These are electronic appendices to the paper by Johnson 2002 Determinants of loss of mammal species during the Late Quaternary 'megafauna' extinctions: life history and ecology, but not body size. *Proc. R. Soc. Lond.* B **269**, 2221—2227.

Electronic appendices are refereed with the text. However, no attempt has been made to impose a uniform editorial style on the electronic appendices.

Table S1: Species used in analysis for Table 1, Fig 1 and Fig 2.

	Species	status (0=extinct)	mass (gm)	reproductive rate (observed)	reproductive rate (derived)
Ursidae	U. spelaeus	0	500000	.	0.61
	Tremarctos floridanus	0	280000	.	0.96
	Arctodus simus	0	500000	.	0.61
	A. pristinus	0	300000	.	0.92
	Ursus thibetanus	1	100000	1.7	
	U. americanus	1	180000	1.18	
	U. arctos	1	400000	0.86	
	U. maritimus	1	388000	0.67	
	Tremarctos ornatus	1	100000	1.5	
Felidae	Homotherium latidens	0	150000		0.59
	H. serum	0	150000		0.59
	Panthera leo	0	200000		0.37
	P. pardus	0	90000		0.97
	Smilodon fatalis	0	150000		0.59
	S. populators	0	150000		0.59
	F. silvestris	1	5000	3.72	
	F. pardina	1	10000	2.5	
	F. lynx	1	19500	2.26	
	F. rufus	1	10000	2.87	
	F. geoffroyi	1	4000	2.57	
	F. pardalis	1	13000	1.64	
	F. yagouaroundi	1	7000	3.6	
	F. concolor	1	75000	1.07	
	Panthera onca	1	100000	0.96	
Bovidae	Bison priscus	0	1000000	.	0.62
	B. latifrons	0	900000	.	0.64
	Euceratherium collinum	0	499000	.	0.76
	Bootherium bombifrons	0	753000	.	0.68
	Symbos cavifrons	0	400000	.	0.81
	Oreamnos harringtoni	0	45000	.	1.27
	Spirocerus kiakhtensis	0	790000	.	0.67
	Bison bonasus	1	900000	0.57	
	Bison bison	1	630000	0.81	
	Saiga tartarica	1	43000	1.68	
	Nemorrhaedus goral	1	35000	1	
	Oreamnos americanus	1	90000	1.4	
	Rupicapra rupicapra	1	40000	1	
	Ovibos moschatus	1	310000	0.62	
	Capra aegagrus	1	60000	1.72	
	Capra ibex	1	92000	0.86	
	C. caucasica	1	55000	1.08	

	C. cylindricornis	1	75000	1.2	
	Ovis ammon	1	38000	1.2	
	Ovis canadensis	1	91000	1.36	
	Ovis dalli	1	74000	1.1	
	Ovis orientalis	1	32000	1.09	
	Gazella subgutturosa	1	36000	1.53	
	Procarpa gutturosa	1	34000	1.33	
Cervidae	Navahoceros fricki	0	222600	.	1.16
	Cervalces scotti	0	485600	.	1.06
	Megaloceros giganteus	0	700000	.	1.01
	Sangamona fugitiva	0	158000	.	1.2
	Dama dama	1	70000	1	
	Cervus elaphus	1	240000	1	
	Cervus 'wapiti'	1	500000	1	
	Cervus nippon	1	48000	1.05	
	Odoicoileus hemionus	1	112000	1.67	
	O. virginianus	1	80000	1.69	
	Alces alces	1	410000	1.26	
	Rangifer tarandus	1	165000	1	
	Capreolus capreolus	1	32000	1.92	
	Blastoceros dichotomus	1	109000	1	
	Ozotoceros bezoarticus	1	32000	1.11	
	H. bisulcus	1	70000	.	
	Mazama americana	1	29000	1.5	
	M. gouazoubira	1	16300	.	
	M. rufina	1	8200	.	
	P. pudu	1	10000	1.5	
Lemurs	Pachylemur insignis	0	10000	.	0.842759
	P. jullyi	0	12500	.	0.79632
	Megaladapis grandidieri	0	65000	.	0.453212
	M. madagascariensis	0	40000	.	0.554253
	M. edwardsi	0	75000	.	0.423431
	Archeolemur edwardsi	0	22000	.	0.678671
	A. majori	0	17000	.	0.732328
	Hadropithecus stenognathus	0	28000	.	0.628482
	Mesopropithecus globiceps	0	10000	.	0.842759
	M. pithecoides	0	11000	.	0.822924
	M. dolichobrachion	0	12000	.	0.804815
	Babakotia radofilai	0	15000	.	0.758376
	Palaepropithecus ingens	0	45000	.	0.529741
	P. maximus	0	55000	.	0.487978
	Archaeoindris fontoynontii	0	200000	.	0.219308
	D. robusta	0	50000	.	0.507814
	Hapalemur griseus	1	850	1.25	
	Lemur catta	1	2900	1.17	
	Eulemur fulvus	1	3050	1.2	
	E. macaco	1	2450	1.15	
	E. coronatus	1	2000	1.4	
	E. mongoz	1	2100	1.12	
	Varecia variegata	1	3900	2	
	Lepilemur mustelinus	1	1000	.	
	L. leucopus	1	700	.	
	Avahi laniger	1	1000	.	
	Propithecus verreauxi	1	5250	1	
	Indri indri	1	6750	0.4	

