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A general scaling law reveals why the largest animals are not the fastest

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Supplementary Information for

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Supplementary Table 1

Distribution of data across movement types and taxa.

movement mode	taxonomic group	n data points
running	arthropods	50
	birds	3
	mammals	261
	reptiles	144
flying	arthropods	19
	birds	29
	mammals	7
swimming	arthropods	1
	birds	5
	fish	81
	mammals	16
	mollusks	5
	reptiles	1

Supplementary Table 2

Distribution of data across study and publication types.

study type	nbr. of data points
field study	33
laboratory study	119
meta-study	404
unclear	66

Supplementary Table 3

Δ BIC values for comparing the seven speed models. Taxonomic groups comprise arthropods, birds, fish, mammals, mollusks, reptiles.

Models	flying	Δ BIC running	swimming
time-dependent model	0	0	0
Polynomial	6.79	118.20	19.51
polynomial (* taxon)	17.96	15.97	24.90
polynomial (+ taxon)	8.03	78.60	18.81
power law (* taxon)	12.90	122.57	8.82
power law (+ taxon)	13.52	112.38	25.55
power law	11.95	191.66	46.48

Note that for the time-dependent model, taxon could not be directly included because of the complexity of fitting a non-linear model with four free parameters. Therefore, we conducted a residual analysis (see main text).

Supplementary Table 4

Fitted values of the time-dependent maximum speed model: parameters a , b , h and i (from Eq. 5) with standard errors and resulting equations for the different movement modes (flying, running, swimming). Body mass M in kg and speed v in km h^{-1} .

movement mode	a	b	h	i	equation
flying	142.8 ± 16.7	0.24 ± 0.01	2.4 ± 1.4	-0.72 ± 0.26	$v_{real} = 142.8 M^{0.24}(1 - e^{-2.4 M^{-0.72}})$
running	25.5 ± 0.84	0.26 ± 0.006	22 ± 7.6	-0.6 ± 0.05	$v_{real} = 25.5 M^{0.26}(1 - e^{-22 M^{-0.6}})$
swimming	11.2 ± 0.91	0.36 ± 0.02	19.5 ± 13.6	-0.56 ± 0.07	$v_{real} = 11.2 M^{0.36}(1 - e^{-19.5 M^{-0.56}})$

Supplementary Table 5

References for the masses and speed predictions of Table 1 in the main text.

species	mass	power law	reference	
			morphological model	time-dependent model
<i>Dromaius</i>	(1)	*	(1)	+
<i>Struthio</i>	(1)	*	(1)	+
<i>Patagornis</i>	(2)	*	(2)	+
<i>Velociraptor</i>	(1)	*	(1)	+
<i>Allosaurus</i>	(1)	*	(1)	+
<i>Tyrannosaurus</i>	(1)	*	(1)	+
<i>Triceratops</i>	(3)	*	(3)	+
<i>Apatosaurus</i>	(3)	*	(3)	+
<i>Brachiosaurus</i>	(3)	*	(3)	+

* prediction from a power law (equ. 1)

+ prediction from our model (equ. 5)

References

1. Blanco, R. E. & Jones, W. W. Terror birds on the run: a mechanical model to estimate its maximum running speed. *Proc. R. Soc. B Biol. Sci.* **272**, 1769–1773 (2005).
2. Sellers, W. I. & Manning, P. L. Estimating dinosaur maximum running speeds using evolutionary robotics. *Proc. R. Soc. Lond. B Biol. Sci.* **274**, 2711–2716 (2007).
3. Thulborn, R. A. Speeds and gaits of dinosaurs. *Palaeogeogr. Palaeoclimatol. Palaeoecol.* **38**, 227–256 (1982).

Maximum speed data base

species	taxonomic group	locomotion mode	thermoregulation	body mass [kg]	mass ref.	max. speed [km/h]	speed ref.	primary diet
<i>Aeshna cyanea</i>	arthropod	flying	ectotherm	4.22E-04	28	36	70	carnivore
<i>Anax junius</i>	arthropod	flying	ectotherm	4.50E-04	28	27	70	carnivore
<i>Anax parthenope julius</i>	arthropod	flying	ectotherm	3.90E-04	28	25.92	4	carnivore
<i>Anax sp.</i>	arthropod	flying	ectotherm	0.0138	11	36	11	carnivore
<i>Anopheles ziemanni</i>	arthropod	flying	ectotherm	5.22E-06	92	6.48	36	carnivore
<i>Anthonomus grandis</i>	arthropod	flying	ectotherm	6.86E-06	94	4.8	55	herbivore
<i>Culex pipiens</i>	arthropod	flying	ectotherm	1.30E-06	51	3.6	19	carnivore
<i>Drosophila hydei</i>	arthropod	flying	ectotherm	1.76E-07	64	3.24	25	herbivore
<i>Drosophila melanogaster</i>	arthropod	flying	ectotherm	7.47E-07	11	6.84	11	herbivore
<i>Drosophila melanogaster</i>	arthropod	flying	ectotherm	7.89E-08	64	3.06	52	herbivore
<i>Drosophila virilis</i>	arthropod	flying	ectotherm	2.05E-07	64	4.32	81	herbivore
<i>Eristalis sp.</i>	arthropod	flying	ectotherm	9.00E-05	37	36	20	herbivore
<i>Volucella pellucens</i>	arthropod	flying	ectotherm	1.70E-04	37	36	20	herbivore
<i>Euglossa imperialis</i>	arthropod	flying	ectotherm	0.0015	29	25.56	21	herbivore
<i>Leptocoris chinensis</i>	arthropod	flying	ectotherm	4.73E-05	42	6	77	herbivore
<i>Manduca sexta</i>	arthropod	flying	ectotherm	0.002	29	19.08	75	herbivore
<i>Manduca sexta</i>	arthropod	flying	ectotherm	0.002	29	18	86	herbivore
<i>Riptortus pedestris</i>	arthropod	flying	ectotherm	6.52E-05	47	10.8	77	herbivore
<i>Tabanus affinis</i>	arthropod	flying	ectotherm	1.01E-04	11	23.76	11	carnivore
<i>Accipiter striatus</i>	bird	flying	endotherm	0.0965	30	64	12	carnivore
<i>Anas acuta</i>	bird	flying	endotherm	0.947	30	82.08	11	omnivore
<i>Anas platyrhynchos</i>	bird	flying	endotherm	1.14	30	105	101	omnivore
<i>Apus apus</i>	bird	flying	endotherm	0.058	11	91.8	11	carnivore
<i>Aquila chrysaetos</i>	bird	flying	endotherm	4.2635	30	129	93	carnivore
<i>Archilochus colubris</i>	bird	flying	endotherm	0.0075	11	40.32	11	herbivore
<i>Buteo jamaicensis</i>	bird	flying	endotherm	1.11	30	195	101	carnivore
<i>Calypte anna</i>	bird	flying	endotherm	0.0044	56	56.16	17	herbivore
<i>Chen caerulescens</i>	bird	flying	endotherm	2.641	30	185	46	herbivore

