

**Online Appendix A:** Karyotypic, Biological and Geographic traits utilized for analyses.

**Table S1.** Species utilised to estimate the rate of macrostructural karyotypic diversification (rKDmacro) for families.

<b>Family</b>	<b>Species</b>	<b>2n</b>	<b>FN</b>	<b>References</b>
Acrobatidae	<i>Acrobates pygmaeus</i>	14	24	235
Atelidae	<i>Ateles belzebuth</i>	34	62	67
Atelidae	<i>Ateles geoffroyi</i>	34	62	67
Atelidae	<i>Ateles paniscus chamek</i>	34	62	67
Atelidae	<i>Alouatta caraya</i>	52	70	94
Atelidae	<i>Aloutta belzebul</i>	49/50	70	167
Atelidae	<i>Aloutta seniculus</i>	44	56	307
Balaenidae	<i>Balaena mysticetus</i>	42	74	149
Balaenopteridae	<i>Balanoptera borealis</i>	44	77	312
Balaenopteridae	<i>Balanoptera acutorostrata</i>	44	76	315
Balaenopteridae	<i>Balanoptera physalus</i>	44	76	316
Balaenopteridae	<i>Megaptera novaeangliae</i>	44	79	316
Balaenopteridae	<i>Balaenoptera novaeangliae</i>	44	76	316
Balaenopteridae	<i>Balaenoptera musculus</i>	44	78	317
Barthyergidae	<i>Heliophobus argenteocinereus</i>	60	112	151
Barthyergidae	<i>Heterocephalus glaber</i>	60	112	151
Bovidae	<i>Boselaphus tragocamelus</i>	46	56	33
Bovidae	<i>Alcephalus busephalus</i>	40	58	56
Bovidae	<i>Ammotragus lervia</i>	58	56	56
Bovidae	<i>Bison bison</i>	60	58	56
Bovidae	<i>Capra ibex</i>	60	58	56
Bovidae	<i>Connochates taurinus</i>	58	58	56
Bovidae	<i>Ovis aries</i>	54	58	58

Bovidae	<i>Ovis nivicola</i>	52	58	58
Bovidae	<i>Pseudois nayaur</i>	54	58	59
Bovidae	<i>Hemitragus jemlahicus</i>	48	58	64
Bovidae	<i>Rhynchotragus kirki</i>	46	46	64
Bovidae	<i>Damaliscus dorcas phillipsi</i>	38	58	69
Bovidae	<i>Addax nasomaculatus</i>	58	58	70
Bovidae	<i>Capra hircus</i>	60	58	79
Bovidae	<i>Aepyceros melampus</i>	60	58	92
Bovidae	<i>Gazella granti</i>	30/31	56	92
Bovidae	<i>Gazella spekei</i>	33/32	56	92
Bovidae	<i>Litocranius walleri</i>	60	58	92
Bovidae	<i>Bos taurus</i>	60	58	109
Bovidae	<i>Bos gaurus</i>	58	58	109
Bovidae	<i>Syncerus caffer</i>	52	58	109
Bovidae	<i>Oreamnos americanus</i>	42	58	126
Bovidae	<i>Rupicapra rupicapra</i>	58	58	126
Bovidae	<i>Murrah buffalo</i>	50	58	148
Bovidae	<i>Kobus ellipsiprymnus defassa</i>	54	58	156
Bovidae	<i>Kobus ellipsiprymnus ellipsiprymnus</i>	50	58	156
Bovidae	<i>Oryx dammah</i>	58	58	159
Bovidae	<i>Oryx gazella gazella</i>	56	58	159
Bovidae	<i>Oryx gazella beisa</i>	58	58	159
Bovidae	<i>Oryx leucoryx</i>	58	58	159
Bovidae	<i>Ovis dalli dalli</i>	54	58	194
Bovidae	<i>Ovis musimon</i>	54	58	194
Bovidae	<i>Ovis ammon cycloceros</i>	58	58	194
Bovidae	<i>Ovis canadiensis mexicana</i>	54	58	200
Bovidae	<i>Ovis ammon severtzovi</i>	56	58	201

Bovidae	<i>Ovis vignei</i>	58	58	201
Bovidae	<i>Cephalophus maxwellii</i>	60	58	234
Bovidae	<i>Cephalophus dorsalis</i>	60	58	234
Bovidae	<i>Cephalophus silvicultor</i>	60	58	234
Bovidae	<i>Cephalophus monticola</i>	60	58	234
Bovidae	<i>Cephalophus natelensis</i>	60	58	234
Bovidae	<i>Sylvicapra grimmia</i>	60	58	234
Bovidae	<i>Bubalus bubalis</i>	50	58	271
Bovidae	<i>Bubalus mindorensis</i>	46	56	271
Bovidae	<i>Antilope cervicapra</i>	30/31	56	275
Bovidae	<i>Antidorcas marsupialis</i>	56	58	275
Bovidae	<i>Gazella cuvieri</i>	32/33	56	275
Bovidae	<i>Gazella dama mhorh</i>	40	56	275
Bovidae	<i>Gazella dama ruficollis</i>	38	56	275
Bovidae	<i>Gazella dorcas</i>	30/31	56	275
Bovidae	<i>Gazella gazella erlangeri</i>	34	58	275
Bovidae	<i>Gazella leptoceros</i>	32/33	56	275
Bovidae	<i>Gazella rufifrons</i>	58	56	275
Bovidae	<i>Gazella soemmerringi</i>	36	56	275
Bovidae	<i>Gazella subgutturosa marica</i>	30	56	275
Bovidae	<i>Gazella thomsoni</i>	58	56	275
Bovidae	<i>Naomorphedus goral</i>	55	54	295
Bovidae	<i>Oryx tao</i>	58	58	295
Caenolestidae	<i>Rhyncholestes raphanurus</i>	14	26	7
Camelidae	<i>Camelus bactrianus</i>	74	82	272
Camelidae	<i>Lama huanacus</i>	74	82	272
Camelidae	<i>Vicugna vicugna</i>	74	82	272
Canidae	<i>Pseudoalopex gymnocercus</i>	74	72	55

Canidae	<i>Pseudoalopex griseus</i>	74	72	55
Canidae	<i>Canis lupus</i>	78	76	290
Canidae	<i>Cerdocyon thous</i>	74	106	290
Canidae	<i>Chrysocyon brachyurus</i>	76	74	290
Canidae	<i>Fennecus zerda</i>	64	66	290
Canidae	<i>Otcyon megalotis</i>	72	74	290
Canidae	<i>Speothos venaticus</i>	74	72	290
Canidae	<i>Urocyon cinereoargenteus</i>	66	66	290
Canidae	<i>Alopex lagopus</i>	50	96	291
Canidae	<i>Nyctereutes prcyonoides</i>	42	66	291
Canidae	<i>Vulpes macrotis</i>	50	96	291
Canidae	<i>Vulpes vulpes</i>	36	66	291
Canidae	<i>Canis latrans</i>	78	76	301
Castoroidea	<i>Castor canadensis</i>	40	76	118
Castoroidea	<i>Castor fiber</i>	48	74	151
Caviidae	<i>Cavia porcellus</i>	64	90	71
Caviidae	<i>Cavia cobaya</i>	64	80	288
Caviidae	<i>Dolichotis patagonum</i>	64	124	297
Cebidae	<i>Callimico goeldii</i>	48	78	67
Cebidae	<i>Cebus apella</i>	54	78	67
Cebidae	<i>Callicebus cupreus</i>	46	64	67
Cebidae	<i>Cebus capucinus</i>	54	68	84
Cebidae	<i>Lagothrix lagotricha</i>	62	90	90
Cebidae	<i>Callicebus moloch</i>	46	64	96
Cebidae	<i>Callicebus torquatus</i>	20	26	96
Cebidae	<i>Saimiri boliviensis</i>	44	72	114
Cebidae	<i>Cacajao calvus</i>	46	62	158
Cebidae	<i>Cacajao melanocephalus</i>	45	62	158

Cebidae	<i>Cacajao rubicundus</i>	46	62	158
Cebidae	<i>Chiropotes satanus</i>	54	74	158
Cebidae	<i>Pithecia pithecia</i>	48	64	158
Cebidae	<i>Cebus nigrivittatus</i>	52	68	176
Cebidae	<i>Saimiri sciureus</i>	44	72	318
Cercopithecidae	<i>Cynopithecus niger</i>	42	80	274
Cercopithecoidae	<i>Papio hamadryas</i>	42	80	35
Cercopithecoidae	<i>Papio ursinus</i>	42	80	35
Cercopithecoidae	<i>Cercocebus atys</i>	42	80	54
Cercopithecoidae	<i>Maccaca arctoides</i>	42	80	54
Cercopithecoidae	<i>Maccaca fascicularis</i>	42	80	54
Cercopithecoidae	<i>Maccaca mulatta</i>	42	80	54
Cercopithecoidae	<i>Maccaca nemestrina</i>	42	80	54
Cercopithecoidae	<i>Maccaca nigra</i>	42	80	54
Cercopithecoidae	<i>Maccaca radiata</i>	42	80	54
Cercopithecoidae	<i>Nasalis larvatus</i>	48	92	66
Cercopithecoidae	<i>Cercocebus torquatus</i>	42	80	67
Cercopithecoidae	<i>Cercopithecus nictitans</i>	66	116	67
Cercopithecoidae	<i>Erythrocebus patas</i>	54	94	67
Cercopithecoidae	<i>Maccaca irus</i>	42	80	67
Cercopithecoidae	<i>Papio dogera</i>	42	80	67
Cercopithecoidae	<i>Papio papio</i>	42	80	88
Cercopithecoidae	<i>Papio anubis</i>	42	80	89
Cercopithecoidae	<i>Maccaca fuscata</i>	42	80	93
Cercopithecoidae	<i>Maccaca speciosa</i>	42	80	93
Cercopithecoidae	<i>Cercopithecus aethiops</i>	60	90	100
Cercopithecoidae	<i>Cercocebus aterrimus</i>	42	80	157
Cercopithecoidae	<i>Presbytis entelus</i>	44	82	274

Cervidae	<i>Rucervus duvauceli</i>	56	68	64
Cervidae	<i>Alces alces</i>	68	70	104
Cervidae	<i>Alces alces americana</i>	70	70	104
Cervidae	<i>Axis axis</i>	66	68	104
Cervidae	<i>Axis porcinus</i>	68	68	104
Cervidae	<i>Blastocerus dichotomus</i>	66	70	104
Cervidae	<i>Capreolus capreolus</i>	70	68	104
Cervidae	<i>Cervus albirostris</i>	66	68	104
Cervidae	<i>Cervus aldithamin</i>	58	68	104
Cervidae	<i>Cervus duvauceli</i>	56	68	104
Cervidae	<i>Cervus elaphus</i>	68	68	104
Cervidae	<i>Cervus timorensis</i>	60	68	104
Cervidae	<i>Cervus nippon</i>	68	68	104
Cervidae	<i>Cervus unicolor</i>	58	68	104
Cervidae	<i>Cervus unicolor djejeani</i>	62	68	104
Cervidae	<i>Dama dama</i>	68	68	104
Cervidae	<i>Elaphodus cephalodus</i>	48	50	104
Cervidae	<i>Elaphurus davidianus</i>	68	68	104
Cervidae	<i>Hippocamelus bisulcus</i>	70	70	104
Cervidae	<i>Hydropotes inermis</i>	70	68	104
Cervidae	<i>Mazama americana</i>	68	70	104
Cervidae	<i>Mazama gouazoubira</i>	70	68	104
Cervidae	<i>Muntiacus muntjak vaginalis</i>	6	8	104
Cervidae	<i>Muntiacus muntjak muntjak</i>	8	10	104
Cervidae	<i>Muntiacus reevesi</i>	46	44	104
Cervidae	<i>Muntiacus feai</i>	13	12	104
Cervidae	<i>Muntiacus rooseveltorun</i>	6	8	104
Cervidae	<i>Odocoileus hemionus</i>	70	70	104

Cervidae	<i>Odocoileus virginianus</i>	70	70	104
Cervidae	<i>Ozotoceros bezoarticus</i>	68	70	104
Cervidae	<i>Pudu puda</i>	70	70	104
Cervidae	<i>Rangifer tarandus</i>	70	70	104
Cervidae	<i>Muntiacus crinifrons</i>	8	10	303
Cheirogaleidae	<i>Microcebus myoxinus</i>	66	64	30
Cheirogaleidae	<i>Microcebus rufus</i>	66	64	30
Cheirogaleidae	<i>Chheirogaleus medius</i>	66	64	80
Cheirogaleidae	<i>Microcebus murinus</i>	66	64	238
Cheirogaleidae	<i>Chheirogaleus major</i>	66	64	240
Cheirogaleidae	<i>Microcebus coquereli</i>	66	64	240
Cheirogaleidae	<i>Phaner furcifer</i>	46	60	240
Chinchillidae	<i>Lagostomus maximus</i>	56	106	297
Chrysochloridae	<i>Chorotalpa duthieae</i>	30	60	31
Chrysochloridae	<i>Chorotalpa sclareti</i>	30	58	31
Chrysochloridae	<i>Amblysomus julianae</i>	30	54	31
Chrysochloridae	<i>Amblysomus hottentotus (durban)</i>	30	54	31
Chrysochloridae	<i>Amblysomus hottentotus (dullstroom)</i>	36	60	31
Chrysochloridae	<i>Amblysomus iris</i>	34	68	32
Cricetidae	<i>Oryzomys albigularis</i>	66	102	1
Cricetidae	<i>Neotoma albigula</i>	52	58	17
Cricetidae	<i>Neotoma floridana</i>	52	56	17
Cricetidae	<i>Neotoma fuscipes</i>	56	84	17
Cricetidae	<i>Neotoma lepida</i>	52	60	17
Cricetidae	<i>Neotoma mexicana</i>	52	52	17
Cricetidae	<i>Neotoma micropus</i>	52	56	17
Cricetidae	<i>Neotoma phenax</i>	38	50	17
Cricetidae	<i>Neotoma stephensi</i>	52	58	17

Cricetidae	<i>Nectomys palmipes</i>	16	22	22
Cricetidae	<i>Reithrodontomys fulvescens</i>	50	48	63
Cricetidae	<i>Reithrodontomys megalotis</i>	42	80	63
Cricetidae	<i>Reithrodontomys raviventris</i>	38	72	63
Cricetidae	<i>Reithrodontomys sumichrasti</i>	40	76	63
Cricetidae	<i>Peromyscus sp</i>	48	52	72
Cricetidae	<i>Sigmodon arizonae</i>	22	38	97
Cricetidae	<i>Sigmodon hispidus</i>	52	52	97
Cricetidae	<i>Sigmodon mascotensis</i>	28	28	97
Cricetidae	<i>Scapteromys timidus</i>	36	40	107
Cricetidae	<i>Scapteromys timidus (2)</i>	34	40	107
Cricetidae	<i>Scapteromys timidus (3)</i>	24	40	107
Cricetidae	<i>Cricetulus griseus</i>	22	34	108
Cricetidae	<i>Cricetulus triton</i>	28	30	108
Cricetidae	<i>Clethrionomys rufocanus</i>	56	56	112
Cricetidae	<i>Clethrionomys glareolus</i>	56	56	112
Cricetidae	<i>Anotomys leander</i>	92	98	115
Cricetidae	<i>Akodon lindberghi</i>	42	40	117
Cricetidae	<i>Akodon montensis</i>	24	38	117
Cricetidae	<i>Bolomys lasiurus</i>	34	32	117
Cricetidae	<i>Dicrostonyx torquatus</i>	46	52	121
Cricetidae	<i>Lemmus amurensis</i>	50	48	122
Cricetidae	<i>Lemmus lemmus</i>	50	48	122
Cricetidae	<i>Lemmus nigripes</i>	50	52	122
Cricetidae	<i>Lemmus sibiricus sibiricus</i>	50	52	122
Cricetidae	<i>Lemmus trimicornatus</i>	50	52	122
Cricetidae	<i>Oryzomys alfaroi</i>	60	104	127
Cricetidae	<i>Oryzomys caudatus</i>	58	68	127



