH excav, pres Nat Trust Wales to	<i>C. lupus</i>	R mand ramus frag, P3, M1 post, M2	12.89
TM G/B6/B112	Joint Mitnor Cave		5e	P35082	1940	<i>C. lupus</i>	R ramus, P1-4, M1-2	13.34
TM G/B6/B112	Joint Mitnor Cave		5e	P35085	1940	<i>C. lupus</i>	R ramus frag, P4, M1-2	14.91

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	m1m2B
BGS 483956	Clevedon Cave, Soms		6	16350		<i>C. lupus</i>	R mand, P2-4, M1-3	12.48
SHC D46/1	Bleadon Cavern	Fissure in Bleadon quarry, Bleadon, Soms, 1872.	7	TTNCM 41/1995/12	W. Beard clln Pres'd by Rev.	<i>C. lupus</i>	R mand, P1-4, M1-2	12.14
SHC D65/3	Bleadon Cavern		7	TTNCM 41/1995/300	Wadham Pigott Williams, 1878	<i>C. lupus</i>	R mand, P4, M1-2	12.53
NHM 48 C	Crayford		7	M5047a	pres by FCJ Spurrell esq, 1894	<i>C. lupus</i>	L mand ramus, C1 and fract M1	10.88
NHM 48 C	Crayford		7	M5047b	Spurrell clln	<i>C. lupus</i>	L mand, P4, M1, fract M2	11.79
NHM 44 D drw 7	Hutton Cave	none	7	44739a	none	<i>C. lupus</i>	From above, RP2-4, M1 tal	11.02
SHC D40/2	Hutton Cave		7	TTNCM 42/1995/738	Rev D Williams and W Beard clln	<i>C. lupus</i>	R mand, P2-4, M1-2	12.46
SHC D40/2	Hutton Cave		7	TTNCM 42/1995/44	Rev D Williams and W Beard clln	<i>C. lupus</i>	From above, R mand, C1, P1- 2	10.84

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	m1m2B
BGS 483847	Ilford, Essex		7	204	Dr RP Cotton colln, pres by Cotton, 1878	<i>C. lupus</i>	R mand ramus frag, C1, P2-4, M1-2	12.17
StM 70	Hohler fels im Achtal, Germany		2.4	none		<i>C. lupus</i>	L mand, P3-4, roots M1	13.03
SIW	Ranis, Thuringia, Germany		2.4	1988/22377 (Ranis 21896)		<i>C. lupus</i>	L mand ramus, M1-2	13.12
NHM Andy's Office	Cudmore Grove	Detrital shell bed in estuarine channel filling Project A, Q2, area 17, unit 4c	9		John Claydon 1985-6	<i>C. mosbachensis</i>	L mand ramus frag, M2. With broken mand frags in box	11.72
NHM 25 F d 25	Boxgrove	surface, field no F9 (part)	13	F9/2		<i>C. mosbachensis</i>	R mand, C1, P2-4, M1	10.18
NHM 44D 3rd drw from top	Westbury	no strat info	13	M33942	Bishop colln	<i>C. mosbachensis</i>	L mand, M1	11.16
NHM 44D 3rd drw from top	Westbury	Bed 3	13	M33937	M Bishop 1974	<i>C. mosbachensis</i>	Left mand ramus, P4, M1-2	9.87
NHM 44 E drw 18	Westbury	Calcareous memb unstrat	13	M33642	Bishop, 1974	<i>C. mosbachensis</i>	L edentulate mand ramus	8.85

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	m1m2B
NHM 47 B	West Runton	Upper freshwater bed	17	M17936	AC Savin clln, 1946. Cat 1654. cll'd 1931	<i>C. mosbachensis</i>	R ramus fragment, M2 present.	8.66
VER 00441	Cengelle II, Soave, Italy		3.4	V10138		<i>C. mosbachensis</i>	R mand post	9.84
VER 00441	Monte Zoppega, Soave, Italy		3.4	V10918		<i>C. mosbachensis</i>	R mand ramus, M1-2	9.31
SIW 1 d 4	Untermassfeld, Germany		4	1980/15308 (Mei 14820)		<i>C. mosbachensis</i>	R mand, C1, P1-4, M1-3	9.56
SIW 1 d 4	Untermassfeld, Germany		4	1984/20112 (Mei 19632)		<i>C. mosbachensis</i>	R mand ramus, P3-4, M1-3	10.07
SIW 1 d 4	Untermassfeld, Germany		4	1980/16969 (Mei 16460)		<i>C. mosbachensis</i>	R mand ramus, C1, P2-4, M1-2	10.89
SIW 1 d 4	Untermassfeld, Germany		4	1980/17151 (Mei 16672)		<i>C. mosbachensis</i>	R mand ramus, C1, P1-4, M1-2	9.49
SIW 1 d 4	Untermassfeld, Germany		4	1980/16553 (Mei 16074)		<i>C. mosbachensis</i>	R mand, C1, P2-4, M1-2	9.69

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	m1m2B
SIW 1 d 4	Untermassfeld, Germany		4	1982/17995 (Mei 17515)		<i>C. mosbachensis</i>	R mand, P1-4, M1-3	10.63
SIW 1 d 5	Untermassfeld, Germany		4	1980/15357 (mei 14869)		<i>C. mosbachensis</i>	R mand, I3, C1, P1, post P2, P3-4, M1-2	10.19
FLO 0/02/013/04 (d4)	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF878		<i>C. arnensis</i>	With cranial frag, PAIR. R mand, P3-4, M1-3	9.18
FLO 0/02/013/04 (d4)	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF884		<i>C. arnensis</i>	R mand ramus frag, P4, M1-2	9.35
FLO 0/02/013/04 (d4)	Il Tasso, Italy	Upper Valdarno	4.4	IGF887		<i>C. arnensis</i>	In box with max. R mand, P1-4, M1-3	8.41
FLO Strozzi Sala	Upper Valdarno, Italy	Upper Valdarno	4.4	11800		<i>C. arnensis</i>	R mand ramus, P1-4, M1-2, M3 alv	8.97
FLO 0/02/013/05	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF12967		<i>C. arnensis</i>	R mand ramus, P1-4, M1-2	10.73
FLO Gallery	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF869		<i>C. arnensis</i>	With cranium, L+R mands. R mand, C1, P1-4, M1-3	7.88

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	m1m2B
FLO 0/02/013/01 (d1)	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF888		<i>C. etruscus</i>	L and R mands connected by 2 metal posts. L mand ramus, P2-4, M1-2	10.6
FLO 0/02/013/01 (d1)	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF881		<i>C. etruscus</i>	L mand, P4, M1, M3.	10.59
FLO 0/02/013/01 (d1)	Montecarlo, Italy	Upper Valdarno	4.4	IGF862		<i>C. etruscus</i>	L post mand frag, post M1, M2, M3 alv	10.92
FLO 0/02/013/01 (d1)	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF886		<i>C. etruscus</i>	L mand ramus, P3 frag, P4, M1, M2 frag	10.6
FLO 0/02/013/01 (d1)	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF872		<i>Canis majori</i>	L mand, C1, P2-4, M1-2, M3 alv	10.4
FLO Strozzi Sala	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF11791		<i>C. etruscus</i>	L mand, I3, C1, P1-4, 1-3	10.14
FLO 0/02/013/05	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF864		<i>C. majori</i> (<i>etruscus</i>)	L mand ramus, P3-4, M1-2, M3 alv	10.76
NHM 35 L d 23	Val di Magna, Olivola, Italy	Olivola	4.4	M5680	Forsyth Major, Oct 1895	<i>C. etruscus</i>	L ramus, P4, M1-2	10.4

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	m1m2B
FLO 0/02/013/07 (d7)	Val di Magna, Italy	Olivola	4.4	IGF4413		<i>C. etruscus</i>	L mand, I2-3, C1, P1, P3-4, M1, def M2??	10.8
FLO 0/02/013/07 (d7)	Val di Magna, Italy	Olivola	4.4	IGF4471		<i>C. etruscus</i>	L mand, C1 root, frag P2, frag P4, M1-2	11.27
FLO 0/02/013/07 (d7)	Val di Magna, Italy	Olivola	4.4	IGF4470		<i>C. etruscus</i>	L mand, I2-3 roots, C1 root, P1-2 roots, M1, M2 frags. M3 alv	10.25

24. P1P4L

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	P1P4L
NHM 1	France		1	1843.12.29. 7	F	<i>C. lupus</i>	Cranium, L teeth I1-3, C1, P1, 3-4, M1-2	58.16
NHM 2	Pyrenees	Parzudacki clln	1	44.1.18.1	F	<i>C. lupus</i>	Cranium, L teeth I2-3, C1, P1-4, M1-2	61.82
NHM 3	Nr Abrantos, S of the Tagus, Portugal	WC Tait clln.	1	1938.12.7.1	F	<i>C. lupus</i>	Cranium, R teeth I1-3, C1, P1-4, M1-2	57.76
NHM 5	Riocalado, Burgos, Spain		1	11.10.5.2	F	<i>C. lupus</i>	Cranium, L teeth I1-3, C1, P1-4, M1-2	64.35
NHM 8	Kocane, Macedonia		1	47.1121.a	F	<i>C. lupus</i>	Cranium, L teeth I1-3, C1, P1-4, M1-2	58.58
NRM	Korvijaure, 7 miles N Kiruna	15.4.1959	1	A58 0112	F	<i>C. lupus</i>	L+R mand + cranium. Cranium-fract basicranium. L teeth, I1-	63.24
NRM	S Finnskoga, Skrackarberget	1985.07.29	1	A865126	F	<i>C. lupus</i>	L+R mand+cranium. R teeth, I1-3, P1-4, M1-3	64.01
NRM	Jadraas, 5km N	1991.06.14	1	A915068	F	<i>C. lupus</i>	L+R mand+cranium. R teeth P4, M1-2	65.67

