

Dataset S1: Body mass estimates in grams for all mammal species included in this study. Also included is the source of this measurement. PBDB = Paleobiology Database, NOW = Neogene Old World Database, EOL = Encyclopedia of Life, ADW = Animal Diversity Web. PBDB + regression indicates that body mass was estimated from a measurement on the PBDB using one of the many regression equations listed in Table S3.

Species	Mass (g)	Source
Aaptoryctes ivyi	9.40	PBDB + regression
Absarokius abbotti	6.30	PBDB + regression
Absarokius metoecus	6.10	PBDB + regression
Acarictis ryani	8.30	PBDB + regression
Achaenodon robustus	484.90	PBDB + regression
Achlyoscapter longirostris	11.94	(1)
Acmeodon secans	12.10	PBDB + regression
Acritohippus isonesus	135944.23	(1)
Acritohippus quinni	178082.11	(1)
Acritoparamys atwateri	5.70	PBDB + regression
Acritoparamys francesi	4.50	PBDB + regression
Acritoparamys pattersoni	9.07	PBDB
Acritoparamys wyomingensis	7.02	PBDB
Adeloblarina berklandi	12.68	(1)
Adelphailurus kansensis	33189.87	(1)
Adilophontes brachykolos	119372.01	(1)
Adjidaumo burkei	0.72	PBDB
Adjidaumo craigi	0.90	PBDB + regression
Adjidaumo intermedius	1.10	PBDB + regression
Adjidaumo maximus	1.60	PBDB + regression
Adjidaumo minimus	0.90	PBDB + regression
Adjidaumo minutus	1.40	PBDB + regression
Adunator ladae	2.00	PBDB + regression
Aelurodon asthenostylus	22026.47	(1)
Aelurodon ferox	26370.47	(1)
Aelurodon mcgrewi	22247.84	(1)
Aelurodon montanensis	27722.51	(1)
Aelurodon stirtoni	20537.34	(1)
Aelurodon taxoides	29436.77	(1)
Aepinacodon americanus	809.20	(2)
Aepycamelus bradyi	922.04	(3)
Aepycamelus giraffinus	901.44	PBDB
Aepycamelus robustus	420836.64	(1)
Aepycamelus stocki	348014.70	(1)
Aethomylos simplicidens	2.80	PBDB + regression
Ageitodendron matthewi	8.90	PBDB + regression
Agriochoerus antiquus	56387.34	(1)
Agriochoerus guyotianus	59000.00	(4)
Agriotherium schneideri	355045.06	(1)
Alagomys russelli	0.70	PBDB + regression

Continued on next page

Dataset S1 – continued from previous page

Species	Mass (g)	Source
Aletodon conardae	17.20	PBDB + regression
Aletodon gunnelli	17.90	PBDB + regression
Aletodon quadravus	13.00	PBDB + regression
Aletomeryx gracilis	27173.57	(1)
Alforjas taylori	408399.03	(1)
Alilepus vagus	7.20	PBDB + regression
Alilepus wilsoni	4.90	PBDB + regression
Allomys cristabrevis	6.50	PBDB + regression
Allomys simplicidens	122.00	(4)
Allomys storeri	3.80	PBDB + regression
Alluvisorex arcadentes	5.70	(1)
Alphagaulus pristinus	521.00	(4)
Alphagaulus vetus	523.22	(1)
Alticonus gazini	17.50	PBDB + regression
Alveojunctus minutus	2.20	PBDB + regression
Alveugena carbonensis	21.27	PBDB
Alwoodia harkseni	7.30	PBDB + regression
Alwoodia magna	226.00	(4)
Amebelodon floridanus	8243.20	PBDB + regression
Amelotabes simpsoni	3.40	PBDB + regression
Ammospermophilus hanfordi	58.00	(4)
Ammospermophilus junturensis	53.52	(1)
Amphichinus horncloudi	175.91	(1)
Amphicaenopus platycephalus	2397650.84	(1)
Amphicyon frendens	245241.81	(1)
Amphicyon galushai	138690.48	(1)
Amphicyon ingens	600000.00	(5)
Amphicyon longiramus	113550.16	(1)
Amphicyon riggsi	443.30	PBDB
Amphimachairodus coloradensis	31.90	PBDB + regression
Ampliconus antoni	29.20	PBDB + regression
Amynodon advenus	1197.30	PBDB + regression
Amynodon reedi	994.15	PBDB
Amynodontopsis bodei	548.30	PBDB + regression
Anaptomorphus aemulus	4.50	PBDB + regression
Anaptomorphus westi	6.50	PBDB + regression
Anasazia williamsoni	6.49	(6)
Anchitherium clarencei	230960.04	(1)
Anconodon cochranensis	57.00	(7)
Anemorhysis natronensis	2.50	PBDB + regression
Anemorhysis pattersoni	3.40	PBDB + regression
Anemorhysis pearcei	2.48	(8)
Anemorhysis wortmani	2.90	PBDB + regression
Angustidens vireti	18.17	(1)
Anisonchus oligistus	9.70	PBDB + regression
Anisonchus onostus	12.50	PBDB + regression
Anisonchus sectorius	21.20	PBDB + regression
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Dataset S1 – continued from previous page

Species	Mass (g)	Source
Ankalagon saurognathus	17.90	PBDB + regression
Ankyledon annectens	30.27	(1)
Anomoemys lewisi	5.99	(9)
Ansomys hepburnensis	44.70	(1)
Ansomys nevadensis	51.94	(1)
Ansomys nexodens	3.80	PBDB + regression
Antecalomys phthanus	22.87	(1)
Antecalomys valensis	13.60	(1)
Antecalomys vasquezi	10.70	PBDB
Antiacodon pygmaeus	10.70	PBDB + regression
Antiacodon venustus	24.80	PBDB + regression
Apataelurus kayi	60.00	PBDB + regression
Apatemys bellulus	2.00	PBDB + regression
Apatemys bellus	2.30	PBDB + regression
Apatemys chardini	1.80	PBDB + regression
Apatemys downsi	4.50	PBDB + regression
Apatemys hendryi	1.60	PBDB + regression
Apatemys uintensis	2.70	PBDB + regression
Apatosciuravus bifax	2.20	PBDB + regression
Apatosciuravus jacobsi	2.00	PBDB + regression
Apheliscus chydaeus	3.70	PBDB + regression
Apheliscus insidiosus	4.30	PBDB + regression
Apheliscus nitidus	5.00	PBDB + regression
Apheliscus wapitiensis	2.60	PBDB + regression
Aphelops malacorhinus	3541284.24	(1)
Aphelops megalodus	1689595.99	(1)
Aphelops mutilus	4325334.34	(1)
Aphronorus fraudator	6.30	PBDB + regression
Aphronorus orieli	14.30	PBDB + regression
Aphronorus ratatoski	8.30	PBDB + regression
Apletotomeus crassus	1.00	PBDB + regression
Apternodus gregoryi	5.50	PBDB + regression
Apternodus iliffensis	5.40	PBDB + regression
Arapahovius advena	2.90	PBDB + regression
Archaeocyon falkenbachii	88.00	(10)
Archaeocyon leptodus	3533.34	(1)
Archaeocyon pavidus	2275.60	(1)
Archaeohippus blackbergi	33189.87	(1)
Archaeohippus mannulus	104.00	PBDB + regression
Archaeohippus mourningi	54176.36	(1)
Archaeohippus penultimus	71682.36	(1)
Archaeohippus stenolophus	123.76	PBDB
Archaeolagus acaricolus	578.25	(1)
Archaeolagus emeraldensis	2344.90	(1)
Archaeolagus ennisianus	1064.22	(1)
Archaeolagus macrocephalus	1826.21	(1)
Archaeolagus primigenius	1540.71	(1)
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Dataset S1 – continued from previous page

Species	Mass (g)	Source
Archaeotherium lemleyi	932.90	PBDB + regression
Archaeotherium mortoni	297.60	PBDB + regression
Archaeotherium trippensis	1691.00	PBDB + regression
Arctocyon montanensis	71.10	PBDB + regression
Arctocyon mumak	149.00	PBDB
Arctodontomys nuptus	8.70	PBDB + regression
Arctodontomys simplicidens	7.10	PBDB + regression
Arctodontomys wilsoni	7.40	PBDB + regression
Arctodus pristinus	239.13	(11)
Arctonasua eurybates	15994.50	(1)
Arctonasua gracilis	8866.19	(1)
Arctonasua minima	7044.48	(1)
Arctostylops steini	11.30	PBDB + regression
Ardynomys occidentalis	5.90	PBDB + regression
Arfia junnei	17.90	PBDB + regression
Arfia opisthotoma	61.70	PBDB + regression
Arfia shoshoniensis	56.00	PBDB + regression
Arfia zeke	25.30	PBDB + regression
Arretotherium acridens	179871.86	(1)
Arretotherium fricki	138690.48	(1)
Arretotherium leptodus	575.99	PBDB
Artimonius australis	5.40	PBDB + regression
Artimonius nocerae	3.70	PBDB + regression
Artimonius witteri	4.40	PBDB + regression
Astrohippus stockii	203.04	PBDB
Aulolithomys bounites	3.20	PBDB + regression
Aulolithomys vexillaries	1.50	PBDB + regression
Australocamelus orarius	100709.96	(1)
Auxontodon pattersoni	26.80	PBDB + regression
Avunculus didelphodonti	4.30	PBDB + regression
Aycrossia lovei	5.20	PBDB + regression
Aztlanolagus agilis	27.14	(11)
Azygonyx ancylion	74.20	PBDB + regression
Azygonyx grangeri	94.00	PBDB + regression
Azygonyx xenicus	48.40	PBDB + regression
Baioconodon denverensis	35.70	PBDB + regression
Baioconodon nordicus	21.60	PBDB + regression
Baiomys rexroadii	0.90	PBDB + regression
Baiotomeus douglassi	6.60	PBDB + regression
Baiotomeus rhotonion	1.50	PBDB + regression
Barbourofelis fricki	255250.32	(1)
Barbourofelis loveorum	32.10	PBDB + regression
Barbourofelis morrisoni	90219.42	(1)
Barbourofelis osborni	264.00	(12)
Barbourofelis whitfordi	77652.58	(1)
Barbourofelis trigonocorneus	33860.35	(1)
Barylambda faberi	726.70	PBDB + regression

Continued on next page

Dataset S1 – continued from previous page

Species	Mass (g)	Source
Barylambda jackwilsoni	246.20	PBDB + regression
Basirepomys pliogenicus	3.30	PBDB + regression
Basirepomys robertsi	2.80	PBDB + regression
Bassariscus antiquus	1881.83	(1)
Bassariscus casei	1652.43	(1)
Bassariscus minimus	6.15	(13)
Bassariscus ogallalae	21.94	(14)
Bassariscus parvus	1685.81	(1)
Bathygenys alpha	26.50	PBDB + regression
Bathygenys reevesi	24.00	PBDB + regression
Batodonoides powayensis	0.70	PBDB + regression
Batodonoides vanhouteni	0.40	PBDB + regression
Beckiasorex hibbardi	1.10	PBDB + regression
Bensonomys arizonae	1.73	PBDB
Bensonomys baskini	1.89	PBDB
Bensonomys elachys	1.00	(15)
Bensonomys gidleyi	1.30	PBDB
Bensonomys lindsayi	1.00	PBDB + regression
Bensonomys meadensis	1.55	PBDB
Bensonomys winklerorum	1.02	PBDB
Bensonomys yazhi	1.08	(16)
Betonnia tsosia	3.84	(17)
Bisonalveus browni	5.50	PBDB + regression
Bisonalveus holtzmani	7.40	PBDB + regression
Blacktops latidens	18.02	PBDB
Blacktops longinares	15.14	PBDB
Blarina brevicauda	16.40	PBDB
Blarina carolinensis	3.10	(11)
Blastomeryx gemmifer	10938.02	(1)
Blastomeryx pristinus	168.00	PBDB
Blickomylus galushai	16983.54	(1)
Boreameryx braskerudi	56.30	PBDB + regression
Borophagus diversidens	34891.55	(1)
Borophagus dudleyi	247.00	(18)
Borophagus hilli	29143.87	(1)
Borophagus littoralis	23388.51	(1)
Borophagus orc	16814.55	(1)
Borophagus parvus	19341.34	(1)
Borophagus pugnator	24100.79	(1)
Borophagus secundus	24100.79	(1)
Bothriodon rostratus	451.00	(19)
Bouromeryx americanus	68186.37	(1)
Bouromeryx submilleri	50011.09	(1)
Brachycrus buwaldi	250196.03	(1)
Brachycrus laticeps	387.96	PBDB
Brachycrus rusticus	185.22	PBDB
Brachycrus siouense	145801.30	(1)
Continued on next page		