Cricetidae	<i>Oryzomys fulvescens</i>	60	74	127
Cricetidae	<i>Oryzomys melanotis</i>	62	70	127
Cricetidae	<i>Sigmodon minimus</i>	30	34	140
Cricetidae	<i>Akodon aerosus</i>	40	38	151
Cricetidae	<i>Akodon amoenus</i>	34	32	151
Cricetidae	<i>Akodon azare</i>	38	36	151
Cricetidae	<i>Akodon berlespchii</i>	40	38	151
Cricetidae	<i>Akodon boliviensis</i>	40	38	151
Cricetidae	<i>Bolomys albiventer</i>	40	38	151
Cricetidae	<i>Holochilus brasiliensis</i>	56	54	151
Cricetidae	<i>Nectomys squamipes</i>	52	50	151
Cricetidae	<i>Neotoma alleni</i>	48	52	151
Cricetidae	<i>Oryzomys couesi</i>	56	54	151
Cricetidae	<i>Oryzomys macconnelli</i>	64	62	151
Cricetidae	<i>Oryzomys palustris</i>	56	54	151
Cricetidae	<i>Phyllotis amicus</i>	38	72	151
Cricetidae	<i>Phyllotis caprinus</i>	38	72	151
Cricetidae	<i>Phyllotis gerbilus</i>	38	72	151
Cricetidae	<i>Phyllotis haggardi</i>	38	72	151
Cricetidae	<i>Reithrodontomys creper</i>	52	50	151
Cricetidae	<i>Reithrodontomys gracilis</i>	52	50	151
Cricetidae	<i>Reithrodontomys mexicanus</i>	52	50	151
Cricetidae	<i>Reithrodontomys montanus</i>	38	36	151
Cricetidae	<i>Reithrodontomys humilis</i>	50	48	151
Cricetidae	<i>Thomasomys aureus</i>	44	42	151
Cricetidae	<i>Thomasomys kalinowski</i>	44	44	151
Cricetidae	<i>Thomasomys monochromos</i>	42	42	151
Cricetidae	<i>Thomasomys notatus</i>	44	44	151

Cricetidae	<i>Thomasomys taczanowski</i>	44	44	151
Cricetidae	<i>Zygodontomys sp</i>	34	32	151
Cricetidae	<i>Oryzomys delicatus</i>	60	78	154
Cricetidae	<i>Neotoma goldmani</i>	52	54	163
Cricetidae	<i>Nyctomys sumichrasti</i>	50	52	163
Cricetidae	<i>Baiomys musculus</i>	48	66	163
Cricetidae	<i>Akodon illuteus</i>	52	52	166
Cricetidae	<i>Akodon longipilis</i>	52	52	166
Cricetidae	<i>Akodon olivaceus</i>	52	52	166
Cricetidae	<i>Akodon sanborni</i>	52	52	166
Cricetidae	<i>Akodon serrensis</i>	44	42	166
Cricetidae	<i>Akodon variussimulator</i>	42	40	166
Cricetidae	<i>Akodon xanthorhinus</i>	52	52	166
Cricetidae	<i>Oryzomys subflavus</i>	50	56	169
Cricetidae	<i>Holochilus brasiliensis</i>	48	56	192
Cricetidae	<i>Holochilus vulpinus</i>	36	56	192
Cricetidae	<i>Peromyscus banderamus</i>	48	52	201
Cricetidae	<i>Tylomys nudicaudus</i>	42	60	210
Cricetidae	<i>Tylomys nudicaudus villae</i>	36	60	210
Cricetidae	<i>Tylomys panamensis</i>	52	56	210
Cricetidae	<i>Mesocritus newtoni</i>	38	72	215
Cricetidae	<i>Akodon urichi venezeulensis</i>	18	32	225
Cricetidae	<i>Reithrodontomys montanus</i>	38	72	229
Cricetidae	<i>Scotinomys xerampelinus</i>	58	88	236
Cricetidae	<i>Holochilus venezuelae</i>	44	56	249
Cricetidae	<i>Deltamys kempii</i>	38	36	250
Cricetidae	<i>Phodopus roborovskii</i>	34	56	252
Cricetidae	<i>Phodopus sungorus</i>	28	48	252

Cricetidae	<i>Ichtyomys pittieri</i>	92	98	253
Cricetidae	<i>Neotomodon alstoni</i>	48	62	273
Cricetidae	<i>Phyllotis darwini</i>	38	72	283
Cricetidae	<i>Phyllotis magister</i>	38	72	283
Cricetidae	<i>Phyllotis osgoodi</i>	40	72	283
Cricetidae	<i>Aulyscomys boliviensis</i>	22	30	284
Cricetidae	<i>Aulyscomys micropus</i>	34	34	284
Cricetidae	<i>Aulyscomys sublimis</i>	28	30	284
Cricetidae	<i>Lagurus curtatus</i>	54	54	297
Cricetidae	<i>Lagurus lagurus</i>	54	60	297
Cricetidae	<i>Mesocritus brandti</i>	42	80	297
Cricetidae	<i>Neotoma cinerea</i>	54	60	297
Cricetidae	<i>Akodon cursor</i>	24	42	319
Cricetidae	<i>Mesocritus auratus</i>	44	74	320
Ctenodactylidae	<i>Pectinator spekei</i>	40	76	37
Ctenodactylidae	<i>Massoutiera mzabi</i>	36	68	37
Ctenodactylidae	<i>Ctenodactylus gundi</i>	40	76	37
Ctenodactylidae	<i>Ctenodactylus vali</i>	40	76	37
Ctenomyidae	<i>Ctenomys talarum</i>	48	86	155
Ctenomyidae	<i>Ctenomys australis</i>	48	76	181
Ctenomyidae	<i>Ctenomys mendocinus</i>	48	76	182
Ctenomyidae	<i>Ctenomys argentinus</i>	44	50	209
Ctenomyidae	<i>Ctenomys conoveris</i>	50	52	209
Ctenomyidae	<i>Ctenomys perrensi</i>	50	80	209
Ctenomyidae	<i>Ctenomys dorbignyi</i>	70	80	209
Ctenomyidae	<i>Ctenomys roigi</i>	48	76	209
Ctenomyidae	<i>Ctenomys yolandae</i>	50	76	209
Ctenomyidae	<i>Ctenomys latro</i>	42	50	223

Ctenomyidae	<i>Ctenomys occultus</i>	22	40	223
Ctenomyidae	<i>Ctenomys tucumanus</i>	28	52	223
Ctenomyidae	<i>Ctenomys rionigrensis</i>	50	70	308
Ctenomyidae	<i>Ctenomys maulinus</i>	26	46	309
Ctenomyidae	<i>Ctenomys robustus</i>	26	48	309
Ctenomyidae	<i>Ctenomys magellanicus</i>	34	64	309
Ctenomyidae	<i>Ctenomys opimus</i>	26	48	309
Ctenomyidae	<i>Ctenomys fulvus</i>	26	48	309
Cynocephalidae	<i>Cynocephalus volans</i>	38	36	38
Dasyuridae	<i>Dasyercus cristicaudata</i>	14	24	175
Dasyuridae	<i>Ningai sp.</i>	14	24	235
Daubentoniidae	<i>Daubentonia madagascariensis</i>	30	52	270
Delphinidae	<i>Globicephala melaena</i>	44	76	3
Delphinidae	<i>Globicephala macrorhyncha</i>	44	76	9
Delphinidae	<i>Stenella dubia</i>	44	76	10
Delphinidae	<i>Tursiops gilli</i>	44	76	10
Delphinidae	<i>Delphinus delphis</i>	44	76	10
Delphinidae	<i>Lagenorhynchus albirostris</i>	44	76	10
Delphinidae	<i>Orcinus orca</i>	44	82	10
Delphinidae	<i>Globicephala scammonii</i>	44	76	10
Delphinidae	<i>Stenella clymene</i>	44	76	11
Delphinidae	<i>Lagenorhynchus obliquidens</i>	44	76	82
Delphinidae	<i>Stenella attenuatta</i>	44	76	267
Delphinidae	<i>Stenella longirostris</i>	44	76	267
Delphinidae	<i>Tursiops truncatus</i>	44	76	282
Didelphidae	<i>Philander archeri</i>	16	28	175
Didelphidae	<i>Didelphys azarae</i>	22	20	224
Didelphidae	<i>Didelphys albiventris</i>	22	20	226

Didelphidae	<i>Caluromys derbianus</i>	14	24	226
Didelphidae	<i>Caluromys lanatus</i>	14	24	226
Didelphidae	<i>Caluromys philander</i>	14	24	226
Didelphidae	<i>Chironectes minimus</i>	22	20	226
Didelphidae	<i>Dromiciops australis</i>	14	24	226
Didelphidae	<i>Lutreolina crassicaudata</i>	22	20	226
Didelphidae	<i>Marmosa alstoni</i>	14	24	226
Didelphidae	<i>Marmosa cinerea</i>	14	24	226
Didelphidae	<i>Marmosa elegans</i>	14	22	226
Didelphidae	<i>Marmosa fuscata</i>	14	24	226
Didelphidae	<i>Marmosa mexicana</i>	14	24	226
Didelphidae	<i>Marmosa murina</i>	14	24	226
Didelphidae	<i>Marmosa pusilla</i>	14	24	226
Didelphidae	<i>Marmosa robinsoni</i>	14	24	226
Didelphidae	<i>Metachirus nudicaudatus</i>	14	24	226
Didelphidae	<i>Monodelphis breviceuda</i>	18	30	226
Didelphidae	<i>Monodelphis dimitiata</i>	18	30	226
Didelphidae	<i>Momodelphis orinoci</i>	18	30	226
Didelphidae	<i>Philander mchennyi</i>	22	20	226
Didelphidae	<i>Didelphys virginiana</i>	22	32	259
Didelphidae	<i>Didelphys marsupialis</i>	22	20	269
Didelphidae	<i>Marmosops incanus</i>	14	24	269
Didelphidae	<i>Momodelphis domestica</i>	18	20	269
Didelphidae	<i>Philander opossum</i>	22	20	269
Didelphidae	<i>Micoureus cinereus</i>	14	24	269
Dinomyidae	<i>Dinomys branickii</i>	58	100	43
Echimyidae	<i>Proechymis (guairae) Barina</i>	62	70	57
Echimyidae	<i>Proechimys (guairae) guairae</i>	46	68	57

Echimyidae	<i>Proechymis (guairae) Llano</i>	50	68	57
Echimyidae	<i>Proechimys (guairae) Miranda</i>	48	68	57
Echimyidae	<i>Proechimys (guairae) ochraeus</i>	44	68	57
Echimyidae	<i>Proechimys (guairae) poliopus</i>	42	70	57
Echimyidae	<i>Trichomys aperioides</i>	30	54	261
Elephantidae	<i>Elephas maximus</i>	56	62	147
Elephantidae	<i>Loxodonta africana</i>	56	60	147
Emballonuridae	<i>Taphozous longimanus</i>	42	64	310
Emballonuridae	<i>Taphozous melanopogom</i>	42	62	310
Emballonuridae	<i>Taphozous nudiventris</i>	42	64	310
Emballonuridae	<i>Taphozous saccolaimus</i>	44	64	310
Equidae	<i>Equus africanus somaliensis</i>	64	96	139
Equidae	<i>Equus hemionus kulan</i>	54	90	245
Equidae	<i>Equus kiang holdereri</i>	52	92	246
Equidae	<i>Equus ferus</i>	66	88	247
Equidae	<i>Equus ferus caballus</i>	64	88	247
Equidae	<i>Equus africanus asinus</i>	62	98	247
Equidae	<i>Equus grevyi</i>	46	76	247
Equidae	<i>Equus zebra</i>	32	58	247
Equidae	<i>Equus quagga boehmi</i>	44	76	247
Equidae	<i>Equus hemionus onager</i>	56	98	247
Erinaceidae	<i>Paraechinus aethiopicus</i>	48	92	36
Erinaceidae	<i>Erinaceus europaeus</i>	48	88	68
Erinaceidae	<i>Erinaceus algirus</i>	48	90	125
Erinaceidae	<i>Atelerix albiventris</i>	48	92	143
Erinaceidae	<i>Erinaceus roumanicus/concolor</i>	48	88	170
Erinaceidae	<i>Hemiechinus auritus</i>	48	92	228
Erinaceidae	<i>Hemiechinus dauuricus</i>	48	92	228

Eschrichtiidae	<i>Eschrichtius gibbosus</i>	44	76	10
Felidae	<i>Felis colocolo</i>	36	68	298
Felidae	<i>Felis ornata</i>	38	68	298
Felidae	<i>Felis caracal</i>	38	68	299
Felidae	<i>Felis bengalensis</i>	38	70	299
Felidae	<i>Felis chaus</i>	38	68	299
Felidae	<i>Felis pajeros</i>	36	68	299
Felidae	<i>Felis temmincki</i>	38	68	299
Felidae	<i>Felis viverrina</i>	38	70	299
Felidae	<i>Felis yagouaroundi</i>	38	72	299
Felidae	<i>Panthera leo</i>	38	68	299
Felidae	<i>Panthera onca</i>	38	68	299
Felidae	<i>Felis concolor</i>	38	70	300
Felidae	<i>Felis margarita</i>	38	68	300
Felidae	<i>Felis pardalis</i>	36	68	300
Felidae	<i>Felis aurata</i>	38	68	301
Felidae	<i>Felis catus</i>	38	68	301
Felidae	<i>Felis geoffroyi</i>	36	68	301
Felidae	<i>Felis libyca</i>	38	68	301
Felidae	<i>Felis linx</i>	38	68	301
Felidae	<i>Felis mamul</i>	38	70	301
Felidae	<i>Felis marmorata</i>	38	68	301
Felidae	<i>Felis nigripes</i>	38	68	301
Felidae	<i>Felis planiceps</i>	38	70	301
Felidae	<i>Felis rubiginosa</i>	38	70	301
Felidae	<i>Felis rufa</i>	38	68	301
Felidae	<i>Felis serval</i>	38	68	301
Felidae	<i>Felis sylvestris</i>	38	68	301

Felidae	<i>Felix tigrina</i>	36	68	301
Felidae	<i>Felis wiedi</i>	36	68	301
Felidae	<i>Panthera pardus</i>	38	68	301
Felidae	<i>Panthera tigris</i>	38	68	301
Felidae	<i>Panthera uncia</i>	38	68	301
Felidae	<i>Acinonyx jubatus</i>	38	70	301
Felidae	<i>Neofelis nebulosa</i>	38	68	301
Felidae	<i>Felis iriomotensis</i>	38	70	302
Geomydae	<i>Geomys personatus</i>	70	70	77
Geomydae	<i>Geomys arenarius</i>	70	102	77
Geomydae	<i>Geomys bursarius</i>	72	70	151
Geomydae	<i>Geomys tropicalis</i>	38	72	151
Geomydae	<i>Pappogeomys merriami</i>	36	66	160
Geomydae	<i>Thomomys monticola</i>	40	64	214
Geomydae	<i>Thomomys talpoides</i>	48	84	214
Geomydae	<i>Thomomys umbrius</i>	78	96	214
Geomydae	<i>Geomys pinetis</i>	42	80	293
Giraffidae	<i>Giraffa camelopardis</i>	30	54	110
Gliridae	<i>Eliomys quercinus</i>	48	90	15
Gliridae	<i>Muscardinus avellanarius</i>	46	88	131
Gliridae	<i>Myoxus glis</i>	62	120	131
Gliridae	<i>Dryomys nitedula</i>	48	92	131
Gliridae	<i>Myomimus personatus</i>	44	84	131
Herpestidae	<i>Galidia elegans</i>	44	84	311
Herpestidae	<i>Bdeogale sp</i>	36	68	311
Herpestidae	<i>Atilax paludinosus</i>	36	68	311
Herpestidae	<i>Helogale parvula</i>	36	68	312
Herpestidae	<i>Herpestes javanicus</i>	36	68	313



Herpestidae	<i>Cryptoprocta ferox</i>	42	80	314
Heteromyidae	<i>Dipodomys deserti</i>	64	108	133
Heteromyidae	<i>Dipodomys elator</i>	72	82	133
Heteromyidae	<i>Dipodomys elephantinus</i>	60	116	133
Heteromyidae	<i>Dipodomys graviceps</i>	70	70	133
Heteromyidae	<i>Dipodomys heermanni</i>	52	96	133
Heteromyidae	<i>Dipodomys ingens</i>	64	98	133
Heteromyidae	<i>Dipodomys merriami</i>	52	100	133
Heteromyidae	<i>Dipodomys microps</i>	60	116	133
Heteromyidae	<i>Dipodomys nelsoni</i>	72	134	133
Heteromyidae	<i>Dipodomys nitratoides</i>	54	104	133
Heteromyidae	<i>Dipodomys ordii largus</i>	74	144	133
Heteromyidae	<i>Dipodomys ornatus</i>	72	138	133
Heteromyidae	<i>Dipodomys panamintinus</i>	64	96	133
Heteromyidae	<i>Dipodomys spectabilis</i>	72	70	133
Heteromyidae	<i>Dipodomys stephensi</i>	70	86	133
Heteromyidae	<i>Dipodomys venustus</i>	60	116	133
Heteromyidae	<i>Dipodomys agilis</i>	60	116	151
Heteromyidae	<i>Microdipodops pallidus</i>	42	80	151
Heteromyidae	<i>Microdipodops megacephalus</i>	40	72	151
Heteromyidae	<i>Perognatus apache</i>	44	46	151
Heteromyidae	<i>Heteromys demarestianus</i>	60	86	180
Heteromyidae	<i>Heteromys oresteus</i>	60	78	180
Heteromyidae	<i>Liomys salvini</i>	56	88	180
Heteromyidae	<i>Perognatus penicillatus</i>	46	48	212
Heteromyidae	<i>Perognatus intermedius</i>	46	58	212
Heteromyidae	<i>Perognatus artus</i>	54	56	212
Heteromyidae	<i>Perognatus goldmani</i>	52	56	212