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	P1P4L
NRM	Vastra Amtervik, Hensgard	1993.02.24	1	A935024	F	<i>C. lupus</i>	L+R mand+cranium. L mand, I1-3, C1, P2-4, M1-2	62.3
NRM	Nas-snoan, v71/jvg	1993.08.18	1	A935178	F	<i>C. lupus</i>	L+R mand+cranium. L teeth I1-3, C1, P1-4, M1-2	59.88
NRM	Nyskoga, Kringsberg, Bontjarn	1994.01.19	1	A945045	F	<i>C. lupus</i>	L+R mand+cranium. R teeth, I1-3, C1, P1-4, M1-2	61.96
NRM	Vastmandland, Grythyttan	1999.12.17	1	20005111	F	<i>C. lupus</i>	L+R mand+cranium. R mand I2-3, C1, P2-4, M1-3	63.38
NRM	Narke, Degerfors, Atorp	2001.12.26	1	20025005	F	<i>C. lupus</i>	L+R mand+cranium. L teeth I1-3, P1-4, M1-2	62.47
NRM	Atorp 3.5 km NW, Degerfors, Varmland	2002.03.05	1	20035026	F	<i>C. lupus</i>	L+R mand+cranium. R teeth I1-3, C1, P1-4, M1-2	61.84
NRM	Odlingen, Sillerud, Arjang, Varmland	2004.02.07	1	20045040	F	<i>C. lupus</i>	L+R mand+cranium. R teeth I1-3, C1, P1-4, M1-2	59.81
NRM	Ovre Hurr, Tocksfors, Varmland	2006.05.30	1	20065236	F	<i>C. lupus</i>	L+R mand+cranium. L teeth, I1, I3, C1, P1-4, M1-2	63.77

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	P1P4L
NRM	Rickebo, Hallbo, Bollnas, Halsingland	2006.03.14	1	20065047	F	<i>C. lupus</i>	L+R mand+cranium. R teeth I1-3, C1, P1-4, M1-2	63.13
NRM	Ronnas, Ostra, Leksand, Dalarna	2007.10.09	1	20075381	F	<i>C. lupus</i>	L+R mand+cranium. R teeth I1-3, C1, P1-4, M1-2	64.03
NRM	Jarbo, Backefors, Dalsland Varmland, Nordmark, Algsjion	<i>C. lupus</i>	1	20075314	F	<i>C. lupus</i>	L+R mand+cranium. R teeth I1-3, C1, P1-4, M1-2	61.83
NRM	2 km S Halsingland, Bollnas, Lottefors;	2009.01.25	1	20095063	F	<i>C. lupus</i>	L+R mand+cranium. L teeth I1-3, C1, P1-4, M1-2	62.22
NRM	Rv 83 Vastmanland, Hallefors, Ornviken,	2007.08.19	1	20075312	F	<i>C. lupus</i>	L+R mand + cranium. L teeth I1-3, C1, P1-4, M1-2	60.67
NRM		2010.01.02	1	20105028	F	<i>C. lupus</i>	L+R mand+cranium. R teeth I1-3, C1, P1-4, M1-2	64.22
NHM 4	Riocalado, Burgos, Spain	signatus doubtfully	1	11.10.5.1	M	<i>C. lupus</i>	Cranium, L teeth I1-3, C1, P1-4, M1-2	66.37
NHM 6	Seville, Spain	On note '2 carnassials in tooth case'	1	95.3.3.6	M	<i>C. lupus</i>	Cranium, R teeth I1-3, C1, P1-4, M1-2	61.44

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	P1P4L
NHM 7	Ukraine on modern ticket, on skull and original Norbotten, N Sweden (in arctic circle).		1	34.6.28.47	M	<i>C. lupus</i>	Cranium, L teeth I1-3, C1, post P1, post P2, P3-4, M1-2	68.3
NHM 9			1	28.5.4.1	M	<i>C. lupus</i>	Cranium, I teeth I1-3, C1, P1, P3-4, M1-2	64.35
NHM 11	Moscow district, Russia		1	82.9.18.2	M	<i>C. lupus</i>	Cranium, L teeth I1-3, C1, P1-4, M1-2	75.53
Ost NHM	Abrantos, S of Tagus, Portugal		1	1937.2.10.2	M	<i>C. lupus</i>	Cranium, R teeth I1-3, C1, P1-4, M1-2	61.92
Ost NHM	Bosnia, Yugoslavia		1	1935.8.5.1	M	<i>C. lupus</i>	Cranium, R teeth I1-3, C1, P1-3 P4 roots, M1-2	59.59
NRM	Ljusdal, Ramsjo (s:n)	12.2.1926	1	A580255	M	<i>C. lupus</i>	L+R mand + fract cranium, palate/ant cranium. L teeth I1-3, L+R mand + cranium. R	68.14
NRM	Jokkmokk	11.02.1852	1	A583532	M	<i>C. lupus</i>	teeth I1-3, C1, P1-4, M1-2	66.58
NRM	Orebro	1852	1	A583547	M	<i>C. lupus</i>	L+R mand+cranium. R teeth I1-3, C1, P1-4, M1-3	63.57

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	P1P4L
NRM	Sweden	1907	1	A589147	M	<i>C. lupus</i>	L+R mand + cranium. R teeth I1-3, C1, P1-4, M1-2	66.31
NRM	Sweden	1908	1	A589199	M	<i>C. lupus</i>	L+R mand+cranium. L teeth I1-3, C1, P1-4, M1-2	63.64
NRM	Luktjomtjuolta, Vilhelmina	15.1.1937	1	A590009	M	<i>C. lupus</i>	L+R mand+cranium. R teeth I1-3, C1, P2-4, M1-2	61.43
NRM	Lina alv station	25.12.1977	1	A775097	M	<i>C. lupus</i>	L+R mand+cranium. L teeth I1, I3, C1, P1-4, M1-2	65.78
NRM	Atran, Ogardet	1984.09.12	1	A845131	M	<i>C. lupus</i>	L+R mand+cranium. R teeth I1-3, C1, P1-4, M1-2	67.22
NRM	Hede, 3 mil NV, Norrstadjan	1989.04.17	1	A895039	M	<i>C. lupus</i>	L+R mand+cranium. R teeth I2 from L though-3, P2-4, M1-2	66.58
NRM	Kiruna-Gallivare, Gaddmyr, Jvg	1992.08.24	1	A925106	M	<i>C. lupus</i>	L+R mand+cranium. R mand, I1-3, P2-4, M1-3	65.96
NRM	Boras	1996.01.04	1	A965002	M	<i>C. lupus</i>	L+R mand+cranium. L teeth I1-3, C1, P1-4, M1-2	66.78

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	P1P4L
NRM	Jarna, Flaten, Dalarna	1999.2.6	1	A995016	M	<i>C. lupus</i>	L+R mand+cranium. R teeth, I1-2, P1-4, M1-2	67.62
NRM	Värmland, Eksharad, Halgan; Kolarkojan	1999.06.04	1	995230	M	<i>C. lupus</i>	L+R mand+cranium. R teeth, I1-I3, C1, P1-4, M1-2	69.16
NRM	Jumkil kyrka, Uppsala	2000.11.19	1	20005365	M	<i>C. lupus</i>	L+R mand+cranium. L mand I1-3, C1, P1-4, M1-3	69.82
NRM	Uddalen, Ed, Dalsland	2003.05.12	1	20035114	M	<i>C. lupus</i>	L+R mand+cranium. R teeth I1-3, C1. P1-4, M1-2	69.91
NRM	Ostermören, Smedjebacken, Dalarna	2004.12.09	1	20045305	M	<i>C. lupus</i>	L+R mand+cranium. R teeth I1-3, C1, P1-4, M1-2	64.45
NRM	Dala Floda, Borlange, Dalarna IV 225 (road?), Osma,	2003.03.09	1	20035024	M	<i>C. lupus</i>	L+R mand+cranium. L teeth, I1-3, C1, P1-4, M1-2	61.43
NRM	Södermanland Lanasberget, Grundsjo,	2005.11.26	1	20065027	M	<i>C. lupus</i>	L+broken R mand+cranium. L teeth I1-3, C1, P1-4, M1-2	64.96
NRM	Ljungaverk,	2005.09.02	1	20055287	M	<i>C. lupus</i>	L+R mand+cranium. L teeth I1-3, C1, P1-4, M1-2	67.93

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	P1P4L
NRM	Mullhyttan, Orebro, Narke	2006.09.15	1	20065414	M	<i>C. lupus</i>	L+R mand+cranium. R teeth I1-3, C1, P1-4, M1-2	61.24
NRM	Avik, Laxa, Narke	2007.04.27	1	20075186	M	<i>C. lupus</i>	L+R mand + cranium. L teeth I2-3, C1, P1-4, M1-2	66.55
NRM	Malung-Appelbo, Dalarna	2007.12	1	20085027	M	<i>C. lupus</i>	L+R mand +cranium. L teeth, I1-3, C1, P1-4, M1-2	62.79
NRM	Dalarna, Torsby, Ostmark; Sojensoasen	2007.09.15	1	20075373	M	<i>C. lupus</i>	L+R mand+cranium. R teeth I1-3, C1, P1-4, M1-2	64
NRM	Stormosse, Piro, Bjorneborg, Kristinehamn,	2007.12.27	1	20085036	M	<i>C. lupus</i>	L+R mand+cranium. L teeth I1-3, C1, P1-4, M1-2	67.33
TM Gallery	Kents Cavern	Unknown	3	P30686?	MacEneary	<i>C. lupus</i>	Cranium, L teeth I3, C1, P2-4, M1-2	69.3
MM R4 ColE D 1	Pin Hole Cave	PH (F)	3	LL.1986		<i>C. lupus</i>	R max half, C1, P1-4, M1-2	51.22
MM Gallery	Pin Hole Cave		3			<i>C. lupus</i>	Cranium, R I1-2, P1-4	62.23
NHM 45 D d 12	Banwell Bone Cave		5a	M404		<i>C. lupus</i>	From above, R P1-2, fract P3, P4, M1-2	66.02