Dataset S1 – continued from previous page

Species	Mass (g)	Source
Brachyerix hibbardii	5.04	(20)
Brachyerix incertis	79.84	(1)
Brachyerix macrotis	131.63	(1)
Brachyerix richi	340.36	(1)
Brachyhyops viensis	298.00	PBDB + regression
Brachyhyops wyomingensis	199.30	PBDB + regression
Brachypsalis modicus	512.86	(1)
Brachypsalis obliquidens	157.50	PBDB
Brachypsalis pachycephalus	487.85	(1)
Brachyrhynchocyon dodgei	14.10	PBDB + regression
Brachyrhynchocyon montanus	11.40	PBDB + regression
Brontops tyleri	571500.00	PBDB
Buisnictis breviramus	5.50	PBDB + regression
Buisnictis burrowsi	14.58	PBDB
Buisnictis schoffi	22.42	(1)
Bunomeryx montanus	17.20	PBDB + regression
Bunophorus etsagicus	44.10	PBDB + regression
Bunophorus grangeri	45.50	PBDB + regression
Bunophorus macropternus	37.40	PBDB + regression
Bunophorus pattersoni	27.00	(21)
Bunophorus robustus	23.60	PBDB + regression
Bunophorus sinclairei	50.40	PBDB + regression
Caenolambda jepseni	235.70	PBDB + regression
Calippus cerasinus	81633.91	(1)
Calippus elachistus	43044.94	(1)
Calippus hondurensis	71682.36	(1)
Calippus martini	119372.01	(1)
Calippus placidus	79221.26	(1)
Calippus proplacidus	64860.88	(1)
Calippus regulus	45251.90	(1)
Camelops hesternus	420.31	(11)
Camelops traviswhitei	774.70	PBDB + regression
Campestrallomys annectens	3.50	PBDB + regression
Campestrallomys dawsonae	298.87	(1)
Campestrallomys siouxensis	159.17	(1)
Canis armbrusteri	30333.26	(1)
Canis edwardii	25.40	PBDB + regression
Canis latrans	11765.00	PBDB
Canis lepophagus	14617.87	(1)
Canis rufus	15566.00	PBDB
Cantius abditus	28.60	PBDB + regression
Cantius angulatus	10.10	PBDB + regression
Cantius frugivorus	15.50	PBDB + regression
Cantius mckennai	15.40	PBDB + regression
Cantius nunienus	18.10	PBDB + regression
Cantius ralstoni	13.80	PBDB + regression
Cantius simonsi	34.10	PBDB + regression

Continued on next page

Dataset S1 – continued from previous page

Species	Mass (g)	Source
Cantius torresi	10.00	PBDB + regression
Cantius trigonodus	2000.00	(22)
Capricamelus gettyi	389.10	PBDB + regression
Capromeryx tauntonensis	15835.35	(1)
Cardiophus radinskyi	79.10	PBDB + regression
Cardiophus semihians	80.80	PBDB + regression
Carpocristes cygneus	2.20	PBDB + regression
Carpocristes hobackensis	33.00	(22)
Carpocyon compressus	15214.44	(1)
Carpocyon robustus	19341.34	(1)
Carpocyon webbi	20537.34	(1)
Carpodaptes hazelae	3.20	PBDB + regression
Carpodaptes stonleyi	2.50	PBDB + regression
Carpolestes nigridentis	87.00	(23)
Carpolestes simpsoni	2.30	PBDB + regression
Carpomegodon jepseni	6.10	PBDB + regression
Catopsalis alexanderi	31.90	PBDB + regression
Catopsalis calgariensis	90.20	PBDB + regression
Catopsalis foliatus	48.60	PBDB + regression
Catopsalis joyneri	2435.00	(7)
Cedromus wardi	6.60	PBDB + regression
Centetodon aztecus	2.00	PBDB + regression
Centetodon bembicophagus	1.50	PBDB + regression
Centetodon chadronensis	2.40	PBDB + regression
Centetodon divaricatus	30.57	(1)
Centetodon hendryi	2.00	PBDB + regression
Centetodon kuenzii	2.60	PBDB + regression
Centetodon magnus	33.45	(1)
Centetodon neashami	4.00	PBDB + regression
Centetodon pulcher	2.80	PBDB + regression
Centimanomys major	6.50	PBDB + regression
Ceratogaulus hatcheri	80.00	(19)
Cernictis hesperus	177.68	(1)
Cernictis repenningi	53.55	(24)
Chacomylus sladei	5.80	PBDB + regression
Chadrolagus emryi	3.60	PBDB + regression
Chalicomomys willwoodensis	0.80	PBDB + regression
Chasmaporthetes ossifragus	28.10	PBDB + regression
Chipetaia lamporea	10.10	PBDB + regression
Chiromyoides caesor	7.10	PBDB + regression
Chiromyoides minor	3.80	PBDB + regression
Chiromyoides potior	6.80	PBDB + regression
Chriacus badgleyi	18.00	PBDB + regression
Chriacus baldwini	20.70	PBDB + regression
Chriacus gallinae	20.10	PBDB + regression
Chriacus pelvidens	39.50	PBDB + regression
Chumashius balchi	4.90	PBDB + regression

Continued on next page

Dataset S1 – continued from previous page

Species	Mass (g)	Source
Churcheria baroni	2.70	PBDB + regression
Cimexomys minor	2.30	PBDB + regression
Cimolestes incisus	9.10	PBDB + regression
Colodon cingulatus	282.74	PBDB
Colodon kayi	104.20	PBDB + regression
Colodon occidentalis	178.10	PBDB + regression
Colodon stovalli	115.70	PBDB + regression
Colodon woodi	150.60	PBDB + regression
Conacodon cophater	7.40	PBDB + regression
Conacodon delphae	31.40	PBDB + regression
Conacodon entoconus	25.50	PBDB + regression
Conacodon kohlbergeri	12.20	PBDB + regression
Conoryctes comma	76.10	PBDB + regression
Copecion brachypternus	37.10	PBDB + regression
Copecion davisii	28.60	PBDB + regression
Copedelphys innominata	2.10	PBDB + regression
Copedelphys titanelix	1.00	PBDB + regression
Copelemur australotutus	21.30	PBDB + regression
Copelemur tutus	22.90	PBDB + regression
Copemys barstowensis	32.14	(1)
Copemys esmeraldensis	27.94	(1)
Copemys lindsayi	14.88	(1)
Copemys longidens	26.84	(1)
Copemys loxodon	28.79	(1)
Copemys mariae	31.50	(1)
Copemys pagei	15.18	(1)
Copemys russelli	24.29	(1)
Copemys shotwelli	1.10	PBDB + regression
Copemys tenuis	23.34	(1)
Coriphagus encinensis	10.40	PBDB + regression
Coriphagus montanus	6.90	PBDB + regression
Cormocyon copei	4817.45	(1)
Cormocyon haydeni	4359.01	(1)
Coryphodon armatus	882.70	PBDB + regression
Coryphodon eocaenus	659.70	PBDB + regression
Coryphodon lobatus	1189.40	PBDB + regression
Coryphodon proterus	1068.80	PBDB + regression
Coryphodon radians	864.30	PBDB + regression
Cosoryx cerroensis	16814.55	(1)
Cosoryx furcatus	44.87	PBDB
Cranioceras clarendonensis	18.90	PBDB + regression
Cranioceras teres	96761.07	(1)
Cranioceras unicornis	134591.56	(1)
Cratogeomys sansimonensis	4.80	PBDB + regression
Crucimys milleri	36.60	(1)
Crypholestes vaughni	2.09	PBDB
Cryptotis adamsi	13.33	(1)
Continued on next page		

Dataset S1 – continued from previous page

Species	Mass (g)	Source
Cryptotis kansasensis	3.00	PBDB + regression
Cryptotis parva	4.10	PBDB
Cupidinimus avawatzensis	20.09	(1)
Cupidinimus bidahochiensis	27.39	(1)
Cupidinimus boronensis	14.59	(1)
Cupidinimus eurekaensis	0.54	PBDB
Cupidinimus halli	1.10	PBDB + regression
Cupidinimus lindsayi	7.61	(1)
Cupidinimus madisonensis	1.11	PBDB
Cupidinimus magnus	1.70	PBDB + regression
Cupidinimus nebraskensis	9.30	(1)
Cupidinimus prattensis	21.33	(1)
Cupidinimus tertius	16.44	(1)
Cupidinimus whitlocki	16.78	(1)
Cuvieronius tropicus	10934.90	PBDB + regression
Cuyamalagus dawsoni	639.06	(1)
Cylindrodon fontis	3.70	PBDB + regression
Cylindrodon nebraskensis	5.30	PBDB + regression
Cynarctoides acridens	2921.93	(1)
Cynarctoides gawnae	2643.87	(1)
Cynarctoides harlowi	1863.11	(1)
Cynarctoides lemur	2321.57	(1)
Cynarctoides luskensis	2392.27	(1)
Cynarctoides roii	1826.21	(1)
Cynarctus crucidens	4964.16	(1)
Cynarctus galushai	9228.02	(1)
Cynarctus saxatilis	10097.06	(1)
Cynelos caroniavorus	16647.24	(1)
Cynelos idoneus	105873.47	(1)
Cynelos sinapius	213202.99	(1)
Cynodesmus martini	14185.85	(1)
Cynodesmus thooides	9228.02	(1)
Cynorca occidentale	20537.34	(1)
Cynorca sociale	82.80	PBDB + regression
Cyriacotherium psamminum	70.30	PBDB
Dakotallomys lillegraveni	5.81	PBDB
Dakotallomys pelycomyoides	6.57	(25)
Daphoenodon falkenbachii	137310.49	(1)
Daphoenodon notionastes	43477.55	(1)
Daphoenodon superbus	77652.58	(1)
Daphoenus hartshornianus	13.90	PBDB + regression
Daphoenus lambei	11.40	PBDB + regression
Daphoenus ruber	13.70	PBDB + regression
Daphoenus socialis	13000.00	(4)
Daphoenus vetus	19535.72	(1)
Dartinius jepseni	1.47	(26)
Dasyopus bellus	104.90	(11)
Continued on next page		

Dataset S1 – continued from previous page

Species	Mass (g)	Source
Delahomeryx browni	38948.67	(1)
Desmatippus avus	179871.86	(1)
Desmatippus texanus	169.36	PBDB
Desmatochoerus hesperus	296.24	(27)
Desmatochoerus megalodon	335100.00	(4)
Desmatoclaenus hermaeus	61.70	PBDB + regression
Desmatolagus schizopetrus	6.72	PBDB
Desmocyon matthewi	8103.08	(1)
Desmocyon thomsoni	6974.39	(1)
Diaconchus meizon	2.10	PBDB + regression
Diaconchus minutus	3.00	PBDB + regression
Diacodexis gracilis	14.30	PBDB + regression
Diacodexis kelleyi	20.70	PBDB + regression
Diacodexis metsiacus	17.80	PBDB + regression
Diacodexis minutus	11.80	PBDB + regression
Diacodexis primus	19.50	PBDB + regression
Diacodexis secans	24.60	PBDB + regression
Diacodon alticuspis	8.80	PBDB + regression
Diceratherium annectens	864580.76	(1)
Diceratherium armatum	3541284.24	(1)
Diceratherium gregorii	734.10	PBDB + regression
Diceratherium niobrarense	2105366.25	(1)
Diceratherium tridactylum	965112.54	(1)
Didelphodus absarokae	12.90	PBDB + regression
Didelphodus altidens	10.20	PBDB + regression
Didelphodus rheos	7.20	PBDB + regression
Didelphodus serus	7.00	PBDB + regression
Didymictis altidens	105.86	PBDB
Didymictis leptomylus	8.61	PBDB + regression
Didymictis protenus	11.30	PBDB + regression
Didymictis proteus	8.95	PBDB + regression
Didymictis vancleveae	160.55	(28)
Dikkomys matthewi	47.47	(1)
Dillerlemur pagei	5.40	PBDB + regression
Dilophodon destitutus	29.93	(29)
Dilophodon minusculus	70.40	PBDB + regression
Dinaelurus crassus	37320.00	(4)
Dinofelis palaeoonca	24.30	PBDB + regression
Dinohippus interpolatus	257815.63	(1)
Dinohippus leardi	392385.48	(1)
Dinohippus leidymanus	229900.00	(30)
Dinohippus mexicanus	609259.77	(1)
Dinohippus spectans	536500.00	(4)
Dinohyus hollandi	1215.50	PBDB + regression
Diplobunops matthewi	167.50	PBDB + regression
Dipodomys compactus	5.43	(11)
Dipodomys gidleyi	1.50	PBDB + regression
Continued on next page		

Dataset S1 – continued from previous page

Species	Mass (g)	Source
Dipodomys hibbardi	17.81	(1)
Diprionomys agrarius	2.00	PBDB + regression
Diprionomys parvus	11.00	(4)
Dipsalidictis aequidens	126.40	PBDB + regression
Dipsalidictis platypus	54.00	PBDB + regression
Dipsalidictis transiens	89.10	PBDB + regression
Dipsalodon churchillorum	98.20	PBDB + regression
Dipsalodon matthewi	162.00	PBDB + regression
Dissacus navaiovius	10.80	PBDB + regression
Dissacus praenuntius	14.40	PBDB + regression
Domnina dakotensis	28.50	(1)
Domnina gradata	36.60	(1)
Domnina greeni	33.78	(1)
Domnina thompsoni	2.20	PBDB + regression
Domninoides hessei	149.90	(1)
Domninoides knoxjonesi	2.88	PBDB
Domninoides mimicus	135.64	(1)
Domninoides riparensis	56.83	(1)
Dorraletes diminutivus	3.20	PBDB + regression
Douglassciurus jeffersoni	8.19	(25)
Downsimus chadwicki	56.26	(1)
Drepanomeryx falciformis	90219.42	(1)
Dromomeryx borealis	144350.55	(1)
Dryomomys dulcifer	0.85	(31)
Dryomomys szalayi	1.00	(31)
Duchesneodus uintensis	1358.50	PBDB + regression
Dyseohyus fricki	21807.30	(1)
Dyseolemur pacificus	3.80	PBDB + regression
Ectocion cedrus	38.60	PBDB + regression
Ectocion collinus	42.90	PBDB + regression
Ectocion major	64.70	PBDB + regression
Ectocion mediotuber	41.20	PBDB + regression
Ectocion osbornianus	46.50	PBDB + regression
Ectocion parvus	30.30	PBDB + regression
Ectocion superstes	68.50	PBDB + regression
Ectoconus ditrigonus	89.20	PBDB + regression
Ectoganus gliriformes	140.40	(31)
Ectoganus gliriformis	140.40	PBDB + regression
Ectopocynus antiquus	8266.78	(1)
Ectopocynus intermedius	12456.53	(1)
Ectypodus aphronorus	18.00	(7)
Ectypodus childei	1.60	PBDB + regression
Ectypodus lovei	1.60	PBDB + regression
Ectypodus musculus	2.40	PBDB + regression
Ectypodus powelli	1.90	PBDB + regression
Ectypodus szalayi	1.80	PBDB + regression
Ectypodus tardus	1.70	PBDB + regression