Heteromyidae	<i>Perognatus pernix</i>	38	56	212
Heteromyidae	<i>Perognatus baileyi</i>	48	60	212
Heteromyidae	<i>Perognatus hispidus</i>	34	62	212
Heteromyidae	<i>Perognatus longimembris</i>	56	88	292
Heteromyidae	<i>Perognatus amplus</i>	56	94	292
Heteromyidae	<i>Perognatus inornatus</i>	56	88	292
Heteromyidae	<i>Perognatus parvus</i>	54	68	292
Heteromyidae	<i>Perognatus alticola</i>	54	74	292
Heteromyidae	<i>Perognatus fasciatus</i>	44	48	292
Heteromyidae	<i>Perognatus flavescens</i>	44	48	292
Heteromyidae	<i>Perognatus flavus</i>	50	86	292
Heteromyidae	<i>Perognatus formosus</i>	36	52	292
Heteromyidae	<i>Perognatus merriami</i>	50	86	292
Heteromyidae	<i>Perognatus xanthonatus</i>	54	76	292
Hippopotamidae	<i>Hippopotamus amphibius</i>	36	68	45
Hipposideridae	<i>Coelops frithi formosanus</i>	30	56	5
Hipposideridae	<i>Hipposideros armiger terasensis</i>	32	60	5
Hipposideridae	<i>Hipposideros turpis</i>	32	60	5
Hipposideridae	<i>Aselliscus stoliczkanus</i>	30	56	130
Hipposideridae	<i>Hipposideros ater</i>	32	60	262
Hipposideridae	<i>Hipposideros cineraceus</i>	32	60	262
Hipposideridae	<i>Hipposideros fulvus</i>	32	60	262
Hipposideridae	<i>Hipposideros landakadiva</i>	32	60	262
Hipposideridae	<i>Hipposideros pomona</i>	32	60	262
Hipposideridae	<i>Hipposideros speoris</i>	32	60	262
Hominidae	<i>Pan paniscus</i>	48	82	47
Hominidae	<i>Gorilla gorilla</i>	48	86	306
Hominidae	<i>Homo sapiens</i>	46	78	306

Hominidae	<i>Pan troglodytes</i>	48	82	306
Hominidae	<i>Pongo pygmaeus</i>	48	76	306
Hyaenidae	<i>Lycaon pictus</i>	38	64	132
Hyaenidae	<i>Hyaena brunnea</i>	40	66	298
Hyaenidae	<i>Crocuta crocuta</i>	40	70	301
Hylobatidae	<i>Hylobates concolor</i>	52	94	87
Hylobatidae	<i>Hylobates lar</i>	44	82	87
Hylobatidae	<i>Symphalangus syndactylus</i>	50	94	157
Hylobatidae	<i>Hylobates hoolock</i>	38	72	216
Hylobatidae	<i>Hylobates agilis</i>	44	82	264
Hylobatidae	<i>Hylobates klossii</i>	44	82	264
Hylobatidae	<i>Hylobates moloch</i>	44	82	264
Hylobatidae	<i>Hylobates pileatus</i>	44	82	264
Indridae	<i>Avahi laniger</i>	70	74	241
Indridae	<i>Propithecus verreauxi</i>	48	76	241
Indridae	<i>Propithecus diadema</i>	44	74	258
Indridae	<i>Propithecus tattersalli</i>	42	72	258
Lemuridae	<i>Lemur fulvus albifrons</i>	60	62	129
Lemuridae	<i>Hapalemur griseus occ</i>	58	64	201
Lemuridae	<i>Hapalemur griseus grisseus</i>	54	62	201
Lemuridae	<i>Lemur fulvus colaris</i>	52	62	238
Lemuridae	<i>Lemur fulvus albocollaris</i>	48	62	238
Lemuridae	<i>Lemur fulvus fulvus</i>	60	62	238
Lemuridae	<i>Lemur mongoz</i>	60	62	238
Lemuridae	<i>Lemur macaco</i>	44	62	238
Lemuridae	<i>Hapalemur simus</i>	60	64	239
Lemuridae	<i>Lemur catta</i>	56	58	239
Lemuridae	<i>Eulemur coronatus</i>	46	62	240

Lemuridae	<i>Varecia variegata</i>	46	62	240
Leporidae	<i>Sylvilagus floridanus</i>	42	74	137
Leporidae	<i>Oryctolagus cuniculus</i>	44	76	205
Leporidae	<i>Lepus saxatilis</i>	48	78	230
Leporidae	<i>Sylvilagus aquaticus</i>	38	64	232
Leporidae	<i>Sylvilagus transitionalis</i>	52	94	232
Leporidae	<i>Sylvilagus palustris</i>	38	64	233
Leporidae	<i>Sylvilagus idahoensis</i>	44	76	254
Leporidae	<i>Sylvilagus bachmani</i>	48	78	266
Leporidae	<i>Lepus americanus</i>	48	78	266
Lorisidae	<i>Arctocebus calabarensis</i>	52	100	46
Lorisidae	<i>Perodictis potto</i>	62	106	46
Lorisidae	<i>Nycticebus coucang</i>	50	96	157
Lorisidae	<i>Loris tardigradus</i>	62	90	244
Lorisidae	<i>Nycticebus pygmaeus</i>	50	96	287
Macropodidae	<i>Macropus parma</i>	16	28	43
Macropodidae	<i>Petrogale xanthopus</i>	22		47
Macropodidae	<i>Petrogale brachyotis</i>	20		49
Macropodidae	<i>Petrogale concinna</i>			49
Macropodidae	<i>Petrogale mareeba</i>	18	18	98
Macropodidae	<i>Petrogale penicillata</i>	22	20	98
Macropodidae	<i>Petrogale persephone</i>	22	26	99
Macropodidae	<i>Petrogale lateralis lateralis</i>	22	26	99
Macropodidae	<i>Petrogale rothschildi</i>	22	26	99
Macropodidae	<i>Thylogale billardieri</i>	22	26	99
Macropodidae	<i>Thylogale thetis</i>	22	26	99
Macropodidae	<i>Thylogale stigmata</i>	22	26	99
Macropodidae	<i>Macropus eugenii</i>	16	28	131

Macropodidae	<i>Wallabia bicolor</i>	10	8	161
Macropodidae	<i>Macropus rufogriseus</i>	16	28	161
Macropodidae	<i>Macropus parryi</i>	16	28	161
Macropodidae	<i>Macropus giganteus</i>	16	28	161
Macropodidae	<i>Macropus fuliginosus</i>	16	28	161
Macropodidae	<i>Macropus robustus</i>	16	28	161
Macropodidae	<i>Macropus rufus</i>	20	36	161
Macropodidae	<i>Petrogale lateralis pearsoni</i>	22	26	289
Macropodidae	<i>Petrogale xanthopus</i>	22	26	289
Macroscelididae	<i>Macroscelides proboscideus</i>	28	48	228
Manidae	<i>Manis pentadactyla</i>	36	66	222
Megadermatidae	<i>Megaderma spasma</i>	38	58	85
Megadermatidae	<i>Megaderma lyra</i>	54	104	91
Megalonychidae	<i>Choloepus sp</i>	53	66	23
Megalonychidae	<i>Choloepus hoffmanni</i>	49	66	76
Microbiotheriidae	<i>Dromiciops australis</i>	14	24	7
Molossidae	<i>Molossops temminckii</i>	48	70	189
Molossidae	<i>Nyctinomops laticaudatus</i>	48	64	189
Molossidae	<i>Eumops auripendulus</i>	42	62	285
Molossidae	<i>Eumops glaucinus</i>	38	64	285
Molossidae	<i>Eumops perotis</i>	48	56	285
Molossidae	<i>Eumops underwoodi</i>	48	56	285
Molossidae	<i>Molossops abrasus</i>	34	60	285
Molossidae	<i>Molossops greenhalii</i>	34	60	285
Molossidae	<i>Molossus ater</i>	48	58	285
Molossidae	<i>Molossus molossus</i>	48	58	285
Molossidae	<i>Molossus sinaloe</i>	48	58	285
Molossidae	<i>Otomops martienssi</i>	48	58	285

Molossidae	<i>Platymops setiger</i>	48	54	285
Molossidae	<i>Promops centralis</i>	48	58	285
Molossidae	<i>Promops davisoni</i>	48	58	285
Molossidae	<i>Tadarida aurispinosa</i>	48	58	285
Molossidae	<i>Tadarida brasiliensis</i>	48	56	285
Molossidae	<i>Tadarida formosrosassa</i>	48	58	285
Molossidae	<i>Tadarida kalinowskii</i>	48	56	285
Molossidae	<i>Tadarida laticaudata</i>	48	58	285
Molossidae	<i>Tadarida macrotis</i>	48	58	285
Monodontidae	<i>Monodon monoceros</i>	44	78	6
Monodontidae	<i>Delphinapterus leucas</i>	44	76	150
Mormoopidae	<i>Mormoops blainvilli</i>	38	60	260
Mormoopidae	<i>Mormoops megalophyla</i>	38	60	260
Mormoopidae	<i>Pteronotus davyi</i>	38	60	260
Mormoopidae	<i>Pteronotus gymnonotus</i>	38	60	260
Mormoopidae	<i>Pteronotus macleayii</i>	38	60	260
Mormoopidae	<i>Pteronotus parnelii</i>	38	60	260
Mormoopidae	<i>Pteronotus personatus</i>	38	60	260
Mormoopidae	<i>Pteronotus quadridens</i>	38	60	260
Moschidae	<i>Moschus moschiferus</i>	58	112	43
Muridae	<i>Acomys dimidiatus</i>	38	68	2
Muridae	<i>Conilurus penicillatus</i>	48	50	26
Muridae	<i>Hydromys chrysogaster</i>	48	50	26
Muridae	<i>Leporillus conditor</i>	46	52	26
Muridae	<i>Mastacomys fuscus</i>	48	56	26
Muridae	<i>Melomys littoralis</i>	48	50	26
Muridae	<i>Melomys cervinipes</i>	48	52	26
Muridae	<i>Mesembriomus gouldii</i>	48	50	26

Muridae	<i>Notomys alexis</i>	48	50	26
Muridae	<i>Notomys cervinus</i>	48	76	26
Muridae	<i>Notomys fuscus</i>	48	48	26
Muridae	<i>Notomys mitchellii</i>	48	54	26
Muridae	<i>Pseudomys albocinereus</i>	48	50	26
Muridae	<i>Pseudomys australis</i>	48	54	26
Muridae	<i>Pseudomys delicatius</i>	48	52	26
Muridae	<i>Pseudomys desertor</i>	48	50	26
Muridae	<i>Pseudomys fumeus</i>	48	50	26
Muridae	<i>Pseudomys gracilicaudatus</i>	48	56	26
Muridae	<i>Pseudomys higginsi</i>	48	52	26
Muridae	<i>Pseudomys nanus</i>	48	50	26
Muridae	<i>Pseudomys novaehollandiae</i>	48	52	26
Muridae	<i>Pseudomys occidentalis</i>	48	52	26
Muridae	<i>Pseudomys praeconis</i>	48	50	26
Muridae	<i>Pseudomys shortridgei</i>	48	50	26
Muridae	<i>Uromys caudimaculatus</i>	46	50	26
Muridae	<i>Zyzomys woodwardi</i>	44	46	26
Muridae	<i>Zyzomys argurus</i>	44	46	26
Muridae	<i>Xeromys myoides</i>	48	50	26
Muridae	<i>Rattus fuscipes</i>	38	56	27
Muridae	<i>Rattus leucopus</i>	34	56	27
Muridae	<i>Rattus lutreolus</i>	42	56	27
Muridae	<i>Rattus tunneyi</i>	42	58	27
Muridae	<i>Rattus sordidus</i>	32	58	27
Muridae	<i>Microtus guentheri</i>	54	52	29
Muridae	<i>Microtus cabrerai</i>	54	60	60
Muridae	<i>Microtus arvalis</i>	46	78	61

Muridae	<i>Microtus nivalus</i>	54	52	61
Muridae	<i>Eothenomys miletus</i>	56	54	65
Muridae	<i>Microtus agrestis</i>	50	52	75
Muridae	<i>Rattus rattus</i>	38	58	78
Muridae	<i>Lemmyscomys rosalia</i>	48	62	81
Muridae	<i>Rhabdomys pumilio</i>	46	60	81
Muridae	<i>Microtus oeconomus</i>	30	56	106
Muridae	<i>Microtus savii</i>	54	56	111
Muridae	<i>Dasymys incomtus</i>	38	44	123
Muridae	<i>Alticola argentatus</i>	56	58	134
Muridae	<i>Alticola barakshin</i>	56	58	134
Muridae	<i>Alticola semicanus</i>	56	60	134
Muridae	<i>Alticola strelzovi</i>	56	58	134
Muridae	<i>Rhizomys sumatrensis</i>	50	96	141
Muridae	<i>Rattus natalensis</i>	36	56	142
Muridae	<i>Arvicola terrestris</i>	36	68	151
Muridae	<i>Apodemus flavicolis</i>	50	48	151
Muridae	<i>Apodemus pensuli</i>	48	46	151
Muridae	<i>Apodemus sylvaticus</i>	48	46	151
Muridae	<i>Mus castaneus</i>	40	38	151
Muridae	<i>Mus musculus</i>	40	38	151
Muridae	<i>Mus spretus</i>	40	38	151
Muridae	<i>Rattus norvegicus</i>	42	58	151
Muridae	<i>Mus mattheyi</i>	36	34	152
Muridae	<i>Mus minutoides/musculoides</i>	34	32	152
Muridae	<i>Mus obanguii</i>	28	32	152
Muridae	<i>Mus setulosus</i>	36	34	152
Muridae	<i>Phloeomys cumingi</i>	40	56	153



Muridae	<i>Microtus mexicanus</i>	48	58	163
Muridae	<i>Ellobius lutescens</i>	18	32	184
Muridae	<i>Leggadina hermannsburgensis</i>	48	50	185
Muridae	<i>Mus booduga</i>	40	38	185
Muridae	<i>Pitymys duodecimcostatus</i>	62	72	187
Muridae	<i>Pitymys mariae</i>	62	70	187
Muridae	<i>Pitymys pyrenaicus</i>	54	56	187
Muridae	<i>Pitymys savii</i>	54	58	187
Muridae	<i>Pitymys subterraneus</i>	52	54	187
Muridae	<i>Pitymys multiplex</i>	48	50	187
Muridae	<i>Pitymys linchensteini</i>	46	48	187
Muridae	<i>Pitymys thomasi</i>	44	42	187
Muridae	<i>Pitymys atticus</i>	44	44	187
Muridae	<i>Pitymys tatricus</i>	32	44	187
Muridae	<i>Microtus oregoni</i>	17	30	208
Muridae	<i>Parotomys brantsii</i>	42	78	220
Muridae	<i>Arvicola shermani exitus</i>	36	60	251
Muridae	<i>Vandeleuria o. oleracea</i>	29	40	255
Muridae	<i>Bandicota bengalensis</i>	42	56	256
Muridae	<i>Mus dunni</i>	40	38	257
Muridae	<i>Acomys airensis</i>	42	66	276
Muridae	<i>Hylomyscus stella</i>	46	68	276
Muridae	<i>Malacomys longipes</i>	48	48	276
Muridae	<i>Mastomys huberti</i>	32	44	276
Muridae	<i>Myomys daltoni</i>	36	34	276
Muridae	<i>Uranomys ruddi</i>	58	64	276
Muridae	<i>Arvicanthis niloticus</i>	58	70	280
Muridae	<i>Arvicanthis abyssinicus</i>	62	60	280