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	P1P4L
NHM 45 D d 12	Banwell Bone Cave		5a	44640		<i>C. lupus</i>	From above, R P4, M1-2	66.91
SHC D19/1	Banwell Bone Cave		5a	TTNCM 40/1995/18	William Beard clln	<i>C. lupus</i>	R max, P2-4	68.66
MM Gallery	Windy Knoll		5a	LL12009		<i>C. lupus</i>	Cranium, L C1, P2, P4, M1-2	59.35
BC	Walton Bone Cave, Clevedon		6	Ce15096	S.H. Reynolds	<i>C. lupus</i>	L upper max, P4, M1	59.61
BC	Walton Bone Cave, Clevedon		6	Ce12521 TTNCM	B.N.S. Soc	<i>C. lupus</i>	L upper max, P4, M2	62.48
SHC D40/2	Hutton Cave		7	42/1995/68 8	Rev D Williams and W Beard clln	<i>C. lupus</i>	L upper max and partial palate frag, P2, P4, M2	64.06
StM 80	Villa Seckendorf, Bad Canstatt, Germany	Stuttgart Travertine	2.8	31296 or SE.21.2.57/ 10		<i>C. lupus</i>	R upper max, P2-4, M2	66.16
NHM 25 F d 3	Boxgrove	Project A, Q2, area GTP4, unit 6, field no F1	13	F1/3		<i>C. mosbachensis</i>	R upper max, C1, P2-4, M1	59.91
NHM 25 G d 24	Boxgrove	Project A, Q1, Area A, unit 4b, field no. F3445	13	F2445		<i>C. mosbachensis</i>	Cranium Cont...R teeth I1-3, C1, P1-4, M1-2	55.36

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	P1P4L
SIW 1 d 1	Untermassfeld, Germany		4	1982/18249 (Mei 17769)		<i>C. mosbachensis</i>	R max, I1-3, C1, P1-4, I M1-2	56.06
SIW 1 d 1	Untermassfeld, Germany		4	1982/18052		<i>C. mosbachensis</i>	Cranium, R teeth I1-3, C1, P1-4, M1-2	60.61
FLO 0/02/013/05	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF877		<i>C. arnensis</i>	With lower mands, part snout - R teeth, P2-4, M1-2	54.28
FLO Gallery	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF869		<i>C. arnensis</i>	Squashed cranium cont. R teeth, I1-2, C1, P1-4, M1-2	54.41
FLO Gallery	near le strette al tasso, Italy	Upper Valdarno	4.4	IGF867		<i>C. arnensis</i>	Squashed cranium, pair R teeth, I1-3, C1, P1-4, M1-2	54.49
FLO 0/02/013/06 (d6)	Olivola, Italy	Olivola	4.4	IGF4408		<i>C. etruscus</i>	R upper C1, P4, part M1, M2	59.02
FLO Gallery	Olivola, Italy	Olivola	4.4	IGF4407		<i>C. etruscus</i>	R teeth, C1, P3-4, M1-2	60.57

25. P1M2L

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Se x	Species	Material	P1M2L
NHM 1	France		1	1843.12.29. 7	F	<i>C. lupus</i>	Cranium, L teeth I1-3, C1, P1, 3-4, M1-2	77
NHM 2	Pyrenees	Parzudacki clln	1	44.1.18.1	F	<i>C. lupus</i>	Cranium, L teeth I2-3, C1, P1-4, M1-2	80.07
NHM 3	Nr Abrantos, S of the Tagus, Portugal	WC Tait clln.	1	1938.12.7.1	F	<i>C. lupus</i>	Cranium, R teeth I1-3, C1, P1-4, M1-2	74.73
NHM 5	Riocalado, Burgos, Spain		1	11.10.5.2	F	<i>C. lupus</i>	Cranium, L teeth I1-3, C1, P1-4, M1-2	82.92
NHM 8	Kocane, Macedonia		1	47.1121.a	F	<i>C. lupus</i>	Cranium, L teeth I1-3, C1, P1-4, M1-2	77.5
NRM	Korvijaure, 7 miles N Kiruna	15.4.1959	1	A58 0112	F	<i>C. lupus</i>	L+R mand + cranium. Cranium-fract basicranium. L teeth, I1-	84.82
NRM	S Finnskoga, Skrackarberget	1985.07.29	1	A865126	F	<i>C. lupus</i>	L+R mand+cranium. R teeth, I1-3, P1-4, M1-3	83.08
NRM	Jadraas, 5km N	1991.06.14	1	A915068	F	<i>C. lupus</i>	L+R mand+cranium. R teeth P4, M1-2	84.89

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sequence	Species	Material	P1M2L
NRM	Vastra Amtervik, Hensgard	1993.02.24	1	A935024	F	<i>C. lupus</i>	L+R mand+cranium. L mand, I1-3, C1, P2-4, M1-2	80.57
NRM	Nas-snoan, v71/jvg Nyskoga, Kringsberg, Bontjarn	1993.08.18	1	A935178	F	<i>C. lupus</i>	L+R mand+cranium. L teeth I1-3, C1, P1-4, M1-2	79.99
NRM		1994.01.19	1	A945045	F	<i>C. lupus</i>	L+R mand+cranium. R teeth, I1-3, C1, P1-4, M1-2	80.76
NRM	Vastmandland, Grythyttan	1999.12.17	1	20005111	F	<i>C. lupus</i>	L+R mand+cranium. R mand I2-3, C1, P2-4, M1-3	83.34
NRM	Narke, Degerfors, Atorp	2001.12.26	1	20025005	F	<i>C. lupus</i>	L+R mand+cranium. L teeth I1-3, P1-4, M1-2	82.92
NRM	Atorp 3.5 km NW, Degerfors, Varmland	2002.03.05	1	20035026	F	<i>C. lupus</i>	L+R mand+cranium. R teeth I1-3, C1, P1-4, M1-2	81.9
NRM	Odlingen, Sillerud, Arjang, Varmland	2004.02.07	1	20045040	F	<i>C. lupus</i>	L+R mand+cranium. R teeth I1-3, C1, P1-4, M1-2	80.1
NRM	Ovre Hurr, Tocksfors, Varmland	2006.05.30	1	20065236	F	<i>C. lupus</i>	L+R mand+cranium. L teeth, I1, I3, C1, P1-4, M1-2	83.12
NRM	Rickebo, Hallbo, Bollnas, Halsingland	2006.03.14	1	20065047	F	<i>C. lupus</i>	L+R mand+cranium. R teeth I1-3, C1, P1-4, M1-2	81.92

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Se x	Species	Material	P1M2L
NRM	Ronnas, Ostra, Leksand, Dalarna	2007.10.09	1	20075381	F	<i>C. lupus</i>	L+R mand+cranium. R teeth I1-3, C1, P1-4, M1- 2	82.15
NRM	Jarbo, Backefors, Dalsland	<i>C. lupus</i>	1	20075314	F	<i>C. lupus</i>	L+R mand+cranium. R teeth I1-3, C1, P1-4, M1- 2	82.06
NRM	Varmland, Nordmark, Algsjion 2 km S	2009.01.25	1	20095063	F	<i>C. lupus</i>	L+R mand+cranium. L teeth I1-3, C1, P1-4, M1- 2	81.67
NRM	Halsingland, Bollnas, Lottefors; Rv 83	2007.08.19	1	20075312	F	<i>C. lupus</i>	L+R mand + cranium. L teeth I1-3, C1, P1-4, M1- 2	79.6
NRM	Vastmanland, Hallefors, Ornviken,	2010.01.02	1	20105028	F	<i>C. lupus</i>	L+R mand+cranium. R teeth I1-3, C1, P1-4, M1- 2	83.76
NHM 4	Riocalado, Burgos, Spain	On note '2 carnassials in tooth case'	1	11.10.5.1	M	<i>C. lupus</i>	Cranium, L teeth I1-3, C1, P1-4, M1-2	84.98
NHM 6	Seville, Spain		1	95.3.3.6	M	<i>C. lupus</i>	Cranium, R teeth I1-3, C1, P1-4, M1-2	80.29
NHM 7	Ukraine on modern ticket, on skull and original		1	34.6.28.47	M	<i>C. lupus</i>	Cranium, L teeth I1-3, C1, post P1, post P2, P3-4, M1-2	87.53
NHM 9	Norbotten, N Sweden (in arctic circle).		1	28.5.4.1	M	<i>C. lupus</i>	Cranium, l teeth I1-3, C1, P1, P3-4, M1-2	84.83

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Se x	Species	Material	P1M2L
NHM 11	Moscow district, Russia		1	82.9.18.2	M	<i>C. lupus</i>	Cranium, L teeth I1-3, C1, P1-4, M1-2	90.81
Ost NHM	Abrantos, S of Tagus, Portugal		1	1937.2.10.2	M	<i>C. lupus</i>	Cranium, R teeth I1-3, C1, P1-4, M1-2	80.54
Ost NHM	Bosnia, Yugoslavia		1	1935.8.5.1	M	<i>C. lupus</i>	Cranium, R teeth I1-3, C1, P1-3 P4 roots, M1-2 L+R mand + fract	80.48
NRM	Ljusdal, Ramsjo (s:n)	12.2.1926	1	A580255	M	<i>C. lupus</i>	cranium, palate/ant cranium. L teeth I1-3, C1, L+R mand + cranium. R	87.36
NRM	Jokkmokk	11.02.1852	1	A583532	M	<i>C. lupus</i>	teeth I1-3, C1, P1-4, M1- 2 L+R mand+cranium. R	86.36
NRM	Orebro	1852	1	A583547	M	<i>C. lupus</i>	teeth I1-3, C1, P1-4, M1- 3 L+R mand + cranium. R	82.12
NRM	Sweden	1907	1	A589147	M	<i>C. lupus</i>	teeth I1-3, C1, P1-4, M1- 2 L+R mand+cranium. L	88.03
NRM	Sweden	1908	1	A589199	M	<i>C. lupus</i>	teeth I1-3, C1, P1-4, M1- 2 L+R mand+cranium. R	84.08
NRM	Luktjomtjuolta, Vilhelmina	15.1.1937	1	A590009	M	<i>C. lupus</i>	teeth I1-3, C1, P2-4, M1- 2	80.29

