

Table S14. Species traits used in the study.

Order	Genus	Species	mass	lit.sz	lit.yr	longev	torp	mig	IUCN	area	lat	sympatry	cit	viruses	zoon	refs
Chiroptera	Anoura	geoffroyi	15.100	1.000	1.000	3650	1	1	LC	8665212	5	293	25	9	6	[1, 2, 3]
Chiroptera	Antrozous	pallidus	20.800	2.000	1.000	5406	2	1	LC	4506699	28	115	106	1	1	[1, 4, 2, 5, 6, 7, 8, 4]
Chiroptera	Artibeus	jamaicensis	41.800	1.000	2.000	7013	1	1	LC	1997429	17	262	163	12	9	[1, 5, 2, 9, 10]
Chiroptera	Artibeus	lituratus	65.600	1.025	1.879	3979	1	1	LC	15442170	9	300	77	14	12	[1, 5, 2, 9, 11, 12, 13]
Chiroptera	Barbastella	barbastellus	8.029	1.833	1.000	8401	3	1	NT	3924018	45	51	48	1	1	[1, 5, 14, 15, 16, 17, 18, 19, 20]
Chiroptera	Carollia	perspicillata	16.400	1.045	2.033	6209	1	1	LC	14606378	7	287	225	15	11	[1, 5, 2, 9, 21, 22, 23]
Chiroptera	Corynorhinus	townsendii	9.920	1.000	1.000	7487	3	1	LC	4849204	37	116	44	1	1	[1, 5, 24]
Chiroptera	Cynopterus	brachyotis	34.082	1.000	2.333	3689	1	1	LC	2861168	9	213	41	5	2	[1, 5, 25, 26]
Chiroptera	Cynopterus	sphinx	62.938	1.156	1.846	3650	2	1	LC	6858556	3	266	103	3	3	[1, 14, 27, 28, 29]
Chiroptera	Desmodus	rotundus	33.041	1.056	1.263	10665	2	1	LC	19150173	-3	302	246	7	4	[1, 5, 30, 31, 18, 3]
Chiroptera	Dobsonia	moluccensis	381.437	1.000	1.000	4490	1	1	LC	898926	-6	141	0	1	1	[1, 25, 9, 5, 32, 33]
Chiroptera	Eidolon	dupreanum	286.563	1.000	1.000	7300	1	1	V	460031	-17	38	6	3	2	[1, 34, 35, 36]
Chiroptera	Eidolon	helvum	252.840	1.020	1.167	7961	1	3	NT	12561712	-4	200	60	7	4	[1, 37, 38, 39, 40]
Chiroptera	Eonycteris	spelaea	59.887	1.000	2.333	1825	1	1	LC	3648868	7	296	21	5	3	[1, 37, 25, 26, 41]
Chiroptera	Epomophorus	gambianus	148.231	1.000	1.667	2849	1	1	LC	4800140	9	132	7	1	1	[1, 5, 42]
Chiroptera	Epomophorus	wahlbergi	89.538	1.000	2.000	3689	1	1	LC	5089184	-5	160	20	1	1	[1, 5, 43]
Chiroptera	Eptesicus	fuscus	17.221	1.500	1.000	7305	3	1	LC	14020198	20	280	1032	7	5	[1, 5, 14, 15, 44]
Chiroptera	Eptesicus	serotinus	22.859	1.375	1.000	6940	2	1	LC	27959853	46	187	104	4	3	[1, 5, 14, 45, 19, 20, 18]
Chiroptera	Glossophaga	soricina	9.400	1.000	2.000	4018	2	1	LC	16158143	9	310	128	8	7	[1, 5, 2, 46, 47, 48]
Chiroptera	Hypsignathus	monstrosus	328.294	1.143	2.000	4383	1	1	LC	3098273	6	150	10	2	2	[1, 5, 49, 50, 51]
Chiroptera	Lasionycteris	noctivagans	12.134	1.840	1.000	4383	2	3	LC	10473443	38	65	133	1	1	[1, 5, 14, 52, 53]
Chiroptera	Lasiurus	cinereus	25.279	2.053	1.000	5115	3	3	LC	23416663	6	274	168	2	2	[1, 5, 54, 53, 55]