Mustelidae	<i>Putorius furo</i>	40	66	24
Mustelidae	<i>Mustela frenata</i>	42	62	25
Mustelidae	<i>Mustela vison</i>	30	54	171
Mustelidae	<i>Mustela erminea</i>	44	76	172
Mustelidae	<i>Taxidea taxus</i>	32	48	298
Mustelidae	<i>Mustela nivalis</i>	42	66	299
Mustelidae	<i>Eira barbara</i>	38	68	301
Mustelidae	<i>Galictis vittata</i>	38	64	301
Mustelidae	<i>Mellivora capensis</i>	40	70	301
Mustelidae	<i>Melogale sp.</i>	38	62	301
Myocastoridae	<i>Myocastor coypus</i>	42	80	177
Myrmecophagidae	<i>Cyclopes didactylus</i>	64	98	23
Myrmecophagidae	<i>Myrmecophaga tridactyla</i>	60	104	23
Myrmecophagidae	<i>Tamandua tetradactyla</i>	54	104	23
Mystacinidae	<i>Mystacina tuberculata</i>	36	60	101
Natalidae	<i>Natalus major</i>	36	54	95
Noctilionidae	<i>Noctilio albiventris</i>	34	62	213
Notoryctidae	<i>Notoryctes typhlops</i>	20	36	113
Ochotonidae	<i>Ochotona Princeps</i>	68	72	266
Ochotonidae	<i>Ochotona princeps</i>	68	84	297
Octodontidae	<i>Tympanoctomys barrerae</i>	102	198	73
Octodontidae	<i>Aconaemys fuscus</i>	56	108	74
Octodontidae	<i>Aconaemys porteri</i>	58	112	74
Octodontidae	<i>Aconaemys sagei</i>	54	104	74
Octodontidae	<i>Octomys mimax</i>	56	108	74

Octodontidae	<i>Octodon bridgesi</i>	58	112	74
Octodontidae	<i>Octodon degus</i>	58	112	74
Octodontidae	<i>Octodontomys gliroides</i>	38	72	74
Octodontidae	<i>Spalacopus cyanus</i>	58	112	74
Odobenidae	<i>Odobenus rosmarus</i>	32	60	8
Ornithorhynchidae	<i>Ornithorhynchus anatinus</i>	54	104	321
Orycteropidae	<i>Orycteropus afer</i>	20	36	211
Otaridae	<i>Eumetopias jubata</i>	36	66	8
Otaridae	<i>Zapholus californianus</i>	36	66	8
Otaridae	<i>Callorhinus urinus</i>	36	68	102
Pedetidae	<i>Pedetes capensis</i>	38	68	124
Peramelidae	<i>Perameles nasuta</i>	14	24	175
Peramelidae	<i>Isodon macrurus</i>	14	24	175
Peramelidae	<i>Isodon obesulus</i>	14	24	175
Peramelidae	<i>Thyalocomys lagotis</i>	14	24	175
Petauridae	<i>Petaurus norfolcensis</i>	20/21	36	161
Phalangeridae	<i>Cercateus nanus</i>	14	24	175
Phalangeridae	<i>Lasiorhinus latifrons</i>	14	24	235
Phascolarctidae	<i>Phascolarctus cinereus</i>	14	24	175
Phocidae	<i>Cystophora cristata</i>	34	62	8
Phocidae	<i>Erignathus barbatus</i>	34	62	8
Phocidae	<i>Halichoerus grypus</i>	32	60	8
Phocidae	<i>Histiophoca fasciata</i>	32	60	8
Phocidae	<i>Leptonychotes weddelli</i>	34	62	8
Phocidae	<i>Miorunga leonina</i>	34	62	8
Phocidae	<i>Pagophilus groenlandicus</i>	32	60	8
Phocidae	<i>Phoca vitulina</i>	32	60	8

Phocidae	<i>Pusa hispida</i>	32	60	8
Phocidae	<i>Phoca hispida krascheninikovi</i>	32	58	102
Phocidae	<i>Miorunga angustirostris</i>	34	62	231
Phocoenidae	<i>Phocoenoides dalli</i>	44	76	10
Phocoenidae	<i>Phocoena phocoena</i>	44	76	11
Phyllostomatidae	<i>Mesophylla macconelli</i>	22	20	18
Phyllostomatidae	<i>Artibeus cinereus</i>	30	56	19
Phyllostomatidae	<i>Artibeus phaeotis</i>	30	56	19
Phyllostomatidae	<i>Artibeus watsoni</i>	30	56	19
Phyllostomatidae	<i>Brachyphylla nana</i>	32	60	19
Phyllostomatidae	<i>Centurio senex</i>	28	52	19
Phyllostomatidae	<i>Chiroderma villosum</i>	26	48	19
Phyllostomatidae	<i>Demodus rotundus</i>	28	52	19
Phyllostomatidae	<i>Diaemus youngii</i>	32	60	19
Phyllostomatidae	<i>Dyphilla eucadata</i>	32	60	19
Phyllostomatidae	<i>Erophylla sezekorni</i>	32	60	19
Phyllostomatidae	<i>Glossophaga soricina</i>	32	60	19
Phyllostomatidae	<i>Macrotus californicus</i>	40	60	19
Phyllostomatidae	<i>Monophylus redmani</i>	32	60	19
Phyllostomatidae	<i>Phyllonycteris aphylla</i>	32	60	19
Phyllostomatidae	<i>Phyllostomus elongatus</i>	32	58	19
Phyllostomatidae	<i>Sturnina erythromos</i>	30	56	19
Phyllostomatidae	<i>Uroderma bilobatum</i>	44	48	19
Phyllostomatidae	<i>Carollia subrufa</i>	20	36	20
Phyllostomatidae	<i>Rhinophylla fischeriae</i>	34	56	20
Phyllostomatidae	<i>Rhinophylla pumilio</i>	36	62	20
Phyllostomatidae	<i>Artibeus jamaicensis</i>	30	52	21
Phyllostomatidae	<i>Enchistemes harti</i>	30	50	21

Phyllostomatidae	<i>Sturnina lilium</i>	30	56	21
Phyllostomatidae	<i>Artibeus lituratus</i>	30	56	28
Phyllostomatidae	<i>Ametrida centurio</i>	30/31	52	116
Phyllostomatidae	<i>Ardops nichollsi</i>	30	56	116
Phyllostomatidae	<i>Ariteus flavecens</i>	30	56	116
Phyllostomatidae	<i>Artibeus fuliginosus</i>	30/31	56	116
Phyllostomatidae	<i>Artibeus glaucus</i>	30/31	56	116
Phyllostomatidae	<i>Artibeus planirostris</i>	30/31	56	116
Phyllostomatidae	<i>Brachyphylla pumila</i>	32	60	116
Phyllostomatidae	<i>Chiroderma improvisum</i>	26	46	116
Phyllostomatidae	<i>Choeroniscus godmani</i>	20	36	116
Phyllostomatidae	<i>Erophylla bombifrons</i>	32	60	116
Phyllostomatidae	<i>Ectophylla alba</i>	30	56	116
Phyllostomatidae	<i>Lonchophylla thomasi</i>	32	38	116
Phyllostomatidae	<i>Phyllonycteris obtusa</i>	32	60	116
Phyllostomatidae	<i>Phyllops haitiensis</i>	30	56	116
Phyllostomatidae	<i>Sturnina nana</i>	30	56	116
Phyllostomatidae	<i>Sturnina magna</i>	30	56	116
Phyllostomatidae	<i>Tonatia brasiliensis</i>	30	56	116
Phyllostomatidae	<i>Tonatia carrikeri</i>	26	46	116
Phyllostomatidae	<i>Tonatia sylvicola</i>	34	60	116
Phyllostomatidae	<i>Vampyrops enfuscus</i>	30	56	116
Phyllostomatidae	<i>Vampyrops nigellus</i>	30	56	116
Phyllostomatidae	<i>Vampyressa pusilla</i>	22	20	116
Phyllostomatidae	<i>Vampyressa melissa</i>	14	24	116
Phyllostomatidae	<i>Vampyressa brocki</i>	24	44	116
Phyllostomatidae	<i>Vampyressa bidens</i>	26	48	116
Phyllostomatidae	<i>Vampyressa nymphaea</i>	26	48	116

Phyllostomatidae	<i>Phyllostomus hastatus</i>	32	58	154
Phyllostomatidae	<i>Phyllostomus discolor</i>	32	60	154
Phyllostomatidae	<i>Macrotus waterhousii</i>	46	60	213
Phyllostomatidae	<i>Micronycteris nicefori</i>	28	52	213
Phyllostomatidae	<i>Micronycteris brachyotis</i>	32	60	213
Phyllostomatidae	<i>Micronycteris minuta</i>	28	50	213
Phyllostomatidae	<i>Micronycteris megalotis</i>	40	68	213
Phyllostomatidae	<i>Mimon crenulatum</i>	32	60	213
Phyllostomatidae	<i>Tonatia bidens</i>	16	20	213
Phyllostomatidae	<i>Tonatia minuta</i>	30	56	213
Phyllostomatidae	<i>Carollia brevicauda</i>	20	36	265
Phyllostomatidae	<i>Carollia castanea</i>	20	36	265
Phyllostomatidae	<i>Carollia perpicillata</i>	20	36	265
Phyllostomatidae	<i>Choeroniscus intermedius??</i>	20	36	265
Physeteridae	<i>Kogia breviceps</i>	42	80	10
Physeteridae	<i>Physeter catodon</i>	42	80	10
Potoridae	<i>Potorous tridactylus</i>	12	20	131
Procyonidae	<i>Bassariscus astutus</i>	38	68	300
Procyonidae	<i>Procyon lotor</i>	38	68	300
Procyonidae	<i>Bassaricyon sp.</i>	38	68	300
Pseudocheiridae	<i>Pseudocheirus peregrinus</i>	20	22	191
Pseudocheiridae	<i>Pseudocheirus dahli</i>	16	28	191
Pteropodidae	<i>Epomops frequenti</i>	36	64	128
Pteropodidae	<i>Hypsignathus monstrosus</i>	36	66	128
Pteropodidae	<i>Lissonycteris angolensis</i>	36	64	128
Pteropodidae	<i>Megaoglossus woermanni</i>	34	58	128
Pteropodidae	<i>Micropteropus pusillus</i>	35	62	128
Pteropodidae	<i>Myonycteris torquata</i>	36	64	128

Pteropodidae	<i>Rousettus aegyptiacus</i>	36	64	128
Pteropodidae	<i>Scotonycteris ophiodon</i>	34	58	128
Pteropodidae	<i>Eonycteris spelaea</i>	36	66	136
Pteropodidae	<i>Macroglossus lagochilus</i>	34	60	136
Pteropodidae	<i>Macroglossus minimus</i>	34	60	136
Pteropodidae	<i>Megaerops ecaudatus</i>	24	44	304
Rhinolophidae	<i>Rhinolophus luctus</i>	52	60	5
Rhinolophidae	<i>Rhinolophus monoceros</i>	62	60	5
Rhinolophidae	<i>Rhinolophus euryale</i>	58	60	62
Rhinolophidae	<i>Rhinolophus ferrumequinum</i>	58	60	62
Rhinolophidae	<i>Rhinolophus ferrumequinum</i>	56	60	62
Rhinolophidae	<i>Rhinolophus acuminatus</i>	62	60	218
Rhinolophidae	<i>Rhinolophus affinis</i>	62	70	218
Rhinolophidae	<i>Rhinolophus balsii</i>	58	60	218
Rhinolophidae	<i>Rhinolophus clivosus</i>	58	62	218
Rhinolophidae	<i>Rhinolophus cornutus</i>	62	60	218
Rhinolophidae	<i>Rhinolophus darlingi</i>	58	60	218
Rhinolophidae	<i>Rhinolophus hipposideros</i>	56	60	218
Rhinolophidae	<i>Rhinolophus malayanus</i>	62	60	218
Rhinolophidae	<i>Rhinolophus pusillus</i>	62	60	218
Rhinopomatidae	<i>Rhinopoma microphyllum</i>	42	64	144
Rhinopomatidae	<i>Rhinopoma hardwickei</i>	36	68	144
Rhynocerotidae	<i>Ceratotherium simun</i>	82	80	138
Rhynocerotidae	<i>Diceros bicornis</i>	84	106	146
Rhynocerotidae	<i>Rhinoceros unicornis</i>	82	100	296
Sciuridae	<i>Marmota marmota</i>	38	60	103
Sciuridae	<i>Marmota broweri</i>	36	62	135
Sciuridae	<i>Marmota caligata</i>	42	62	135

Sciuridae	<i>Marmota flaviventris</i>	42	62	135
Sciuridae	<i>Marmota monax</i>	38	62	135
Sciuridae	<i>Citellus citellus</i>	40	62	151
Sciuridae	<i>Citellus armatus</i>	34	64	164
Sciuridae	<i>Citellus beldingi</i>	30	56	164
Sciuridae	<i>Citellus columbianus</i>	32	60	164
Sciuridae	<i>Citellus dauricus</i>	36	68	164
Sciuridae	<i>Citellus erythrogegensys</i>	36	68	164
Sciuridae	<i>Citellus fulvus</i>	36	68	164
Sciuridae	<i>Citellus mollis</i>	38	62	164
Sciuridae	<i>Citellus pygmaeus</i>	36	68	164
Sciuridae	<i>Citellus elegans</i>	34	64	164
Sciuridae	<i>Citellus nevadensis</i>	34	64	164
Sciuridae	<i>Citellus undulatus</i>	32	60	164
Sciuridae	<i>Citellus parryi</i>	34	64	164
Sciuridae	<i>Citellus relictus</i>	36	68	164
Sciuridae	<i>Citellus richardsoni</i>	36	64	164
Sciuridae	<i>Citellus townsendii</i>	36	68	164
Sciuridae	<i>Citellus undulatus</i>	36	68	164
Sciuridae	<i>Citellus vigilis</i>	46	66	164
Sciuridae	<i>Citellus washingtoni</i>	36	66	164
Sciuridae	<i>Ammospermophilus interpres</i>	32	60	178
Sciuridae	<i>Ammospermophilus leucurus</i>	32	60	178
Sciuridae	<i>Ammospermophilus nelsoni</i>	32	60	178
Sciuridae	<i>Ammospermophilus spilosoma</i>	32	60	178
Sciuridae	<i>Ammospermophilus insularis</i>	32	60	179
Sciuridae	<i>Spermophilus townsendi canus</i>	46	68	193
Sciuridae	<i>Spermophilus townsendi idahoensis</i>	38	66	193



Sciuridae	<i>Spermophilus townsendi townsendi</i>	36	68	193
Sciuridae	<i>Petaurista petaurista</i>	38	72	195
Sciuridae	<i>Dremomys rufigensis</i>	38	68	196
Sciuridae	<i>Menetes berdmorei</i>	62	76	196
Sciuridae	<i>Sciurus anomalus</i>	40	76	196
Sciuridae	<i>Sciurus granatensis</i>	42	78	196
Sciuridae	<i>Spermophilus leptodactylus</i>	38	70	197
Sciuridae	<i>Xerus rutilus</i>	38	70	197
Sciuridae	<i>Cynomys ludovicicianus</i>	50	96	198
Sciuridae	<i>Callosciurus flavimanus</i>	40	68	199
Sciuridae	<i>Glaucomys sabrinus lascivus</i>	48	74	199
Sciuridae	<i>Glaucomys volans</i>	48	72	199
Sciuridae	<i>Sciurus aberti</i>	40	76	199
Sciuridae	<i>Sciurus carolinensis</i>	40	76	199
Sciuridae	<i>Sciurus griseus</i>	40	76	199
Sciuridae	<i>Sciurus niger rufiventer</i>	40	76	199
Sciuridae	<i>Eutamias sibiricus</i>	38	52	202
Sciuridae	<i>Ammospermophilus harrisi</i>	32	60	276
Sciuridae	<i>Eutamias minimus</i>	38	56	276
Sciuridae	<i>Eutamias quatrivittatus</i>	38	58	276
Sciuridae	<i>Eutamias umbrius</i>	38	58	276
Sciuridae	<i>Funambulus pennati</i>	54	58	276
Sciuridae	<i>Spermophilus richardsonii</i>	34	64	276
Sciuridae	<i>Spermophilus beldingi</i>	30	56	276
Sciuridae	<i>Spermophilus mexicanus pavidens</i>	34	64	276
Sciuridae	<i>Spermophilus tridecemlineatus</i>	34	64	276
Sciuridae	<i>Spermophilus tereticadus</i>	36	68	276
Sciuridae	<i>Tamias striatus</i>	38	58	276