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Se x	Species	Material	P1M2L
NRM	Lina alv station	25.12.1977	1	A775097	M	<i>C. lupus</i>	L+R mand+cranium. L teeth I1, I3, C1, P1-4, M1-2	83.68
NRM	Atran, Ogardet	1984.09.12	1	A845131	M	<i>C. lupus</i>	L+R mand+cranium. R teeth I1-3, C1, P1-4, M1-2	88.3
NRM	Hede, 3 mil NV, Norrstadjan	1989.04.17	1	A895039	M	<i>C. lupus</i>	L+R mand+cranium. R teeth I2 from L though-3, P2-4, M1-2	86.19
NRM	Kiruna-Gallivare, Gaddmyr, Jvg	1992.08.24	1	A925106	M	<i>C. lupus</i>	L+R mand+cranium. R mand, I1-3, P2-4, M1-3	86.39
NRM	Boras	1996.01.04	1	A965002	M	<i>C. lupus</i>	L+R mand+cranium. L teeth I1-3, C1, P1-4, M1-2	86.5
NRM	Jarna, Flaten, Dalarna	1999.2.6	1	A995016	M	<i>C. lupus</i>	L+R mand+cranium. R teeth, I1-2, P1-4, M1-2	88.51
NRM	Varmland, Eksharad, Halgan; Kolarkojan	1999.06.04	1	995230	M	<i>C. lupus</i>	L+R mand+cranium. R teeth, I1-I3, C1, P1-4, M1-2	88.39
NRM	Jumkil kyrka, Uppsala	2000.11.19	1	20005365	M	<i>C. lupus</i>	L+R mand+cranium. L mand I1-3, C1, P1-4, M1-3	89.09
NRM	Uddalen, Ed, Dalsland	2003.05.12	1	20035114	M	<i>C. lupus</i>	L+R mand+cranium. R teeth I1-3, C1. P1-4, M1-2	91.88

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Se x	Species	Material	P1M2L
NRM	Ostermoren, Smedjebacken, Dalarna	2004.12.09	1	20045305	M	<i>C. lupus</i>	L+R mand+cranium. R teeth I1-3, C1, P1-4, M1- 2	84.34
NRM	Dala Floda, Borlange, Dalarna IV 225 (road?), Osma,	2003.03.09	1	20035024	M	<i>C. lupus</i>	L+R mand+cranium. L teeth, I1-3, C1, P1-4, M1- 2	82.85
NRM	Sodermanland Lanasberget, Grundsjo,	2005.11.26	1	20065027	M	<i>C. lupus</i>	L+broken R mand+cranium. L teeth I1-3, C1, P1-4, M1-2	84.55
NRM	Ljungaverk,	2005.09.02	1	20055287	M	<i>C. lupus</i>	L+R mand+cranium. L teeth I1-3, C1, P1-4, M1- 2	87.98
NRM	Mullhyttan, Orebro, Narke	2006.09.15	1	20065414	M	<i>C. lupus</i>	L+R mand+cranium. R teeth I1-3, C1, P1-4, M1- 2	82.56
NRM	Avik, Laxa, Narke	2007.04.27	1	20075186	M	<i>C. lupus</i>	L+R mand + cranium. L teeth I2-3, C1, P1-4, M1- 2	85.9
NRM	Malung-Appelbo, Dalarna	2007.12	1	20085027	M	<i>C. lupus</i>	L+R mand +cranium. L teeth, I1-3, C1, P1-4, M1- 2	82.1
NRM	Dalarna, Torsby, Ostmark; Sojensoasen	2007.09.15	1	20075373	M	<i>C. lupus</i>	L+R mand+cranium. R teeth I1-3, C1, P1-4, M1- 2	85.6
NRM	Stormosse, Piro, Bjorneborg, Kristinehamn,	2007.12.27	1	20085036	M	<i>C. lupus</i>	L+R mand+cranium. L teeth I1-3, C1, P1-4, M1- 2	86.98

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Source	Species	Material	P1M2L
TM Gallery	Kents Cavern	Unknown	3	P30686	MacEnery	<i>C. lupus</i>	Cranium, L teeth I3, C1, P2-4, M1-2	88.48
MM Gallery	Pin Hole Cave		3	LL11899		<i>C. lupus</i>	Cranium, L I1-3, P1-2, post P3, ant P4, M2	82.79
NHM 45 D d 12	Banwell Bone Cave		5a	M404		<i>C. lupus</i>	From above, R P1-2, fract P3, P4, M1-2	81.15
NHM 45 D d 12	Banwell Bone Cave		5a	44640		<i>C. lupus</i>	From above, R P4, M1-2	85.83
MM Gallery	Windy Knoll		5a	LL12009		<i>C. lupus</i>	Cranium, L C1, P2, P4, M1-2	77.16
BC	Clevedon Cave		6	Ce12521	B.N.S. Soc	<i>C. lupus</i>	L upper max, P4, M2	78.43
SHC D40/2	Hutton Cave		7	TTNCM 42/1995/68 8	Rev D Williams and W Beard cln	<i>C. lupus</i>	L upper max and partial palate frag, P2, P4, M2	83.19

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Se x	Species	Material	P1M2L
StM 80	Villa Seckendorf, Bad Canstatt, Germany	Stuttgart Travertine	2.8	31299 (21.02.57/1 0)		<i>C. lupus</i>	L upper max, P2-4, M1-2	92.13
NHM 25 G d 24	Boxgrove	Project A, Q1, Area A, unit 4b, field no. F3445	13	F2445		<i>C. mosbachensis</i>	Cranium, L teeth I1-3, C1, P1-4, M1-2	74.65
SIW 1 d 1	Untermassfeld, Germany		4	1982/1824 9 (Mei 17769)		<i>C. mosbachensis</i>	R max, I1-3, C1, P1-4, I M1-2	74.41
SIW 1 d 1	Untermassfeld, Germany		4	1982/1805 2		<i>C. mosbachensis</i>	Cranium, R teeth I1-3, C1, P1-4, M1-2	78.48
FLO 0/02/013/05	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF877		<i>C. arnensis</i>	With lower mandibles, part snout - R teeth, P2-4, M1- 2	71.47
FLO Gallery	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF869		<i>C. arnensis</i>	Squashed cranium cont. R teeth, I1-2, C1, P1-4, M1-2	70.85
FLO Gallery	near le strette al tasso, Italy	Upper Valdarno	4.4	IGF867		<i>C. arnensis</i>	Squashed cranium, pair R teeth, I1-3, C1, P1-4, M1- 2	70.31
FLO Gallery	Olivola, Italy	Olivola	4.4	IGF4407		<i>C. etruscus</i>	Frontal cranium and partial snout. Upper max and palatte. L teeth, P3- 4, M1-2	79.87

26. C1M2L

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	C1M2L
NHM 1	France		1	1843.12.29.7	F	<i>C. lupus</i>	Cranium, L teeth I1-3, C1, P1, 3-4, M1-2	78.87
NHM 2	Pyrenees	Parzudacki clln	1	44.1.18.1	F	<i>C. lupus</i>	Cranium, L teeth I2-3, C1, P1-4, M1-2	84.09
NHM 3	Nr Abrantos, S of the Tagus, Portugal	WC Tait clln.	1	1938.12.7.1	F	<i>C. lupus</i>	Cranium, R teeth I1-3, C1, P1-4, M1-2	76.34
NHM 5	Riocalado, Burgos, Spain		1	11.10.5.2	F	<i>C. lupus</i>	Cranium, L teeth I1-3, C1, P1-4, M1-2	84.45
NHM 8	Kocane, Macedonia		1	47.1121.a	F	<i>C. lupus</i>	Cranium, L teeth I1-3, C1, P1-4, M1-2	80.74
NRM	Korvijaure, 7 miles N Kiruna	15.4.1959	1	A58 0112	F	<i>C. lupus</i>	L+R mand + cranium. Cranium-fract basicranium. L teeth, I1-4, M1-2	86.16
NRM	Kiruna	14.4.1908	1	A581198	F	<i>C. lupus</i>	L+R mand + cranium extreme tooth wear down to bone. L teeth I1-4, M1-2	83.13
NRM	S Finnskoga, Skrackerberget	1985.07.29	1	A865126	F	<i>C. lupus</i>	L+R mand+cranium. R teeth, I1-3, P1-4, M1-3	84.58

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	C1M2L
NRM	Jadraas, 5km N	1991.06.14	1	A915068	F	<i>C. lupus</i>	L+R mand+cranium. R teeth P4, M1-2	87.68
NRM	Vastra Amtervik, Hensgard	1993.02.24	1	A935024	F	<i>C. lupus</i>	L+R mand+cranium. L mand, I1-3, C1, P2-4, M1-2	84.24
NRM	Nas-snoan, v71/jvg	1993.08.18	1	A935178	F	<i>C. lupus</i>	L+R mand+cranium. L teeth I1-3, C1, P1-4, M1-2	81.79
NRM	Nyskoga, Kringsberg, Bontjarn	1994.01.19	1	A945045	F	<i>C. lupus</i>	L+R mand+cranium. R teeth, I1-3, C1, P1-4, M1-2	85.04
NRM	Vastmandland, Grythyttan	1999.12.17	1	20005111	F	<i>C. lupus</i>	L+R mand+cranium. R mand I2-3, C1, P2-4, M1-3	84.82
NRM	Narke, Degerfors, Atorp	2001.12.26	1	20025005	F	<i>C. lupus</i>	L+R mand+cranium. L teeth I1-3, P1-4, M1-2	85.02
NRM	Atorp 3.5 km NW, Degerfors, Varmland	2002.03.05	1	20035026	F	<i>C. lupus</i>	L+R mand+cranium. R teeth I1-3, C1, P1-4, M1-2	84.37
NRM	Odlingen, Sillerud, Arjang, Varmland	2004.02.07	1	20045040	F	<i>C. lupus</i>	L+R mand+cranium. R teeth I1-3, C1, P1-4, M1-2	83.19
NRM	Ovre Hurr, Tocksfors, Varmland	2006.05.30	1	20065236	F	<i>C. lupus</i>	L+R mand+cranium. L teeth, I1, I3, C1, P1-4, M1-2	87.05