Chiroptera	Macrotus	californicus	11.990	1.033	1.000	6209	1	1	LC	644039	27	71	46	1	1	[1, 5, 56, 14, 9, 57]
Chiroptera	Megaderma	lyra	48.709	1.100	1.000	5115	1	1	LC	6322216	17	218	100	2	1	[1, 5, 22]
Chiroptera	Miniopterus	schreibersii	11.609	1.001	1.000	8036	3	2	NT	4027214	29	154	161	12	6	[1, 5, 14, 58, 59, 60, 61, 62, 63, 19]
Chiroptera	Myotis	austroriparius	6.838	1.942	1.000	2190	2	1	LC	835458	33	17	25	1	1	[1, 64, 65, 66]
Chiroptera	Myotis	californicus	4.600	1.000	1.000	5479	3	1	LC	4188639	36	130	24	2	1	[1, 67, 68, 7, 8, 69]
Chiroptera	Myotis	daubentonii	7.373	1.125	1.000	10227	3	2	LC	34589751	53	90	175	3	2	[1, 5, 14, 70, 19, 71, 72]
Chiroptera	Myotis	evotis	6.875	1.000	1.000	8036	3	1	LC	3211018	44	34	38	2	1	[1, 5, 14, 73, 74, 75]
Chiroptera	Myotis	griseus	10.371	1.000	1.000	6026	3	2	NT	854076	36	17	40	1	1	[1, 5, 14, 76, 77]
Chiroptera	Myotis	leibii	5.210	1.000	1.000	4380	3	1	LC	1444356	42	17	18	1	1	[1, 5, 78, 79]
Chiroptera	Myotis	lucifugus	7.677	1.106	1.000	12419	3	2	LC	12664800	50	37	816	8	4	[1, 5, 14, 15, 80, 81, 82, 83, 18, 84]
Chiroptera	Myotis	myotis	22.925	1.375	1.000	7962	3	2	LC	3981498	40	43	279	7	2	[1, 14, 15, 85, 23, 86]
Chiroptera	Myotis	mystacinus	4.988	1.167	1.000	8766	3	1	LC	5217604	50	48	38	2	1	[1, 5, 14, 76, 18, 87, 88, 19]
Chiroptera	Myotis	nattereri	7.127	1.000	1.000	7305	3	1	LC	6190453	47	52	74	6	1	[1, 5, 14, 76, 89, 90, 19]
Chiroptera	Myotis	nigricans	4.252	1.000	3.000	2557	2	1	LC	15129223	-7	289	27	3	3	[1, 5, 14, 91, 92]
Chiroptera	Myotis	septentrionalis	6.268	1.000	1.000	6940	3	2	LC	5168594	48	23	81	4	4	[1, 5, 14, 93, 83]
Chiroptera	Myotis	thysanodes	8.191	1.000	1.000	6685	3	1	LC	3661784	35	123	21	1	1	[1, 5, 14, 91, 94, 95]
Chiroptera	Myotis	velifer	10.097	1.000	1.000	4128	3	2	LC	1967504	32	139	32	1	1	[1, 5, 14, 96, 97]
Chiroptera	Myotis	volans	8.765	1.000	1.000	1159	3	1	LC	4845574	32	94	22	2	1	[1, 98, 99, 100, 101]
Chiroptera	Myotis	yumanensis	9.158	1.000	1.000	3217	3	1	LC	4205191	38	86	27	2	1	[1, 5, 14, 102, 103]
Chiroptera	Nyctalus	leisleri	13.280	1.667	1.000	5844	3	3	LC	5868175	42	87	63	1	0	[1, 5, 104, 105, 19, 22]
Chiroptera	Nyctalus	noctula	27.967	1.439	1.000	4383	3	3	LC	13146436	41	173	132	9	5	[1, 5, 14, 54, 19, 62, 106]
Chiroptera	Nycticeius	humeralis	8.989	2.188	1.000	2192	3	2	LC	2910364	35	70	62	1	1	[1, 5, 14, 54, 107, 108]
Chiroptera	Parastrellus	hesperus	3.700	1.942	1.000	1840	3	1	LC	2680623	32	99	19	1	1	[1, 68, 7, 8, 109]
Chiroptera	Perimyotis	subflavus	5.737	2.140	1.000	5406	3	2	LC	4370640	40	143	105	1	1	[1, 5, 14, 76, 110]