Continued on next page

Dataset S1 – continued from previous page

Species	Mass (g)	Source
Edworthia lerbekmoi	2.10	PBDB + regression
Ekgmowechashala philotau	2079.74	(1)
Elomeryx armatus	157944.66	(1)
Elphidotarsius florencae	1.80	PBDB + regression
Elphidotarsius russelli	2.10	PBDB + regression
Elphidotarsius wightoni	2.30	PBDB + regression
Elpidophorus elegans	14.70	PBDB + regression
Elpidophorus minor	5.80	PBDB + regression
Elwynella oreas	4.60	PBDB + regression
Elymys complexus	0.80	PBDB + regression
Enhydritherium terraenovae	16.50	PBDB + regression
Enhydrocyon basilateralis	20332.99	(1)
Enhydrocyon crassidens	18582.95	(1)
Enhydrocyon pahinsintewakpa	14764.78	(1)
Enhydrocyon stenocephalus	14044.69	(1)
Entoptychus grandiplanus	59.74	(1)
Entoptychus individens	84.00	(4)
Entoptychus planifrons	134.29	(1)
Entoptychus sheppardi	94.63	(1)
Entoptychus wheelerensis	84.00	(4)
Eoconodon gaudrianus	8.50	(32)
Eoconodon hutchisoni	55.68	PBDB
Eoconodon nidhoggi	6.90	PBDB + regression
Eohaplomys matutinus	18.60	PBDB + regression
Eohaplomys serus	14.20	PBDB + regression
Eohaplomys tradux	12.60	PBDB + regression
Eomoropus amarorum	128.80	PBDB + regression
Eoryctes melanus	4.00	PBDB + regression
Eotitanops borealis	297.00	PBDB + regression
Eotitanops minimus	14.90	PBDB + regression
Eotitanotherium osborni	988.00	PBDB
Eotylopus reedi	88.90	PBDB + regression
Epeiromys spanius	4.00	PBDB + regression
Epicyon haydeni	41772.77	(1)
Epicyon saevus	27722.51	(1)
Epihippus gracilis	54.50	PBDB + regression
Epihippus intermedius	61.09	PBDB
Epitriplopus uintensis	32600.00	(30)
Eporeodon occidentalis	118300.00	(4)
Equus complicatus	270.97	(11)
Equus conversidens	241.29	(11)
Equus cumminsii	354.80	PBDB + regression
Equus francisci	278.00	PBDB + regression
Equus fromanensis	172311.00	(4)
Equus giganteus	270.97	(11)
Equus idahoensis	560.70	PBDB + regression
Equus leidy	337.30	PBDB + regression

Continued on next page

Dataset S1 – continued from previous page

Species	Mass (g)	Source
<i>Equus occidentalis</i>	317.03	(11)
<i>Equus scotti</i>	312.31	(11)
<i>Equus simplicidens</i>	296558.57	(1)
<i>Eremotherium eomigrans</i>	2584400.00	(33)
<i>Eremotherium laurillardi</i>	366.13	(11)
<i>Erethizon bathygnathum</i>	51.10	PBDB + regression
<i>Erethizon kleini</i>	31.30	PBDB + regression
<i>Escavadodon zygus</i>	5.50	PBDB + regression
<i>Esthonyx acutidens</i>	80.80	PBDB + regression
<i>Esthonyx bisulcatus</i>	48.00	PBDB + regression
<i>Esthonyx spatularius</i>	60.80	PBDB + regression
<i>Eucyon davisi</i>	10509.13	(1)
<i>Eudaemonema cuspidata</i>	11.50	PBDB + regression
<i>Eumys brachyodus</i>	126.47	(1)
<i>Eumys elegans</i>	4.10	PBDB + regression
<i>Euoplocyon brachygnathus</i>	11271.13	(1)
<i>Euoplocyon spissidens</i>	9798.65	(1)
<i>Eusmilus cerebrealis</i>	804.32	(1)
<i>Eusmilus sicarius</i>	19.20	PBDB + regression
<i>Eutypomys acares</i>	3.60	PBDB + regression
<i>Eutypomys hibernodus</i>	12.20	PBDB + regression
<i>Eutypomys inexpectatus</i>	12.00	PBDB + regression
<i>Eutypomys montanensis</i>	943.88	(1)
<i>Eutypomys obliquidens</i>	5.90	PBDB + regression
<i>Eutypomys parvus</i>	7.00	PBDB + regression
<i>Eutypomys thomsoni</i>	10.70	PBDB + regression
<i>Fanimus clasoni</i>	3.67	PBDB
<i>Fanimus ultimus</i>	164.02	(1)
<i>Felis rexroadensis</i>	30333.26	(1)
<i>Ferinestrix vorax</i>	103.50	PBDB
<i>Florentiamys agnewi</i>	84.77	(1)
<i>Florentiamys kinseyi</i>	157.59	(1)
<i>Florentiamys loomisi</i>	151.41	(1)
<i>Florentiamys tiptoni</i>	117.92	(1)
<i>Floridachoerus olseni</i>	35596.41	(1)
<i>Floridameryx floridanus</i>	8184.52	(1)
<i>Floridatragulus dolichanthereus</i>	43477.55	(1)
<i>Floridatragulus texanus</i>	61083.68	(1)
<i>Fouchia elyensis</i>	36.80	PBDB + regression
<i>Galbreathia bettae</i>	165.67	(1)
<i>Galbreathia novellus</i>	6.97	PBDB
<i>Galecyon mordax</i>	23.70	PBDB + regression
<i>Gazinius amplus</i>	875.00	(22)
<i>Gazinocyon vulpeculus</i>	39.60	PBDB + regression
<i>Gelastops joni</i>	8.50	PBDB + regression
<i>Gelastops parvus</i>	7.50	PBDB + regression
<i>Geomys carranzai</i>	2.00	PBDB + regression

Continued on next page

Dataset S1 – continued from previous page

Species	Mass (g)	Source
Geringia gloveri	26.84	(1)
Geringia mcgregori	41.26	(1)
Gigantocamelus spatulus	1435.10	PBDB + regression
Glossotherium chapadmalense	310540.00	(33)
Glyptotherium arizonae	789680.00	(33)
Gomphotherium obscurum	10056.96	PBDB
Gomphotherium osborni	117.00	(34)
Goniodontomys disjunctus	44.26	(1)
Gracilocyon winkleri	13.30	PBDB + regression
Grangeria anarsius	126.00	PBDB + regression
Gregorymys curtus	106.70	(1)
Gregorymys formosus	77.48	(1)
Gregorymys riograndensis	43.82	(1)
Gripholagomys lavocati	507.76	(1)
Griphomys alecer	1.40	PBDB + regression
Griphomys toltecus	1.83	(25)
Guanajuatomys hibbardi	5.30	PBDB + regression
Guildayomys hibbardi	82.27	(1)
Hapalodectes anthracinus	4.09	PBDB + regression
Hapalodectes leptognathus	4.94	PBDB + regression
Haplaletes disceptatrix	5.30	PBDB + regression
Haplaletes pelicatus	6.90	PBDB + regression
Haploconus angustus	18.00	PBDB + regression
Haplohippus texanus	63.70	PBDB + regression
Haplolambda quinni	276.64	PBDB
Haplolambda simpsoni	595.34	(35)
Haplomylus bozemanensis	5.40	PBDB + regression
Haplomylus palustris	4.80	PBDB + regression
Haplomylus scottianus	6.40	PBDB + regression
Haplomylus simpsoni	7.90	PBDB + regression
Haplomylus speirianus	5.80	PBDB + regression
Haplomys galbreathi	2.30	PBDB + regression
Haplomys liolophus	39.00	(4)
Harpagolestes leotensis	30.60	PBDB + regression
Harpagolestes uintensis	28.00	PBDB + regression
Harrymys irvini	83.93	(1)
Harrymys magnus	50.40	(1)
Harrymys woodi	2.48	(15)
Heliscomys hatcheri	0.89	(7)
Heliscomys ostranderi	0.60	PBDB + regression
Heliscomys senex	0.70	PBDB + regression
Heliscomys vetus	0.70	PBDB + regression
Heliscomys woodi	1.10	PBDB + regression
Hemiacodon engardae	11.60	PBDB + regression
Hemiacodon gracilis	11.90	PBDB + regression
Hemiauchenia gracilis	225.00	PBDB + regression
Hemiauchenia macrocephala	154.62	(11)
Continued on next page		

Dataset S1 – continued from previous page

Species	Mass (g)	Source
Hemiauchenia minima	85819.37	(1)
Hemiauchenia vera	299.50	PBDB + regression
Hemipsalodon grandis	453.84	(36)
Hemithlaeus harbourae	18.67	(37)
Hendryomeryx defordi	25.31	PBDB
Hendryomeryx esulcatus	27.80	PBDB + regression
Hendryomeryx wilsoni	16.50	PBDB + regression
Heptacodon pellionis	153.70	PBDB + regression
Heptodon calciculus	69.50	PBDB + regression
Herpetotherium fugax	1.90	PBDB + regression
Herpetotherium knighti	3.20	PBDB + regression
Herpetotherium merriami	2.20	PBDB + regression
Herpetotherium valens	3.40	PBDB + regression
Herpetotherium youngi	2.80	PBDB + regression
Hesperhys pinensis	68186.37	(1)
Hesperhys vagrans	73865.41	(1)
Hesperocyon gregarius	3533.34	(1)
Hesperolagomys fluviatilis	169.02	(1)
Hesperolagomys galbreathi	149.90	(1)
Hesperoscalops mcgreui	8.60	PBDB + regression
Heteralestes leotanus	45.60	PBDB + regression
Heteromeryx dispar	107.00	PBDB + regression
Heteropliohippus hulberti	302549.45	(1)
Hexacodus pelodes	12.60	PBDB + regression
Hexameryx simpsoni	30638.11	(1)
Hexobelomeryx fricki	118.50	PBDB + regression
Hibbarderix obfuscatus	3.00	PBDB + regression
Hibbardomys fayae	3.00	PBDB + regression
Hibbardomys marthae	3.60	PBDB + regression
Hibbardomys skinneri	3.00	PBDB + regression
Hibbardomys voorhiesi	3.00	PBDB + regression
Hipparion forcei	194852.86	(1)
Hipparion tehonense	100709.96	(1)
Hippotherium emsliei	264.70	PBDB + regression
Hippotherium ingenuum	176.70	PBDB + regression
Hippotherium plicatile	232.00	PBDB + regression
Hippotherium quinni	431.00	PBDB + regression
Hitonkala macdonalddtau	24.53	(1)
Holmesina floridanus	164.90	PBDB + regression
Homacodon vagans	28.00	PBDB + regression
Homogalax protapirinus	57.30	PBDB + regression
Homotherium crusafonti	322.50	PBDB
Homotherium idahoensis	257900.00	(4)
Homotherium johnstoni	29.50	PBDB + regression
Hoplophoneus mentalis	206.00	PBDB + regression
Hoplophoneus primaevus	16.00	PBDB + regression
Huerfanodon polecatensis	104.30	PBDB + regression