<i>Columba livia</i>	bird	flying	endotherm	0.3545	30	136.8	101	herbivore
<i>Cygnus columbianus</i>	bird	flying	endotherm	6.75	30	135	31	omnivore
<i>Cygnus columbianus bewickii</i>	bird	flying	endotherm	6.05	11	67.68	11	omnivore
<i>Cygnus cygnus</i>	bird	flying	endotherm	9.35	30	88	39	omnivore
<i>Diomedea exulans</i>	bird	flying	endotherm	8.19	30	127	71	carnivore
<i>Falco peregrinus</i>	bird	flying	endotherm	0.78	30	110	96	carnivore
<i>Fregata aquila</i>	bird	flying	endotherm	1.5	101	153	101	carnivore
<i>Gymnogyps californianus</i>	bird	flying	endotherm	4.49	30	90	101	carnivore
<i>Hirundapus caudacutus</i>	bird	flying	endotherm	0.096	30	170	101	carnivore
<i>Mergus serrator</i>	bird	flying	endotherm	1.02	30	129	101	carnivore
<i>Morus bassanus</i>	bird	flying	endotherm	3	30	100	101	carnivore
<i>Numenius phaeopus</i>	bird	flying	endotherm	0.366	30	83.52	11	carnivore
<i>Nymphicus hollandicus</i>	bird	flying	endotherm	0.088	30	46.8	41	herbivore
<i>Otis tarda</i>	bird	flying	endotherm	10.55	30	80	43	herbivore
<i>Pelecanus onocrotalus</i>	bird	flying	endotherm	9.52	30	82.08	11	carnivore
<i>Phylloscopus trochilus</i>	bird	flying	endotherm	0.0087	30	43.2	11	carnivore
<i>Plectropterus gambensis</i>	bird	flying	endotherm	3.869	30	142	101	omnivore
<i>Somateria mollissima</i>	bird	flying	endotherm	2.07	30	113	101	carnivore
<i>Thalassarche chrysostoma</i>	bird	flying	endotherm	3.51	30	127	14	carnivore
<i>Xanthocephalus xanthocephalus</i>	bird	flying	endotherm	0.0646	30	56.33	23	omnivore
<i>Chalinolobus tuberculatus</i>	mammal	flying	endotherm	0.0085	60	60	60	carnivore
<i>Euderma maculatum</i>	mammal	flying	endotherm	0.0162	56	53	15	carnivore
<i>Glossophaga soricina</i>	mammal	flying	endotherm	0.0103	56	37.8	88	herbivore
<i>Lasiurus borealis</i>	mammal	flying	endotherm	0.013	56	64	62	carnivore
<i>Lasiurus semotus</i>	mammal	flying	endotherm	0.02603	56	54.72	62	carnivore
<i>Nyctinomops macrotis</i>	mammal	flying	endotherm	0.023	56	61	22	carnivore
<i>Tadarida brasiliensis</i>	mammal	flying	endotherm	0.0125	56	96.5	26	carnivore
<i>Agelenopsis aperta</i>	arthropod	running	ectotherm	1.28E-04	3	0.933	66	carnivore
<i>Argiope keyserlingi</i>	arthropod	running	ectotherm	4.02E-06	65	1.2	65	carnivore
<i>Blaberus discoidalis</i>	arthropod	running	ectotherm	0.003	76	1.998	76	omnivore
<i>Carabinae</i>	arthropod	running	ectotherm	8.68E-05	32	2.14	32	carnivore
<i>Carabinae</i>	arthropod	running	ectotherm	8.85E-05	32	2.24	32	carnivore
<i>Carabinae</i>	arthropod	running	ectotherm	7.28E-05	32	2.25	32	carnivore