Chiroptera	Phyllostomus	hastatus	90.022	1.000	1.000	6575	2	1	LC	13235754	2	262	73	13	10	[1, 5, 14, 111]
Chiroptera	Pipistrellus	kuhlii	5.934	1.300	1.000	2922	3	1	LC	12479184	31	115	41	1	1	[1, 5, 14, 112, 22]
Chiroptera	Pipistrellus	nathusii	7.309	1.900	1.000	4018	3	3	LC	6115801	53	43	53	4	1	[1, 5, 14, 113, 19, 114, 115, 116, 106]
Chiroptera	Pipistrellus	pipistrellus	5.557	1.281	1.000	5844	3	1	LC	34836390	44	168	365	8	3	[1, 5, 14, 15, 19, 20, 117, 118] [119, 19, 120, 121, 122]
Chiroptera	Plecotus	auritus	8.148	1.250	1.000	10958	3	1	LC	6895907	53	44	209	3	2	[1, 5, 14, 76, 18, 19, 85, 123]
Chiroptera	Pteropus	alecto	686.928	1.200	1.000	7191	1	2	LC	1404130	-12	172	55	7	6	[1, 5, 124]
Chiroptera	Pteropus	giganteus	842.349	1.000	1.000	14610	1	2	LC	4058065	14	132	82	2	1	[1, 5, 9, 125]
Chiroptera	Pteropus	hypomelanus	421.069	1.000	1.000	7410	1	1	LC	550427	4	183	27	5	5	[1, 5, 9, 126, 127, 32, 128]
Chiroptera	Pteropus	poliocephalus	718.814	1.000	1.000	8614	1	3	V	249713	-30	36	111	4	4	[1, 5, 9, 129, 22]
Chiroptera	Pteropus	scapulatus	412.179	1.000	1.000	5770	1	2	LC	3126765	-19	78	22	8	7	[1, 5, 9, 130]
Chiroptera	Pteropus	vampyrus	1027.955	1.000	1.000	7629	1	2	NT	1985718	6	219	33	1	1	[1, 5, 9, 124, 131]
Chiroptera	Rhinolophus	ferrumequinum	21.061	0.984	1.000	11140	3	1	LC	25129304	37	178	233	12	7	[1, 5, 14, 132, 18, 19, 133]
Chiroptera	Rhinolophus	hipposideros	4.958	1.137	1.000	5338	3	1	LC	7260478	39	84	69	1	0	[1, 132, 19, 134, 135, 136, 134]
Chiroptera	Rhinolophus	rouxii	11.788	1.000	1.000	1825	1	1	LC	870083	22	116	95	3	2	[1, 22]
Chiroptera	Rousettus	aegyptiacus	134.774	1.021	1.706	8359	1	2	LC	4450539	-1	211	196	10	7	[1, 9, 137]
Chiroptera	Rousettus	leschenaultii	89.181	1.040	1.875	5114	1	2	LC	7194098	9	222	55	14	9	[1, 5, 14, 138, 139, 140, 141, 142]
Chiroptera	Sturnira	lilium	19.343	1.000	2.333	4383	2	1	LC	16647201	11	303	68	8	6	[1, 5, 143, 144, 13, 145, 146]
Chiroptera	Tadarida	brasiliensis	11.978	1.031	1.000	4383	3	3	LC	15746797	18	330	300	5	5	[1, 5, 15, 147]
Chiroptera	Taphozous	melanopogon	27.568	1.000	1.000	7300	2	2	LC	5988880	8	311	23	4	3	[1, 148, 149, 150]
Chiroptera	Vespertilio	murinus	20.786	1.375	1.000	4380	3	3	LC	29699591	57	81	38	2	2	[1, 151, 19, 152, 153, 154, 155, 106]
Rodentia	Abrothrix	olivaceus	23.645	5.323	2.000	360	1		LC	1086786	-42	60	53	1	1	[1]
Rodentia	Aethomys	namaquensis	55.025	3.900	2.000	1717	1		LC	3375275	-24	99	53	2	2	[1, 5]