	Daubentonia madagascariensis	1	2600	0.4	
Macropodidae	Procoptodon goliath	0	250000	.	0.44
	P. rapha	0	150000	.	0.63
	P. pusio	0	75000	.	0.89
	P. texasensis	0	150000	.	0.63
	Simosthenurus pales	0	150000	.	0.63
	S. orientalis	0	75000	.	0.89
	S. occidentalis	0	50000	.	1.05
	S. brownei	0	50000	.	1.05
	S. maddocki	0	50000	.	1.05
	S. gilli	0	30000	.	1.24
	Sthenurus stirlingi	0	150000	.	0.63
	S. tindalei	0	100000	.	0.79
	S. atlas	0	150000	.	0.63
	S. oreas	0	100000	.	0.79
	S. andersoni	0	50000	.	1.05
	Kangurus congrous	0	40000	.	1.13
	Troposodon minor	0	40000	.	1.13
	Macropus pearsoni	0	150000	.	0.63
	M. ferragus	0	150000	.	0.63
	M. thor	0	30000	.	1.24
	M. piltonensis	0	30000	.	1.24
	Protemnodon anak	0	100000	.	0.79
	P. roechus	0	100000	.	0.79
	P. brehus	0	100000	.	0.79
	P. hopei	0	50000	.	1.05
	P. tumbuna	0	50000	.	1.05
	P. nombe	0	40000	.	1.13
	Bohra paulae	0	35000		1.18
	Dendrolagus bennettianus	1	10000	1	
	D. Lumholtzi	1	6800	0.84	
	Dorcopsis luctuosa	1	3600	1.91	
	Lagorchestes conspicilattus	1	3000	2.39	
	L. hirsutus	1	1280	2.92	
	Lagostrophus fasciatus	1	1700	1	
	Macropus agilis	1	15000	1.66	
	M. antilopinus	1	27000	1.35	
	M. dorsalis	1	11000	1.73	
	M. eugenii	1	6500	1	
	M. fuliginosus	1	40000	0.98	
	M. giganteus	1	49000	1.00	
	M. parma	1	5400	1.71	
	M. parryi	1	13000	1.37	
	M. robustus	1	35000	1.38	
	M. rufogriseus	1	17000	1.28	
	M. rufus	1	46000	1.51	
	Onychogalea fraenata	1	6000	2.92	
	Peradorcas concinna	1	1400	2.13	
	Petrogale assimilis	1	4400	1.82	
	P. inornata	1	4600	1.74	
	P. penicillata	1	7100	1.78	
	P. persephone	1	6200	1.75	
	P. xanthopus	1	9000	1.86	
	Setonix brachyurus	1	3200	1	
	Thylogale billardieri	1	5500	1.79	