<i>Carabinae</i>	arthropod	running	ectotherm	1.40E-04	32	2.27	32	carnivore
<i>Cataglyphis sp.</i>	arthropod	running	ectotherm	1.55E-05	83	2.088	40	carnivore
<i>Cicindela eburneola</i>	arthropod	running	ectotherm	3.89E-05	45	6.696	45	carnivore
<i>Cicindela hudsoni</i>	arthropod	running	ectotherm	2.00E-04	45	9	45	carnivore
<i>Cicindela leucothrix</i>	arthropod	running	ectotherm	6.20E-05	45	3.67	45	carnivore
<i>Cicindela repanda</i>	arthropod	running	ectotherm	4.76E-05	87	1.91	35	carnivore
<i>Cicindela saetigera</i>	arthropod	running	ectotherm	7.08E-05	45	5.04	45	carnivore
<i>Cicindela salicursoria</i>	arthropod	running	ectotherm	4.36E-05	45	5.29	45	carnivore
<i>Cicindela velox</i>	arthropod	running	ectotherm	8.60E-05	45	6.95	45	carnivore
<i>Dolomedes fimbriatus</i>	arthropod	running	ectotherm	1.87E-04	9	0.976	9	carnivore
<i>Dolomedes plantarius</i>	arthropod	running	ectotherm	1.79E-04	67	2.7	38	carnivore
<i>Dolomedes triton</i>	arthropod	running	ectotherm	4.00E-04	9	1.14	9	carnivore
<i>Hogna carolinensis (female)</i>	arthropod	running	ectotherm	1.26E-04	57	4.50	57	carnivore
<i>Hogna carolinensis (male)</i>	arthropod	running	ectotherm	1.02E-04	57	4.73	57	carnivore
<i>Hololena adnexa</i>	arthropod	running	ectotherm	2.64E-05	74	2.16	74	carnivore
<i>Hololena curta</i>	arthropod	running	ectotherm	2.64E-05	74	1.83	74	carnivore
<i>insect</i>	arthropod	running	ectotherm	0.001	7	3.6	7	herbivore
<i>insect</i>	arthropod	running	ectotherm	0.001	7	5.4	7	herbivore
<i>insect</i>	arthropod	running	ectotherm	0.05	7	2.88	7	herbivore
<i>Ocymyrmex barbiger</i>	arthropod	running	ectotherm	4.10E-06	53	1.38	53	omnivore
<i>Paratarsotomus macropalpis</i>	arthropod	running	ectotherm	1.82E-07	89	0.5	89	carnivore
<i>Paratarsotomus macropalpis</i>	arthropod	running	ectotherm	2.68E-07	69	0.63	69	carnivore
<i>Parateneriffia spp.</i>	arthropod	running	ectotherm	3.00E-08	89	0.4716	89	carnivore
<i>Pardosa amentata</i>	arthropod	running	ectotherm	1.10E-05	67	1.476	24	carnivore
<i>Pardosa lugubris</i>	arthropod	running	ectotherm	1.03E-05	67	1.44	13	carnivore
<i>Pardosa valens</i>	arthropod	running	ectotherm	8.50E-05	1	1.53	1	carnivore
<i>Periplaneta americana</i>	arthropod	running	ectotherm	8.30E-04	33	5.4	33	omnivore
<i>Pirata sedentarius (Size class 1)</i>	arthropod	running	ectotherm	1.52E-05	2	0.915	2	carnivore
<i>Pirata sedentarius (Size class 2)</i>	arthropod	running	ectotherm	2.25E-05	2	0.791	2	carnivore
<i>Pirata sedentarius (Size class 3)</i>	arthropod	running	ectotherm	3.62E-05	2	1.22	2	carnivore
<i>Pirata sedentarius (Size class 4)</i>	arthropod	running	ectotherm	5.85E-05	2	1.57	2	carnivore
<i>Schizocosa ocreata (Size class 1)</i>	arthropod	running	ectotherm	1.78E-05	24	0.621	24	carnivore
<i>Schizocosa ocreata (Size class 2)</i>	arthropod	running	ectotherm	2.56E-05	24	1.60	24	carnivore

<i>Schizocosa ocreata (Size class 3)</i>	arthropod	running	ectotherm	3.11E-05	24	2.53	24	carnivore
<i>Schizocosa ocreata (Size class 4)</i>	arthropod	running	ectotherm	4.49E-05	24	2.64	24	carnivore
<i>Schizocosa ocreata (Size class 5)</i>	arthropod	running	ectotherm	5.30E-05	24	2.23	24	carnivore
<i>Servaea incana</i>	arthropod	running	ectotherm	5.36E-05	54	0.9	54	carnivore
<i>Varacosa terricola (Size class 1)</i>	arthropod	running	ectotherm	1.76E-04	24	2.57	24	carnivore
<i>Varacosa terricola (Size class 2)</i>	arthropod	running	ectotherm	2.87E-04	24	2.57	24	carnivore
<i>Varacosa terricola (Size class 3)</i>	arthropod	running	ectotherm	3.20E-04	24	2.50	24	carnivore
<i>Varacosa terricola (Size class 4)</i>	arthropod	running	ectotherm	4.87E-04	24	2.72	24	carnivore
<i>Varacosa terricola (Size class 5)</i>	arthropod	running	ectotherm	5.28E-04	24	2.24	24	carnivore
<i>Varacosa terricola (Size class 6)</i>	arthropod	running	ectotherm	6.01E-04	24	2.11	24	carnivore
<i>Varacosa terricola (Size class 7)</i>	arthropod	running	ectotherm	7.17E-04	24	1.84	24	carnivore
<i>Geococcyx californianus</i>	bird	running	endotherm	0.5	101	32	101	omnivore
<i>Struthio camelus</i>	bird	running	endotherm	111	30	70	101	herbivore
<i>Struthio camelus</i>	bird	running	endotherm	111	30	82.8	11	herbivore
<i>Acinonyx jubatus</i>	mammal	running	endotherm	39	16	104.95	16	carnivore
<i>Acinonyx jubatus</i>	mammal	running	endotherm	65	101	120	101	carnivore
<i>Acinonyx jubatus</i>	mammal	running	endotherm	58.8	44	106.91	44	carnivore
<i>Acinonyx jubatus</i>	mammal	running	endotherm	44.87	11	104.4	11	carnivore
<i>Aepyceros melampus</i>	mammal	running	endotherm	50	16	74.99	16	herbivore
<i>Aepyceros melampus</i>	mammal	running	endotherm	50	34	47	34	herbivore
<i>Aepyceros melampus</i>	mammal	running	endotherm	53.25	7	45.68	7	herbivore
<i>Alcelaphus buselaphus</i>	mammal	running	endotherm	150	16	69.98	16	herbivore
<i>Alcelaphus buselaphus</i>	mammal	running	endotherm	170	34	80	34	herbivore
<i>Alcelaphus buselaphus</i>	mammal	running	endotherm	136	7	77.98	7	herbivore
<i>Alces alces</i>	mammal	running	endotherm	410.2	16	55.98	16	herbivore
<i>Alces alces</i>	mammal	running	endotherm	384	7	54.55	7	herbivore
<i>Ammospermophilus leucurus</i>	mammal	running	endotherm	0.0759	44	16.77	44	omnivore
<i>Antechinomys laniger</i>	mammal	running	endotherm	0.025	44	14.51	44	carnivore
<i>Antechinus flavipes</i>	mammal	running	endotherm	0.052	44	16.20	44	carnivore
<i>Antechinus stuartii</i>	mammal	running	endotherm	0.0315	44	17.38	44	carnivore
<i>Antidorcas marsupialis</i>	mammal	running	endotherm	21.18	16	87.90	16	herbivore
<i>Antidorcas marsupialis</i>	mammal	running	endotherm	34	34	97	34	herbivore
<i>Antidorcas marsupialis</i>	mammal	running	endotherm	34	7	94.302	7	herbivore