Rodentia	Akodon	azarae	24.500	4.680	2.000	549	1		LC	1231751	-36	93	106	2	2	[1, 156, 157]
Rodentia	Apodemus	agrarius	24.575	5.706	3.125	1460	1		LC	14443824	41	233	223	8	6	[1]
Rodentia	Apodemus	argenteus	21.000	4.077	4.000	1826	1		LC	367845	35	22	51	1	1	[1, 5]
Rodentia	Apodemus	flavicollis	32.260	5.367	4.875	1644	1		LC	6298880	57	122	407	11	7	[1, 5, 9]
Rodentia	Apodemus	sylvaticus	26.914	5.057	4.000	2301	1		LC	5399377	56	91	952	16	8	[1, 5]
Rodentia	Arvicanthis	niloticus	120.900	5.146	3.500	2447	1		LC	6772138	9	242	196	9	4	[1, 5]
Rodentia	Arvicola	amphibius	129.557	5.022	4.843	1338	1		LC	18522732	56	181	371	2	1	[1]
Rodentia	Baiomys	taylori	7.475	2.623	10.000	1127	2		LC	1280182	27	166	44	2	1	[1, 15]
Rodentia	Castor	fiber	19000.000	3.208	1.000	7665	1		LC	3812235	54	79	200	1	1	[1]
Rodentia	Coendou	prehensilis	4154.000	1.000	1.300	5268	1		LC	10484553	1	332	18	1	1	[1, 5, 158, 9]
Rodentia	Cricetomys	gambianus	1403.200	3.136	3.750	3068	1		LC	9019456	-4	263	98	4	1	[1, 5, 9]
Rodentia	Cuniculus	paca	8309.333	2.639	1.750	5954	1		LC	13382516	7	524	96	1	1	[1, 5, 9]
Rodentia	Cynomys	ludovicianus	883.587	4.536	1.000	3103	2		LC	1824941	40	114	355	1	0	[1, 159]
Rodentia	Dasyprocta	leporina	3339.300	1.800	1.300	6497	1		LC	2040718	5	81	61	3	3	[1, 160]
Rodentia	Erethizon	dorsatum	8144.400	1.032	1.000	8547	1		LC	12649972	41	210	113	3	2	[1, 5, 9]
Rodentia	Funisciurus	congius	112.120	2.200	2.000	3468	1		LC	1750122	-7	104	1	1	1	[1, 5, 9]
Rodentia	Gerbilliscus	validus	121.000	4.250	2.000	1826	1		LC	4675845	-5	186	1	1	1	[1, 5]
Rodentia	Glaucomys	volans	70.346	3.169	1.800	4137	1		LC	3926064	25	175	135	1	1	[1, 9]
Rodentia	Glis	glis	166.700	4.500	1.000	3114	3		LC	3811259	44	118	170	1	1	[1, 161, 15]
Rodentia	Hydromys	chrysogaster	651.125	3.437	2.209	2666	1		LC	4299391	-15	127	35	1	1	[1, 5, 9]
Rodentia	Hystrix	africaeustralis	13309.005	1.884	1.500	8437	1		LC	7729424	-17	205	35	1	1	[1, 5, 9]
Rodentia	Lemniscomys	striatus	50.400	4.609	1.500	1753	1		LC	4773339	8	242	30	4	2	[1, 5]
Rodentia	Marmota	monax	3795.903	4.767	1.000	5114	3		LC	8064664	50	77	347	5	3	[1, 5, 15]
Rodentia	Mesocricetus	auratus	97.125	9.076	4.500	1947	3		V	4702	37	16	1960	7	1	[1, 15]
Rodentia	Micromys	minutus	7.793	5.669	2.667	1278	1		LC	24127199	39	288	94	2	1	[1]
Rodentia	Microtus	agrestis	41.633	4.831	3.700	1753	1		LC	13088085	60	112	728	10	5	[1, 5]