Solenodontidae	<i>Solenodon paradoxus</i>	34	60	162
Soricidae	<i>Crocidura dsnezumi</i>	40	44	44
Soricidae	<i>Crocidura gueldenstedtii</i>	40	46	44
Soricidae	<i>Cryptotis parva</i>	52	50	119
Soricidae	<i>Blarina brevicauda</i>	50	48	120
Soricidae	<i>Blarina carolinensis</i>	52	50	120
Soricidae	<i>Blarina hylophaga</i>	52	62	120
Soricidae	<i>Crocidura gracilipes</i>	52	82	188
Soricidae	<i>Crocidura nimbae</i>	50	82	188
Soricidae	<i>Crocidura nigeriae</i>	50	72	188
Soricidae	<i>Crocidura odorata</i>	50	62	188
Soricidae	<i>Crocidura planiceps</i>	44	68	188
Soricidae	<i>Crocidura poensis</i>	50	72	188
Soricidae	<i>Crocidura wimmeri</i>	50	80	188
Soricidae	<i>Anourosorex squamipes</i>	50	92	228
Soricidae	<i>Crocidura bottegi</i>	40	54	228
Soricidae	<i>Crocidura crossei</i>	44	62	228
Soricidae	<i>Crocidura horsfieldi</i>	38	44	228
Soricidae	<i>Crocidura lamottei</i>	52	64	228
Soricidae	<i>Crocidura lasiura</i>	40	54	228
Soricidae	<i>Crocidura leucodon</i>	28	52	228
Soricidae	<i>Crocidura occidentalis</i>	50	62	228
Soricidae	<i>Crocidura russula</i>	42	58	228
Soricidae	<i>Crocidura suaveolens</i>	40	46	228
Soricidae	<i>Crocidura theresae</i>	50	78	228
Soricidae	<i>Crocidura zimmermanni</i>	34	40	228
Soricidae	<i>Diplomesodon pulchellum</i>	44	50	228
Soricidae	<i>Neomys anomalus</i>	52	94	228

Soricidae	<i>Neomys fodiens</i>	52	94	228
Soricidae	<i>Notlosorex crawfordi</i>	68	102	228
Soricidae	<i>Sorex arcticus</i>	28	34	228
Soricidae	<i>Sorex araneus</i>	22	36	228
Soricidae	<i>Sorex asper</i>	32	52	228
Soricidae	<i>Sorex bendirii</i>	54	70	228
Soricidae	<i>Sorex buchariensis</i>	40	56	228
Soricidae	<i>Sorex caecutiens</i>	42	60	228
Soricidae	<i>Sorex caucasicus</i>	22	40	228
Soricidae	<i>Sorex cinereus</i>	66	70	228
Soricidae	<i>Sorex coronatus</i>	22	38	228
Soricidae	<i>Sorex daphaenodon</i>	24	42	228
Soricidae	<i>Sorex fumeus</i>	66	94	228
Soricidae	<i>Sorex granarius</i>	32	34	228
Soricidae	<i>Sorex isodon</i>	42	60	228
Soricidae	<i>Sorex minutissimus</i>	42	72	228
Soricidae	<i>Sorex minutus</i>	42	54	228
Soricidae	<i>Sorex mirabilis</i>	38	60	228
Soricidae	<i>Sorex ornatus</i>	54	72	228
Soricidae	<i>Sorex raddei</i>	36	66	228
Soricidae	<i>Sorex samniticus</i>	52	50	228
Soricidae	<i>Sorex shinto</i>	42	58	228
Soricidae	<i>Sorex sinuosus</i>	54	72	228
Soricidae	<i>Sorex trowbridgii</i>	34	40	228
Soricidae	<i>Sorex tundrensis</i>	30	50	228
Soricidae	<i>Sorex unguiculatus</i>	42	58	228
Soricidae	<i>Sorex vagrans</i>	54	58	228
Soricidae	<i>Sorex vir</i>	42	64	228

Soricidae	<i>Sorex volnuchi</i>	40	56	228
Soricidae	<i>Suncus etruscus</i>	42	68	228
Soricidae	<i>Suncus murinus</i>	40	52	228
Soricidae	<i>Sylvisorex megalura</i>	48	92	228
Suidae	<i>Phacochoerus aetiopicus</i>	34	60	50
Suidae	<i>Sus scroffa</i>	36	60	50
Suidae	<i>Sus salvanius</i>	38	60	51
Suidae	<i>Sus celebensis</i>	38	60	52
Suidae	<i>Sus verrucosus</i>	38	60	52
Suidae	<i>Babyrousa bayrousa</i>	38	64	53
Suidae	<i>Hylochoerus meinertzhageni</i>	32	60	186
Suidae	<i>Potamochoerus porcus</i>	34	56	186
Tachyglossidae	<i>Tachyglossus aculeatus</i>	64	124	39
Tachyglossidae	<i>Zaglossus bruijni</i>	64	124	294
Talpidae	<i>Condylura cristata</i>	34	64	228
Talpidae	<i>Galemys pyrenaicus</i>	42	64	228
Talpidae	<i>Mogera robusta</i>	36	56	228
Talpidae	<i>Neurotrichus gibsii</i>	38	72	228
Talpidae	<i>Parascalops breweri</i>	34	56	228
Talpidae	<i>Scalopus aquaticus</i>	34	64	228
Talpidae	<i>Scapanus latimarus</i>	34	60	228
Talpidae	<i>Talpa altaica</i>	34	64	228
Talpidae	<i>Talpa caeca</i>	36	64	228
Talpidae	<i>Talpa caucasica</i>	38	62	228
Talpidae	<i>Talpa europaea</i>	34	64	228
Talpidae	<i>Talpa levantis</i>	34	62	228
Talpidae	<i>Talpa minima</i>	34	62	228
Talpidae	<i>Talpa occidentalis</i>	34	64	228

Talpidae	<i>Talpa romana</i>	34	62	228
Tapiridae	<i>Tapirus terrestris</i>	80	80	145
Tapiridae	<i>Tapirus pinchaque</i>	76	80	145
Tapiridae	<i>Tapirus bairdii</i>	80	94	145
Tapiridae	<i>Tapirus indicus</i>	52	84	145
Tarsiidae	<i>Tarsius syrichta</i>	80	90	86
Tarsiidae	<i>Tarsius bancanus</i>	80	90	157
Tarsiidae	<i>Tarsius diana</i>	46	78	206
Tarsipedidae	<i>Tarsipes rostratus</i>	24	22	165
Tayassuidae	<i>Catagonus wagneri</i>	20	36	34
Tayassuidae	<i>Tayassu albirostris</i>	26	48	34
Tayassuidae	<i>Tayassu tajacu</i>	30	48	34
Tenrecidae	<i>Centete (Tenrec) eucadatus</i>	38	72	48
Tenrecidae	<i>Microgale dobsoni</i>	30	50	49
Tenrecidae	<i>Microgale talazaci</i>	30	52	49
Tenrecidae	<i>Echinops telfairi</i>	40	76	228
Tenrecidae	<i>Hemicentetes semispinosus</i>	38	48	228
Tenrecidae	<i>Microgale cowani</i>	54	54	228
Tenrecidae	<i>Microgale thomsoni</i>	30	48	228
Tenrecidae	<i>Micropotamogale lamottei</i>	38	72	228
Tenrecidae	<i>Setifer setosus</i>	40	50	228
Tragulidae	<i>Tragulus javanicus</i>	32	60	174
Trichechidae	<i>Trichechus manatus</i>	48	84	173
Tupaiaidae	<i>Tupaia chinensis</i>	62	72	14
Tupaiaidae	<i>Tupaia longipes</i>	60	70	14
Tupaiaidae	<i>Tupaia montana</i>	68	70	14
Tupaiaidae	<i>Tupaia palawanensis</i>	52	68	14
Tupaiaidae	<i>Urogale everetti</i>	44	76	14

Tupaiaidae	<i>Tupaia glis</i>	60	70	157
Tupaiaidae	<i>Tupaia berlingeri</i>	62	72	190
Ursidae	<i>Ailuropoda melanoluca</i>	42	74	204
Ursidae	<i>Black bear</i>	74	76	204
Ursidae	<i>Brown bear</i>	74	76	204
Ursidae	<i>Polar bear</i>	74	76	204
Ursidae	<i>Sun bear</i>	74	76	204
Ursidae	<i>Sloth bear</i>	74	76	204
Ursidae	<i>Asiatic black</i>	74	76	204
Ursidae	<i>Tremarctos ornatus</i>	52	82	204
Vespertilionidae	<i>Barbastella leucomelas</i>	32	50	4
Vespertilionidae	<i>Eptesicus japonensis</i>	50	48	4
Vespertilionidae	<i>Myotis frater</i>	44	52	4
Vespertilionidae	<i>Myotis hosonoi</i>	44	52	4
Vespertilionidae	<i>Myotis macrodactylus</i>	44	52	4
Vespertilionidae	<i>Myotis nattereri</i>	44	50	4
Vespertilionidae	<i>Murina aurata</i>	44	60	4
Vespertilionidae	<i>Murina leucogaster</i>	44	58	4
Vespertilionidae	<i>Nyctalus furvus</i>	44	52	4
Vespertilionidae	<i>Nyctalus lasiopterus</i>	42	50	4
Vespertilionidae	<i>Pipistrellus endoi</i>	36	50	4
Vespertilionidae	<i>Pipistrellus abramus</i>	26	44	4
Vespertilionidae	<i>Vespertilio orientalis</i>	38	50	4
Vespertilionidae	<i>Vespertilio superans</i>	38	50	4
Vespertilionidae	<i>Rhogeesa genowasyi</i>	42	50	16
Vespertilionidae	<i>Rhogeesa parvula</i>	44	50	16
Vespertilionidae	<i>Rhogeesa tumida</i>	30	50	16
Vespertilionidae	<i>Idionycteris Phyllotis</i>	30	50	19

Vespertilionidae	<i>Myotis carteri</i>	44	50	19
Vespertilionidae	<i>Myotis auriculus</i>	44	52	40
Vespertilionidae	<i>Myotis austroriparius</i>	44	50	40
Vespertilionidae	<i>Myotis evotis</i>	44	52	40
Vespertilionidae	<i>Myotis grisescens</i>	44	50	40
Vespertilionidae	<i>Myotis keaysi</i>	44	50	40
Vespertilionidae	<i>Myotis keenii</i>	44	50	40
Vespertilionidae	<i>Myotis nigricans</i>	44	50	40
Vespertilionidae	<i>Myotis sodalis</i>	44	50	40
Vespertilionidae	<i>Myotis thysanodes</i>	44	52	40
Vespertilionidae	<i>Myotis velifer</i>	44	50	40
Vespertilionidae	<i>Myotis yumanensis</i>	44	50	40
Vespertilionidae	<i>Nycticeius humeralis</i>	46	48	40
Vespertilionidae	<i>Antrozous pallidus</i>	46	50	41
Vespertilionidae	<i>Eptesicus fuscus</i>	50	48	41
Vespertilionidae	<i>Eptesicus lyinni</i>	50	48	41
Vespertilionidae	<i>Lasiurus borealis</i>	28	48	41
Vespertilionidae	<i>Lasiurus seminolus</i>	28	48	41
Vespertilionidae	<i>Lasiurus cinereus</i>	28	48	41
Vespertilionidae	<i>Lasiurus ega</i>	28	48	41
Vespertilionidae	<i>Lasionycteris noctivagans</i>	20	28	41
Vespertilionidae	<i>Myotis albescens</i>	44	50	41
Vespertilionidae	<i>Pispitrellus subflavus</i>	30	50	41
Vespertilionidae	<i>Myotis oxygnathus</i>	44	50	42
Vespertilionidae	<i>Nyctalus noctula</i>	42	50	83
Vespertilionidae	<i>Miniopterus schreibersi</i>	46	52	130
Vespertilionidae	<i>Myotis mystacinus</i>	44	52	130
Vespertilionidae	<i>Myotis siligerensis</i>	44	52	130

Vespertilionidae	<i>Pispitrellus pulveratus</i>	44	52	130
Vespertilionidae	<i>Tylonicteris robustula</i>	32	50	130
Vespertilionidae	<i>Plecotus mexicanus</i>	32	50	168
Vespertilionidae	<i>Plecotus rafinesqui</i>	32	50	168
Vespertilionidae	<i>Otonycteris hemprichii</i>	28	46	217
Vespertilionidae	<i>Plecotus austriacus</i>	32	50	217
Vespertilionidae	<i>Myotis beccstenii</i>	44	50	227
Vespertilionidae	<i>Myotis blythi</i>	44	50	227
Vespertilionidae	<i>Myotis capaccinii</i>	44	50	227
Vespertilionidae	<i>Myotis emarginatus</i>	44	50	227
Vespertilionidae	<i>Myotis myotis</i>	44	50	227
Vespertilionidae	<i>Miniopterus inflatus</i>	46	50	237
Vespertilionidae	<i>Nycticeius schlieffeni</i>	34	52	237
Vespertilionidae	<i>Scotophilus dinganii</i>	36	50	237
Vespertilionidae	<i>Scotophilus nux</i>	36	50	237
Vespertilionidae	<i>Scotophilus viridis</i>	36	50	237
Vespertilionidae	<i>Euderma maculatum</i>	30	52	268
Vespertilionidae	<i>Plecotus townsendii</i>	32	50	268
Vespertilionidae	<i>Barbastella barbastellus</i>	32	50	278
Vespertilionidae	<i>Plecotus auritus</i>	32	50	278
Vespertilionidae	<i>Vespertilio murinus</i>	38	50	278
Vespertilionidae	<i>Tylonicteris pachypus</i>	46	54	305
Viverridae	<i>Crossarchus obscurus</i>	36	68	105
Viverridae	<i>Cynictis penicillata</i>	36	68	105
Viverridae	<i>Helogale parvula</i>	36	68	105
Viverridae	<i>Herpestes auropunctatus</i>	35/36	68	105
Viverridae	<i>Herpestes brachyurus</i>	35/36	68	105
Viverridae	<i>Herpestes edwardesi</i>	35/36	68	105



Viverridae	<i>Herpestes fuscus</i>	35/36	68	105
Viverridae	<i>Herpestes icneumon</i>	43/44	68	105
Viverridae	<i>Herpestes pulvulentus</i>	39/40	76	105
Viverridae	<i>Herpestes sanguineus</i>	41/42	68	105
Viverridae	<i>Herpestes urva</i>	36	68	105
Viverridae	<i>Mungos mungo</i>	36	68	105
Viverridae	<i>Artogalidia trivigarta stigmatica</i>	40	62	298
Viverridae	<i>Cynogale bennetti</i>	42	68	298
Viverridae	<i>Ailurus fulges</i>	36	66	300
Viverridae	<i>Arctictis binturong</i>	42	70	300
Viverridae	<i>Atilax paludinosus</i>	36	64	300
Viverridae	<i>Bdeogale sp.</i>	36	62	300
Viverridae	<i>Genetta tigrina</i>	52	96	300
Viverridae	<i>Cryptoprocta ferox</i>	42	72	300
Viverridae	<i>Fossa fossa</i>	42	70	300
Viverridae	<i>Galidia elegans</i>	44	74	300
Viverridae	<i>Hemigalus derbyanus</i>	42	66	300
Viverridae	<i>Nandinia binota</i>	38	70	300
Viverridae	<i>Paguna larvata</i>	44	70	300
Viverridae	<i>Paradoxurus hermaphroditicus</i>	42	68	300
Viverridae	<i>Prionodon linsang</i>	34	62	300
Viverridae	<i>Viverricula indica</i>	36	64	300
Vombatidae	<i>Phascolomis mitchelli</i>	14	24	175
Vombatidae	<i>Vombatus ursinus</i>	14	24	235
Ziphiidae	<i>Mesoplodon carlhubbsi</i>	42	74	13
Ziphiidae	<i>Mesoplodon europaeus</i>	42	74	13

**Table S2.** Species and variables utilised in the phylogenetic generalized least squares regression (PGLS) of microstructural karyotypic diversification rate (rKDmicro). Body Mass (BM); Sexual Maturity Age in days (SMA.d); Litter Size per year (LitPerYear); Maximum Life Span in months (MaxLifespan.m); Basal Metabolic Rate (MetRateMass\_g); Species Distribution Area (distr\_Area\_km2). All biological traits are log transformed.