<i>Antilocapra americana</i>	mammal	running	endotherm	46.03	16	87.10	16	herbivore
<i>Antilocapra americana</i>	mammal	running	endotherm	50	101	98	101	herbivore
<i>Antilope cervicapra</i>	mammal	running	endotherm	37	34	105	34	herbivore
<i>Antilope cervicapra</i>	mammal	running	endotherm	34.99	16	94.84	16	herbivore
<i>Antilope cervicapra</i>	mammal	running	endotherm	37.5	7	102.08	7	herbivore
<i>Axis axis</i>	mammal	running	endotherm	45.5	56	65	102	herbivore
<i>Bettongia penicillata</i>	mammal	running	endotherm	1.1	44	24.11	44	herbivore
<i>Bison bison</i>	mammal	running	endotherm	624.58	56	52.00	16	herbivore
<i>Bison bison</i>	mammal	running	endotherm	865	7	54.43	7	herbivore
<i>Bison bonasus</i>	mammal	running	endotherm	225	16	55.98	16	herbivore
<i>Bos sauveli</i>	mammal	running	endotherm	800	34	29	34	herbivore
<i>Bos sauveli</i>	mammal	running	endotherm	800	7	28.15	7	herbivore
<i>Boselaphus tragocamelus</i>	mammal	running	endotherm	200	16	47.97	16	herbivore
<i>Camelus bactrianus</i>	mammal	running	endotherm	549.54	16	59.98	16	herbivore
<i>Camelus dromedarius</i>	mammal	running	endotherm	500	34	32	34	herbivore
<i>Camelus dromedarius</i>	mammal	running	endotherm	414.95	16	52.00	16	herbivore
<i>Camelus dromedarius</i>	mammal	running	endotherm	550	7	31.09	7	herbivore
<i>Canis aureus</i>	mammal	running	endotherm	9.2	16	55.98	16	carnivore
<i>Canis aureus</i>	mammal	running	endotherm	8.8	44	54.44	44	carnivore
<i>Canis familiaris</i>	mammal	running	endotherm	17	34	54.95	16	carnivore
<i>Canis familiaris</i>	mammal	running	endotherm	25	44	65.14	44	carnivore
<i>Canis latrans</i>	mammal	running	endotherm	12.3	16	55.98	16	carnivore
<i>Canis latrans</i>	mammal	running	endotherm	18	101	69.04	101	carnivore
<i>Canis latrans</i>	mammal	running	endotherm	13.3	44	63.19	44	carnivore
<i>Canis lupus</i>	mammal	running	endotherm	40	34	63.97	16	carnivore
<i>Canis lupus</i>	mammal	running	endotherm	35.3	44	62.06	44	carnivore
<i>Canis mesomelas</i>	mammal	running	endotherm	7.6	16	59.98	16	carnivore
<i>Canis mesomelas</i>	mammal	running	endotherm	7	44	58.29	44	carnivore
<i>Capra aegaerus</i>	mammal	running	endotherm	46	16	44.98	16	herbivore
<i>Capra aegagrus</i>	mammal	running	endotherm	30	7	43.75	7	herbivore
<i>Capra aegagrus</i>	mammal	running	endotherm	30	7	78.09	7	herbivore
<i>Capra caucasica</i>	mammal	running	endotherm	55	16	44.98	16	herbivore
<i>Capreolus capreolus</i>	mammal	running	endotherm	25	16	59.98	16	herbivore