Rodentia	Microtus	arvalis	25.117	4.841	6.786	1753	1	LC	8014045	50	160	629	7	5	[1, 5, 9]
Rodentia	Microtus	californicus	56.424	5.425	7.665	365	1	LC	288183	37	97	87	3	1	[1, 162]
Rodentia	Microtus	ochrogaster	43.210	4.160	4.000	1936	1	LC	3279550	36	82	967	2	0	[1, 5]
Rodentia	Microtus	oeconomus	34.647	5.709	3.413	584	1	LC	370998862	58	154	269	5	4	[1]
Rodentia	Microtus	pennsylvanicus	42.136	5.369	3.919	1423	1	LC	12643410	43	137	937	5	1	[1, 5]
Rodentia	Mus	minutoides	7.120	4.257	4.000	1571	1	LC	4269469	-11	218	37	1	0	[1, 5, 9]
Rodentia	Myocastor	coypus	6559.575	5.801	2.479	2784	1	LC	46600750	18	268	242	2	2	[1, 9]
Rodentia	Myodes	gapperi	22.100	5.296	2.366	600	1	LC	8792882	46	138	265	2	2	[1, 9]
Rodentia	Myodes	glareolus	22.829	4.362	3.150	1790	1	LC	9836202	56	113	1549	16	11	[1, 5, 9]
Rodentia	Myodes	rufocanus	30.333	4.930	3.750	1205	1	LC	14280106	46	102	317	2	2	[1, 5, 9]
Rodentia	Neotoma	albigula	200.258	2.144	2.000	3470	1	LC	835143	30	122	75	1	1	[1, 5, 9]
Rodentia	Neotoma	cinerea	254.125	3.590	1.773	2118	1	LC	3732149	48	146	56	2	2	[1, 5, 9]
Rodentia	Neotoma	lepida	236.000	3.083	3.333	3835	1	LC	988729	27	125	72	2	1	[1, 5, 9]
Rodentia	Neotoma	micropus	247.000	2.456	1.750	1205	2	LC	1066915	32	123	59	1	0	[1, 5, 163]
Rodentia	Oligoryzomys	flavescens	21.300	5.200	2.000	1403	1	LC	3209722	-28	238	50	2	2	[1, 157]
Rodentia	Ondatra	zibethicus	997.121	7.051	2.601	2118	1	LC	15517661	43	195	250	5	1	[1, 5, 9]
Rodentia	Onychomys	leucogaster	26.207	3.974	2.667	1825	1	LC	4156363	41	185	104	1	1	[1, 164]
Rodentia	Otomys	irroratus	117.113	1.810	4.000	730	1	LC	557001	-24	67	55	1	0	[1, 5, 9]
Rodentia	Pedetes	capensis	2727.500	1.001	3.600	7305	1	LC	3847276	-19	117	48	1	1	[1, 5, 9]
Rodentia	Perognathus	parvus	21.400	5.140	1.440	1460	3	LC	922281	42	110	42	1	1	[1, 132]
Rodentia	Peromyscus	californicus	43.606	2.021	4.375	2009	2	LC	132681	34	75	206	2	0	[1, 5, 9]
Rodentia	Peromyscus	eremicus	22.636	2.509	3.250	2703	2	LC	1227317	28	162	47	1	1	[1, 5, 15]
Rodentia	Peromyscus	gossypinus	27.998	4.094	4.000	300	2	LC	1163524	33	39	71	3	3	[1, 132]
Rodentia	Peromyscus	leucopus	18.400	4.309	4.300	2885	2	LC	6141145	37	199	1202	7	6	[1, 5, 15]
Rodentia	Peromyscus	maniculatus	19.333	4.892	3.248	3032	2	LC	13623312	39	293	1528	6	6	[1, 5, 15]
Rodentia	Peromyscus	truei	25.913	3.600	3.000	1972	2	LC	1567435	39	157	39	3	2	[1, 5, 9]
Rodentia	Proechimys	semispinosus	406.409	2.650	4.680	2118	1	LC	374844	5	104	62	2	2	[1, 5]
Rodentia	Rattus	exulans	52.450	3.800	5.920	450	1	LC	2279381338	-7	404	180	4	1	[1]
Rodentia	Rattus	fuscipes	115.300	4.844	3.300	1936	1	LC	524290	-33	28	145	1	0	[1, 5, 9]
Rodentia	Rattus	norvegicus	305.717	8.735	3.192	1825	1	LC	180534351	7	569	3182	20	7	[1, 5]
Rodentia	Rattus	rattus	176.612	6.394	3.117	1534	1	LC	62945738	22	993	987	15	11	[1, 5, 9]
Rodentia	Reithrodontomys	megalotis	10.968	4.545	4.500	1315	2	LC	5308921	38	280	103	2	1	[1, 5, 15]
Rodentia	Rhabdomys	pumilio	44.838	6.162	7.000	1644	1	LC	3304974	-9	170	123	1	1	[1, 5, 9]
Rodentia	Sciurus	carolinensis	527.738	3.384	1.885	8620	1	LC	4162786	39	85	333	15	8	[1, 5]
Rodentia	Sciurus	granatensis	279.000	2.029	2.000	4200	1	LC	995652	10	175	13	1	1	[1, 5]
Rodentia	Sciurus	griseus	714.000	2.670	1.000	4018	1	LC	377346	40	103	24	1	1	[1, 5]
Rodentia	Sciurus	niger	810.443	3.222	1.563	5844	1	LC	4408246	38	122	147	4	4	[1, 5]
Rodentia	Sciurus	vulgaris	348.500	4.600	2.333	5406	1	LC	43680564	52	185	310	4	2	[1, 5]
Rodentia	Sigmodon	hispidus	114.395	5.645	7.267	1899	1	LC	2676280	31	126	647	18	11	[1, 5, 9]
Rodentia	Spermophilus	beecheyi	648.025	6.075	1.000	3650	3	LC	463741	39	104	139	2	1	[1, 132, 165]
Rodentia	Spermophilus	citellus	290.000	6.500	1.250	2447	3	V	443576	44	45	69	2	0	[1, 5, 15]
Rodentia	Spermophilus	lateralis	192.033	5.292	1.000	3799	3	LC	1713233	37	150	267	1	1	[1, 5, 15]
Rodentia	Spermophilus	richardsonii	329.300	6.800	1.000	2192	3	LC	904070	50	48	163	2	1	[1, 5, 15]
Rodentia	Spermophilus	tridecemlineatus	172.168	7.841	1.333	2885	3	LC	3799232	37	111	304	2	2	[1, 5, 166]
Rodentia	Spermophilus	variegatus	673.430	4.946	1.250	3579	3	LC	2327898	31	209	33	2	1	[1, 5, 132]
Rodentia	Tamias	amoenus	49.800	5.315	1.071	1899	3	LC	1152398	43	102	89	1	1	[1, 5, 15]
Rodentia	Tamias	minimus	48.058	5.092	1.200	3653	3	LC	5585611	52	145	24	1	1	[1, 5, 166]
Rodentia	Tamias	sibiricus	92.227	5.046	1.143	3506	3	LC	16750695	47	164	51	1	0	[1, 5, 167]
Rodentia	Tamias	striatus	108.501	4.715	1.563	3470	3	LC	4321942	43	53	281	5	5	[1, 5, 15]