	T. stigmatica	1	4600	1.97	
	T. thetis	1	5900	2.00	
	Wallabia bicolor	1	15000	1.43	
Tayassuidae	Mylohyus nasutus	0	86750	.	0.67
	Platygonus compressus	0	81250	.	0.73
	Catagonus wagneri	1	35000	2.46	
	Tayassu tajacu	1	20000	4	
	Tayassu pecari	1	33500	1.7	
Dasypodidae	Holmesina septentrionalis	0	312000	.	
	Dasypus bellus	0	45000	.	1.09
	Kraglievichia	0	45000	.	1.09
	Chaetophractus villosus	1	2400	1.62	
	Chaetophractus nationi	1	1620	1.5	
	Dasypus hybridus	1	1500	8	
	D. novemcinctus	1	3900	4	
	D. kappleri	1	9500	2	
	D. sabanicola	1	1500	4	
	D. septemcinctus	1	1630	6	
	Euphractus sexcinctus	1	4315	1.5	
	Priodontes maximus	1	26800	1.5	
	Tolypeutes matacus	1	1100	1	
	Zaedyus pichiy	1	1020	2	
	Cabassous centralis	1	2750	1	
Vombatoidea	Lasiorhinus angustidens	0	50000	.	0.75
	Phascolomys medius	0	50000	.	0.75
	Phascolonus gigas	0	200000	.	0.59
	Ramsaya magna	0	100000	.	0.67
	Vombatus hacketti	0	30000	.	0.81
	Warenja wakefieldi	0	10000	.	0.94
	L. latifrons	1	26000	1	
	L. krefftii	1	31000	0.65	
	V. ursinus	1	26000	0.5	
	P. cinereus	1	5100	1	

Table S2: Ecological traits of species from the regions covered by the analysis that went extinct in the Late Pleistocene.

Family	Species	log10 mass (gm)	terrestrial 0, arboreal 1	Habitat (0 = open, 1 =closed)
Mustelidae	Brachyprotoma	2.30103	0	1
	Martes nobilis	.	0	
Canidae	Canis dirus	4.60205999	0	0
	Protocyon	4.30103	0	
Felidae	Acinonyx trumani	.	0	0
	Homotherium latidens	5.17609126	0	
	H. serum	5.17609126	0	0
	Panthera leo	5.30103	0	0
	P. pardus	4.95424251	0	
	Smilodon fatalis	5.17609126	0	
	S. populators	5.17609126	0	
Hyaenidae	Crocuta crocuta	4.84509804	0	
	Hyaena hyaena	4.60205999	0	
Ursidae	U. spelaeus	5.69897	0	
	Tremarctos floridanus	5.447158	0	
	Arctodus simus	5.69897	0	
	A. pristinus	5.477121	0	
Castoridae	Castoroides ohioensis	5.255273	0	1
	Trogontherium	4.39794001	0	
Myoxidae	Leithia	2.90308999	0	
Hydrochoeridae	Neochoerus pinkneyi	5	0	
	Hydrochoerus holmesi			1
Macrauchenidae	Macrauchenia	5.69897	0	
	Windhausenia	.	0	
Toxodontidae	Mixotoxodon	.	0	
	Toxodon	.	0	
	Mesotherium	.	0	0
Equidae	Equus	.	0	0
	Hippidion	.	0	
	Onohippidium	.	0	
Tapiridae	Tapirus veroensis	5.47712126	0	1
	T. califronicus		0	1
	T. copei		0	1
Rhinocerotidae	Coelodonta	6.4624	0	0
	Elasmotherium	.	0	0
	Dicerorhinus hemitoechus	6.2041	0	0
	D. kirchbergensis	6.2041	0	1
Plesiorycteropodidae	Plesiorycteropus madagascarensis		0	1
	P. germainepetterae		0	1
Tayassuidae	Mylohyus nasutus	4.86628734	0	0
	Platygonus compressus	4.7201593	0	0
Hippopotamidae	Hippopotamus amphibius	6.47712126	0	0
	H. lemerlei		0	