<i>Ceratotherium simum</i>	mammal	running	endotherm	2000	7	24.36	7	herbivore
<i>Ceratotherium simum</i>	mammal	running	endotherm	1901	16	39.99	16	herbivore
<i>Ceratotherium simum</i>	mammal	running	endotherm	3000	34	25	34	herbivore
<i>Cercartetus concinnus</i>	mammal	running	endotherm	0.015	44	4.84	44	carnivore
<i>Cervus canadensis</i>	mammal	running	endotherm	382	101	72.4	101	herbivore
<i>Cervus elaphus</i>	mammal	running	endotherm	84.92	16	71.94	16	herbivore
<i>Chaetodipus baileyi</i>	mammal	running	endotherm	0.0391	44	12.09	44	herbivore
<i>Chaetodipus fallax</i>	mammal	running	endotherm	0.018	44	12.45	44	herbivore
<i>Connochaetes gnou</i>	mammal	running	endotherm	157	16	79.98	16	herbivore
<i>Connochaetes gnou</i>	mammal	running	endotherm	250	101	64	101	herbivore
<i>Connochaetes gnou</i>	mammal	running	endotherm	300	34	90	34	herbivore
<i>Connochaetes gnou</i>	mammal	running	endotherm	132.25	56	62.18	7	herbivore
<i>Connochaetes gnou</i>	mammal	running	endotherm	132.25	56	69.97	7	herbivore
<i>Connochaetes taurinus</i>	mammal	running	endotherm	180	34	79.98	16	herbivore
<i>Crocota crocuta</i>	mammal	running	endotherm	65.01	16	59.98	16	carnivore
<i>Crocota crocuta</i>	mammal	running	endotherm	50	101	64	101	carnivore
<i>Crocota crocuta</i>	mammal	running	endotherm	52	44	62.99	44	carnivore
<i>Dama dama</i>	mammal	running	endotherm	45	16	65.01	16	herbivore
<i>Dama dama</i>	mammal	running	endotherm	55	7	63.40	7	herbivore
<i>Damaliscus dorcas</i>	mammal	running	endotherm	43.45	16	69.98	16	herbivore
<i>Damaliscus hunteri</i>	mammal	running	endotherm	158.85	16	69.98	16	herbivore
<i>Damaliscus lunatus</i>	mammal	running	endotherm	125.89	16	69.98	16	herbivore
<i>Damaliscus lunatus</i>	mammal	running	endotherm	130	7	68.24	7	herbivore
<i>Dasyuroides byrnei</i>	mammal	running	endotherm	0.12	44	25.66	44	carnivore
<i>Diceros bicornis</i>	mammal	running	endotherm	875	16	44.98	16	herbivore
<i>Diceros bicornis</i>	mammal	running	endotherm	1200	7	43.80	7	herbivore
<i>Dipodomys deserti</i>	mammal	running	endotherm	0.0976	44	14.63	44	herbivore
<i>Dipodomys merriami</i>	mammal	running	endotherm	0.035	44	31.22	44	herbivore
<i>Dipodomys microps</i>	mammal	running	endotherm	0.056	44	20.43	44	herbivore
<i>Dipodomys ordii</i>	mammal	running	endotherm	0.0478	44	13.66	44	herbivore
<i>Elephas maximus</i>	mammal	running	endotherm	4000	34	26	34	herbivore
<i>Elephas maximus</i>	mammal	running	endotherm	4000	7	25.28	7	herbivore
<i>Equus asinus</i>	mammal	running	endotherm	165.2	16	54.95	16	herbivore

<i>Equus burchelli</i>	mammal	running	endotherm	136.14	16	69.98	16	herbivore
<i>Equus burchelli</i>	mammal	running	endotherm	235	7	68.15	7	herbivore
<i>Equus caballus</i>	mammal	running	endotherm	529.66	16	63.97	16	herbivore
<i>Equus caballus</i>	mammal	running	endotherm	350	7	68.04	7	herbivore
<i>Equus caballus</i>	mammal	running	endotherm	600	101	88	101	herbivore
<i>Equus hemionus</i>	mammal	running	endotherm	220.8	16	63.97	16	herbivore
<i>Equus hemionus</i>	mammal	running	endotherm	220.8	16	63.97	16	herbivore
<i>Equus hemionus</i>	mammal	running	endotherm	230	101	64	101	herbivore
<i>Equus hemionus</i>	mammal	running	endotherm	200	7	68.04	7	herbivore
<i>Equus hemionus</i>	mammal	running	endotherm	200	7	68.04	7	herbivore
<i>Equus zebra</i>	mammal	running	endotherm	276.06	16	63.97	16	herbivore
<i>Equus zebra</i>	mammal	running	endotherm	328	101	64.4	101	herbivore
<i>Eudorcas thomsonii</i>	mammal	running	endotherm	20	101	65	101	herbivore
<i>Felis catus</i>	mammal	running	endotherm	6	101	48	101	carnivore
<i>Gazella dorcas</i>	mammal	running	endotherm	19	16	79.98	16	herbivore
<i>Gazella granti</i>	mammal	running	endotherm	50	16	80.91	16	herbivore
<i>Gazella subgutturosa</i>	mammal	running	endotherm	24	16	97.05	16	herbivore
<i>Gazella thomsoni</i>	mammal	running	endotherm	19	16	79.98	16	herbivore
<i>Giraffa camelopardalis</i>	mammal	running	endotherm	1700	16	55.98	16	herbivore
<i>Giraffa camelopardalis</i>	mammal	running	endotherm	1700	101	52	101	herbivore
<i>Giraffa camelopardalis</i>	mammal	running	endotherm	1000	34	60	34	herbivore
<i>Giraffa camelopardalis</i>	mammal	running	endotherm	1075	7	58.41	7	herbivore
<i>Gorilla gorilla</i>	mammal	running	endotherm	127	44	31.08	44	herbivore
<i>Heteromys desmarestianus</i>	mammal	running	endotherm	0.05	44	12.19	44	herbivore
<i>Hippopotamus amphibius</i>	mammal	running	endotherm	1210.60	16	25.00	16	herbivore
<i>Hippopotamus amphibius</i>	mammal	running	endotherm	3800	7	24.36	7	herbivore
<i>Hippotragus equinus</i>	mammal	running	endotherm	224.91	16	55.98	16	herbivore
<i>Hippotragus equinus</i>	mammal	running	endotherm	226.5	7	54.58	7	herbivore
<i>Hippotragus niger</i>	mammal	running	endotherm	181.13	16	57.02	16	herbivore
<i>Homo sapiens</i>	mammal	running	endotherm	70	44	38.83	44	omnivore
<i>Homo sapiens</i>	mammal	running	endotherm	70	7	43.85	7	omnivore
<i>Hyaena hyaena</i>	mammal	running	endotherm	31.99	16	50.00	16	carnivore
<i>Hyaena hyaena</i>	mammal	running	endotherm	26.8	44	48.47	44	carnivore