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	C1M2L
NRM	Rickebo, Hallbo, Bollnas, Halsingland	2006.03.14	1	20065047	F	<i>C. lupus</i>	L+R mand+cranium. R teeth I1-3, C1, P1-4, M1-2	83.93
NRM	Ronnas, Ostra, Leksand, Dalarna	2007.10.09	1	20075381	F	<i>C. lupus</i>	L+R mand+cranium. R teeth I1-3, C1, P1-4, M1-2	84.17
NRM	Jarbo, Backefors, Dalsland	<i>C. lupus</i>	1	20075314	F	<i>C. lupus</i>	L+R mand+cranium. R teeth I1-3, C1, P1-4, M1-2	84.04
NRM	Varmland, Nordmark, Algsjion 2 km S	2009.01.25	1	20095063	F	<i>C. lupus</i>	L+R mand+cranium. L teeth I1-3, C1, P1-4, M1-2	85.17
NRM	Halsingland, Bollnas, Lottefors; Rv 83	2007.08.19	1	20075312	F	<i>C. lupus</i>	L+R mand + cranium. L teeth I1-3, C1, P1-4, M1-2	82.72
NRM	Vastmanland, Hallefors, Ornviken,	2010.01.02	1	20105028	F	<i>C. lupus</i>	L+R mand+cranium. R teeth I1-3, C1, P1-4, M1-2	86.45
NHM 4	Riocalado, Burgos, Spain		1	11.10.5.1	M	<i>C. lupus</i>	Cranium, L teeth I1-3, C1, P1-4, M1-2	87.18
NHM 6	Seville, Spain	On note '2 carnassials in tooth case'	1	95.3.3.6	M	<i>C. lupus</i>	Cranium, R teeth I1-3, C1, P1-4, M1-2	81.02
NHM 7	Ukraine on modern ticket, on skull and original		1	34.6.28.47	M	<i>C. lupus</i>	Cranium, L teeth I1-3, C1, post P1, post P2, P3-4, M1-2	91.75

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	C1M2L
NHM 9	Norbotten, N Sweden (in arctic circle).		1	28.5.4.1	M	<i>C. lupus</i>	Cranium, I teeth I1-3, C1, P1, P3-4, M1-2	87.16
NHM 11	Moscow district, Russia		1	82.9.18.2	M	<i>C. lupus</i>	Cranium, L teeth I1-3, C1, P1-4, M1-2	92.19
Ost NHM	Abrantos, S of Tagus, Portugal		1	1937.2.10.2	M	<i>C. lupus</i>	Cranium, R teeth I1-3, C1, P1-4, M1-2	81.64
Ost NHM	Bosnia, Yugoslavia		1	1935.8.5.1	M	<i>C. lupus</i>	Cranium, R teeth I1-3, C1, P1-3 P4 roots, M1-2 L+R mand + fract	85.98
NRM	Ljusdal, Ramsjo (s:n)	12.2.1926	1	A580255	M	<i>C. lupus</i>	cranium, palate/ant cranium. L teeth I1-3, C1, L+R mand + cranium. R	91.48
NRM	Jokkmokk	11.02.1852	1	A583532	M	<i>C. lupus</i>	teeth I1-3, C1, P1-4, M1- 2 L+R mand+cranium. R	86.8
NRM	Orebro	1852	1	A583547	M	<i>C. lupus</i>	teeth I1-3, C1, P1-4, M1- 3 L+R mand + cranium. R	82.16
NRM	Sweden	1907	1	A589147	M	<i>C. lupus</i>	teeth I1-3, C1, P1-4, M1- 2 L+R mand+cranium. L	89.37
NRM	Sweden	1908	1	A589199	M	<i>C. lupus</i>	teeth I1-3, C1, P1-4, M1- 2	86.05

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	C1M2L
NRM	Luktjomtjuolta, Vilhelmina	15.1.1937	1	A590009	M	<i>C. lupus</i>	L+R mand+cranium. R teeth I1-3, C1, P2-4, M1-2	84.04
NRM	Lina alv station	25.12.1977	1	A775097	M	<i>C. lupus</i>	L+R mand+cranium. L teeth I1, I3, C1, P1-4, M1-2	86.17
NRM	Atran, Ogardet	1984.09.12	1	A845131	M	<i>C. lupus</i>	L+R mand+cranium. R teeth I1-3, C1, P1-4, M1-2	90.56
NRM	Hede, 3 mil NV, Norrstadjan	1989.04.17	1	A895039	M	<i>C. lupus</i>	L+R mand+cranium. R teeth I2 from L though-3, P2-4, M1-2	88.89
NRM	Kiruna-Gallivare, Gaddmyr, Jvg	1992.08.24	1	A925106	M	<i>C. lupus</i>	L+R mand+cranium. R mand, I1-3, P2-4, M1-3	89.57
NRM	Boras	1996.01.04	1	A965002	M	<i>C. lupus</i>	L+R mand+cranium. L teeth I1-3, C1, P1-4, M1-2	88.13
NRM	Jarna, Flaten, Dalarna	1999.2.6	1	A995016	M	<i>C. lupus</i>	L+R mand+cranium. R teeth, I1-2, P1-4, M1-2	90.32
NRM	Varmland, Eksharad, Halgan; Kolarkojan	1999.06.04	1	995230	M	<i>C. lupus</i>	L+R mand+cranium. R teeth, I1-I3, C1, P1-4, M1-2	90.04
NRM	Jumkil kyrka, Uppsala	2000.11.19	1	20005365	M	<i>C. lupus</i>	L+R mand+cranium. L mand I1-3, C1, P1-4, M1-3	91.53

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	C1M2L
NRM	Uddalen, Ed, Dalsland	2003.05.12	1	20035114	M	<i>C. lupus</i>	L+R mand+cranium. R teeth I1-3, C1, P1-4, M1- 2	91.57
NRM	Ostermoren, Smedjebacken, Dalarna	2004.12.09	1	20045305	M	<i>C. lupus</i>	L+R mand+cranium. R teeth I1-3, C1, P1-4, M1- 2	84.5
NRM	Dala Floda, Borlange, Dalarna	2003.03.09	1	20035024	M	<i>C. lupus</i>	L+R mand+cranium. L teeth, I1-3, C1, P1-4, M1- 2	86.1
NRM	IV 225 (road?), Osmo, Sodermanland	2005.11.26	1	20065027	M	<i>C. lupus</i>	L+broken R mand+cranium. L teeth I1-3, C1, P1-4, M1-2	86.5
NRM	Lanasberget, Grundsjo, Ljungaverk,	2005.09.02	1	20055287	M	<i>C. lupus</i>	L+R mand+cranium. L teeth I1-3, C1, P1-4, M1- 2	91.82
NRM	Mullhyttan, Orebro, Narke	2006.09.15	1	20065414	M	<i>C. lupus</i>	L+R mand+cranium. R teeth I1-3, C1, P1-4, M1- 2	85.13
NRM	Avik, Laxa, Narke	2007.04.27	1	20075186	M	<i>C. lupus</i>	L+R mand + cranium. L teeth I2-3, C1, P1-4, M1- 2	89.78
NRM	Malung-Appelbo, Dalarna	2007.12	1	20085027	M	<i>C. lupus</i>	L+R mand +cranium. L teeth, I1-3, C1, P1-4, M1- 2	82.68
NRM	Dalarna, Torsby, Ostmark; Sojensoasen	2007.09.15	1	20075373	M	<i>C. lupus</i>	L+R mand+cranium. R teeth I1-3, C1, P1-4, M1- 2	86.85

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	C1M2L
NRM	Stormosse, Piro, Bjerneborg, Kristinehamn,	2007.12.27	1	20085036	M	<i>C. lupus</i>	L+R mand+cranium. L teeth I1-3, C1, P1-4, M1-2	90.31
TM Gallery	Kents Cavern	Unknown	3	P30686?	MacEnery	<i>C. lupus</i>	Cranium, L teeth I3, C1, P2-4, M1-2	92.79
MM Gallery	Pin Hole Cave		3	LL11899		<i>C. lupus</i>	Cranium, L I1-3, P1-2, post P3, ant P4, M2	84.96
NHM 45 D d 12	Banwell Bone Cave		5a	44640		<i>C. lupus</i>	From above, R P4, M1-2	88.62
MM Gallery	Windy Knoll		5a	LL12009		<i>C. lupus</i>	Cranium, L C1, P2, P4, M1-2	83.14
NHM 44 D drw 7	Hutton Cave	none	7	44739a	Bright?	<i>C. lupus</i>	From above, R half of RP2 in P1 socket!, P2-4, M1-2	99.6
NHM 25 G d 24	Boxgrove	Project A, Q1, Area A, unit 4b, field no. F3445	13	F2445		<i>C. mosbachensis</i>	Cranium, L teeth I1-3, C1, P1-4, M1-2	75.24
SIW 1 d 1	Untermassfeld, Germany		4	1982/1824 9 (Mei 17769)		<i>C. mosbachensis</i>	R max, I1-3, C1, P1-4, I M1-2	75.92
SIW 1 d 1	Untermassfeld, Germany		4	1982/1805 2		<i>C. mosbachensis</i>	Cranium, R teeth I1-3, C1, P1-4, M1-2	80.93

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	C1M2L
FLO 0/02/013/01 (d1)	Il Tasso, Italy	Upper Valdarno	4.4	IGF868		<i>C. arnensis</i>	With 2 mands. Max, snout and basicranium. L max, I1-2, C1, P1-4, M1-2 intact R side. Sag crest, akrokranium present,	75.77
FLO Gallery	il tasso, Italy	Upper Valdarno	4.4	IGF869		<i>C. arnensis</i>	some basicranial Squashed cranium, L side better than R, not much.	71.27
FLO Gallery	near le strette al tasso, Italy	Upper Valdarno	4.4	IGF867		<i>C. arnensis</i>	L teeth, I1-3, C1, P1-4, M1-2	72.23
FLO Gallery	Olivola, Italy	Olivola	4.4	IGF4407		<i>C. etruscus</i>	Frontal cranium and partial snout. Upper max and palatte. L teeth, P3-4, M1-2	82.38