Order	Family	Specie	BM	SMA.d	LitPerYear	MaxLifespan.m	MetRateMass_g	distr_Area_km2	Chromosome_changes	Ancestral	Ancestral Origin	rKDmicro	Ref
Carnivora	Ursidae	Ailuropoda melanoleuca	11.68	7.79	-0.356674944	5.89	10.83	10.50		34 Carnivora	60	0.5667	340
Rodentia	Cricetidae	Akodon cursor	3.68	3.80	1.791759469	3.81	3.60	14.19		26 Muroidea	30	0.8667	329
Rodentia	Cricetidae	Akodon montensis	3.55	5.42	0.222762547	3.95	3.17	11.06		19 Muroidea	30	0.6333	329
Rodentia	Cricetidae	Akodon paranaensis	4.90	5.89	0.006931472	4.03	4.86	9.73		10 Muroidea	30	0.3333	329
Rodentia	Cricetidae	Akodon serrensis	3.34	4.36	0.937062995	3.71	3.39	10.84		5 Muroidea	30	0.1667	329
Rodentia	Cricetidae	Alloccricetus curtatus	3.87	4.89	0.720500673	4.03	3.87	13.79		24 Muroidea	30	0.8000	335
Rodentia	Cricetidae	Alloccricetus eversmanni	4.75	4.85	0.693147181	4.09	4.74	14.45		21 Muroidea	30	0.7000	335
Primata	Atelidae	Alouatta belzebul	8.73	6.73	-0.074011008	5.69	8.59	14.46		12 Platyrrhini	21.4	0.5607	326
Primata	Atelidae	Alouatta caraya	8.63	7.15	-0.020202707	5.50	8.43	14.24		12 Platyrrhini	21.4	0.5607	326
Primata	Atelidae	Alouatta guariba	8.55	6.80	-0.059687908	5.63	8.34	13.62		9 Platyrrhini	21.4	0.4206	326
Primata	Atelidae	Alouatta macconnelli	8.89	6.61	-0.024607314	5.22	8.60	14.33		11 Platyrrhini	21.4	0.5140	326
Primata	Atelidae	Alouatta sara	8.80	6.71	-0.041287194	5.55	8.44	13.17		16 Platyrrhini	21.4	0.7477	326
Primata	Atelidae	Alouatta seniculus	8.76	7.43	-0.356674944	5.70	8.62	14.74		16 Platyrrhini	21.4	0.7477	326
Chiroptera	Phyllostomidae	Anoura cultrata	2.86	5.52	0.654120203	4.66	2.88	14.44		8 Phyllostomidae	37.5	0.2133	338
Primata	Cebidae	Aotus lemurinus	6.76	6.63	0	5.38	6.77	12.68		9 Platyrrhini	21.4	0.4206	326
Primata	Cebidae	Aotus nancymae	6.67	6.60	0.024233758	5.41	6.75	11.97		14 Platyrrhini	21.4	0.6542	326
Chiroptera	Hipposideridae	Aselliscus stoliczkanus	1.81	5.96	0	5.42	1.96	14.15		14 Chiroptera	70	0.2000	344
Primata	Atelidae	Ateles belzebuth	8.81	7.63	-1.203972804	5.82	8.88	13.85		19 Platyrrhini	21.4	0.8879	326
Primata	Atelidae	Ateles geoffroyi	8.93	7.65	-1.139434283	5.79	9.41	13.60		19 Platyrrhini	21.4	0.8879	326
Primata	Atelidae	Ateles paniscus	9.07	7.65	-0.693147181	6.12	9.43	13.70		18 Platyrrhini	21.4	0.8411	326
Rodentia	Muridae	Bandicota savilei	5.56	5.85	0.57941887	4.53	5.56	13.43		12 Rattini	8.4	1.4286	323
Rodentia	Muridae	Berymys berdmorei	5.46	5.77	0.585408279	4.42	5.48	13.25		11 Rattini	8.4	1.3095	323
Rodentia	Muridae	Berymys bowersi	5.88	5.66	0.45995748	3.55	5.82	14.37		11 Rattini	8.4	1.3095	323
Eulipotyphla	Soricidae	Blarinella griselda	2.08	5.50	0.496090951	3.26	2.22	11.77		20 Eulipotyphla	73	0.2740	325
Lagomorpha	Leporidae	Brachylagus idahoensis	6.07	5.53	0.693147181	4.04	6.09	13.14		10 Lagomorpha	39.6	0.2525	322
Primata	Atelidae	Brachyteles arachnoides	9.26	7.96	-1.078809661	6.17	9.45	8.82		6 Platyrrhini	21.4	0.2804	326

Lagomorpha	Leporidae	Bunolagus monticularis	7.47	6.46	0.023274301	5.19	7.71	10.52	20	Lagomorpha	39.6	0.5051	322
Primata	Pitheciidae	Cacajao calvus	8.14	7.14	-0.693147181	5.78	8.49	11.55	4	Platyrrhini	21.4	0.1869	326
Primata	Pitheciidae	Callicebus cupreus	7.02	6.82	-0.072570693	5.76	7.19	13.45	11	Platyrrhini	21.4	0.5140	326
Primata	Pitheciidae	Callicebus donacophilus	6.80	6.51	0.019739915	5.70	6.79	12.57	11	Platyrrhini	21.4	0.5140	326
Primata	Pitheciidae	Callicebus lugens	6.96	6.60	0.01384853	5.52	6.90	10.91	6	Platyrrhini	21.4	0.2804	326
Primata	Pitheciidae	Callicebus moloch	6.86	7.14	0	5.72	6.98	13.72	5	Platyrrhini	21.4	0.2336	326
Primata	Pitheciidae	Callicebus pallescens	6.96	6.57	-0.02447052	5.35	6.96	11.44	9	Platyrrhini	21.4	0.4206	326
Primata	Pitheciidae	Callicebus personatus	7.24	6.62	0.020585959	5.53	7.19	12.06	6	Platyrrhini	21.4	0.2804	326
Primata	Cebidae	Callimico goeldii	6.32	6.03	0.157003749	5.37	6.30	13.05	5	Platyrrhini	21.4	0.2336	326
Primata	Cebidae	Callithrix jacchus	5.67	6.12	0.693147181	5.31	5.25	13.31	7	Platyrrhini	21.4	0.3271	326
Rodentia	Sciuridae	Callosciurus erythraeus	5.65	5.77	0.693147181	5.26	5.52	14.67	8	Glires	79	0.1013	322
Rodentia	Muridae	Calomyscus sp	5.63	5.90	0.064232526	5.03	5.47	13.49	14	Muroidea	30	0.4667	335
Carnivora	Canidae	Canis lupus	10.37	6.52	0.693147181	5.87	10.41	17.74	6	Canidae	12	0.5000	328
Rodentia	Castoridae	Castor fiber	9.85	6.94	0	5.70	10.33	14.89	22	Glires	79	0.2785	322
Primata	Cebidae	Cebus apella	7.92	7.47	-0.597837001	6.29	8.15	16.19	3	Platyrrhini	21.4	0.1402	326
Primata	Cebidae	Cebus capucinus	8.01	7.67	-0.776528789	6.49	8.20	12.97	3	Platyrrhini	21.4	0.1402	326
Primata	Cebidae	Cebus nigrivittatus	7.96	7.67	-0.515237412	6.27	8.26	13.02	3	Platyrrhini	21.4	0.1402	326
Perissodactyla	Rhinocerotidae	Ceratotherium simum	14.64	7.92	-0.867500568	6.40	12.09	14.97	1	Tapiridae-Rhinocerotidae	48.6	0.0206	341
Carnivora	Canidae	Cerdocyon thous	8.66	5.63	0.641853886	4.93	8.63	15.77	7	Canidae	12	0.5833	328
Primata	Pitheciidae	Chiropotes utahickae	7.96	6.57	0.009256314	5.29	7.95	11.74	4	Platyrrhini	21.4	0.1869	326
Primata	Cercopithecidae	Colobus guereza	9.20	7.56	-0.527632742	5.68	9.27	15.20	5	Cercopithecidae	29.6	0.1689	324
Carnivora	Mephitidae	Conepatus leuconotus	8.10	5.83	0.693147181	4.43	7.83	14.74	18	Carnivora	60	0.3000	434
Rodentia	Cricetidae	Cricetulus barabensis	3.13	4.03	1.165968815	4.15	3.20	15.06	22	Muroidea	30	0.7333	335
Rodentia	Cricetidae	Cricetulus longicaudatus	3.10	4.22	0.986976827	3.92	3.24	14.56	20	Muroidea	30	0.6667	335
Rodentia	Cricetidae	Cricetulus migratorius	3.42	5.00	0.693147181	3.86	3.08	16.15	21	Muroidea	30	0.7000	335
Rodentia	Cricetidae	Cricetulus sokolovi	4.58	5.55	0.527653033	4.18	4.58	13.02	24	Muroidea	30	0.8000	335
Rodentia	Cricetidae	Cricetus cricetus	6.06	4.46	0.693147181	3.87	5.89	15.72	21	Muroidea	30	0.7000	335
Carnivora	Hyaenidae	Crocuta crocuta	11.06	6.67	0	6.20	10.96	16.51	10	Carnivora	60	0.1667	434
Carnivora	Canidae	Cuon alpinus	9.67	5.92	0	5.26	9.70	16.17	6	Canidae	12	0.5000	328
Chiroptera	Phyllostomidae	Desmodus rotundus	3.50	6.46	0.231111721	5.46	3.38	16.69	10	Phyllostomidae	37.5	0.2667	338
Chiroptera	Phyllostomidae	Diaemus youngi	3.60	5.85	0	4.81	3.61	16.42	10	Phyllostomidae	37.5	0.2667	338
Perissodactyla	Rhinocerotidae	Dicerorhinus sumatrensis	13.86	7.93	-1.237874356	6.04	11.93	13.29	1	Tapiridae-Rhinocerotidae	48.6	0.0206	341
Perissodactyla	Rhinocerotidae	Diceros bicornis	13.81	7.70	-0.94160854	6.34	12.08	16.25	1	Tapiridae-Rhinocerotidae	48.6	0.0206	341
Chiroptera	Phyllostomidae	Diphylla ecaudata	3.34	5.81	0	4.56	3.33	15.90	9	Phyllostomidae	37.5	0.2400	338
Rodentia	Gliridae	Eliomys melanurus	4.61	4.84	0.693147181	4.19	4.48	12.65	2	Eliomys	3.5	0.5714	337
Rodentia	Gliridae	Eliomys munbyanus	4.90	5.89	0.006931472	4.03	4.86	9.73	1	Eliomys	3.5	0.2857	337
Rodentia	Gliridae	Eliomys quercinus	4.74	6.34	0	4.19	4.89	15.17	2	Eliomys	3.5	0.5714	337

Chiroptera	Pteropodidae	Eonycteris spelaea	4.07	5.88	0.693147181	4.09	3.94	15.17	9	Chiroptera	70	0.1286	344
Perissodactyla	Equidae	Equus ferus	12.91	6.73	0	6.61	11.76	13.33	1	Equus	4	0.2500	341
Perissodactyla	Equidae	Equus grevyi	12.92	7.20	-0.693147181	5.74	11.93	12.17	3	Equus	4	0.7500	341
Perissodactyla	Equidae	Equus hemionus	12.37	7.08	-0.400477567	6.14	11.96	14.10	9	Equus	4	2.2500	341
Perissodactyla	Equidae	Equus kiang	12.55	7.57	-0.693147181	5.77	11.83	13.20	7	Equus	4	1.7500	341
Perissodactyla	Equidae	Equus quagga	12.90	7.48	-0.510825624	5.48	11.95	12.92	5	Equus	4	1.2500	341
Perissodactyla	Equidae	Equus zebra	12.55	6.87	-1.049822124	5.66	11.87	11.88	4	Equus	4	1.0000	341
Carnivora	Felidae	Felis catus	7.97	5.69	0.699055845	6.01	7.91	15.48	4	Carnivora	60	0.0667	340
Carnivora	Heupleridae	Fossa fossana	7.53	6.28	0.006731325	4.88	7.62	11.58	5	Carnivora	60	0.0833	434
Lorisiformes	Galagidae	Galago moholi	5.26	6.04	0.693147181	5.29	5.39	15.46	11	Lorisiformes	34.2	0.3216	332
Dermoptera	Cynocephalidae	Galeopterus variegatus	7.01	5.84	0.627801965	1.24	6.96	14.15	21	Tupaiaidae-Cynocephalidae	80	0.2625	332
Cetartiodactyla	Giraffidae	Giraffa camelopardalis	13.78	7.40	0	6.08	12.21	14.84	13	Giraffidae	29.4	0.4422	336
Chiroptera	Phyllostomidae	Glossophaga soricina	2.30	5.31	0.693147181	4.79	2.17	16.55	3	Phyllostomidae	37.5	0.0800	338
Carnivora	Ursidae	Helarctos malayanus	10.95	6.76	-0.038470359	5.70	10.57	14.74	21	Carnivora	60	0.3500	340
Rodentia	Bathyergidae	Heliophobius argenteocinereus	5.07	5.33	0.405465108	3.62	4.48	14.61	16	Bathyergidae	38	0.4211	327
Eulipotyphla	Erinacenaidae	Hemiechinus auritus	5.77	5.89	0	4.40	5.99	15.99	13	Eulipotyphla	73	0.1781	325
Carnivora	Herpestidae	Herpestes javanicus	6.62	5.12	0.693147181	4.79	6.66	15.74	8	Carnivora	60	0.1333	434
Cetartiodactyla	Hippopotamidae	Hippopotamus amphibius	14.24	7.62	0	6.48	12.00	14.43	26	Delphi-Hippopo	50	0.5200	336
Chiroptera	Hipposideridae	Hipposideros larvatus	2.99	5.85	0	4.77	3.10	15.15	15	Chiroptera	70	0.2143	344
Primata	Hylobatidae	Hylobates lar	8.63	8.26	-0.798507696	6.17	8.80	12.96	16	Hylobatidae	18.8	0.8511	331
Primata	Atelidae	Lagothrix lagotricha	8.74	7.46	-0.693147181	5.89	9.21	13.59	6	Platyrrhini	21.4	0.2804	326
Primata	Cebidae	Leontopithecus chrysomelas	6.35	6.51	0.235275841	5.54	6.31	10.43	6	Platyrrhini	21.4	0.2804	326
Rodentia	Muridae	Leopoldamys edwardsi	5.73	5.91	0.017917595	4.48	5.67	14.13	4	Rattini	8.4	0.4762	323
Lagomorpha	Leporidae	Lepus timidus	8.04	5.56	1.098612289	5.38	7.92	16.81	8	Lagomorpha	39.6	0.2020	322
Proboscidea	Elephantidae	Loxodonta africana	15.16	8.51	-1.560647748	6.87	12.44	15.26	10	Paengulate	62	0.1613	333
Rodentia	Sciuridae	Marmota baibacina	8.92	6.27	0	5.04	8.63	13.52	4	Sciuridae	51.5	0.0777	322
Rodentia	Sciuridae	Marmota himalayana	8.52	6.35	0.036537068	5.02	8.33	14.10	4	Sciuridae	51.5	0.0777	322
Carnivora	Mustelidae	Martes flavigula	7.83	7.14	0.67676064	5.12	7.87	15.48	6	Carnivora	60	0.1000	434
Carnivora	Mustelidae	Martes foina	7.42	6.61	0	5.38	7.57	15.76	8	Carnivora	60	0.1333	434
Rodentia	Muridae	Maxomys surifer	5.01	5.32	0.631914086	3.74	4.74	14.83	5	Rattini	8.4	0.5952	323
Chiroptera	Megadermatidae	Megaderma spasma	3.21	5.43	0.551887528	4.37	3.29	15.64	14	Chiroptera	70	0.2000	344
Carnivora	Mustelidae	Meles meles	9.38	6.04	-0.287682072	5.27	9.36	15.09	5	Carnivora	60	0.0833	434
Carnivora	Mustelidae	Melogale moschata	6.84	5.79	0.702693801	4.84	7.03	14.21	2	Carnivora	60	0.0333	434
Rodentia	Sciuridae	Menetes berdmorei	5.25	5.92	0	3.94	5.33	13.81	7	Glires	79	0.0886	334
Carnivora	Mephitidae	Mephitis macroura	7.00	5.87	0.042121276	4.62	6.89	14.40	15	Carnivora	60	0.2500	434
Carnivora	Mephitidae	Mephitis mephitis	7.78	5.87	0.693147181	5.04	7.78	16.32	15	Carnivora	60	0.2500	434
Rodentia	Cricetidae	Mesocricetus auratus	4.59	3.93	1.386294361	4.79	4.61	13.72	24	Muroidea	30	0.8000	335