<i>Isoodon obesulus</i>	mammal	running	endotherm	0.718	44	13.90	44	omnivore
<i>Lama guanicoe</i>	mammal	running	endotherm	89.95	16	55.98	16	herbivore
<i>Lama guanicoe</i>	mammal	running	endotherm	95	7	54.62	7	herbivore
<i>Leggadina forresti</i>	mammal	running	endotherm	0.0155	44	12.25	44	omnivore
<i>Lepus alleni</i>	mammal	running	endotherm	4.4	44	70.04	44	herbivore
<i>Lepus americanus</i>	mammal	running	endotherm	1.5	44	48.55	44	herbivore
<i>Lepus arcticus</i>	mammal	running	endotherm	4.6	44	62.24	44	herbivore
<i>Lepus californicus</i>	mammal	running	endotherm	2	44	62.14	44	herbivore
<i>Lepus europaeus</i>	mammal	running	endotherm	4	44	70.02	44	herbivore
<i>Lepus townsendii</i>	mammal	running	endotherm	3.5	44	54.45	44	herbivore
<i>Liomys pictus</i>	mammal	running	endotherm	0.042	44	16.72	44	omnivore
<i>Lontra canadensis</i>	mammal	running	endotherm	8.09	56	18	85	carnivore
<i>Loxodonta africana</i>	mammal	running	endotherm	8000	101	40.07	101	herbivore
<i>Loxodonta africana</i>	mammal	running	endotherm	6000	34	35	34	herbivore
<i>Loxodonta africana</i>	mammal	running	endotherm	6000	7	34.02	7	herbivore
<i>Lycaon pictus</i>	mammal	running	endotherm	21.98	16	66.07	16	carnivore
<i>Lycaon pictus</i>	mammal	running	endotherm	30	101	72.42	101	carnivore
<i>Lycaon pictus</i>	mammal	running	endotherm	20	44	68.05	44	carnivore
<i>Macropus eugenii</i>	mammal	running	endotherm	4	44	38.88	44	herbivore
<i>Macropus rufus</i>	mammal	running	endotherm	80	101	70	101	herbivore
<i>Macropus spp</i>	mammal	running	endotherm	50	7	38.89	7	herbivore
<i>Macropus spp</i>	mammal	running	endotherm	50	7	58.32	7	herbivore
<i>Macropus spp</i>	mammal	running	endotherm	50	7	97.2	7	herbivore
<i>Macropus spp.</i>	mammal	running	endotherm	50	44	63.33	44	herbivore
<i>Madoqua kirki</i>	mammal	running	endotherm	5.11	16	41.98	16	herbivore
<i>Madoqua kirki</i>	mammal	running	endotherm	5	7	40.82	7	herbivore
<i>Marmota monax</i>	mammal	running	endotherm	4	44	15.55	44	herbivore
<i>Meles meles</i>	mammal	running	endotherm	11.6	44	29.17	44	carnivore
<i>Mephitis mephitis</i>	mammal	running	endotherm	2.5	44	15.55	44	omnivore
<i>Mesocricetus brandti</i>	mammal	running	endotherm	0.11	44	8.75	44	herbivore
<i>Microdipodops megacephalus</i>	mammal	running	endotherm	0.0123	44	10.60	44	omnivore
<i>Microtus pennsylvanicus</i>	mammal	running	endotherm	0.05	44	10.68	44	herbivore
<i>Microtus pinetorum</i>	mammal	running	endotherm	0.03	44	6.60	44	herbivore

<i>Monodelphis brevicaudata</i>	mammal	running	endotherm	0.0745	44	11.37	44	carnivore
<i>Mus musculus</i>	mammal	running	endotherm	0.019	101	13	101	omnivore
<i>Mus musculus</i>	mammal	running	endotherm	0.016	44	12.64	44	omnivore
<i>Myrmecobius fasciatus</i>	mammal	running	endotherm	0.48	44	13.54	44	carnivore
<i>Napaeozapus insignis</i>	mammal	running	endotherm	0.025	44	8.36	44	omnivore
<i>Nasua narica</i>	mammal	running	endotherm	4.4	44	26.24	44	omnivore
<i>Nasua nasua</i>	mammal	running	endotherm	3.40	16	26.98	16	omnivore
<i>Neotoma lepida</i>	mammal	running	endotherm	0.1106	44	16.62	44	herbivore
<i>Notomys alexis</i>	mammal	running	endotherm	0.0245	44	12.73	44	omnivore
<i>Notomys cervinus</i>	mammal	running	endotherm	0.035	44	13.66	44	omnivore
<i>Odocoileus hemionus</i>	mammal	running	endotherm	54.95	16	63.97	16	herbivore
<i>Odocoileus hemionus</i>	mammal	running	endotherm	120	34	61	34	herbivore
<i>Odocoileus virginianus</i>	mammal	running	endotherm	61.94	16	63.97	16	herbivore
<i>Odocoileus virginianus</i>	mammal	running	endotherm	80	101	48.2	101	herbivore
<i>Onychomys torridus</i>	mammal	running	endotherm	0.0193	44	10.06	44	omnivore
<i>Oreamnos americanus</i>	mammal	running	endotherm	119.95	16	33.04	16	herbivore
<i>Oreamnos americanus</i>	mammal	running	endotherm	113.5	7	32.05	7	herbivore
<i>Oryctolagus cuniculus</i>	mammal	running	endotherm	1.9	44	54.432	44	herbivore
<i>Ourebia ourebi</i>	mammal	running	endotherm	14.49	16	50.00	16	herbivore
<i>Ovibos moschatus</i>	mammal	running	endotherm	209.89	16	39.99	16	herbivore
<i>Ovis ammon</i>	mammal	running	endotherm	114.02	16	59.98	16	herbivore
<i>Ovis ammon</i>	mammal	running	endotherm	65	7	58.32	7	herbivore
<i>Ovis canadensis</i>	mammal	running	endotherm	95.06	16	47.97	16	herbivore
<i>Panthera leo</i>	mammal	running	endotherm	169.82	16	54.95	16	carnivore
<i>Panthera leo</i>	mammal	running	endotherm	200	101	80	101	carnivore
<i>Panthera leo</i>	mammal	running	endotherm	155.80	7	57.35	7	carnivore
<i>Panthera pardus</i>	mammal	running	endotherm	51.05	16	59.98	16	carnivore
<i>Panthera pardus</i>	mammal	running	endotherm	52.4	44	58.32	44	carnivore
<i>Panthera tigris</i>	mammal	running	endotherm	144.88	16	55.98	16	carnivore
<i>Panthera tigris</i>	mammal	running	endotherm	161	7	54.43	7	carnivore
<i>Pecari tajacu</i>	mammal	running	endotherm	21.98	16	34.99	16	omnivore
<i>Perognathus longimembris</i>	mammal	running	endotherm	0.0089	44	9.62	44	omnivore
<i>Perognathus parvus</i>	mammal	running	endotherm	0.0244	44	12.15	44	herbivore