Continued on next page

Dataset S1 – continued from previous page

Species	Mass (g)	Source
Huerfanodon torreonius	85.80	PBDB + regression
Hyaenodon brevirostris	118.10	PBDB + regression
Hyaenodon crucians	71.10	PBDB + regression
Hyaenodon horridus	193.20	PBDB + regression
Hyaenodon montanus	101.60	PBDB + regression
Hyaenodon mustelinus	51.10	PBDB + regression
Hyaenodon raineyi	17.10	PBDB + regression
Hyaenodon venturae	27.20	PBDB + regression
Hyaenodon vetus	111.00	PBDB + regression
Hylomeryx quadricuspid	23.00	PBDB + regression
Hyopsodus fastigatus	23.10	PBDB + regression
Hyopsodus lepidus	12.60	PBDB + regression
Hyopsodus loomisi	11.00	PBDB + regression
Hyopsodus lysitensis	15.60	PBDB + regression
Hyopsodus mentalis	20.20	PBDB + regression
Hyopsodus minor	10.40	PBDB + regression
Hyopsodus minusculus	10.40	PBDB + regression
Hyopsodus paulus	14.10	PBDB + regression
Hyopsodus paucillius	6.40	PBDB + regression
Hyopsodus powellianus	19.70	PBDB + regression
Hyopsodus simplex	13.70	PBDB + regression
Hyopsodus tonksi	10.70	PBDB + regression
Hyopsodus uintensis	20.30	PBDB + regression
Hyopsodus walcottianus	44.10	PBDB + regression
Hyopsodus wortmani	14.40	PBDB + regression
Hypertragulus calcaratus	8880.00	(4)
Hypertragulus hesperius	4572.00	(4)
Hypohippus affinis	442413.39	(1)
Hypohippus equinus	271034.12	(1)
Hypohippus osborni	299539.03	(1)
Hypolagus edensis	665.14	(1)
Hypolagus fontinalis	1211.97	(1)
Hypolagus furlongi	678.58	(1)
Hypolagus gidleyi	1998.20	(1)
Hypolagus oregonensis	2344.90	(1)
Hypolagus parviplicatus	1702.75	(1)
Hypolagus ringoldensis	319.00	(4)
Hypolagus vetus	2892.86	(1)
Hypolagus voorhiesi	319.00	(4)
Hypsops bannackensis	214.80	(38)
Hypsops breviceps	156373.08	(1)
Hyrachyus affinis	178.70	PBDB + regression
Hyrachyus eximius	262.00	PBDB + regression
Hyrachyus modestus	278.50	PBDB + regression
Hyracodon leidyanus	455.80	PBDB + regression
Hyracodon medius	169.40	PBDB + regression
Hyracodon nebraskensis	211081.59	(1)
Continued on next page		

Dataset S1 – continued from previous page

Species	Mass (g)	Source
Hyracodon petersoni	354.50	PBDB + regression
Hyracodon priscidens	381.90	PBDB + regression
Hyracotherium cristatum	64.84	PBDB
Hyracotherium vasaccense	24900.00	(30)
Ictidopappus mustelinus	4.10	PBDB + regression
Ignacius fremontensis	1.90	PBDB + regression
Ignacius frugivorus	3.90	PBDB + regression
Ignacius graybullianus	5.30	PBDB + regression
Indarctos nevadensis	42.80	PBDB + regression
Indarctos oregonensis	302549.45	(1)
Ischyrocyon gidleyi	282095.23	(1)
Ischyromys typus	12.50	PBDB + regression
Ischyromys veterior	9.60	PBDB + regression
Jacobsomys verdensis	50.91	(1)
Janimus dawsonae	1.50	PBDB + regression
Jaywilsonomys ojinagaensis	13.70	PBDB + regression
Jemezius szalaii	4.50	PBDB + regression
Jepsenella praepropera	2.10	PBDB + regression
Jimomys labaughi	69.41	(1)
Jimomys lulli	28.00	(4)
Kansasimys dubius	135.64	(1)
Kansasimys wilsoni	6.33	(39)
Kimbetohia mziae	72.00	(7)
Knightomys cremneus	1.90	PBDB + regression
Knightomys cuspidatus	2.62	PBDB
Knightomys depressus	3.10	PBDB + regression
Knightomys huerfanensis	4.70	PBDB + regression
Knightomys minor	1.90	PBDB + regression
Knightomys reginensis	1.10	PBDB + regression
Knightomys senior	2.50	PBDB + regression
Kolponomos clallamensis	253.10	(40)
Kolponomos newportensis	664.45	(41)
Kryptoceras amatorum	369534.73	(1)
Labidolemur kayi	3.00	PBDB + regression
Labidolemur serus	4.60	PBDB + regression
Labidolemur soricoides	1.80	PBDB + regression
Lambdotherium popoagicum	74.70	PBDB + regression
Lambertocyon eximius	43.60	PBDB + regression
Lambertocyon ischyryus	23.90	PBDB + regression
Lanthanotherium sawini	5.50	PBDB + regression
Laredochoerus edwardsi	41.50	PBDB + regression
Laredomys riograndensis	0.80	PBDB + regression
Leidymys cerasus	41.68	(1)
Leidymys korthi	2.20	PBDB + regression
Leipsanolestes siegfriedti	2.60	PBDB + regression
Lemoynea biradicularis	45.60	(1)
Lepoides lepoides	3640.95	(1)
Continued on next page		

Dataset S1 – continued from previous page

Species	Mass (g)	Source
Leptacodon munusculum	1.10	PBDB + regression
Leptacodon packi	1.80	PBDB + regression
Leptacodon tener	1.30	PBDB + regression
Leptarctus mummorum	129.10	PBDB + regression
Leptarctus oregonensis	2580.00	(4)
Leptarctus primus	149.90	(1)
Leptarctus supremus	125.10	PBDB
Leptauchenia decora	20130.67	(1)
Leptauchenia major	30946.03	(1)
Leptictis dakotensis	63.70	PBDB + regression
Leptochoerus elegans	33.10	PBDB + regression
Leptochoerus spectabilis	34.10	PBDB + regression
Leptochoerus supremus	56.50	PBDB + regression
Leptocyon mollis	3300.00	(4)
Leptocyon vafer	5377.61	(1)
Leptodontomys douglassi	0.70	PBDB + regression
Leptodontomys stirtoni	0.90	(42)
Leptolambda schmidtii	383.51	(43)
Leptomeryx blacki	21.80	PBDB + regression
Leptomeryx elissae	27.50	PBDB + regression
Leptomeryx evansi	35.10	PBDB + regression
Leptomeryx mammifer	55.40	PBDB + regression
Leptomeryx speciosus	34.60	PBDB + regression
Leptomeryx yoderi	38.20	PBDB + regression
Leptoreodon edwardsi	44.00	PBDB + regression
Leptoreodon leptolophus	34.60	PBDB + regression
Leptoreodon major	79.60	PBDB + regression
Leptoreodon marshi	58.90	PBDB + regression
Leptoreodon pusillus	19.80	PBDB + regression
Leptoreodon stocki	59.50	PBDB + regression
Leptoromys wilsoni	4.20	PBDB + regression
Leptotomus caryophilus	13.50	PBDB + regression
Leptotomus leptodus	26.40	PBDB + regression
Leptotomus parvus	14.10	PBDB + regression
Leptotragulus clarki	24.20	PBDB + regression
Leptotragulus medius	44.10	PBDB + regression
Leptotragulus proavus	40.70	PBDB + regression
Lepus californicus	2288.00	PBDB
Lignimus austridakotensis	14.88	(1)
Lignimus montis	2.30	PBDB + regression
Limaconyssus habrus	2.10	PBDB + regression
Limnoecus niobrarensis	7.17	(1)
Limnoecus tricuspis	5.10	(1)
Liodontia alexandrae	198.34	(1)
Litaletes disjunctus	13.20	PBDB + regression
Litocherus lacunatus	5.30	PBDB + regression
Litocherus notissimus	3.20	PBDB + regression

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Dataset S1 – continued from previous page

Species	Mass (g)	Source
Litocherus zygeus	4.10	PBDB + regression
Litolagus molidens	4.70	PBDB + regression
Litolestes ignotus	2.10	PBDB + regression
Litomylus dissentaneus	6.70	PBDB + regression
Litomylus orthronepius	6.40	PBDB + regression
Litoyoderimys auogoleus	2.60	PBDB + regression
Longirostromeryx clarendonensis	13226.80	(1)
Longirostromeryx wellsii	17500.77	(1)
Lophiparamys debequensis	2.00	PBDB + regression
Lophiparamys murinus	3.70	PBDB + regression
Loveina minuta	3.00	PBDB + regression
Loveina zephyri	3.70	PBDB + regression
Loxolophus crisswelli	24.70	PBDB + regression
Loxolophus hyattianus	23.70	PBDB + regression
Loxolophus pentacus	71.30	PBDB + regression
Loxolophus priscus	34.30	PBDB + regression
Loxolophus schizophrenus	15.20	PBDB + regression
Loxolophus spiekeri	80.00	PBDB + regression
Lutravus halli	454.86	(1)
Lycophocyon hutchisoni	9.90	PBDB + regression
Lynx proterolyncis	15677.78	(1)
Lynx rufus	10482.00	PBDB
Machaeromeryx gilchristensis	4536.90	(1)
Machaeromeryx tragulus	4536.90	(1)
Macrocranion junnei	1.90	PBDB + regression
Macrocranion nitens	3.00	PBDB + regression
Macrognathomys crassigenis	174.00	PBDB
Macrognathomys gemmacolis	0.80	PBDB + regression
Macrognathomys nanus	5.16	(1)
Macrotarsius montanus	17.60	PBDB + regression
Macrotarsius roederi	1640.00	(22)
Macrotarsius siegerti	17.90	PBDB + regression
Mahgarita stevensi	9.29	(44)
Malaquiferus tourteloti	47.30	PBDB + regression
Mammacyon obtusidens	70262.96	(1)
Mammut americanum	777.43	(11)
Mammut cosoensis	7029.00	(45)
Mammut furlongi	7102.00	PBDB + regression
Mammuthus columbi	995.26	(11)
Mammut raki	8929.90	PBDB + regression
Marmota korthi	2038.56	(1)
Marmota vetus	658.52	(1)
Martes gazini	1767.00	(4)
Martes parviloba	42.75	(46)
Martinogale alveodens	17.99	(1)
Mattimys kalicola	2.10	PBDB + regression
Megacamelus merriami	1905014.16	(1)
Continued on next page		

Dataset S1 – continued from previous page

Species	Mass (g)	Source
Megadelphus lundeliusi	32.90	PBDB + regression
Megahippus matthewi	882046.45	(1)
Megalagus abaconis	1118.79	(1)
Megalagus brachyodon	9.50	PBDB + regression
Megalagus primitivus	3165.29	(1)
Megalagus turgidus	3071.74	(1)
Megalesthyx hopsoni	132.29	(47)
Megalictis ferox	1587.63	(1)
Megalictis frazieri	111.47	PBDB
Megalonix curvidens	185050.00	(33)
Megalonix leptostomus	355.40	PBDB + regression
Megalonix wheatleyi	336.20	PBDB + regression
Megantereon hesperus	67507.91	(1)
Megapeomys bobwilsoni	411.58	(1)
Megasmithus tihen	55.70	(1)
Megatylopus cochrani	702.00	PBDB + regression
Megatylopus matthewi	1383324.20	(1)
Megatylopus primaevus	701.90	PBDB + regression
Meniscomys hippodus	69.41	(1)
Meniscomys uhtoffi	70.00	(4)
Meniscotherium chamense	77.80	PBDB + regression
Meniscotherium tapiacitum	22.90	PBDB + regression
Menoceras arikarens	597195.61	(1)
Menoceras barbouri	1251683.50	(1)
Menops bakeri	1897.40	PBDB
Mentoclaenodon acrogenius	118.30	PBDB + regression
Mephitis mephitis	2055.00	PBDB
Merriamoceros coronatus	15214.44	(1)
Merychippus brevidontus	124243.67	(1)
Merychippus calamarius	196811.17	(1)
Merychippus californicus	86681.87	(1)
Merychippus goorisi	282.80	PBDB + regression
Merychippus gunteri	92041.97	(1)
Merychippus insignis	125492.34	(1)
Merychippus primus	95798.28	(1)
Merychippus relictus	60471.00	(4)
Merychippus sejunctus	75357.60	(1)
Merychys arenarum	109.50	PBDB + regression
Merychys crabilli	117.00	(48)
Merychys elegans	45706.69	(1)
Merychys medius	108012.26	(1)
Merychys minimus	74.70	PBDB + regression
Merychys relictus	164.00	PBDB
Merychys smithi	203.50	PBDB + regression
Merychochoerus carrikeri	354.04	(49)
Merychochoerus chelydra	336.00	PBDB
Merychochoerus magnus	331041.82	(1)
Continued on next page		

Dataset S1 – continued from previous page

Species	Mass (g)	Source
Merycochoerus matthewi	275.00	PBDB + regression
Merycochoerus proprius	265667.29	(1)
Merycochoerus superbus	438400.00	(4)
Merycodus prodromus	9.00	(50)
Merycodus sabulonis	10509.13	(1)
Merycodus warreni	42.50	(51)
Merycoides harrisonensis	90219.42	(1)
Merycoides longiceps	215.00	(52)
Merycoides pariogonus	77000.00	(4)
Merycoidodon bullatus	109500.00	(4)
Merycoidodon culbertsoni	184.60	PBDB + regression
Merycoidodon major	62200.00	(4)
Mescalerolemur horneri	6.62	(53)
Mesocyon brachyops	7942.63	(1)
Mesocyon coryphaeus	10198.54	(1)
Mesocyon temnodon	7186.79	(1)
Mesodma ambigua	5.00	PBDB + regression
Mesodma formosa	2.50	PBDB + regression
Mesodma garfieldensis	2.70	PBDB + regression
Mesodma pygmaea	1.20	PBDB + regression
Mesodma thompsoni	3.30	PBDB + regression
Mesogaulus paniensis	13.97	PBDB
Mesohippus bairdi	89.90	PBDB + regression
Mesohippus exoletus	102.10	PBDB + regression
Mesohippus texanus	84.40	PBDB + regression
Mesohippus westoni	90.10	PBDB + regression
Mesonyx obtusidens	279.00	PBDB
Mesoreodon chelonys	201.25	(54)
Mesoreodon floridensis	104820.01	(1)
Mesoreodon minor	159700.00	(4)
Mesoscalops montanensis	85.63	(1)
Mesoscalops scopelotemos	95.58	(1)
Metadjidaumo hendryi	10.38	(1)
Metaliomys sevierensis	1.40	PBDB + regression
Metanoiamys agorus	1.20	PBDB + regression
Metanoiamys fantasma	1.60	PBDB + regression
Metanoiamys korthi	1.30	PBDB + regression
Metanoiamys lacus	1.10	PBDB + regression
Metanoiamys marinus	1.00	PBDB + regression
Metarhinus pater	810.00	PBDB
Metatomarctus canavus	10938.02	(1)
Metechinus amplior	24.12	(35)
Miacis deutschii	16.00	PBDB + regression
Miacis exiguus	22.30	PBDB + regression
Miacis hookwayi	26.00	(55)
Miacis latidens	25.30	PBDB + regression
Miacis parvivorus	26.20	PBDB + regression