Rodentia	Cricetidae	Mesocricetus brandti	5.29	3.76	1.098612289	3.97	4.88	13.73	25	Muroidea	30	0.8333	335
Rodentia	Cricetidae	Mesocricetus newtoni	4.58	4.55	1.165409294	4.14	4.57	11.56	27	Muroidea	30	0.9000	335
Rodentia	Cricetidae	Mesocricetus raddei	4.33	4.54	0.693147181	3.88	4.37	11.93	24	Muroidea	30	0.8000	335
Rodentia	Cricetidae	Microtus agrestis	3.58	3.64	1.252762968	3.68	3.24	16.09	4	Microtus	5.27	0.7590	330
Rodentia	Cricetidae	Microtus arvalis	3.29	3.34	1.791759469	3.58	3.09	15.87	4	Microtus	5.27	0.7590	330
Rodentia	Cricetidae	Microtus dogramacii	4.90	5.89	0.006931472	4.03	4.86	9.73	3	Microtus	5.27	0.5693	330
Rodentia	Cricetidae	Microtus gregalis	3.86	4.03	1.011600912	3.27	3.80	15.09	7	Microtus	5.27	1.3283	330
Rodentia	Cricetidae	Microtus maximowiczii	3.23	4.61	0.85761328	3.54	3.23	14.34	9	Microtus	5.27	1.7078	330
Rodentia	Cricetidae	Microtus oeconomus	3.50	3.80	1.252762968	3.07	3.52	16.78	12	Microtus	5.27	2.2770	330
Rodentia	Cricetidae	Microtus socialis	3.87	3.89	1.609437912	3.60	3.77	14.60	3	Microtus	5.27	0.5693	330
Cetartiodactyla	Moschidae	Moschus moschiferus	9.50	6.19	0	4.97	9.59	15.96	2	Moschidae-Bovidae	26.2	0.0763	336
Cetartiodactyla	Moschidae	Muntiacus reevesi	9.51	5.69	0.405465108	5.46	9.92	14.39	19	Moschidae-Bovidae	26.2	0.7252	336
Rodentia	Muridae	Mus mattheyi	4.52	5.88	0.002870569	3.97	4.69	8.19	14	Mus	11.4	1.2281	342
Rodentia	Muridae	Mus minutoides	1.86	4.05	1.386294361	3.62	2.07	14.31	14	Mus	11.4	1.2281	342
Rodentia	Muridae	Mus musculus	2.96	4.17	1.504077397	4.28	3.58	13.77	22	Mus	11.4	1.9298	342
Rodentia	Muridae	Mus pahari	3.25	5.78	0	4.66	3.33	14.07	3	Mus	11.4	0.2632	342
Rodentia	Muridae	Mus platythrix	3.37	5.37	0.146998474	3.96	3.30	11.69	29	Mus	11.4	2.5439	342
Carnivora	Mustelidae	Mustela altaica	5.19	5.52	0.100303673	3.99	5.63	15.85	8	Carnivora	60	0.1333	434
Carnivora	Mustelidae	Mustela eversmannii	7.43	5.79	0	4.69	7.36	16.62	11	Carnivora	60	0.1833	434
Carnivora	Mustelidae	Mustela nivalis	4.36	5.14	0	4.79	4.34	17.59	9	Carnivora	60	0.1500	434
Carnivora	Mustelidae	Mustela putorius	6.88	5.73	0	5.12	6.94	15.84	12	Carnivora	60	0.2000	434
Chiroptera	Vespertilionidae	Myotis goudoti	1.72	5.77	0.023150076	4.67	2.44	12.66	3	Chiroptera	70	0.0429	344
Chiroptera	Vespertilionidae	Myotis myotis	3.24	5.99	0	5.58	3.40	15.13	3	Chiroptera	70	0.0429	344
Chiroptera	Myzopodidae	Myzopoda aurita	2.21	5.81	-0.000779615	4.02	2.48	11.77	14	Chiroptera	70	0.2000	344
Carnivora	Nandiniidae	Nandinia binotata	7.68	6.92	0.693147181	5.40	8.05	15.60	2	Carnivora	60	0.0333	434
Primata	Cercopithecidae	Nasalis larvatus	9.41	7.55	-0.400477567	5.53	9.28	13.26	5	Cercopithecidae	29.6	0.1689	324
Carnivora	Felidae	Neofelis nebulosa	9.61	6.62	-0.00374404	5.32	8.96	14.88	4	Carnivora	60	0.0667	340
Eulipotyphla	Erinacenaidae	Neovison vison	7.00	5.83	0	4.92	5.13	16.40	13	Eulipotyphla	73	0.1781	325
Rodentia	Muridae	Niviventer fulvescens	4.40	4.50	1.126753433	4.16	4.47	15.06	6	Rattini	8.4	0.7143	323
Primata	Hylobatidae	Nomascus leucogenys	8.90	6.79	-0.082155942	5.61	8.75	12.18	27	Hylobatidae	18.8	1.4362	331
Carnivora	Canidae	Nyctereutes procyonoides	8.35	5.79	0	5.12	8.35	15.72	11	Canidae	12	0.9167	328
Lorisiformes	Lorisidae	Nycticebus coucang	6.83	6.49	0	5.76	6.87	14.22	5	Lorisiformes	34.2	0.1462	332
Lagomorpha	Ochotonidae	Ochotona forresti	4.83	5.26	0.602277724	3.79	4.59	12.65	10	Lagomorpha	39.6	0.2525	322
Lagomorpha	Ochotonidae	Ochotona hyperborea	4.79	5.73	0	3.58	4.80	16.14	11	Lagomorpha	39.6	0.2778	322
Cetartiodactyla	Giraffidae	Okapia johnstoni	12.35	6.85	0	5.98	11.70	13.92	15	Giraffidae	29.4	0.5102	336
Rodentia	Cricetidae	Oligoryzomys flavescens	3.22	5.00	0.414078113	4.01	3.37	14.64	7	Muroidea	30	0.2333	329
Lagomorpha	Leporidae	Oryctolagus cuniculus	7.37	5.22	1.504077397	5.38	7.21	14.65	8	Lagomorpha	39.6	0.2020	322

Lorisiformes	Galagidae	Otolemur crassicaudatus	7.10	6.41	0	5.42	6.88	15.23	2	Lorisiformes	34.2	0.0585	332
Lorisiformes	Galagidae	Otolemur garnettii	6.70	6.38	0.3074847	5.32	6.69	13.57	2	Lorisiformes	34.2	0.0585	332
Carnivora	Viverridae	Paguma larvata	8.37	6.66	0.693147181	5.38	8.34	15.51	3	Carnivora	60	0.0500	434
Carnivora	Felidae	Panthera leo	11.97	6.90	0.693147181	5.89	11.96	16.23	4	Carnivora	60	0.0667	340
Carnivora	Viverridae	Paradoxurus hermaphroditus	8.07	5.99	0.693147181	5.59	8.07	15.77	2	Carnivora	60	0.0333	434
Cetartiodactyla	Tayassuidae	Pecari tajacu	9.96	5.75	0.693147181	5.69	9.80	16.57	54	Tayassuidae	42.8	1.2617	336
Rodentia	Cricetidae	Peromyscus eremicus	3.12	3.99	1.098612289	4.49	3.07	12.54	6	Muroidea	30	0.2000	335
Rodentia	Sciuridae	Petaurista albiventer	7.31	6.47	0.023372621	5.55	7.66	14.02	7	Glires	79	0.0886	322
Rodentia	Cricetidae	Phodopus campbelli	3.30	3.84	1.252762968	3.07	3.45	14.53	32	Muroidea	30	1.0667	335
Rodentia	Cricetidae	Phodopus roborovskii	2.93	3.06	1.252762968	4.05	3.24	14.89	29	Muroidea	30	0.9667	335
Rodentia	Cricetidae	Phodopus sungorus	3.42	4.35	1.098612289	3.65	3.58	13.38	32	Muroidea	30	1.0667	335
Primata	Pitheciidae	Pithecia irrorata	7.74	6.46	0.204760981	5.33	7.72	13.94	2	Platyrrhini	21.4	0.0935	326
Primata	Cercopithecidae	Presbytis comata	8.79	7.47	-0.699163905	5.83	8.60	10.65	3	Cercopithecidae	29.6	0.1014	324
Hyracoidea	Procaviidae	Procavia capensis	7.99	6.19	0	5.12	7.75	17.00	6	Paengulate	62	0.0968	333
Lagomorpha	Leporidae	Pronolagus rupestris	7.72	5.74	0.755437627	4.80	7.64	14.14	13	Lagomorpha	39.6	0.3283	322
Primata	Cercopithecidae	Pygathrix nemaeus	9.15	7.28	0	5.70	8.85	11.92	2	Cercopithecidae	29.6	0.0676	324
Rodentia	Muridae	Rattus exulans	3.92	4.05	1.360976553	3.70	4.05	14.45	10	Rattini	8.4	1.1905	323
Rodentia	Muridae	Rattus losea	4.65	5.10	0.702999259	4.12	4.66	12.81	10	Rattini	8.4	1.1905	323
Rodentia	Muridae	Rattus norvegicus	5.65	4.01	1.252762968	3.82	5.29	13.72	10	Rattini	8.4	1.1905	323
Rodentia	Muridae	Rattus rattus	4.96	4.75	1.32175584	3.92	4.82	14.13	12	Rattini	8.4	1.4286	323
Rodentia	Muridae	Rattus tanezumi	4.95	5.61	0.655763389	4.46	4.96	11.08	10	Rattini	8.4	1.1905	323
Perissodactyla	Rhinocerotidae	Rhinoceros unicornis	14.43	7.63	-1.203972804	6.38	11.93	10.12	1	Tapiridae-Rhinocerotidae	48.6	0.0206	341
Chiroptera	Rhinolopodidae	Rhinolophus pearsonii	2.45	5.81	0	4.80	2.52	15.05	15	Chiroptera	70	0.2143	344
Chiroptera	Rhinolopodidae	Rhinolophus sinicus	5.54	5.83	0.621031978	4.54	5.50	14.68	19	Chiroptera	70	0.2714	344
Chiroptera	Pteropodidae	Rousettus leschenaultii	4.44	5.78	0.693147181	4.66	4.52	15.46	9	Chiroptera	70	0.1286	344
Primata	Cebidae	Saguinus oedipus	6.14	6.52	0	5.62	5.82	10.84	6	Platyrrhini	21.4	0.2804	326
Primata	Cebidae	Saimiri sciureus	6.62	7.24	0.285178942	5.78	6.75	14.97	1	Platyrrhini	21.4	0.0467	326
Rodentia	Sciuridae	Sciurus carolinensis	6.30	5.82	0.693147181	5.66	6.09	15.22	8	Glires	79	0.1013	322
Rodentia	Sciuridae	Sciurus vulgaris	5.81	5.89	0.693147181	4.97	5.82	16.69	8	Glires	79	0.1013	322
Primata	Cercopithecidae	Semnopithecus entellus	9.45	7.31	-0.400477567	5.70	9.34	14.23	3	Cercopithecidae	29.6	0.1014	324
Rodentia	Cricetidae	Sigmodon arizonae	5.29	5.61	0.51360325	4.05	5.27	12.76	7	Sygodon	9.42	0.7431	339
Rodentia	Cricetidae	Sigmodon fulviventris	5.28	4.65	1.084500461	3.75	4.93	13.22	10	Sygodon	9.42	1.0616	339
Rodentia	Cricetidae	Sigmodon mascotensis	4.79	5.15	0.818451892	3.98	4.76	12.44	8	Sygodon	9.42	0.8493	339
Eulipotyphla	Soricidae	Sorex araneus	2.22	5.75	0.693147181	3.18	2.09	16.48	30	Eulipotyphla	73	0.4110	325
Eulipotyphla	Soricidae	Sorex granarius	1.85	5.42	0.528694159	3.13	2.09	11.16	30	Eulipotyphla	73	0.4110	325
Eulipotyphla	Soricidae	Sorex minutus	1.46	5.87	0.405465108	3.18	1.44	16.55	36	Eulipotyphla	73	0.4932	325
Rodentia	Sciuridae	Spermophilus erythrognys	5.87	5.86	0	4.04	5.84	14.10	9	Sciuridae	51.5	0.1748	322

Rodentia	Sciuridae	Spermophilus major	6.26	5.92	0	4.23	6.36	13.34	9	Sciuridae	51.5	0.1748	322
Rodentia	Sciuridae	Spermophilus suslicus	5.53	5.38	0	3.86	5.50	13.68	10	Sciuridae	51.5	0.1942	322
Rodentia	Sciuridae	Spermophilus undulatus	6.61	5.93	0	4.17	6.52	14.70	11	Sciuridae	51.5	0.2136	322
Carnivora	Mephitidae	Spilogale gracilis	6.15	5.80	0.552943596	5.06	6.37	15.16	21	Carnivora	60	0.3500	434
Cetartiodactyla	Suidae	Sus scrofa	11.34	5.86	0.405465108	5.53	10.61	17.07	10	Suidae	42.8	0.2336	336
Lagomorpha	Leporidae	Sylvilagus floridanus	7.10	4.66	1.570697084	4.68	6.85	15.79	11	Lagomorpha	39.6	0.2778	322
Chiroptera	Molossidae	Tadarida teniotis	3.33	5.92	0	5.05	3.37	15.37	1	Chiroptera	70	0.0143	344
Eulipotyphla	Talpidae	Talpa altaica	4.44	5.86	-0.198450939	4.74	4.57	14.88	6	Eulipotyphla	73	0.0822	325
Eulipotyphla	Talpidae	Talpa europaea	4.47	5.82	0	4.43	4.47	15.78	6	Eulipotyphla	73	0.0822	325
Rodentia	Sciuridae	Tamias sibiricus	4.54	5.86	0	4.75	4.52	16.44	8	Glires	79	0.1013	322
Chiroptera	Emballonuridae	Taphozous melanopogon	3.26	5.93	0	5.32	3.37	15.79	10	Chiroptera	70	0.1429	344
Perissodactyla	Tapiridae	Tapirus bairdii	12.59	6.57	-0.342490309	5.77	11.59	12.15	5	Tapiridae-Rhinocerotidae	48.6	0.1029	341
Perissodactyla	Tapiridae	Tapirus indicus	12.65	7.03	-0.693147181	5.89	11.82	13.59	4	Tapiridae-Rhinocerotidae	48.6	0.0823	341
Perissodactyla	Tapiridae	Tapirus pinchaque	11.96	7.02	-0.549027923	5.83	11.75	12.09	3	Tapiridae-Rhinocerotidae	48.6	0.0617	341
Perissodactyla	Tapiridae	Tapirus terrestris	12.04	6.76	-0.168714503	6.04	11.75	16.43	2	Tapiridae-Rhinocerotidae	48.6	0.0412	341
Rodentia	Cricetidae	Thaptomys nigrita	2.99	5.88	0	3.93	3.17	13.49	5	Muroidea	30	0.1667	329
Primata	Cercopithecidae	Trachypithecus cristatus	8.88	7.45	-0.427421655	5.92	8.76	13.63	4	Cercopithecidae	29.6	0.1351	324
Primata	Cercopithecidae	Trachypithecus francoisi	9.00	7.42	-0.441688992	5.75	9.08	12.65	4	Cercopithecidae	29.6	0.1351	324
Primata	Cercopithecidae	Trachypithecus phayrei	8.95	7.37	-0.223143551	5.83	9.01	14.09	4	Cercopithecidae	29.6	0.1351	324
Cetartiodactyla	Tragulidae	Tragulus javanicus	7.54	5.06	0.875468737	4.97	7.39	13.76	21	Tragulidae	46.3	0.4536	336
Carnivora	Ursidae	Tremarctos ornatus	11.72	6.88	-0.10724351	6.08	10.83	12.92	33	Carnivora	60	0.5500	340
Rodentia	Cricetidae	Tscherskia triton	3.22	4.69	0.855195849	4.02	3.58	14.60	34	Muroidea	30	1.1333	335
Scandentia	Tupaiaidae	Tupaia belangeri	5.30	4.68	2.014903021	4.79	5.23	14.84	16	Tupaiaidae-Cynocephalidae	80	0.2000	332
Scandentia	Tupaiaidae	Tupaia minor	4.25	5.89	0.027472709	4.99	4.72	14.07	17	Tupaiaidae-Cynocephalidae	80	0.2125	332
Carnivora	Canidae	Urocyon cinereoargenteus	8.25	5.86	-0.020202707	5.19	8.26	16.01	9	Canidae	12	0.7500	328
Carnivora	Viverridae	Viverricula indica	7.98	5.89	0.671586997	4.84	7.94	15.91	6	Carnivora	60	0.1000	434
Carnivora	Canidae	Vulpes corsac	7.87	6.93	0	5.05	7.90	15.67	22	Canidae	12	1.8333	328
Carnivora	Canidae	Vulpes lagopus	8.62	6.04	0	4.79	8.53	14.67	8	Canidae	12	0.6667	328
Carnivora	Canidae	Vulpes velox	7.64	6.15	0	5.48	7.64	13.42	16	Canidae	12	1.3333	328
Carnivora	Canidae	Vulpes vulpes	8.48	5.77	-0.094310679	5.19	8.32	17.96	23	Canidae	12	1.9167	328
Carnivora	Canidae	Vulpes zerda	7.18	5.68	0	5.16	7.17	15.76	9	Canidae	12	0.7500	328
Rodentia	Sciuridae	Xerus erythropus	6.40	5.35	0.722831892	4.28	6.59	15.87	7	Glires	79	0.0886	322

**Table S3.** Families and variables utilised in the phylogenetic generalized least squares regression (PGLS) of rate of macrostructural karyotypic diversification (rKDmacro). Time of divergence of the Family (Time Family); Body Mass (BM); Sexual Maturity Age in days (SMA.d); Litter Size per year (LitSzPerYear); Maximum Life Span in months (MaxLifespan.m); Basal Metabolic Rate (MetRateMass\_g); Mean Distributional Range for species (Mean distr Species); Distributional range of each family (All distr Family). All biological traits are log transformed.