<i>Peromyscus crinitus</i>	mammal	running	endotherm	0.0137	44	11.08	44	omnivore
<i>Peromyscus eremicus</i>	mammal	running	endotherm	0.0198	44	12.73	44	omnivore
<i>Peromyscus leucopus</i>	mammal	running	endotherm	0.025	44	10.69	44	omnivore
<i>Peromyscus maniculatus</i>	mammal	running	endotherm	0.0182	44	13.03	44	omnivore
<i>Peromyscus maniculatus</i>	mammal	running	endotherm	0.022	11	9	11	omnivore
<i>Peromyscus truei</i>	mammal	running	endotherm	0.0193	44	13.90	44	herbivore
<i>Phacochoerus aethiopicus</i>	mammal	running	endotherm	87.90	16	54.95	16	herbivore
<i>Phacochoerus aethiopicus</i>	mammal	running	endotherm	85	7	46.77	7	herbivore
<i>Phacochoerus aethiopicus</i>	mammal	running	endotherm	85	7	53.48	7	herbivore
<i>Potorous tridactylus</i>	mammal	running	endotherm	0.998	44	20.80	44	omnivore
<i>Potorous tridactylus</i>	mammal	running	endotherm	0.998	7	20.80	7	omnivore
<i>Presbytis</i>	mammal	running	endotherm	13	44	35.97	44	herbivore
<i>Procyon lotor</i>	mammal	running	endotherm	7.50	16	10.91	16	omnivore
<i>Procyon lotor</i>	mammal	running	endotherm	7	44	23.35	44	omnivore
<i>Pseudomys australis</i>	mammal	running	endotherm	0.05	44	15.92	44	omnivore
<i>Pseudomys hermannsburgensis</i>	mammal	running	endotherm	0.018	44	12.25	44	omnivore
<i>Pseudomys nanus</i>	mammal	running	endotherm	0.061	44	14.05	44	herbivore
<i>Rangifer tarandus</i>	mammal	running	endotherm	159.96	16	69.98	16	herbivore
<i>Rangifer tarandus</i>	mammal	running	endotherm	120	34	80	34	herbivore
<i>Rangifer tarandus</i>	mammal	running	endotherm	100	7	77.79	7	herbivore
<i>Rattus</i>	mammal	running	endotherm	0.25	44	9.43	44	omnivore
<i>Rupicapra pyrenaica</i>	mammal	running	endotherm	33.96	16	50.00	16	herbivore
<i>Rupicapra rupicapra</i>	mammal	running	endotherm	38.02	16	50.00	16	herbivore
<i>Rupicapra rupicapra</i>	mammal	running	endotherm	50	34	50	34	herbivore
<i>Saiga tatarica</i>	mammal	running	endotherm	26.18	16	74.99	16	herbivore
<i>Saiga tatarica</i>	mammal	running	endotherm	35	34	80	34	herbivore
<i>Saiga tatarica</i>	mammal	running	endotherm	35	7	77.76	7	herbivore
<i>Sciurus carolinensis</i>	mammal	running	endotherm	0.5	44	29.11	44	herbivore
<i>Sciurus carolinensis</i>	mammal	running	endotherm	0.133	101	20	101	omnivore
<i>Sciurus carolinensis</i>	mammal	running	endotherm	0.479	11	27.36	11	omnivore
<i>Sciurus niger</i>	mammal	running	endotherm	1.078	44	23.33	44	omnivore
<i>Sciurus vulgaris</i>	mammal	running	endotherm	0.4	44	19.46	44	herbivore
<i>Sminthopsis crassicaudata</i>	mammal	running	endotherm	0.017	44	11.18	44	carnivore