	H. laloumena		0	
	H. madagascariensis		0	
Camelidae	Camelops hesternus	5.763428	0	0
	Hemiauchenia macrocephala	5	0	0
	Paleolama mirifica	4.90309	0	1
	Camelus knoblochi	5.740363	0	
	Titanotylopus	.	0	
Bovidae	Bison priscus	6	0	0
	B. latifrons	5.954243	0	0
	Euceratherium collinum	5.698101	0	
	Bootherium bombifrons	5.876795	0	
	Symbos cavifrons	5.60206	0	0
	Oreamnos harringtoni	4.653213	0	1
	Spirocerus kiakhtensis	5.897627	0	
Cervidae	Navahoceros fricki	5.347525	0	1
	Alces latifrons	.	0	
	Cervalces scotti	5.686279	0	
	Megaloceros giganteus	5.845098	0	0
	Sangamona fugitiva	5.198657	0	0
	Choritoceros	.	0	
	Morenelephas	.	0	
Antilocapridae	Capromeryx minor	4	0	0
	Stockoceros	4.41497335	0	0
	Tetrameryx	4.65321251	0	0
Mammutidae	Mammut americanum	.	0	1
Gomphotheriidae	Cuvieronius	.	0	
	Haplomastodon	.	0	
	Stegomastodon	.	0	0
Elephantidae	Mammuthus primigenius	6.69897	0	0
	Mammuthus jeffersonii	.	0	0
	Palaeoloxodon antiquus	6.9542	0	1
Lemurs	Pachylemur insignis	4	1	1
	P. jullyi	4.09691	1	1
	Megaladapis grandidieri	4.812913	1	1
	M. madagascariensis	4.60206	1	1
	M. edwardsi	4.875061	1	1
	Archeolemur edwardsi	4.342423	0	1
	A. majori	4.230449	0	1
	Hadropithecus stenognathus	4.447158	0	1
	Mesopropithecus globiceps	4	1	1
	M. pithecoides	4.041393	1	1
	M. dolichobrachion	4.079181	1	1
	Babakotia radofilai	4.176091	1	1
	Palaepropithecus ingens	4.653213	1	1
	P. maximus	4.740363	1	1
	Archaeoindris fontoynontii	5.30103	0	1
	D. robusta	4.69897	1	1
Potoroidae	Propleopus oscillans	4.60205999	0	0
	N. gen	3.69897	0	

Macropodidae	Bohra paulae	4.54407	1	1
	Procoptodon goliah	5.39794	0	0
	P. rapha	5.176091	0	0
	P. pusio	4.875061	0	0
	P. texasensis	5.176091	0	0
	Simosthenurus pales	5.176091	0	0
	S. orientalis	4.875061	0	0
	S. occidentalis	4.69897	0	0
	S. brownei	4.69897	0	0
	S. maddocki	4.69897	0	0
	S. gilli	4.477121	0	0
	Sthenurus stirlingi	5.176091	0	0
	S. tindalei	5	0	0
	S. atlas	5.176091	0	0
	S. oreas	5	0	0
	S. andersoni	4.69897	0	0
	Kangurus congrous	4.60206	0	
	Troposodon minor	4.60206	0	
	Macropus pearsoni	5.176091	0	
	M. ferragus	5.176091	0	
	M. thor	4.477121	0	
	M. piltonensis	4.477121	0	
	Protemnodon anak	5	0	
	P. roechus	5	0	
	P. brehus	5	0	0
	P. hopei	4.69897	0	
	P. tumbuna	4.69897	0	
	P. nombe	4.60206	0	
Tachyglossidae	Megalibgwilia ramsayi	4	0	
	Zaglossus hacketti	4.47712126	0	
Diprotodontidae	Diprotodon minor	5.95424251	0	0
	D. optatum	6	0	0
	Euryzygoma dunense	5.69897	0	
	Euwenia grata	5.69897	0	
	Nototherium mitchelli	5.69897	0	0
	Zygomaturus trilobus	5.69897	0	1
	Kolopsis watutense	5.47712126	0	
	Hulitherium thomasettii	5.17609126	0	
	Maokopia ronaldi	5	0	
Palorchestidae	Palorchestes azael	5.69897	0	1
	P. parvus	5	0	1
Vombatidae	Lasiorhinus angustidens	4.69897	0	1
	Phascolomys medius	4.69897	0	1
	Phascolonus gigas	5.30103	0	
	Ramsaya magna	5	0	1
	Vombatus hacketti	4.477121	0	1
	Warenja wakefieldi	4	0	1
Thylacoleonidae	Thylacaleo carnifex	5.30103	0	0
Megalonychidae	Megalonyx jeffersonii	5.778151	0	1