Family	Time_Family	rKDmacro	BM	SMA.d	LitSzPerYear	MaxLifespan.m	MetRateMass_g	Mean distr Species	All distr Family
Acrobatidae	41.6	0.024	3.30	5.49	0.693147181	3.82	3.34	13.35	26.71
Atelidae	21.4	0.187	8.86	7.15	-0.349079538	5.73	8.79	12.59	302.06
Balaenidae	27.3	0.037	14.17	7.71	-0.699894834	6.12	10.57	12.94	51.78
Balaenopteridae	19.3	0.207	15.37	7.43	-0.591769072	6.60	11.39	13.08	91.54
Bathyergidae	38	0.026	4.91	5.54	0.52551854	4.57	4.96	12.52	200.38
Bovidae	26.2	0.802	10.65	6.36	0.088260038	5.26	10.36	13.27	1898.11
Caenolestidae	75.6	0.013	3.43	5.73	0.125470647	4.10	3.77	9.82	58.95
Camelidae	67.3	0.015	12.09	7.03	0	5.97	11.88	12.86	51.44
Canidae	44.0	0.227	8.38	6.01	0.139534754	5.06	8.31	14.75	516.33
Castoridae	66.4	0.030	9.83	6.72	0	5.45	9.84	15.72	31.44
Caviidae	25.6	0.117	6.60	4.92	1.264703603	4.46	6.52	13.21	237.72



Cebidae	21.4	0.561	6.16	6.41	0.224837317	5.31	6.23	11.71	655.56
Cercopithecidae	29.6	0.203	8.55	7.04	-0.214709328	5.63	8.54	12.00	1583.66
Cervidae	27.8	0.576	10.29	6.31	0.057670626	5.30	10.25	12.68	646.78
Cheirogaleidae	37.1	0.054	4.92	5.87	0.191699943	4.74	5.06	9.06	190.35
Chinchillidae	20.2	0.050	6.82	5.68	0.577611156	5.01	6.95	11.94	83.56
Chrysochloridae	65.4	0.077	3.70	5.70	0.168964733	4.04	3.85	9.05	190.07
Cricetidae	24.2	2.562	4.02	5.30	0.471915426	4.26	4.12	11.22	7641.92
Ctenodactylidae	44.3	0.045	5.31	5.85	0.199397052	4.67	5.52	12.89	64.44
Ctenomyidae	17.3	0.809	5.29	5.81	0.419108963	4.68	5.36	10.06	603.50
Cynocephalidae	86.2	0.012	7.07	6.20	0.351495148	3.29	7.32	12.93	25.85
Dasypodidae	70.5	0.142	7.55	5.97	0.338764637	5.06	7.52	14.42	302.77
Dasyuridae	27.3	0.037	3.93	5.75	0.231529052	3.90	4.01	11.69	806.35
Daubentoniidae	52.2	0.019	7.91	6.73	-0.867500568	5.68	8.18	11.86	11.86
Delphinidae	19.8	0.101	11.62	7.34	-0.44561324	5.77	11.34	12.96	440.61
Didelphidae	20.2	0.050	4.31	5.36	0.471297397	4.03	4.44	11.97	1041.14
Dinomyidae	20.2	0.050	9.43	5.75	0.614811707	4.73	9.41	14.49	14.49
Echimyidae	7.3	0.959	5.29	5.75	0.455930051	4.61	5.31	11.25	1012.48
Elephantidae	65.3	0.031	15.18	8.07	-1.206163823	6.57	12.37	14.93	44.78
Emballonuridae	51.5	0.058	2.63	5.79	0.209790512	4.78	2.91	13.35	681.02
Equidae	55.1	0.182	12.59	7.00	-0.44438065	5.99	11.94	13.44	107.48
Erinaceidae	66.2	0.045	5.33	5.58	0.326130001	4.34	5.39	12.58	301.98
Eschrichtiidae	19.3	0.052	17.12	8.07	-0.693147181	6.83	12.36	14.54	14.54
Felidae	37.8	0.106	8.72	6.33	0.295019957	5.29	8.59	14.94	597.78
Geomyidae	28.4	0.317	5.46	5.45	0.442351269	4.17	5.34	9.82	392.91
Giraffidae	29.4	0.034	13.06	7.13	0	6.03	12.05	14.38	28.76
Gliridae	62.4	0.064	3.86	5.48	0.290029674	4.33	3.96	11.97	335.07
Herpestidae	28.0	0.107	6.98	5.92	0.557964839	4.91	7.06	14.06	464.13
Heteromyidae	28.4	1.197	3.66	5.13	0.498147779	3.92	3.69	11.54	692.28

Hippopotamidae	52.9	0.019	13.31	7.47	0	6.37	11.61	12.46	24.92
Hipposideridae	50.1	0.040	2.97	5.84	0.197473761	4.83	3.16	11.87	961.09
Hominidae	18.8	0.213	11.03	7.83	-1.026188347	6.31	10.99	12.56	87.89
Hyaenidae	33.8	0.089	10.30	6.66	-0.158788749	5.72	10.25	15.92	63.69
Hylobatidae	18.8	0.213	8.46	7.44	-0.626507959	5.87	8.59	11.52	161.29
Indriidae	37.1	0.108	7.88	6.85	-0.168963757	5.46	7.82	9.26	101.90
Lemuridae	37.1	0.243	7.64	6.61	0.171597558	5.42	7.63	9.18	174.33
Leporidae	39.6	0.126	7.26	5.66	0.839537846	4.77	7.21	12.37	754.57
Lorisidae	34.2	0.117	5.93	6.15	0.204375368	5.25	5.81	12.71	114.40
Macropodidae	14.2	0.423	8.30	6.33	0.214321936	5.06	8.07	11.10	721.72
Macroscelididae	73	0.014	4.44	5.00	0.898060155	4.13	4.48	13.05	195.81
Manidae	77.6	0.013	8.58	6.60	0.043669573	5.39	8.51	14.39	115.09
Megadermatidae	43.0	0.047	3.63	5.98	0.218457114	4.90	3.70	15.30	76.51
Megalonychidae	19.6	0.102	8.74	7.22	-0.178337472	5.88	8.48	14.49	28.99
Microbiotheriidae	64.8	0.015	3.22	6.32	0	3.65	3.77	10.98	10.98
Molossidae	48.1	0.187	3.05	5.71	0.286335116	4.72	3.05	13.59	1359.40
Monodontidae	13.1	0.153	13.95	7.75	-0.891598119	6.17	12.53	13.53	27.05
Mormoopidae	37.5	0.153	2.74	5.81	0.145987143	4.84	2.87	13.19	131.91
Moschidae	26.2	0.038	8.71	6.36	0.038525681	5.23	8.58	12.53	87.71
Muridae	24.2	2.355	4.37	5.41	0.473017157	4.33	4.45	10.91	7966.08
Mustelidae	28.0	0.357	7.33	6.07	0.188163453	4.99	7.29	14.49	854.76
Myocastoridae	7.3	0.137	8.76	5.23	0.947789399	4.97	7.93	15.24	15.24
Myrmecophagidae	39.7	0.076	9.04	6.65	0	5.05	8.94	15.58	46.75
Mystacinidae	45.3	0.022	2.94	5.55	0.346573591	4.58	2.92	12.12	24.24
Natalidae	50.6	0.020	2.80	5.76	0.279238324	4.68	2.96	11.48	91.88
Noctilionidae	36.6	0.027	3.42	5.81	0.335476143	4.82	3.59	16.45	32.91
Notoryctidae	62.7	0.016	3.77	5.62	0.295559326	3.44	3.92	12.81	25.61
Ochotonidae	39.6	0.051	4.97	5.57	0.52959923	4.18	4.94	11.96	358.87

Octodontidae	17.3	0.289	4.80	5.64	0.375472217	4.42	4.82	10.49	136.35
Odobenidae	22	0.045	13.86	7.75	-0.717350391	6.17	12.20	12.99	12.99
Ornithorhynchidae	45.9	0.022	7.30	6.61	0	5.58	7.18	13.21	13.21
Orycteropodidae	76.8	0.013	10.94	6.63	0	5.66	10.78	16.71	16.71
Otariidae	22	0.091	10.80	7.23	-0.216495161	5.53	10.60	12.72	203.58
Pedetidae	48.3	0.021	6.21	5.83	0.792315766	4.98	6.23	14.41	28.82
Peramelidae	23.8	0.061	6.46	5.43	0.73144006	4.26	6.39	10.30	185.39
Petauridae	36.8	0.027	5.50	6.00	0.456813878	4.96	5.61	10.16	111.81
Phalangeridae	42.8	0.023	6.95	6.13	0.374698273	4.89	6.99	10.23	276.29
Phascolarctidae	39	0.026	8.78	6.73	0	5.48	8.46	13.83	13.83
Phocidae	30	0.100	12.24	7.42	-0.125237123	5.97	11.83	14.02	266.46
Phocoenidae	13.1	0.076	10.93	7.05	-0.309913374	5.33	11.21	13.04	78.23
Phyllostomidae	37.5	0.640	3.05	5.63	0.448890016	4.65	3.03	13.73	2196.53
Physeteridae	24.5	0.041	13.86	7.51	-0.661262765	5.99	12.06	13.58	40.74
Potoroidae	14.2	0.070	7.17	5.95	0.782166222	4.73	7.12	10.05	100.48
Procyonidae	28.0	0.036	7.61	6.44	0.123847813	5.37	7.69	12.95	181.35
Pseudocheiridae	36.8	0.054	6.54	6.16	0.21921265	4.86	6.53	10.42	177.20
Pteropodidae	57.5	0.104	4.82	6.00	0.395806605	4.95	4.86	10.65	1981.43
Rhinocerotidae	48.6	0.062	14.22	7.76	-1.015887673	6.26	12.25	13.09	65.47
Rhinolophidae	50.1	0.120	2.74	5.84	0.165634639	4.83	2.91	12.25	943.59
Rhinopomatidae	47.0	0.043	3.18	5.97	0.080698278	4.84	3.42	15.28	61.13
Sciuridae	51.5	0.524	5.50	5.81	0.28998033	4.54	5.52	12.10	3363.44
Solenodontidae	80.5	0.012	5.67	5.91	0.599788711	4.72	5.82	10.37	41.49
Soricidae	66.2	0.725	3.10	5.50	0.329433086	4.18	3.33	11.05	4155.92
Suidae	42.8	0.140	9.20	6.07	0.16960619	5.12	8.66	12.01	228.26
Tachyglossidae	45.9	0.022	7.72	6.30	-0.086908602	5.66	7.62	11.01	44.04
Talpidae	74.3	0.121	4.07	5.64	0.124567848	4.02	4.10	11.60	452.44
Tapiridae	48.6	0.082	12.31	6.84	-0.466363743	5.90	11.67	13.56	54.26

Tarsiidae	71.1	0.028	4.69	6.10	0.471290167	4.86	4.77	9.25	64.74
Tarsipedidae	39.1	0.026	2.27	5.18	1.098612289	3.18	2.30	12.26	12.26
Tayassuidae	42.8	0.070	10.27	6.33	0.372200895	5.30	10.15	15.24	45.72
Tenrecidae	65.4	0.122	3.49	5.38	0.331012791	4.04	3.69	10.68	320.33
Tragulidae	46.3	0.022	6.47	5.60	0.348008617	4.87	6.43	12.63	101.04
Trichechidae	38.1	0.026	13.01	7.43	-0.699916261	5.86	11.83	13.02	39.07
Tupaiidae	90.6	0.055	4.89	5.58	0.415860371	4.59	4.93	11.77	223.54
Ursidae	40.0	0.075	11.75	7.22	-0.563520262	6.04	11.37	14.27	114.13
Vespertilionidae	44.0	0.455	2.62	5.76	0.153864503	4.81	2.74	12.60	5128.28
Viverridae	39.7	0.428	7.62	6.04	0.560882356	5.07	7.69	13.21	462.48
Vombatidae	39	0.026	10.24	6.76	-0.23104906	5.77	9.99	11.42	34.26
Ziphiidae	28.2	0.036	13.86	7.66	-0.642530594	5.99	11.72	13.12	275.59

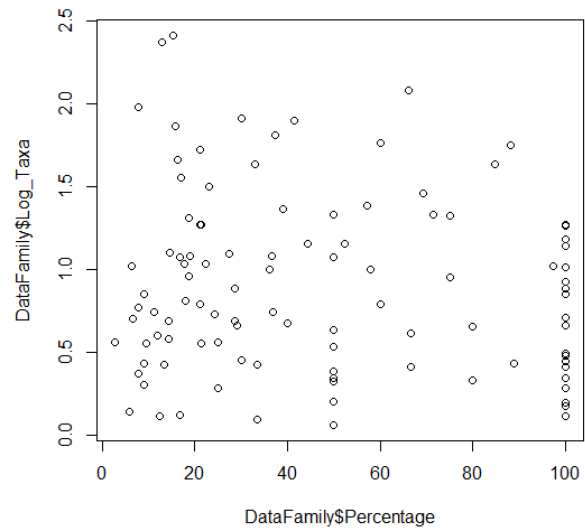
**Table S4.** Akaike Information Criterium (AIC) values for pglS analyses using the Brownian motion (BM) and Ornstein–Uhlenbeck (OU) correlation structure.

Trait	Model	AIC BM	AIC OU
rKDmacro	Body Mass	164.6714	175.0108
	Metabolic Rate	164.6843	174.7713
	Longevity	164.328	146.5953
	Litters per Year	165.502	171.9412
	Sexual Maturity Age	163.2486	170.3882
	Family Geographic Range	160.0034	135.3067
	MeanSpeciesGeographic Range	113.4815	169.9212
	Longevity*Body Mass	168.2674	187.4945
	Litters per Year*Longevity	168.2674	174.8892
	Sexual Maturity Age*Longevity	166.6973	179.3915
Family Geographic Range * Mean Species Geographic Range	107.9817	154.9431	
rKDmicro	Body Mass	73.77	125.2634
	Metabolic Rate	73.8	125.2437
	Longevity	68.6	119.2099
	Litters per Year	73.7	122.9147
	Sexual Maturity Age	72.34	125.1267
	Geographic Range	73.54	126.1962
	Longevity*Body Mass	72.11	132.3171
	Litters per Year*Longevity	68.92	130.4255
	Sexual Maturity Age*Longevity	71.08	135.4805

**Table S5.** Results of models using non-imputed data.

<b>Response</b>	<b>Model</b>	<b>Characteristic</b>	<b>Traits</b>	<b>slope</b>	<b>p</b>	<b>df</b>
rKDmacro	Simple	Metabolic	Body Mass	1.23	0.22	105
			Metabolic Rate	-0.44	0.66	73
		Reproductive	Longevity	-1.66	0.099	102
			Litters per Year	1.66	0.099	102
			<b>Sexual Maturity Age</b>	<b>-2.65</b>	<b>0.009</b>	<b>95</b>
		Geographic	<b>Family Geographic Range</b>	<b>8.15</b>	<b>&lt;0.001</b>	<b>105</b>
	<b>MeanSpeciesGeographic Range</b>		<b>-2.43</b>	<b>0.016</b>	<b>105</b>	
	Multiple	Metabolic	<b>Longevity*Body Mass</b>		<b>0.005</b>	<b>100</b>
			Reproductive	Litters per Year*Longevity	0.059	97
			<b>Sexual Maturity Age*Longevity</b>		<b>0.007</b>	<b>92</b>
		Geographic	<b>Family Geographic Range * Mean</b>			
			<b>Species Geographic Range</b>		<b>&lt;0.001</b>	<b>103</b>
rKDmicro	Simple	Metabolic	Body Mass	-0.21	0.83	207
			Metabolic Rate	-1.45	0.152	41
		Reproductive	<b>Longevity</b>	<b>-2.07</b>	<b>0.039</b>	<b>131</b>
			Litters per Year	-0.74	0.458	125
			Sexual Maturity Age	-0.01	0.988	114
	Geographic	Geographic Range	-0.51	0.607	207	
	Multiple	Metabolic	Longevity*Body Mass		0.15	129
		Reproductive	<b>Litters per Year*Longevity</b>		<b>0.051</b>	<b>106</b>
			Sexual Maturity Age*Longevity		0.12	106

**Figure S1.** Relationship between rKDmacro and the percentage of species that were karyotyped in each family.



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