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Dataset S1 – continued from previous page

Species	Mass (g)	Source
Miacis petilus	21.00	PBDB + regression
Michenia agatensis	99707.88	(1)
Michenia exilis	65512.75	(1)
Microcosmodon conus	1.70	PBDB + regression
Microcosmodon rosei	2.30	PBDB + regression
Microeutypomys karenae	1.20	PBDB + regression
Microeutypomys tilliei	1.70	PBDB + regression
Micromomys antelucanus	0.90	PBDB
Microparamys cheradius	2.90	PBDB + regression
Microparamys dubius	1.60	PBDB + regression
Microparamys hunterae	1.32	PBDB
Microparamys minutus	1.80	PBDB + regression
Microparamys nimius	2.00	PBDB + regression
Microparamys sambucus	2.40	PBDB + regression
Microparamys tricus	2.90	PBDB + regression
Microparamys woodi	2.10	PBDB + regression
Micropternodus borealis	3.40	PBDB + regression
Micropternodus montrosensis	6.00	PBDB + regression
Micropternodus morgani	72.24	(1)
Microsus cuspidatus	15.00	PBDB + regression
Microsyops angustidens	9.20	PBDB + regression
Microsyops annectens	20.50	PBDB + regression
Microsyops cardiolestes	6.50	PBDB + regression
Microsyops elegans	13.80	PBDB + regression
Microsyops knightensis	11.40	PBDB + regression
Microsyops kratos	20.00	PBDB + regression
Microsyops latidens	10.80	PBDB + regression
Microsyops scottianus	12.70	PBDB + regression
Microtomarctus conferta	8866.19	(1)
Mictomys vetus	3.40	PBDB + regression
Mimatuta morgoth	11.30	PBDB + regression
Mimetodon silberlingi	2.00	PBDB + regression
Mimomys mcknighti	110.70	PBDB
Mimomys panacaensis	3.60	PBDB + regression
Mimomys parvus	99.10	PBDB
Mimomys primus	163.60	PBDB
Mimomys taylori	80.90	PBDB
Mimoperadectes labrus	8.20	PBDB + regression
Mimotricentes fremontensis	27.90	PBDB + regression
Mimotricentes subtrigonus	23.70	PBDB + regression
Miniochoerus affinis	84.70	PBDB
Miniochoerus gracilis	48.60	PBDB
Minippus index	22.55	PBDB
Mioclaenus turgidus	36.70	PBDB + regression
Miocyon scotti	125.60	PBDB + regression
Miocyon vallisrubrae	69.70	PBDB + regression
Mioheteromys amplissimus	41.26	(1)
Continued on next page		

Dataset S1 – continued from previous page

Species	Mass (g)	Source
Miohippus anceps	41650.00	(4)
Miohippus assiniboensis	142.10	PBDB + regression
Miohippus equiceps	41650.00	(4)
Miohippus equinanus	35954.16	(1)
Miohippus gidleyi	197.80	PBDB + regression
Miohippus grandis	139.38	PBDB
Miohippus intermedius	82454.34	(1)
Miohippus obliquidens	52575.21	(1)
Miolabis fricki	240385.70	(1)
Miomustela madisonae	13.46	(1)
Mionictis elegans	11.00	PBDB
Mionictis incertus	12.30	PBDB
Mionictis letifer	134.29	(1)
Mionictis pristinus	18.70	PBDB + regression
Miosciurus ballovanus	36.60	(1)
Miosicista angulus	0.96	PBDB
Miospermophilus laveryi	106.70	(1)
Miospermophilus wyomingensis	83.10	(1)
Miotapirus harrisonensis	325.20	PBDB + regression
Miotylopus gibbi	48050.12	(1)
Miotylopus leonardi	43044.94	(1)
Miotylopus taylori	73865.41	(1)
Miracinonyx inexpectatus	20.40	PBDB + regression
Miracinonyx studeri	17.30	PBDB + regression
Mithrandir gillianus	12.80	PBDB + regression
Mixodectes malaris	11.60	PBDB + regression
Mixodectes pungens	20.80	PBDB + regression
Mojavemys galushai	28.22	(1)
Mojavemys lophatus	1.36	PBDB
Mojavemys magnumarcus	56.26	(1)
Montanatylopus matthewi	242.70	PBDB + regression
Mookomys altifluminis	13.07	(1)
Mookomys formicarum	1.19	PBDB
Mookomys thrinax	11.94	(1)
Moropus elatus	707858.86	(1)
Moropus merriami	173767.00	(4)
Moropus oregonensis	189094.09	(1)
Mustela frenata	8.73	(11)
Mustela meltoni	5.60	PBDB + regression
Mustela rexroadensis	9.58	(1)
Mylanodon rosei	2.30	PBDB + regression
Mylohyus elmorei	235.60	PBDB + regression
Myrmecoboides montanensis	3.60	PBDB + regression
Myrmecophaga tridactyla	32544.00	PBDB
Mysops parvus	2.80	PBDB + regression
Mystipterus martini	29.37	(1)
Mystipterus pacificus	14.88	(1)

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Dataset S1 – continued from previous page

Species	Mass (g)	Source
Mytonolagus petersoni	7.00	PBDB + regression
Mytonolagus wyomingensis	4.20	PBDB + regression
Mytonomeryx scotti	24.50	PBDB + regression
Mytonomys burkei	25.90	PBDB + regression
Mytonomys mytonensis	16.00	PBDB + regression
Mytonomys robustus	26.10	PBDB + regression
Namatomys lloydi	1.80	PBDB + regression
Nannippus aztecus	173.50	PBDB + regression
Nannippus beekensis	205.70	PBDB + regression
Nannippus peninsulatus	68871.66	(1)
Nannippus westoni	62317.65	(1)
Nannodectes gidleyi	11.40	PBDB + regression
Nannodectes intermedius	5.40	PBDB + regression
Nannodectes simpsoni	9.90	PBDB + regression
Nanodelphys hunti	1.10	PBDB + regression
Nanotragulus loomisi	2724.39	(1)
Nanotragulus ordinatus	5541.39	(1)
Nanotragulus planiceps	3678.00	(4)
Navajovius kohlhaasae	1.50	PBDB + regression
Nebraskomys mcgrewi	46.06	(1)
Nebraskomys rexroadensis	2.60	PBDB + regression
Nekrolagus progressus	1510.20	(1)
Neohipparion affine	167711.41	(1)
Neohipparion eurystyle	133252.35	(1)
Neohipparion leptode	233281.23	(1)
Neohipparion trampasense	120571.71	(1)
Neoliotomus conventus	23.10	PBDB + regression
Neoliotomus ultimus	25.40	PBDB + regression
Neoplagiaulax donaldorum	52.00	(7)
Neoplagiaulax grangeri	93.00	(7)
Neoplagiaulax hazeni	4.50	PBDB + regression
Neoplagiaulax hunteri	2.90	PBDB + regression
Neoplagiaulax macrotomeus	1.60	PBDB + regression
Neoplagiaulax mckennai	3.50	PBDB + regression
Neotoma cinerea	11.89	(11)
Neotoma fossilis	5.20	PBDB + regression
Neotoma leucopetrica	8.56	(56)
Neotoma quadriplicata	9.60	PBDB + regression
Neotoma sawrockensis	99.48	(1)
Neotoma taylori	5.70	PBDB + regression
Neotoma vauhani	5.70	PBDB + regression
Nerterogeomys anzensis	36.20	PBDB
Nerterogeomys garbanii	43.40	PBDB
Nerterogeomys minor	2.30	PBDB + regression
Nerterogeomys persimilis	2.67	(56)
Nexuotapirus marslandensis	144350.55	(1)
Nexuotapirus robustus	302549.45	(1)
Continued on next page		

Dataset S1 – continued from previous page

Species	Mass (g)	Source
Niglarodon koeneri	68.03	(1)
Nimravides galiani	159532.03	(1)
Nimravides thinobates	2460.50	PBDB
Nimravus brachyops	3789.54	(1)
Nimravus sectator	28.50	PBDB + regression
Niptomomys doreenae	1.80	PBDB + regression
Niptomomys thelmae	1.90	PBDB + regression
Nonomys gutzleri	1.60	PBDB + regression
Nonomys simplicidens	1.40	PBDB + regression
Notharctus pugnax	29.90	PBDB + regression
Notharctus robinsoni	31.40	PBDB + regression
Notharctus robustior	6900.00	(22)
Notharctus tenebrosus	36.30	PBDB + regression
Notharctus venticolus	28.00	PBDB + regression
Nothokemas floridanus	100709.96	(1)
Nothokemas waldropi	22925.38	(1)
Nothotylopus camptognathus	334368.85	(1)
Nothrotheriops shastensis	613762.01	(57)
Nothrotheriops texanus	228.60	PBDB + regression
Notiosorex jacksoni	1.52	(58)
Notiosorex repenningi	1.98	(59)
Notiotitanops mississippiensis	2039.60	PBDB + regression
Notolagus lepusculus	372.41	(1)
Nototamias hulberti	17.12	(1)
Nototamias quadratus	35.87	(1)
Nyctitherium serotinum	1.60	PBDB + regression
Nyctitherium velox	2.50	PBDB + regression
Ochotona spanglei	188.67	(1)
Odocoileus virginianus	52607.00	PBDB
Ogmodontomys poaphagus	131.63	(1)
Ogmodontomys sawrockensis	140.40	PBDB
Oklahomalagus whisenhunti	387.61	(1)
Oligobunis floridanus	17.00	PBDB + regression
Oligoryctes cameronensis	0.90	PBDB + regression
Oligoscalops galbreathi	2.90	PBDB + regression
Oligospermophilus douglassi	4.30	PBDB + regression
Omomys carteri	6.20	PBDB + regression
Omomys lloydi	3.70	PBDB + regression
Onychomys hollisteri	1.60	PBDB + regression
Onychomys martini	18.36	(1)
Onychomys pedroensis	36.23	(1)
Oregonomys magnus	1.60	PBDB + regression
Oregonomys pebblespringsensis	26.58	(1)
Oregonomys sargenti	26.05	(1)
Oreodontoides oregonensis	25336.47	(1)
Oreolagus colteri	3.10	PBDB + regression
Oreolagus nebrascensis	336.97	(1)
Continued on next page		

Dataset S1 – continued from previous page

Species	Mass (g)	Source
Oreolagus nevadensis	78.00	(4)
Oreolagus wallacei	354.25	(1)
Oreotalpa florissantensis	1.50	PBDB + regression
Orohippus pumilus	39.20	PBDB + regression
Orohippus sylvaticus	37.00	PBDB + regression
Oromeryx plicatus	32.90	PBDB + regression
Oropycitis pediasius	5.20	PBDB + regression
Osbornoceros osborni	17326.63	(1)
Osbornodon brachypus	141.90	(60)
Osbornodon fricki	25848.30	(1)
Osbornodon iammonensis	13904.95	(1)
Osbornodon renjie	12.33	PBDB + regression
Osbornodon scitulus	11849.01	(1)
Osbornodon sesnoni	8349.86	(1)
Otarocyon cooki	1826.21	(1)
Otarocyon macdonaldi	6.30	PBDB + regression
Ottoceros peacevalleyensis	13493.99	(1)
Ourayia hopsoni	12.20	PBDB + regression
Ourayia uintensis	14.00	PBDB + regression
Oxytocyon cuspidatus	2440.60	(1)
Oxyacodon agapetillus	9.20	PBDB + regression
Oxyacodon apiculatus	17.30	PBDB + regression
Oxyacodon ferronensis	12.50	PBDB + regression
Oxyacodon priscilla	14.50	PBDB + regression
Oxyaena forcipata	137.50	PBDB + regression
Oxyaena gulo	126.30	PBDB + regression
Oxyaena intermedia	130.30	PBDB + regression
Oxyclaenus cuspidatus	5.30	PBDB + regression
Oxyclaenus pugnax	7.10	PBDB + regression
Oxyclaenus simplex	4.80	PBDB + regression
Oxydactylus longipes	112420.32	(1)
Oxydactylus lulli	275.00	PBDB
Oxyprimus erikseni	5.40	PBDB + regression
Pachyaena gigantea	24.50	PBDB + regression
Pachyaena gracilis	19.80	PBDB + regression
Pachyaena ossifraga	380.00	PBDB
Pachyarmatherium leiseyi	15420.00	(33)
Pacculus montanus	3.20	PBDB + regression
Pacculus nebraskensis	80.64	(1)
Pacculus woodi	2.10	(61)
Paenemarmota barbouri	10301.04	(1)
Paenemarmota mexicana	56.60	PBDB + regression
Paenemarmota nevadensis	7644.00	(4)
Paenemarmota sawrockensis	5943.18	(1)
Palaechthon alticuspis	3.20	PBDB + regression
Palaechthon woodi	2.30	PBDB + regression
Palaeictops bicuspis	7.31	(9)
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Dataset S1 – continued from previous page