27. M1M2L

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	M1M2L
NHM 1	France		1	1843.12.29.7	F	<i>C. lupus</i>	Cranium, L teeth I1-3, C1, P1, 3-4, M1-2	19.9
NHM 2	Pyrenees	Parzudacki clln	1	44.1.18.1	F	<i>C. lupus</i>	Cranium, L teeth I2-3, C1, P1-4, M1-2	20.27
NHM 3	Nr Abrantos, S of the Tagus, Portugal	WC Tait clln.	1	1938.12.7.1	F	<i>C. lupus</i>	Cranium, R teeth I1-3, C1, P1-4, M1-2	19.52
NHM 5	Riocalado, Burgos, Spain		1	11.10.5.2	F	<i>C. lupus</i>	Cranium, L teeth I1-3, C1, P1-4, M1-2	21.32
NHM 8	Kocane, Macedonia		1	47.1121.a	F	<i>C. lupus</i>	Cranium, L teeth I1-3, C1, P1-4, M1-2	21.27
NRM	Korvijaure, 7 miles N Kiruna	15.4.1959	1	A58 0112	F	<i>C. lupus</i>	L+R mand + cranium. Cranium-fract basicranium. L teeth, I1-	23.6
NRM	Kiruna	14.4.1908	1	A581198	F	<i>C. lupus</i>	L+R mand + cranium extreme tooth wear down to bone. L teeth I1-	22.42
NRM	S Finnskoga, Skrackarberget	1985.07.29	1	A865126	F	<i>C. lupus</i>	L+R mand+cranium. R teeth, I1-3, P1-4, M1-3	22.33

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	M1M2L
NRM	Jadraas, 5km N	1991.06.14	1	A915068	F	<i>C. lupus</i>	L+R mand+cranium. R teeth P4, M1-2	23.49
NRM	Vastra Amtervik, Hensgard	1993.02.24	1	A935024	F	<i>C. lupus</i>	L+R mand+cranium. L mand, I1-3, C1, P2-4, M1-2	22.93
NRM	Nas-snoan, v71/jvg	1993.08.18	1	A935178	F	<i>C. lupus</i>	L+R mand+cranium. L teeth I1-3, C1, P1-4, M1-2	23.65
NRM	Nyskoga, Kringsberg, Bontjarn	1994.01.19	1	A945045	F	<i>C. lupus</i>	L+R mand+cranium. R teeth, I1-3, C1, P1-4, M1-2	24.37
NRM	Vastmandland, Grythyttan	1999.12.17	1	20005111	F	<i>C. lupus</i>	L+R mand+cranium. R mand I2-3, C1, P2-4, M1-3	23.93
NRM	Narke, Degerfors, Atorp	2001.12.26	1	20025005	F	<i>C. lupus</i>	L+R mand+cranium. L teeth I1-3, P1-4, M1-2	24.04
NRM	Atorp 3.5 km NW, Degerfors, Varmland	2002.03.05	1	20035026	F	<i>C. lupus</i>	L+R mand+cranium. R teeth I1-3, C1, P1-4, M1-2	23.84
NRM	Odlingen, Sillerud, Arjang, Varmland	2004.02.07	1	20045040	F	<i>C. lupus</i>	L+R mand+cranium. R teeth I1-3, C1, P1-4, M1-2	23.15
NRM	Ovre Hurr, Tocksfors, Varmland	2006.05.30	1	20065236	F	<i>C. lupus</i>	L+R mand+cranium. L teeth, I1, I3, C1, P1-4, M1-2	23.13

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	M1M2L
NRM	Rickebo, Hallbo, Bollnas, Halsingland	2006.03.14	1	20065047	F	<i>C. lupus</i>	L+R mand+cranium. R teeth I1-3, C1, P1-4, M1-2	24.75
NRM	Ronnas, Ostra, Leksand, Dalarna	2007.10.09	1	20075381	F	<i>C. lupus</i>	L+R mand+cranium. R teeth I1-3, C1, P1-4, M1-2	23.9
NRM	Jarbo, Backefors, Dalsland Varmland, Nordmark, Algsjion	<i>C. lupus</i>	1	20075314	F	<i>C. lupus</i>	L+R mand+cranium. R teeth I1-3, C1, P1-4, M1-2	21.86
NRM	2 km S Halsingland, Bollnas, Lottefors;	2009.01.25	1	20095063	F	<i>C. lupus</i>	L+R mand+cranium. L teeth I1-3, C1, P1-4, M1-2	23.05
NRM	Rv 83 Vastmanland, Hallefors, Ornviken,	2007.08.19	1	20075312	F	<i>C. lupus</i>	L+R mand + cranium. L teeth I1-3, C1, P1-4, M1-2	24.41
NRM		2010.01.02	1	20105028	F	<i>C. lupus</i>	L+R mand+cranium. R teeth I1-3, C1, P1-4, M1-2	23.69
NHM 4	Riocalado, Burgos, Spain		1	11.10.5.1	M	<i>C. lupus</i>	Cranium, L teeth I1-3, C1, P1-4, M1-2	22.67
NHM 6	Seville, Spain Ukraine on modern ticket, on skull and original	On note '2 carnassials in tooth case'	1	95.3.3.6	M	<i>C. lupus</i>	Cranium, R teeth I1-3, C1, P1-4, M1-2	20.38
NHM 7			1	34.6.28.47	M	<i>C. lupus</i>	Cranium, L teeth I1-3, C1, post P1, post P2, P3-4, M1-2	21.07

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	M1M2L
NHM 9	Norbotten, N Sweden (in arctic circle).		1	28.5.4.1	M	<i>C. lupus</i>	Cranium, I teeth I1-3, C1, P1, P3-4, M1-2	22.36
NHM 11	Moscow district, Russia		1	82.9.18.2	M	<i>C. lupus</i>	Cranium, L teeth I1-3, C1, P1-4, M1-2	21.58
Ost NHM	Abrantos, S of Tagus, Portugal		1	1937.2.10.2	M	<i>C. lupus</i>	Cranium, R teeth I1-3, C1, P1-4, M1-2	20.11
Ost NHM	Bosnia, Yugoslavia		1	1935.8.5.1	M	<i>C. lupus</i>	Cranium, R teeth I1-3, C1, P1-3 P4 roots, M1-2 L+R mand + fract	23.3
NRM	Ljusdal, Ramsjo (s:n)	12.2.1926	1	A580255	M	<i>C. lupus</i>	cranium, palate/ant cranium. L teeth I1-3, C1, L+R mand + cranium. R	23.5
NRM	Jokkmokk	11.02.1852	1	A583532	M	<i>C. lupus</i>	teeth I1-3, C1, P1-4, M1-2 L+R mand+cranium. R	23.33
NRM	Orebro	1852	1	A583547	M	<i>C. lupus</i>	teeth I1-3, C1, P1-4, M1-3 L+R mand + cranium. R	23.6
NRM	Sweden	1907	1	A589147	M	<i>C. lupus</i>	teeth I1-3, C1, P1-4, M1-2 L+R mand+cranium. L	24.9
NRM	Sweden	1908	1	A589199	M	<i>C. lupus</i>	teeth I1-3, C1, P1-4, M1-2	24.64

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	M1M2L
NRM	Luktjomtjuolta, Vilhelmina	15.1.1937	1	A590009	M	<i>C. lupus</i>	L+R mand+cranium. R teeth I1-3, C1, P2-4, M1-2	23.1
NRM	Lina alv station	25.12.1977	1	A775097	M	<i>C. lupus</i>	L+R mand+cranium. L teeth I1, I3, C1, P1-4, M1-2	25
NRM	Atran, Ogardet	1984.09.12	1	A845131	M	<i>C. lupus</i>	L+R mand+cranium. R teeth I1-3, C1, P1-4, M1-2	24.25
NRM	Hede, 3 mil NV, Norrstadjan	1989.04.17	1	A895039	M	<i>C. lupus</i>	L+R mand+cranium. R teeth I2 from L though-3, P2-4, M1-2	25.46
NRM	Kiruna-Gallivare, Gaddmyr, Jvg	1992.08.24	1	A925106	M	<i>C. lupus</i>	L+R mand+cranium. R mand, I1-3, P2-4, M1-3	24.95
NRM	Boras	1996.01.04	1	A965002	M	<i>C. lupus</i>	L+R mand+cranium. L teeth I1-3, C1, P1-4, M1-2	23.9
NRM	Jarna, Flaten, Dalarna	1999.2.6	1	A995016	M	<i>C. lupus</i>	L+R mand+cranium. R teeth, I1-2, P1-4, M1-2	26.31
NRM	Värmland, Eksharad, Halgan; Kolarkojan	1999.06.04	1	995230	M	<i>C. lupus</i>	L+R mand+cranium. R teeth, I1-I3, C1, P1-4, M1-2	24.18
NRM	Jumkil kyrka, Uppsala	2000.11.19	1	20005365	M	<i>C. lupus</i>	L+R mand+cranium. L mand I1-3, C1, P1-4, M1-3	23.9

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	M1M2L
NRM	Uddalen, Ed, Dalsland	2003.05.12	1	20035114	M	<i>C. lupus</i>	L+R mand+cranium. R teeth I1-3, C1, P1-4, M1-2	25.24
NRM	Ostermoren, Smedjebacken, Dalarna	2004.12.09	1	20045305	M	<i>C. lupus</i>	L+R mand+cranium. R teeth I1-3, C1, P1-4, M1-2	25.38
NRM	Dala Floda, Borlange, Dalarna IV 225 (road?), Osmo,	2003.03.09	1	20035024	M	<i>C. lupus</i>	L+R mand+cranium. L teeth, I1-3, C1, P1-4, M1-2	27.16
NRM	Sodermanland Lanaberget, Grundsjo,	2005.11.26	1	20065027	M	<i>C. lupus</i>	L+broken R mand+cranium. L teeth I1-3, C1, P1-4, M1-2	24.07
NRM	Ljungaverk,	2005.09.02	1	20055287	M	<i>C. lupus</i>	L+R mand+cranium. L teeth I1-3, C1, P1-4, M1-2	22.88
NRM	Mullhyttan, Orebro, Narke	2006.09.15	1	20065414	M	<i>C. lupus</i>	L+R mand+cranium. R teeth I1-3, C1, P1-4, M1-2	24.31
NRM	Avik, Laxa, Narke	2007.04.27	1	20075186	M	<i>C. lupus</i>	L+R mand + cranium. L teeth I2-3, C1, P1-4, M1-2	24.55
NRM	Malung-Appelbo, Dalarna	2007.12	1	20085027	M	<i>C. lupus</i>	L+R mand +cranium. L teeth, I1-3, C1, P1-4, M1-2	25.33
NRM	Dalarna, Torsby, Ostmark; Sojensoasen	2007.09.15	1	20075373	M	<i>C. lupus</i>	L+R mand+cranium. R teeth I1-3, C1, P1-4, M1-2	25.47