Rodentia	Tamiasciurus	hudsonicus	215.535	4.034	1.625	3579	1	LC	10942922	43	147	314	4	2	[1, 5, 9]
Rodentia	Thryonomys	swinderianus	4053.347	4.144	2.250	1972	1	LC	8119945	-4	260	64	1	1	[1, 5]
Rodentia	Xerus	erythropus	649.133	3.417	3.000	3762	1	LC	10427903	15	248	12	2	1	[1, 5, 168]
Rodentia	Xerus	inauris	588.000	2.048	1.000	580	1	LC	1519144	-25	66	2	1	1	[1, 5, 166]

abbreviations and units:

‘mass’ – body mass in grams

‘lit.sz’ – mean litter size

‘lit.yr’ – mean number of litters per year

‘longev’ – maximum longevity in days

‘torp’ - torpor category, 1=no evidence of torpor use; 2=some torpor use with minimum body temperature > 11°C; 3=true hibernation with min Tb < 11°C)

‘mig’ – migration category, 1=only local movement; 2=regional migration, 3=long distance migration (see main text)

‘IUCN’ – IUCN conservation status. LC= least concern; V=vulnerable; NT=near threatened

‘area’ – area in km² of the species’ distribution

‘lat’ – absolute value of the latitude at the midpoint of the species distribution

‘sympatry’ – number of other species in the same taxonomic order whose distributions overlap with the species of interest

‘cit’ – number of citations on Web of Science for the species name

‘viruses’ – the number of viruses identified in the species in the attached database

‘zoon’ – the number of zoonotic viruses

All of the data for IUCN status, species distribution area, latitude and number of range overlaps (sympatry) came from ref[169].

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