Species	Mass (g)	Source
Palaeictops bridgeri	7.20	PBDB + regression
Palaeictops multicuspis	7.50	PBDB + regression
Palaeogale dorothiae	607.89	(1)
Palaeogale minuta	400.00	NOW
Palaeogale sectoria	13.57	PBDB
Palaeolagus burkei	307.97	(1)
Palaeolagus hemirhizis	5.30	PBDB + regression
Palaeolagus hypsodus	678.58	(1)
Palaeolagus philoi	1211.97	(1)
Palaeolagus primus	5.10	PBDB + regression
Palaeolagus temnodon	6.20	PBDB + regression
Palaeonictis occidentalis	117.30	PBDB + regression
Palaeonictis peloria	154.40	PBDB + regression
Palaeoryctes cruoris	4.40	PBDB + regression
Palaeoryctes puercensis	2.50	PBDB + regression
Palaeosyops laevidens	787.30	PBDB + regression
Palaeosyops paludosus	945.00	PBDB + regression
Palaeosyops robustus	1046.40	PBDB + regression
Palenochtha minor	1.30	PBDB + regression
Palenochtha weissae	1.30	PBDB + regression
Paleotomus junior	6.20	PBDB + regression
Paleotomus radagasti	19.20	PBDB
Panthera onca	100000.00	PBDB
Pantolambda bathmodon	308.05	PBDB
Pantolambda cavirictus	214.50	PBDB + regression
Pantolambda intermedius	147.80	PBDB + regression
Parablastomeryx galushi	56.40	PBDB + regression
Paracosoryx furlongi	13493.99	(1)
Paracosoryx wilsoni	10.67	PBDB
Paracryptotis gidleyi	28.22	(1)
Paracryptotis rex	42.10	(1)
Paracynarctus kelloggi	8349.86	(1)
Paracynarctus sinclairei	8022.46	(1)
Paradaphoenus cuspidatus	4023.87	(1)
Paradaphoenus minimus	8.70	PBDB + regression
Paradaphoenus tooheyi	3498.19	(1)
Paradjidaumo alberti	1.40	PBDB + regression
Paradjidaumo hypsodus	2.00	PBDB + regression
Paradjidaumo reynoldsi	1.60	PBDB + regression
Paradjidaumo spokaneensis	2.80	PBDB + regression
Paradjidaumo trilophus	2.10	PBDB + regression
Paradjidaumo validus	3.00	PBDB + regression
Paradominina relictus	23.81	(1)
Paraenhydrocyon josephi	7942.63	(1)
Paraenhydrocyon wallovianus	14185.85	(1)
Parahippus leonensis	94845.07	(1)
Parahippus pawnsiensis	99707.88	(1)
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Dataset S1 – continued from previous page

Species	Mass (g)	Source
Parahippus tyleri	173.20	PBDB + regression
Parahippus wyomingensis	98400.00	(30)
Parahyus vagus	250.90	PBDB + regression
Paralabis cedrensis	138.80	PBDB + regression
Parallomys americanus	162.39	(1)
Paramiolabis taylori	131926.47	(1)
Paramylodon harlani	491.20	PBDB + regression
Paramys adamus	2.70	PBDB + regression
Paramys atavus	2.60	PBDB + regression
Paramys compressidens	20.00	PBDB + regression
Paramys copei	10.30	PBDB + regression
Paramys delicatior	12.00	PBDB + regression
Paramys delicatus	20.30	PBDB + regression
Paramys excavatus	6.80	PBDB + regression
Paramys taurus	7.60	PBDB + regression
Paranamatomys storeri	0.92	PBDB
Paraplihippus carrizoensis	80821.64	(1)
Parapliosacomys oregonensis	24.29	(1)
Parapliosacomys transversus	2.54	PBDB
Parapotos tedfordi	3533.34	(1)
Pararyctes pattersoni	2.00	PBDB + regression
Paratomarctus euthos	14472.42	(1)
Paratomarctus temerarius	11498.82	(1)
Paratylopus labiatus	101.80	PBDB + regression
Paratylopus primaevus	13.20	PBDB + regression
Parectypodus clemensi	2.10	PBDB + regression
Parectypodus corystes	2.80	PBDB + regression
Parectypodus laytoni	1.40	PBDB + regression
Parectypodus lunatus	2.00	PBDB + regression
Parectypodus simpsoni	2.70	PBDB + regression
Parectypodus sinclairi	19.00	(7)
Parectypodus sylviae	1.50	PBDB + regression
Parectypodus trovessartianus	4.30	PBDB + regression
Pareumys boskeyi	3.70	PBDB + regression
Pareumys grangeri	2.90	PBDB + regression
Pareumys guensburgi	4.80	PBDB + regression
Pareumys milleri	3.40	PBDB + regression
Parictis parvus	6.80	PBDB + regression
Parictis personi	7.60	PBDB + regression
Paromomys depressidens	3.40	PBDB + regression
Paromomys maturus	6.70	PBDB + regression
Paronychomys alticuspis	17.12	(1)
Paronychomys lemredfieldi	20.09	(1)
Paronychomys tuttlei	38.86	(1)
Paroreodon parvus	51150.00	(4)
Parvericius montanus	41.26	(1)
Parvericius voorhiesi	28.79	(1)
Continued on next page		

Dataset S1 – continued from previous page

Species	Mass (g)	Source
Patriofelis ferox	22418.00	(4)
Patriofelis ulta	136.00	PBDB + regression
Patriolestes novaceki	10.20	PBDB + regression
Pauromys exallos	1.50	PBDB + regression
Pauromys lillegraveni	1.20	PBDB + regression
Pauromys simplex	1.30	PBDB + regression
Pauromys texensis	1.50	PBDB + regression
Pediomeryx hemphillensis	167711.41	(1)
Pelycodus jarrovi	30.90	PBDB + regression
Pelycomys brulanus	6.10	PBDB + regression
Pelycomys rugosus	7.80	PBDB + regression
Penetrigonias hudsoni	544.50	PBDB
Pentacemylus leotensis	24.90	PBDB + regression
Pentacemylus progressus	29.20	PBDB + regression
Pentacodon inversus	17.70	PBDB + regression
Pentacodon occultus	31.70	PBDB + regression
Peraceras hessei	936589.16	(1)
Peraceras profectum	2326789.55	(1)
Peraceras superciliosum	1639660.88	(1)
Peradectes californicus	1.00	PBDB + regression
Peradectes chesteri	0.90	PBDB + regression
Peradectes elegans	1.40	PBDB + regression
Peradectes minor	1.40	(62)
Peradectes protinnominatus	1.50	PBDB + regression
Peratherium comstocki	4.30	PBDB + regression
Peratherium marsupium	4.40	PBDB + regression
Perchoerus probus	94.00	PBDB + regression
Peridiomys halis	63.43	(1)
Peridiomys oregonensis	2.20	PBDB + regression
Peridiomys rusticus	69.41	(1)
Periptychus carinidens	106.00	PBDB + regression
Periptychus coarctatus	90.00	PBDB + regression
Perognathus ancenensis	11.47	(1)
Perognathus coquorum	2.20	PBDB + regression
Perognathus dunklei	7.92	(1)
Perognathus furlongi	9.68	(1)
Perognathus gidleyi	11.82	(1)
Perognathus maldei	1.10	PBDB + regression
Perognathus mclaughlini	8.33	(1)
Perognathus minutus	5.93	(1)
Perognathus pearlettensis	6.89	(1)
Perognathus rexroadensis	1.50	PBDB + regression
Perognathus trojectionansrum	3.63	(1)
Peromyscus antiquus	26.84	(1)
Peromyscus brachygnathus	1.10	PBDB + regression
Peromyscus complexus	1.83	PBDB
Peromyscus cragini	15.49	(1)
Continued on next page		

Dataset S1 – continued from previous page

Species	Mass (g)	Source
Peromyscus dentalis	1.20	PBDB + regression
Peromyscus hagermanensis	19.89	(1)
Peromyscus minimus	0.70	PBDB + regression
Peromyscus nosher	1.40	PBDB + regression
Peromyscus polionotus	14.30	PBDB
Peromyscus sarmocophinus	1.50	PBDB + regression
Petauristodon jamesi	307.97	(1)
Petauristodon mathewsi	214.86	(1)
Petauristodon pattersoni	336.97	(1)
Pewelagus dawsonae	57.70	(63)
Pewelagus mexicanus	6.50	PBDB + regression
Phelosacomys annae	26.31	(1)
Phelosacomys hibbardi	46.53	(1)
Phelosacomys neomexicanus	19.89	(1)
Phelosacomys shotwelli	20.49	(1)
Phenacocoelus typus	52052.08	(1)
Phenacodaptes sabulosus	6.20	PBDB + regression
Phenacodus bisonensis	76.90	PBDB + regression
Phenacodus grangeri	101.90	PBDB + regression
Phenacodus intermedius	131.50	PBDB + regression
Phenacodus magnus	169.80	PBDB + regression
Phenacodus matthewi	41.18	(64)
Phenacodus trilobatus	159.30	PBDB + regression
Phenacodus vortmani	59.40	PBDB + regression
Phenacolemur fortior	6.50	(65)
Phenacolemur mcgrewi	3.60	PBDB + regression
Phenacolemur praecox	5.80	PBDB + regression
Phenacolemur simonsi	2.80	PBDB + regression
Phenacomys gryci	228.00	(4)
Philotrox condoni	11968.10	(1)
Phlaocyon achoros	2951.30	(1)
Phlaocyon annectens	3498.19	(1)
Phlaocyon latidens	2779.43	(1)
Phlaocyon leucosteus	3827.63	(1)
Phlaocyon minor	3498.19	(1)
Phlaocyon taylori	1939.14	(1)
Phlaocyon yatkolai	9604.62	(1)
Phoberocyon johnhenryi	179871.86	(1)
Picrodus calgariensis	1.50	PBDB + regression
Picrodus canpaci	3.10	PBDB + regression
Picrodus silberlingi	3.10	PBDB + regression
Pipestoneomys bisulcatus	2.60	PBDB + regression
Plagiostenodon krausae	0.90	PBDB + regression
Plagiostenodon rosei	1.50	PBDB + regression
Plagiomene accola	9.30	PBDB + regression
Plagiomene multicuspis	14.90	PBDB + regression
Planisorex dixonensis	1.60	PBDB + regression
Continued on next page		

Dataset S1 – continued from previous page

Species	Mass (g)	Source
Platygonus bicalcaratus	182.50	PBDB + regression
Platygonus oregonensis	40134.84	(1)
Platygonus pearcei	55826.28	(1)
Platygonus vetus	65463.62	(57)
Plesiadapis anceps	8.30	PBDB + regression
Plesiadapis churchilli	15.10	PBDB + regression
Plesiadapis cookei	36.80	PBDB + regression
Plesiadapis dubius	10.10	PBDB + regression
Plesiadapis fodinatus	13.50	PBDB + regression
Plesiadapis gingerichi	28.20	PBDB + regression
Plesiadapis praecursor	6.60	PBDB + regression
Plesiadapis rex	13.30	PBDB + regression
Plesiocolopirus hancocki	94.70	PBDB + regression
Plesiogulo lindsayi	4628.55	(1)
Plesiogulo marshalli	3133.79	(1)
Plesiolestes nacimienti	233.00	(22)
Plesiolestes problematicus	5.00	PBDB + regression
Plesiolestes wilsoni	9.40	PBDB + regression
Plesiosminthus clivus	9.30	(1)
Plesiosorex coloradensis	192.48	(1)
Plesiosorex donroosai	685.40	(1)
Pleurolicus dakotensis	60.95	(1)
Pleurolicus exiguus	1.80	PBDB + regression
Pleurolicus sellardsi	2.77	(66)
Pleurolicus sulcifrons	83.93	(1)
Pliocyon medius	172818.99	(1)
Pliocyon robustus	176310.16	(1)
Pliogale furlongi	10.60	(65)
Pliogale manka	8.40	PBDB + regression
Pliogeomys parvus	10.28	(1)
Pliogeomys russelli	15.18	(1)
Plihippus fossulatus	257815.63	(1)
Plihippus pernix	198789.15	(1)
Plihippus tehonensis	231.80	PBDB + regression
Pliometanastes galushai	53.00	PBDB
Pliometanastes protistus	189.00	PBDB + regression
Plionarctos edensis	56954.05	(1)
Plionarctos harroldorum	21.30	PBDB + regression
Plionictis ogygia	36.97	(1)
Pliophenacomys dixonensis	2.70	PBDB + regression
Pliophenacomys finneyi	3.10	PBDB + regression
Pliophenacomys meadensis	2.80	PBDB + regression
Pliophenacomys osborni	86.49	(1)
Pliophenacomys primaevus	61.56	(1)
Pliosaccomys dubius	27.66	(1)
Pliosaccomys higginsensis	18.17	(1)
Pliotaxidea garberi	9.60	PBDB + regression
Continued on next page		