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	M1M2L
NRM	Stormosse, Piro, Bjorneborg, Kristinehamn,	2007.12.27	1	20085036	M	<i>C. lupus</i>	L+R mand+cranium. L teeth I1-3, C1, P1-4, M1-2	24.78
NHM 23 K	Cae Gywn Cave		2	M2613	Pres by H Hicks and E Bouwerie Luxmoore	<i>C. lupus</i>	R upper max frag, P3-4, M1-2	23.37
SMES IV 266	Black Rock Quarries, Tenby		3	D2600		<i>C. lupus</i>	R maxilla frag, P4, M1-2	22.67
SMES IV 266	Black Rock Quarries, Tenby		3	D2597		<i>C. lupus</i>	R maxilla frag, P3-4, M1-2	24.67
TM Gallery	Kents Cavern	Unknown	3	P30686?	MacEnery?	<i>C. lupus</i>	Cranium, L teeth I3, C1, P2-4, M1-2	23.48
SM blue boxes	Paviland		3	Z 836.6.1006		<i>C. lupus</i>	L upper max frag, P4	19.83
MM R4 ColE D 1	Pin Hole Cave	PH (F)	3	LL.1986		<i>C. lupus</i>	R max half, C1, P1-4, M1-2	18.34
NHM 45 D d13	Banwell Bone Cave		5a	M223 with M223a (L teeth)	Enniskillen clln	<i>C. lupus</i>	L maxilla, upper P3-4, M1-2	25.3

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	M1M2L
NHM 45 D d13	Banwell Bone Cave		5a	44643	Pres Benj Bright 1873	<i>C. lupus</i>	Portion of L maxilla/palate. Alveoli P3-4, M1-2	24.58
NHM 45 D d12	Banwell Bone Cave		5a	M404	Egerton Cln, 1882	<i>C. lupus</i>	Fract crania, LP3-4, M1-2	20.67
SHC D19/1	Banwell Bone Cave		5a	TTNCM 40/1995/16	William Beard clln	<i>C. lupus</i>	L upper max frag, P4, M1-2	22.94
SHC D19/1	Banwell Bone Cave		5a	TTNCM 40/1995/17	William Beard clln	<i>C. lupus</i>	L max, P4, M1-2	21.35
MM R5 colK d14	Windy Knoll		5a	P2497	Dawkins	<i>C. lupus</i>	R max frag, P4, M1-2	23.94
MM Gallery & wolf box in display case 9	Windy Knoll		5a	LL12009		<i>C. lupus</i>	With above. Cranium, R l1-2, l3 root, C1, P2-4, M1-2	22.34
& wolf box in display case 9	Bosco's Den		5a	SM. 1858.1.58		<i>C. lupus</i>	R upper max frag, M1-2	21.26
& wolf box in display case 9	Bosco's Den		5a	SM. 1858.1.75		<i>C. lupus</i>	R upper max frag, M1, M2 alv.	23.12

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	M1M2L
& wolf box in display case 9	Bosco's Den		5a	SM. 1858.1.48		<i>C. lupus</i>	R upper max frag, P4, M1-2	24.04
TM G/B6/B112	Joint Mitnor Cave		5e	P35084	1940	<i>C. lupus</i>	L upper max frag in cement, M1-2	23.74
BC	Clevedon Cave		6	Ce15095	S.H. Reynolds	<i>C. lupus</i>	R upper max frag, P4, M1-2	21.73
SHC D46/1	Bleadon Cave	Cave dep	7	TTNCM 41/1995/23	W. Beard clln	<i>C. lupus</i>	L upper max frag, M1-2	23.33
NHM 44 D drw 7	Hutton Cave	none	7	44739	Pres by B Bright, Aug 1878	<i>C. lupus</i>	Ant cranium, part upper palate and max, L M1-2	20.88
NHM 44 D drw 7	Hutton Cave	none	7	44739a	Bright?	<i>C. lupus</i>	Cranium, L I3, (R) C1, half P2, P3-4, M1-2	20.62
SHC D40/2	Hutton Cave		7	TTNCM 42/1995/68 8	Rev D Williams and W Beard clln	<i>C. lupus</i>	L upper max and partial palate frag, P2, P4, M2	22.59
StM 76	Perick Cave		2.4	361		<i>C. lupus</i>	L upper max frag, M1-2	23.29

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	M1M2L
StM 80	Villa Seckendorf, Bad Canstatt, Germany	Stuttgart Travertine	2.8	31299 (21.02.57/10)		<i>C. lupus</i>	L upper max, P2-4, M1-2	24.66
NHM 36 E d 36/E/19	Westphalia, Germany	Cavern	2.4	28582 1968/9826 (Taub 2750)	none	<i>C. lupus</i>	R max frag, P4, M2	20.61
SIW 3 d 9	Taubach, Germany Weimar- Ehringsdorf, Germany		2.8	1968/9659 (Ehr 3880)		<i>C. lupus</i>	L upper max frag, M1-2	22.6
SIW			3			<i>C. lupus</i>	Cranium, L teeth P4, M1-2	22.62
NHM 25 F d 3	Boxgrove	Project A, Q2, area GTP4, unit 6, field no F1	13	F1/4		<i>C. mosbachensis</i>	R upper maxilla, P4, M1- M2	18.66
NHM 25 F d 3	Boxgrove	Project A, Q2, area GTP4, unit 6, field no F1	13	F1/5		<i>C. mosbachensis</i>	R upper max, P1-3, frag ant P4	20.94
NHM 25 E d 14	Boxgrove	Project A, Q1, area TP4, no unit, field no 1	13	F1 (28)		<i>C. mosbachensis</i>	Cont...R teeth P2-4, M1-2	19.57
NHM 25 G d 24	Boxgrove	Project A, Q1, Area A, unit 4b, field no. F3445	13	F2445		<i>C. mosbachensis</i>	Cont...R teeth I1-3, C1, P1-4, M1-2	17.45
NHM 35 H d 3	Westbury	Grey-green silt, W9	13	M34219	NHM excav'78	<i>C. mosbachensis</i>	R upper max frag, P3-4, M1-2	20.37

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	M1M2L
SIW 1 d 1	Untermassfeld, Germany		4	1982/18249 (Mei 17769)		<i>C. mosbachensis</i>	R max, I1-3, C1, P1-4, I M1-2	20.04
SIW 1 d 1	Untermassfeld, Germany		4	1982/18052		<i>C. mosbachensis</i>	Cranium, R teeth I1-3, C1, P1-4, M1-2	21.36
SIW 1 d 3	Untermassfeld, Germany		4	1980/15328 (Mei 14840)		<i>C. mosbachensis</i>	R upper max frag, P4, M1-2	19.68
FLO Gallery	il tasso, Italy	Upper Valdarno	4.4	IGF869		<i>C. arnensis</i>	Squashed cranium. L teeth, I1-3, C1, P1-4, M1-2	18.01
FLO Gallery	near le strette al tasso, Italy	Upper Valdarno	4.4	IGF867		<i>C. arnensis</i>	Squashed cranium, I1-3, C1, P1-4, M1-2	18.04
FLO 0/02/013/04 (d4)	il tasso, Italy	Upper Valdarno	4.4	IGF878		<i>C. arnensis</i>	With lower mands. Squashed BC, with L cranial frag, slight zyg Max, snout and	18.29
FLO 0/02/013/01 (d1)	Il Tasso, Italy	Upper Valdarno	4.4	IGF868		<i>C. arnensis</i>	basicranium. L max, I1-2, C1, P1-4, M1-2	18.59
FLO 0/02/013/04 (d4)	Upper Valdarno, Italy	Upper Valdarno	4.4	IGF861		<i>C. majori (etruscus)</i>	R upper max frag, roots P3, P4, M1-frag M2	20.54
FLO 0/02/013/06 (d6)	Val di Magna, Italy	Olivola	4.4	IGF4408		<i>C. etruscus</i>	Upper palatte and max, and snout. L upper I2-3, P3-4, M1-2	24.44

Row/Loc	Site	Stratigraphy	Age	Specimen number	Collection/Sex	Species	Material	M1M2L
FLO 0/02/013/06 (d6)	Val di Magna, Italy	Olivola	4.4	IGF4411		<i>C. etruscus</i>	Snout with max and teeth. L teeth, P4, M1-2 Frontal cranium and partial snout. Upper max and palatte. L teeth, P3-4, M1-2	19.72
FLO Gallery	Olivola, Italy	Olivola	4.4	IGF4407		<i>C. etruscus</i>	4, M1-2	21.96