	Acratocnus odontrigonus	4.518514	0	
	Parconus serus	4.845098	0	
	Synconus comes	3.778151	0	
	Meizonyx salvadorensis	5.778151	0	
Megatheriidae	Eremotherium rusconii	6.477121	0	0
	Nothrotheriops shastensis	5.477121	0	0
	Megatherium	6.60206	0	
	Nothrotherium	.	0	
Mylodontidae	Glossotherium harlani	5.778151	0	0
	Lestodon	.	0	
	Mylodon	.	0	
	Scelidotherium	5.778151	0	
Dasypodidae	Holmesina septentrionalis	5.494155	0	
	Pampatherium	.	0	
	Dasypus bellus	4.653213	0	
	Kraglievichia floridanus	4.653213	0	
	Eutatus	.	0	
	Propraopus	.	0	
Glyptodontidae	Glyptodon	.	0	
	Glyptotherium floridanum	6	0	1

Table S3. Extant species from the study regions with reproductive rates less than 0.97 offspring per year, and which should therefore have been at high risk during the 'megafauna' extinctions of the late Quaternary

Family	Genus	species	log 10 mass (gm)	reproductive rate	arboreal 1, terrestrial 0	habitat open 0, closed 1	nocturnal 1, diurnal 0	alpine 1	high latitude 1
Camelidae	Lama	guanicoe	5.04	0.5	0	0	0	1	0
	Vicuna	vicugna	4.7	0.67	0	0	0	1	0
Ursidae	Ursus	arctos	5.6	0.86	0	0	0	0	1
	Ursus	maritimus	5.59	0.67	0	0	0	0	1
Felidae	Panthera	onca	5.00	0.96	0	1	0	0	0
Bovidae	Bison	bonasus	5.95	0.57	0	0	0	0	0
	Bison	bison	5.8	0.81	0	0	0	0	0
	Ovibos	moschatus	5.49	0.62	0	0	0	0	1
	Capra	ibex	4.96	0.86	0	1	0	1	0
Lemurs	Indri	indri	3.83	0.4	1	1	0	0	0
	Daubentonia	madagascariensis	3.41	0.4	1	1	1	0	0
Macropodidae	Dendrolagus	lumholtzi	3.83	0.84	1	1	1	0	0
	Dendrolagus	matschiei	3.96	0.89	1	1	1	0	0
Tachyglossidae	Tachyglossus	aculeatus	3.65	0.5	0	0	0	0	0
Choloepidae	Choleopus	didactylus	3.79	0.6	1	1	1	0	0
	Choleopus	hoffmanni	3.76	0.8	1	1	1	1	0
Vombatidae	Lasiorhinus	krefftii	4.49	0.65	0	1	1	0	0
	Vombatus	ursinus	4.41	0.5	0	1	1	0	0
Petauridae	Petaurus	australis	2.76	0.83	1	1	1	0	0
Pseudocheiridae	Petauroides	volans	3.11	0.82	1	1	1	0	0
Tapiridae	Tapirus	bairdii	5..3	0.7	0	1	1	0	0
	T.	terrestris	5.18	0.7	0	1	1	0	0
	T.	pinchaque	5.18	0.7	0	1	1	0	0
Cebidae	Allouatta	palliata	3.78	0.53	1	1	0	0	0
	Ateles	geoffroyi	3.9	0.38	1	1	0	0	0
	Ateles	paniscus	3.94	0.3	1	1	0	0	0
	Brachyteles	arachnoides	4.03	0.5	1	1	0	0	0
	Cacajao	calvus	3.51	0.5	1	1	0	0	0
Erethizontidae	Coendou	prehensilis	3.7	0.84	1	1	1	0	0