Dataset S1 – continued from previous page

Species	Mass (g)	Source
Pliotaxidea nevadensis	130.32	(1)
Pliotomodon primitivus	107.77	(1)
Pliozapus solus	18.73	(1)
Plithocyon ursinus	189094.09	(1)
Poabromylus golzi	40.90	PBDB + regression
Poabromylus kayi	64.10	PBDB + regression
Poebrotherium eximium	106.10	PBDB + regression
Poebrotherium wilsoni	119.80	PBDB + regression
Pogonodon eileenae	242.00	(67)
Pratifelis martini	215345.72	(1)
Pratilepus kansasensis	972.63	(1)
Premnoides douglassi	2.80	PBDB + regression
Presbymys lophatus	3.30	PBDB + regression
Presbyterium rhodorugatus	46.40	PBDB + regression
Princetonia yalensis	21.80	PBDB + regression
Probassariscus matthewi	7.80	PBDB + regression
Probathyopsis harrisorum	162.70	PBDB + regression
Probathyopsis praecursor	187.80	PBDB + regression
Problastomeryx primus	14913.17	(1)
Procamelus grandis	400312.19	(1)
Procamelus occidentalis	189094.09	(1)
Procerberus formicarum	4.60	PBDB + regression
Prochetodon cavus	7.00	PBDB + regression
Prochetodon foxi	6.80	PBDB + regression
Prochetodon speirsae	10.10	PBDB
Prochetodon taxus	10.90	PBDB + regression
Procranioceras skinneri	169396.94	(1)
Procynodictis progressus	9.00	PBDB + regression
Procyon lotor	5814.00	PBDB
Procyon rexroadensis	12.46	PBDB + regression
Prodiacodon concordiarcensis	3.50	PBDB + regression
Prodiacodon crustulum	10.01	(68)
Prodiacodon furor	4.58	(36)
Prodiacodon puercensis	9.66	(69)
Prodiacodon tauricinerei	5.20	PBDB + regression
Prodipodomys centralis	1.65	(70)
Prodipodomys idahoensis	22.42	(1)
Prodipodomys kansensis	12.81	(1)
Prodipodomys timoteoensis	1.60	PBDB + regression
Prohesperocyon wilsoni	9.10	PBDB + regression
Proheteromys fedti	1.50	PBDB + regression
Proheteromys floridanus	5.37	(1)
Proheteromys gremmelsi	1.93	(70)
Proheteromys ironcloudi	10.59	(1)
Proheteromys maximus	87.36	(1)
Proheteromys nebraskensis	1.66	PBDB
Proheteromys sulculus	1.40	PBDB + regression

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Dataset S1 – continued from previous page

Species	Mass (g)	Source
Proheteromys toledoensis	59.15	(1)
Prolapsus junctionis	3.30	PBDB + regression
Prolapsus sibilatoris	5.50	PBDB + regression
Prolimnocyon antiquus	19.90	PBDB + regression
Prolimnocyon atavus	26.70	PBDB + regression
Prolimnocyon haematus	16.80	PBDB + regression
Promartes darbyi	97.00	(71)
Promartes gemmarosae	86.00	(71)
Promartes lepidus	46.41	(72)
Promioclauenus acolytus	10.00	PBDB + regression
Promioclauenus pipiringosi	13.90	PBDB + regression
Promioclauenus thnetus	7.80	(73)
Promylagaulus riggsi	85.63	(1)
Pronodens silberlingi	22247.84	(1)
Pronothodectes gaoi	7.70	PBDB + regression
Pronothodectes jepi	7.50	PBDB + regression
Pronothodectes matthewi	5.60	PBDB + regression
Pronotolagus apachensis	445.86	(1)
Pronotolagus nevadensis	60.34	(1)
Pronotolagus whitei	1436.55	(1)
Proscalops miocaenus	2.70	PBDB + regression
Proscalops secundus	72.97	(1)
Proscalops tertius	96.54	(1)
Prosciurus magnus	4.10	PBDB + regression
Prosciurus parvus	3.20	PBDB + regression
Prosciurus relictus	3.10	PBDB + regression
Prosigmodon chihuahuensis	3.30	PBDB + regression
Prosigmodon ferrusquiai	2.63	PBDB
Prosigmodon holocuspis	113.30	(1)
Prosigmodon oroscoi	1.90	PBDB + regression
Prosomys mimus	2.10	PBDB + regression
Prosthennops niobrarenensis	43044.94	(1)
Prosthennops serus	53637.30	(1)
Prosthennops xiphodonticus	23860.99	(1)
Prosynthetoceras francisi	134591.56	(1)
Prosynthetoceras orthrionanus	40134.84	(1)
Protadjidaumo pauli	1.50	PBDB + regression
Protadjidaumo typus	1.20	PBDB + regression
Protapirus obliquidens	440.00	(74)
Protapirus simplex	253.90	PBDB + regression
Protepicyon raki	23623.56	(1)
Proterix bicuspis	46.00	(75)
Proterix loomisi	16.20	PBDB + regression
Proterixoides davisi	10.10	PBDB + regression
Prothryptacodon albertensis	10.70	PBDB + regression
Prothryptacodon furens	19.20	PBDB + regression
Prothryptacodon hilli	23.50	PBDB + regression
Continued on next page		

Dataset S1 – continued from previous page

Species	Mass (g)	Source
Protictis haydenianus	7.43	PBDB + regression
Protictis microlestes	13.63	PBDB
Protictis minor	6.30	PBDB + regression
Protictis paralus	4.10	PBDB + regression
Protictis paulus	8.40	PBDB
Protictis simpsoni	8.60	PBDB + regression
Protitanops curryi	142477.00	(4)
Protitanotherium superbum	1522.00	PBDB + regression
Protoceras celer	172.20	PBDB + regression
Protoceras skinneri	272.16	PBDB
Protohippus gidleyi	164390.50	(1)
Protohippus perditus	135944.23	(1)
Protohippus supremus	167711.41	(1)
Protohippus vetus	191.40	PBDB
Protolabis coartatus	110194.25	(1)
Protolabis heterodontus	219695.99	(1)
Protomarcus optatus	11271.13	(1)
Protoreodon pacificus	82.10	PBDB + regression
Protoreodon parvus	80.30	PBDB + regression
Protoreodon pearcei	88.30	PBDB + regression
Protoreodon petersoni	55.40	PBDB + regression
Protoreodon pumilus	108.10	PBDB + regression
Protoreodon walshi	118.90	PBDB + regression
Protorohippus venticolus	47.20	PBDB + regression
Protosciurus mengi	8.70	PBDB + regression
Protosciurus tecuyensis	478.19	(1)
Protoselene griphus	21.20	PBDB + regression
Protoselene opisthacus	21.80	PBDB + regression
Protospermophilus kelloggi	202.35	(1)
Protospermophilus malheurensis	103.54	(1)
Protospermophilus oregonensis	450.34	(1)
Protospermophilus quatalensis	273.14	(1)
Protospermophilus vortmani	230.44	(1)
Prototomus deimos	11.20	PBDB + regression
Prototomus martis	32.70	PBDB + regression
Prototomus phobos	28.00	PBDB + regression
Prototomus robustus	26.50	PBDB + regression
Prototomus secundarius	20.50	PBDB + regression
Protungulatum donnae	11.70	PBDB + regression
Protylopus annectens	47.30	PBDB + regression
Protylopus pearsonensis	88.60	PBDB + regression
Protylopus petersoni	54.70	PBDB + regression
Protylopus robustus	53.10	PBDB + regression
Protylopus stocki	48.60	PBDB + regression
Proviverroides piercei	48.50	PBDB + regression
Psolidocyon marianae	8777.97	(1)
Pseudaelurus aeluroides	31571.18	(1)

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Dataset S1 – continued from previous page

Species	Mass (g)	Source
<i>Pseudaelurus intrepidus</i>	40945.61	(1)
<i>Pseudaelurus marshi</i>	33189.87	(1)
<i>Pseudaelurus stouti</i>	5767.53	(1)
<i>Pseudhipparion curtivallum</i>	58104.59	(1)
<i>Pseudhipparion gratum</i>	108012.26	(1)
<i>Pseudhipparion hessei</i>	75357.60	(1)
<i>Pseudhipparion retrusum</i>	86681.87	(1)
<i>Pseudhipparion simpsoni</i>	48050.12	(1)
<i>Pseudhipparion skinneri</i>	54176.36	(1)
<i>Pseudoblastomeryx advena</i>	10097.06	(1)
<i>Pseudoceras skinneri</i>	10938.02	(1)
<i>Pseudocylindrodon lateriviae</i>	4.00	PBDB + regression
<i>Pseudocylindrodon medius</i>	2.50	PBDB + regression
<i>Pseudocylindrodon neglectus</i>	3.70	PBDB + regression
<i>Pseudocylindrodon pintoensis</i>	5.78	MIOMAP
<i>Pseudodiplacodon progressum</i>	888.00	PBDB
<i>Pseudolabis dakotensis</i>	59874.14	(1)
<i>Pseudoparablastomeryx francescita</i>	22.80	PBDB
<i>Pseudoparablastomeryx scotti</i>	5884.05	(1)
<i>Pseudoprotoceras longinaris</i>	83.40	PBDB + regression
<i>Pseudoprotoceras minor</i>	57.60	PBDB + regression
<i>Pseudotheridomys cuyamensis</i>	12.43	(1)
<i>Pseudotheridomys hesperus</i>	14.15	(1)
<i>Pseudotheridomys pagei</i>	8.17	(1)
<i>Pseudotomus californicus</i>	30.40	PBDB + regression
<i>Pseudotomus eugenei</i>	65.90	PBDB + regression
<i>Pseudotomus hians</i>	90.00	PBDB
<i>Pseudotomus horribilis</i>	27.02	(76)
<i>Pseudotomus johanniculi</i>	60.20	PBDB + regression
<i>Pseudotomus littoralis</i>	24.50	PBDB + regression
<i>Pseudotomus petersoni</i>	32.90	(76)
<i>Pseudotomus robustus</i>	32.20	PBDB + regression
<i>Pseudotrimylus mawbyi</i>	7.30	PBDB + regression
<i>Ptilodus fractus</i>	105.00	(7)
<i>Ptilodus gnomus</i>	4.30	PBDB + regression
<i>Ptilodus kummae</i>	6.90	PBDB + regression
<i>Ptilodus mediaevus</i>	8.60	PBDB + regression
<i>Ptilodus montanus</i>	9.50	PBDB + regression
<i>Ptilodus wyomingensis</i>	147.00	(7)
<i>Puercolestes simpsoni</i>	10.60	PBDB + regression
<i>Puma concolor</i>	48009.00	PBDB
<i>Puma lacustris</i>	15.30	PBDB + regression
<i>Pyrocyon dioctetus</i>	22.70	PBDB + regression
<i>Quadratomus grandis</i>	19.00	PBDB + regression
<i>Quadratomus grossus</i>	34.70	PBDB + regression
<i>Quadrodens wilsoni</i>	46.06	(1)
<i>Rakomeryx sinclairi</i>	111301.72	(1)
Continued on next page		

Dataset S1 – continued from previous page

Species	Mass (g)	Source
Rapamys fricki	15.00	PBDB + regression
Raphictis gausion	3.70	PBDB + regression
Reithrodontomys galushai	1.10	PBDB + regression
Reithrodontomys rexroadensis	0.90	PBDB + regression
Reithrodontomys wetmorei	9.03	(1)
Reithroparamys debequensis	5.70	PBDB + regression
Reithroparamys delicatissimus	9.40	PBDB + regression
Reithroparamys huerfanensis	7.90	PBDB + regression
Reithroparamys sciuroides	9.66	(77)
Repomys arizonensis	2.80	PBDB + regression
Repomys gustelyi	81.45	(1)
Repomys maxumi	122.73	(1)
Repomys panacaensis	38.47	(1)
Rhizocyon oregonensis	3361.02	(1)
Rhynchotherium falconeri	10697.20	PBDB + regression
Russellagus vonhofi	214.86	(1)
Sanctimus falkenbachi	151.41	(1)
Sanctimus stouti	120.30	(1)
Sanctimus stuartae	100.48	(1)
Satherium piscinarium	934.49	(1)
Saxonella naylori	3.00	PBDB + regression
Scalopoides isodens	32.14	(1)
Scalopoides ripafodiator	27.39	(1)
Scalopus aquaticus	39.60	PBDB
Scapanoscapter simplicidens	58.56	(1)
Scapanus hagermanensis	7.00	(4)
Scapanus latimanus	55.00	PBDB
Scapanus proceridens	65.37	(1)
Scapanus shultzi	97.00	(4)
Scapanus townsendii	8.59	(11)
Scaphohippus sumani	171.00	PBDB
Scenopagus curticens	2.60	PBDB + regression
Scenopagus edenensis	4.80	PBDB + regression
Scenopagus priscus	2.00	PBDB + regression
Schaubeumys galbreathi	1.57	(78)
Schaubeumys grangeri	1.60	PBDB + regression
Schaubeumys sabrae	1.48	(39)
Schizodontomys amnicolus	111.05	(1)
Schizodontomys greeni	94.00	(4)
Schizodontomys harkseni	105.64	(1)
Sciuravus bridgeri	2.40	PBDB + regression
Sciuravus nitidus	5.30	PBDB + regression
Sciuravus popi	7.90	PBDB + regression
Sciuravus powayensis	3.70	PBDB + regression
Sciuravus wilsoni	3.60	PBDB + regression
Sciurion campestre	1.90	PBDB + regression
Sciurus carolinensis	518.00	PBDB
Continued on next page		