28. Modern *C. lupus* Skull length

Number	Site	Stratigraphy	Age	Specimen number	Sex	Species	Material	SKL
NHM 1	France		1	1843.12.29.7	F	<i>C. lupus</i>	Cranium, L teeth I1-3, C1, P1, 3-4, M1-2	213
NHM 2	Pyrenees	Parzudacki clln	1	44.1.18.1	F	<i>C. lupus</i>	Cranium, L teeth I2-3, C1, P1-4, M1-2	218
NHM 3	Nr Abrantos, S of the Tagus, Portugal	WC Tait clln.	1	1938.12.7.1	F	<i>C. lupus</i>	Cranium, R teeth I1-3, C1, P1-4, M1-2	212
NHM 5	Riocalado, Burgos, Spain		1	11.10.5.2	F	<i>C. lupus</i>	Cranium, L teeth I1-3, C1, P1-4, M1-2	224
NHM 8	Kocane, Macedonia		1	47.1121.a	F	<i>C. lupus</i>	Cranium, L teeth I1-3, C1, P1-4, M1-2 L+R mand + cranium extreme tooth wear down to bone. L	213
NRM	Kiruna	14.4.1908	1	A581198	F	<i>C. lupus</i>	teeth I1-3, M1-2	233
NRM	S Finnskoga, Skrackarberget	1985.07.29	1	A865126	F	<i>C. lupus</i>	L+R mand+cranium. R teeth, I1-3, P1-4, M1-3	233
NRM	Jadraas, 5km N	1991.06.14	1	A915068	F	<i>C. lupus</i>	L+R mand+cranium. R teeth P4, M1-2	243
NRM	Vastra Amtervik, Hensgard	1993.02.24	1	A935024	F	<i>C. lupus</i>	L+R mand+cranium. L mand, I1-3, C1, P2-4, M1-2	236
NRM	Nas-snoan, v71/jvg	1993.08.18	1	A935178	F	<i>C. lupus</i>	L+R mand+cranium. L teeth I1-3, C1, P1-4, M1-2	231

Number	Site	Stratigraphy	Age	Specimen number	Sex	Species	Material	SKL
NRM	Nyskoga, Kringsberg, Bontjarn	1994.01.19	1	A945045	F	<i>C. lupus</i>	L+R mand+cranium. R teeth, I1-3, C1, P1-4, M1-2	230
NRM	Vastmandland, Grythyttan	1999.12.17	1	20005111	F	<i>C. lupus</i>	L+R mand+cranium. R mand I2-3, C1, P2-4, M1-3	238
NRM	Narke, Degerfors, Atorp	2001.12.26	1	20025005	F	<i>C. lupus</i>	L+R mand+cranium. L teeth I1-3, P1-4, M1-2	237
NRM	Atorp 3.5 km NW, Degerfors, Varmland	2002.03.05	1	20035026	F	<i>C. lupus</i>	L+R mand+cranium. R teeth I1-3, C1, P1-4, M1-2	232
NRM	Odlingen, Sillerud, Arjang, Varmland	2004.02.07	1	20045040	F	<i>C. lupus</i>	L+R mand+cranium. R teeth I1-3, C1, P1-4, M1-2	236
NRM	Ovre Hurr, Tocksfors, Varmland	2006.05.30	1	20065236	F	<i>C. lupus</i>	L+R mand+cranium. L teeth, I1, I3, C1, P1-4, M1-2	237
NRM	Rickebo, Hallbo, Bollnas, Halsingland	2006.03.14	1	20065047	F	<i>C. lupus</i>	L+R mand+cranium. R teeth I1-3, C1, P1-4, M1-2	242
NRM	Ronnas, Ostra, Leksand, Dalarna	2007.10.09	1	20075381	F	<i>C. lupus</i>	L+R mand+cranium. R teeth I1-3, C1, P1-4, M1-2	232
NRM	Jarbo, Backefors, Dalsland	<i>C. lupus</i>	1	20075314	F	<i>C. lupus</i>	L+R mand+cranium. R teeth I1-3, C1, P1-4, M1-2	228
NRM	Varmland, Nordmark, Algsjion 2 km S	2009.01.25	1	20095063	F	<i>C. lupus</i>	L+R mand+cranium. L teeth I1-3, C1, P1-4, M1-2	239

Number	Site	Stratigraphy	Age	Specimen number	Sex	Species	Material	SKL
NRM	Halsingland, Bollnas, Lottefors; Rv 83 vasunianianu,	2007.08.19	1	20075312	F	<i>C. lupus</i>	L+R mand + cranium. L teeth I1-3, C1, P1-4, M1-2	228
NRM	Hallefors, Ornviken, Holmtjarnstorp	2010.01.02	1	20105028	F	<i>C. lupus</i>	L+R mand+cranium. R teeth I1-3, C1, P1-4, M1-2	237
NHM 4	Riocalado, Burgos, Spain	On note 2 carnassials in tooth case'	1	11.10.5.1	M	<i>C. lupus</i>	Cranium, L teeth I1-3, C1, P1-4, M1-2	232
NHM 6	Seville, Spain		1	95.3.3.6	M	<i>C. lupus</i>	Cranium, R teeth I1-3, C1, P1-4, M1-2	220
NHM 9	Norbotten, N Sweden (in arctic circle).		1	28.5.4.1	M	<i>C. lupus</i>	Cranium, l teeth I1-3, C1, P1, P3-4, M1-2	239
NHM 11	Moscow district, Russia ивиссовая, Колыма		1	82.9.18.2	M	<i>C. lupus</i>	Cranium, L teeth I1-3, C1, P1-4, M1-2	250
NHM 12	River, NE Siberia, Russia		1	20.7.4.5	M	<i>C. lupus</i>	Cranium, L teeth I1-3, C1, P1-4, M1-2	244
Ost NHM	Abrantos, S of Tagus, Portugal		1	1937.2.10.2	M	<i>C. lupus</i>	Cranium, R teeth I1-3, C1, P1-4, M1-2	220
Ost NHM	Bosnia, Yugoslavia		1	1935.8.5.1	M	<i>C. lupus</i>	Cranium, R teeth I1-3, C1, P1-3 P4 roots, M1-2	227
NRM	Jokkmokk	11.02.1852	1	A583532	M	<i>C. lupus</i>	L+R mand + cranium. R teeth I1-3, C1, P1-4, M1-2	235

Number	Site	Stratigraphy	Age	Specimen number	Sex	Species	Material	SKL
NRM	Orebro	1852	1	A583547	M	<i>C. lupus</i>	L+R mand+cranium. R teeth I1-3, C1, P1-4, M1-3	226
NRM	Sweden	1907	1	A589147	M	<i>C. lupus</i>	L+R mand + cranium. R teeth I1-3, C1, P1-4, M1-2	233
NRM	Sweden	1908	1	A589199	M	<i>C. lupus</i>	L+R mand+cranium. L teeth I1-3, C1, P1-4, M1-2	246
NRM	Luktjomtjuolta, Vilhelmina	15.1.1937	1	A590009	M	<i>C. lupus</i>	L+R mand+cranium. R teeth I1-3, C1, P2-4, M1-2	245
NRM	Lina alv station	25.12.1977	1	A775097	M	<i>C. lupus</i>	L+R mand+cranium. L teeth I1, I3, C1, P1-4, M1-2	242
NRM	Atran, Ogardet	1984.09.12	1	A845131	M	<i>C. lupus</i>	L+R mand+cranium. R teeth I1-3, C1, P1-4, M1-2	255
NRM	Hede, 3 mil NV, Norrstadjan	1989.04.17	1	A895039	M	<i>C. lupus</i>	L+R mand+cranium. R teeth I2 from L though-3, P2-4, M1-2	245
NRM	Kiruna-Gallivare, Gaddmyr, Jvg	1992.08.24	1	A925106	M	<i>C. lupus</i>	L+R mand+cranium. R mand, I1-3, P2-4, M1-3	244
NRM	Boras	1996.01.04	1	A965002	M	<i>C. lupus</i>	L+R mand+cranium. L teeth I1-3, C1, P1-4, M1-2	257
NRM	Jarna, Flaten, Dalarna	1999.2.6	1	A995016	M	<i>C. lupus</i>	L+R mand+cranium. R teeth, I1-2, P1-4, M1-2	248

Number	Site	Stratigraphy	Age	Specimen number	Sex	Species	Material	SKL
NRM	Varmland, Eksharad, Halgan; Kolarkojan	1999.06.04	1	995230	M	<i>C. lupus</i>	L+R mand+cranium. R teeth, I1-I3, C1, P1-4, M1-2	243
NRM	Jumkil kyrka, Uppsala	2000.11.19	1	20005365	M	<i>C. lupus</i>	L+R mand+cranium. L mand I1-3, C1, P1-4, M1-3	252
NRM	Uddalen, Ed, Dalsland Östermören,	2003.05.12	1	20035114	M	<i>C. lupus</i>	L+R mand+cranium. R teeth I1-3, C1. P1-4, M1-2	252
NRM	Smedjebacken, Dalarna	2004.12.09	1	20045305	M	<i>C. lupus</i>	L+R mand+cranium. R teeth I1-3, C1, P1-4, M1-2	242
NRM	Dala Floda, Borlange, Dalarna	2003.03.09	1	20035024	M	<i>C. lupus</i>	L+R mand+cranium. L teeth, I1-3, C1, P1-4, M1-2	237
NRM	IV 225 (road?), Osmo, Sodermanland	2005.11.26	1	20065027	M	<i>C. lupus</i>	L+broken R mand+cranium. L teeth I1-3, C1, P1-4, M1-2	246
NRM	Lanasberget, Grundsjo, Ljungaverk, Medelpad	2005.09.02	1	20055287	M	<i>C. lupus</i>	L+R mand+cranium. L teeth I1-3, C1, P1-4, M1-2	254
NRM	Mullhyttan, Orebro, Narke	2006.09.15	1	20065414	M	<i>C. lupus</i>	L+R mand+cranium. R teeth I1-3, C1, P1-4, M1-2	243
NRM	Avik, Laxa, Narke	2007.04.27	1	20075186	M	<i>C. lupus</i>	L+R mand + cranium. L teeth I2-3, C1, P1-4, M1-2	252
NRM	Malung-Appelbo, Dalarna	2007.12	1	20085027	M	<i>C. lupus</i>	L+R mand +cranium. L teeth, I1-3, C1, P1-4, M1-2	242

Number	Site	Stratigraphy	Age	Specimen number	Sex	Species	Material	SKL
NRM	Dalarna, Torsby, Ostmark; Sojensoasen	2007.09.15	1	20075373	M	<i>C. lupus</i>	L+R mand+cranium. R teeth I1-3, C1, P1-4, M1-2	245
NRM	Stormosse, Piro, Bjorneborg, Kristinehamn, Varmland	2007.12.27	1	20085036	M	<i>C. lupus</i>	L+R mand+cranium. L teeth I1-3, C1, P1-4, M1-2	250