Dataset S1 – continued from previous page

Species	Mass (g)	Source
Sciurus olsoni	1.71	PBDB
Scotimus exiguus	3.21	(31)
Scotimus longiquus	111.05	(1)
Scotimus lophatus	4.65	PBDB
Scotimus viduus	2.50	PBDB + regression
Selenaletes scopaeus	32.10	PBDB + regression
Serbelodon barbourensis	910.00	(45)
Sespedectes singularis	2.70	PBDB + regression
Sespedectes stocki	2.40	PBDB + regression
Sespemys thurstoni	290.03	(1)
Sespia californica	3604.72	(1)
Sespia nitida	91.00	(79)
Shoshonius boweni	5.60	PBDB + regression
Shoshonius cooperi	3.40	PBDB + regression
Sifhippus aemulor	45.36	(80)
Sifhippus grangeri	40.20	PBDB + regression
Sifhippus sandrae	38.00	PBDB + regression
Sigmodon curtisi	3.80	PBDB + regression
Sigmodon hudsouthensis	3.20	PBDB + regression
Sigmodon minor	52.98	(1)
Simidectes magnus	9.10	PBDB + regression
Simidectes medius	8.30	PBDB + regression
Simidectes merriami	11.10	PBDB + regression
Similiscirus maxwelli	259.82	(1)
Simimeryx hudsoni	20.50	PBDB + regression
Simimeryx minutus	11.50	PBDB + regression
Simimys landeri	2.30	PBDB + regression
Simimys simplex	1.30	PBDB + regression
Simocyon primigenius	70000.00	NOW
Simojovelhyus pocitosense	57.20	(38)
Simpsonictis pegus	3.62	PBDB + regression
Simpsonictis tenuis	2.90	PBDB + regression
Simpsonlemur citatus	171.00	(22)
Simpsonlemur jepseni	121.00	(22)
Simpsonodus chacensis	18.50	PBDB + regression
Sinclairella dakotensis	7.20	PBDB + regression
Sinopa major	49.30	PBDB + regression
Sinopa rapax	31.30	PBDB + regression
Smilodectes gracilis	16.60	PBDB + regression
Smilodectes mcgrewi	18.10	PBDB + regression
Smilodectes sororis	15.70	PBDB + regression
Smilodon gracilis	22.70	PBDB + regression
Sminthosinis bowleri	100.48	(1)
Sorex cinereus	3.80	PBDB
Sorex edwardsi	1.13	PBDB
Sorex hagermanensis	1.20	PBDB + regression
Sorex meltoni	3.46	(1)
Continued on next page		

Dataset S1 – continued from previous page

Species	Mass (g)	Source
Sorex palustris	3.09	(11)
Sorex powersi	7.77	(1)
Sorex rexroadensis	8.00	(4)
Sorex yatkolai	0.92	PBDB
Spermophilus argonautus	131.63	(1)
Spermophilus bensoni	184.93	(1)
Spermophilus boothi	9.83	(45)
Spermophilus cragini	578.25	(1)
Spermophilus dottedi	270.43	(1)
Spermophilus fricki	6.38	(9)
Spermophilus gidleyi	700.00	(4)
Spermophilus howelli	139.77	(1)
Spermophilus jerae	87.36	(1)
Spermophilus matachicensis	6.20	PBDB + regression
Spermophilus matthewi	8.68	(81)
Spermophilus meadensis	100.48	(1)
Spermophilus rexroadensis	8.00	PBDB + regression
Spermophilus russelli	166.00	(4)
Spermophilus shotwelli	204.00	(4)
Spermophilus tephros	89.12	(1)
Spermophilus wellingtonensis	295.89	(1)
Spermophilus wilsoni	247.15	(1)
Sphacorhysis burntforkensis	2.80	PBDB + regression
Sphenophalos nevadanus	63.00	PBDB
Spilogale microdens	6.30	(60)
Spilogale putorius	12.59	(11)
Spilogale rexroadi	5.60	PBDB + regression
Stegomastodon mirificus	7985.90	PBDB + regression
Steinius annectens	397.75	(82)
Steinius vespertinus	5.10	PBDB + regression
Stelocyon arctylus	7.50	PBDB + regression
Stenoechinus tantalus	48.42	(1)
Stenomylus gracilis	44801.64	(1)
Stenomylus hitchcocki	38948.67	(1)
Stenomylus taylori	192.72	PBDB
Sthenictis dolichops	665.14	(1)
Sthenictis junturensis	330.30	(1)
Stibarus montanus	17.60	PBDB + regression
Stibarus obtusilobus	19.70	PBDB + regression
Stibarus quadricuspis	24.40	PBDB + regression
Stockia powayensis	6.00	PBDB + regression
Stratimus strobili	20.09	(1)
Strigorhysis bridgerensis	4.40	PBDB + regression
Strigorhysis huerfanensis	6.30	PBDB + regression
Stygmimys gratus	5.30	PBDB + regression
Stygmimys jepseni	84.00	(7)
Stygmimys kuszmauli	8.30	PBDB + regression

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Dataset S1 – continued from previous page

Species	Mass (g)	Source
Stylinodon mirus	135.50	PBDB + regression
Subdromomeryx antilopinus	59874.14	(1)
Subhyracodon mitis	455.00	(83)
Subhyracodon occidentalis	580.10	PBDB + regression
Sunkahetanka geringensis	11158.98	(1)
Swaindelphys cifellii	2.14	PBDB
Symmetrodontomys simplicidens	26.84	(1)
Syndyoceras cooki	73865.41	(1)
Tachylagus gawneae	5.70	PBDB + regression
Taeniolabis taoensis	173.80	PBDB + regression
Talpavoides dartoni	1.20	PBDB + regression
Talpavus conjunctus	3.00	PBDB + regression
Talpavus duplus	1.80	PBDB + regression
Talpavus nitidus	1.40	PBDB + regression
Tamias ateles	2.10	PBDB + regression
Tanymykte brachyodontus	102744.44	(1)
Tapiravus validus	64860.88	(1)
Tapirus simpsoni	369534.73	(1)
Tapochoerus egressus	35.70	PBDB + regression
Tapochoerus mcmillini	21.10	PBDB + regression
Tapocyon dawsonae	77.90	PBDB + regression
Tapocyon robustus	87.70	PBDB + regression
Tardontia nevadans	157.59	(1)
Tardontia occidentale	5.60	PBDB + regression
Tarka styliifera	34.10	PBDB + regression
Tatmanius szalayi	3.04	(84)
Taxidea mexicana	12.80	(85)
Taxidea taxus	47.09	(11)
Tayassu protervus	98.60	PBDB
Teilhardina americana	3.70	PBDB + regression
Teilhardina crassidens	3.40	PBDB + regression
Teleoceras meridianum	2022813.66	(1)
Teletaceras mortivallis	155.00	PBDB + regression
Telmatherium altidens	1236.90	PBDB + regression
Telmatherium cultridens	560.00	PBDB + regression
Telmatherium manteoceras	468.00	PBDB + regression
Temnocyon altigenis	32532.67	(1)
Temnocyon percussor	68871.66	(1)
Tenudomys bodei	43.38	(1)
Tenudomys macdonaldi	79.84	(1)
Tephrocyon rurestris	13095.19	(1)
Tetoniuss ambiguus	4.43	PBDB
Tetoniuss matthewi	4.80	PBDB + regression
Tetoniuss mckennai	3.40	PBDB + regression
Tetraclaenodon puercensis	55.60	PBDB + regression
Tetrapassalus mckennai	0.90	PBDB
Texomys ritchiei	97.51	(1)

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Dataset S1 – continued from previous page

Species	Mass (g)	Source
Thinobadistes segnis	645890.00	(33)
Thinocyon velox	23.30	PBDB + regression
Thinohyus lentus	101400.00	(4)
Thisbemys corrugatus	14.30	PBDB + regression
Thisbemys elachistos	4.80	PBDB + regression
Thisbemys perditus	10.80	PBDB + regression
Thisbemys uintensis	20.20	PBDB + regression
Thomomys bottae	7.85	(11)
Thomomys carsonensis	2.00	PBDB + regression
Thomomys gidleyi	37.34	(1)
Thryptacodon antiquus	35.30	PBDB + regression
Thryptacodon australis	28.30	PBDB + regression
Thryptacodon orthogonius	20.60	PBDB + regression
Thryptacodon pseudarctos	43.70	PBDB + regression
Thylacaelurus campester	2.60	PBDB + regression
Thylacaelurus montanus	3.60	PBDB + regression
Thylacodon pusillus	3.10	PBDB + regression
Ticholeptus zygomanticus	106937.52	(1)
Tillodon fodiens	266.10	PBDB + regression
Tillomys senex	3.60	PBDB + regression
Tinimomys graybulliensis	1.40	PBDB + regression
Tinimomys tribos	0.93	(86)
Titanoides gidleyi	260.10	PBDB + regression
Titanoides nanus	223.10	PBDB + regression
Titanoides primaevus	335.40	PBDB + regression
Tomarctus brevirostris	17500.77	(1)
Tomarctus hippophaga	13766.59	(1)
Torrejonia sirokyi	10.40	PBDB + regression
Toxotherium hunteri	157.70	PBDB + regression
Tregosorex holmani	26.84	(1)
Tremarctos floridanus	176.97	(11)
Trigenicus profectus	73.20	PBDB + regression
Trigonias osborni	542.90	PBDB + regression
Trigonias yoderensis	316.90	PBDB + regression
Trigonictis cookii	11.40	PBDB + regression
Trigonictis macrodon	419.89	(1)
Triisodon quivirensis	16.50	PBDB + regression
Trilaccogaulus ovatus	103.54	(1)
Triplopus cubitalis	82.00	PBDB + regression
Triplopus implicatus	124.90	PBDB + regression
Triplopus obliquidens	161.30	PBDB + regression
Triplopus rhinocerinus	154.00	PBDB
Triplopus woodi	131.13	PBDB
Tritemnodon agilis	10780.00	(87)
Tritemnodon strenuus	38.00	PBDB + regression
Trogolemur amplior	3.50	PBDB + regression
Trogolemur myodes	2.50	PBDB + regression

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Dataset S1 – continued from previous page

Species	Mass (g)	Source
Trogomys rupinimenthae	12.55	(1)
Trogosus castoridens	178.20	PBDB + regression
Trogosus grangeri	242.10	PBDB + regression
Trogosus latidens	373.10	PBDB + regression
Tubulodon atopum	6.50	PBDB + regression
Tubulodon taylori	4.94	PBDB
Tuscahomys medius	3.60	PBDB
Tuscahomys minor	2.50	PBDB
Tylocephalonix skinneri	2018.54	PBDB
Uintaceras radinskyi	492.30	PBDB + regression
Uintacyon asodes	43.80	PBDB + regression
Uintacyon masetericus	30.80	PBDB + regression
Uintacyon rudis	22.90	PBDB + regression
Uintanius ameghini	3.10	PBDB + regression
Uintanius rutherfordi	3.20	PBDB + regression
Uintasorex montezumicus	0.60	PBDB + regression
Uintasorex parvulus	1.00	PBDB + regression
Uintatherium anceps	33.50	PBDB + regression
Untermannerix copiosus	121.51	(1)
Unuchinia dysmathes	6.37	PBDB
Uriscus californicus	4.60	PBDB + regression
Urocyon cinereoargenteus	3829.00	PBDB
Ursavus brevirohinus	80000.00	NOW
Ursavus pawniensis	61697.58	(1)
Ursavus primaevus	90000.00	NOW
Ursus abstrusus	20.70	PBDB + regression
Ursus americanus	93431.00	PBDB
Utahia carina	1.80	PBDB + regression
Utahia kayi	2.70	PBDB + regression
Valenia wilsoni	8.10	PBDB + regression
Vassacyon promicrodon	41.10	PBDB + regression
Viverravus acutus	4.55	PBDB + regression
Viverravus gracilis	5.50	PBDB + regression
Viverravus laytoni	3.60	PBDB + regression
Viverravus lutosus	4.90	PBDB + regression
Viverravus minutus	4.90	PBDB + regression
Viverravus politus	5.83	PBDB + regression
Viverravus rosei	3.06	PBDB + regression
Viverravus sicarius	6.80	PBDB + regression
Vulpavus australis	22.10	PBDB + regression
Vulpavus palustris	28.80	PBDB + regression
Vulpavus profectus	100.00	(88)
Vulpes stenognathus	7331.97	(1)
Vulpes velox	28.28	(11)
Washakius insignis	4.90	PBDB + regression
Washakius izetti	3.90	PBDB + regression
Washakius woodringi	3.10	PBDB + regression

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Dataset S1 – continued from previous page

Species	Mass (g)	Source
Wilsoneumys planidens	51.70	PBDB
Worlandia inusitata	3.90	PBDB + regression
Wyolestes apheles	6.80	PBDB + regression
Wyolestes iglesius	6.33	PBDB + regression
Wyonycteris chalice	1.30	PBDB + regression
Xenicohippus craspedotum	10895.00	(4)
Xenicohippus grangeri	41.80	PBDB + regression
Ysengrinia americana	110194.25	(1)
Yumaceras figginsi	293607.76	(1)
Yumaceras hamiltoni	247706.54	(1)
Yumaceras ruminalis	314896.72	(1)
Zapus burti	21.33	(1)
Zapus rinker	1.90	PBDB + regression
Zapus sandersi	18.92	(1)
Zemiodontomys burkei	4.40	PBDB + regression
Zetamys nebraskensis	60.34	(1)

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