<i>Sminthopsis macroura</i>	mammal	running	endotherm	0.02	44	14.03	44	carnivore
<i>Spermophilopsis leptodactylus</i>	mammal	running	endotherm	0.6	44	35.01	44	omnivore
<i>Spermophilus citellus</i>	mammal	running	endotherm	0.5	44	17.47	44	herbivore
<i>Spermophilus saturatus</i>	mammal	running	endotherm	0.222	44	21.53	44	herbivore
<i>Spermophilus tereticaudus</i>	mammal	running	endotherm	0.1126	44	14.78	44	omnivore
<i>Spermophilus tridecemlineatus</i>	mammal	running	endotherm	0.125	44	11.82	44	omnivore
<i>Spermophilus undulatus</i>	mammal	running	endotherm	0.6	44	19.45	44	omnivore
<i>Sus scrofa</i>	mammal	running	endotherm	135	56	56	98	omnivore
<i>Sylvilagus</i>	mammal	running	endotherm	1.5	44	38.88	44	herbivore
<i>Sylvilagus</i>	mammal	running	endotherm	1.5	7	48.55	7	herbivore
<i>Sylvilagus floridanus</i>	mammal	running	endotherm	2	101	48	101	herbivore
<i>Syncerus caffer</i>	mammal	running	endotherm	439.54	16	57.02	16	herbivore
<i>Syncerus caffer</i>	mammal	running	endotherm	620	7	55.44	7	herbivore
<i>Tamias amoenus</i>	mammal	running	endotherm	0.051	44	18.86	44	omnivore
<i>Tamias minimus</i>	mammal	running	endotherm	0.0293	44	16.27	44	herbivore
<i>Tamias striatus</i>	mammal	running	endotherm	0.1	44	16.52	44	herbivore
<i>Tamias striatus</i>	mammal	running	endotherm	0.125	11	17.28	11	herbivore
<i>Tamiasciurus hudsonicus</i>	mammal	running	endotherm	0.22	44	14.62	44	herbivore
<i>Tamiasciurus hudsonicus</i>	mammal	running	endotherm	0.22	7	14.62	7	herbivore
<i>Tapirus terrestris</i>	mammal	running	endotherm	172.98	16	39.99	16	herbivore
<i>Taurotragus derbianus</i>	mammal	running	endotherm	680.77	16	69.98	16	herbivore
<i>Taurotragus oryx</i>	mammal	running	endotherm	559.76	16	69.98	16	herbivore
<i>Taurotragus oryx</i>	mammal	running	endotherm	511	7	68.17	7	herbivore
<i>Tayassu pecari</i>	mammal	running	endotherm	33.04	16	34.99	16	omnivore
<i>Urocyon cinereoargenteus</i>	mammal	running	endotherm	0.3	44	12.61	44	herbivore
<i>Urocyon cinereoargenteus</i>	mammal	running	endotherm	5.8	101	67.6	101	omnivore
<i>Urocyon cinereoargenteus</i>	mammal	running	endotherm	3.7	44	62.21	44	omnivore
<i>Urocyon cinereoargenteus</i>	mammal	running	endotherm	3.80	16	41.98	16	omnivore
<i>Uromys caudimaculatus</i>	mammal	running	endotherm	1.18	44	16.16	44	omnivore
<i>Ursus americanus</i>	mammal	running	endotherm	104.95	16	47.97	16	carnivore
<i>Ursus americanus</i>	mammal	running	endotherm	93.4	44	46.63	44	carnivore
<i>Ursus arctos</i>	mammal	running	endotherm	250	101	35	101	carnivore
<i>Ursus arctos</i>	mammal	running	endotherm	251.3	7	46.66	7	carnivore

<i>Ursus arctos horribilis</i>	mammal	running	endotherm	154.88	16	47.97	16	carnivore
<i>Ursus maritimus</i>	mammal	running	endotherm	174.98	16	50	16	carnivore
<i>Ursus maritimus</i>	mammal	running	endotherm	650	101	30	101	carnivore
<i>Ursus maritimus</i>	mammal	running	endotherm	265	7	38.92	7	carnivore
<i>Vicugna vicugna</i>	mammal	running	endotherm	44.98	16	46.99	16	herbivore
<i>Vulpes vulpes</i>	mammal	running	endotherm	5.50	16	47.97	16	carnivore
<i>Vulpes vulpes</i>	mammal	running	endotherm	4.8	44	70.03	44	carnivore
<i>Vulpes vulpes</i>	mammal	running	endotherm	4.59	11	72	11	carnivore
<i>Zapus hudsonicus</i>	mammal	running	endotherm	0.018	44	8.65	44	omnivore
<i>Zapus trinotatus</i>	mammal	running	endotherm	0.0285	44	13.84	44	omnivore
<i>Zyzomys argurus</i>	mammal	running	endotherm	0.0605	44	12.05	44	omnivore
<i>Acanthodactylus erythrurus</i>	reptile	running	ectotherm	0.0089	80	11.27	80	carnivore
<i>Acanthodactylus pardalis</i>	reptile	running	ectotherm	0.0067	80	9.42	80	carnivore
<i>Acanthodactylus scutellatus</i>	reptile	running	ectotherm	0.00784	27	11.95	27	carnivore
<i>Acanthodactylus scutellatus</i>	reptile	running	ectotherm	0.0081	80	10.06	80	carnivore
<i>Amblyrhynchus cristatus</i>	reptile	running	ectotherm	0.0718	80	10.08	80	herbivore
<i>Anolis carolinensis</i>	reptile	running	ectotherm	0.006	80	4.32	80	carnivore
<i>Anolis cristatellus</i>	reptile	running	ectotherm	0.0081	80	7.76	80	carnivore
<i>Anolis evermanni</i>	reptile	running	ectotherm	0.0056	80	6.57	80	carnivore
<i>Anolis frenatus</i>	reptile	running	ectotherm	0.0427	80	9.78	80	carnivore
<i>Anolis gundlachi</i>	reptile	running	ectotherm	0.0071	80	7.76	80	carnivore
<i>Anolis humilis</i>	reptile	running	ectotherm	0.001	80	4.18	80	carnivore
<i>Anolis krugi</i>	reptile	running	ectotherm	0.0024	80	6.43	80	carnivore
<i>Anolis lemurinus</i>	reptile	running	ectotherm	0.0036	80	5.33	80	carnivore
<i>Anolis limifrons</i>	reptile	running	ectotherm	9.00E-04	80	4.75	80	carnivore
<i>Anolis lineatopus</i>	reptile	running	ectotherm	0.0046	80	7.32	80	carnivore
<i>Anolis poncensis</i>	reptile	running	ectotherm	0.0016	80	6.34	80	carnivore
<i>Anolis pulchellus</i>	reptile	running	ectotherm	0.0015	80	6.12	80	carnivore
<i>Anolis sagrei</i>	reptile	running	ectotherm	0.0029	80	6.52	80	carnivore
<i>Anolis stratulus</i>	reptile	running	ectotherm	0.0019	80	5.36	80	carnivore
<i>Aspidoscelis tigris</i>	reptile	running	ectotherm	0.01142	27	15.37	27	carnivore
<i>Callisaurus draconoides</i>	reptile	running	ectotherm	0.0982	11	25.92	11	carnivore
<i>Callisaurus draconoides</i>	reptile	running	ectotherm	0.01193	27	17.32	27	carnivore

<i>Carlia fusca</i>	reptile	running	ectotherm	0.00335	27	6.23	27	carnivore
<i>Christinus marmoratus</i>	reptile	running	ectotherm	0.0037	80	3.49	80	carnivore
<i>Cnemidophorus inornatus arizonae</i>	reptile	running	ectotherm	0.0042	80	8.15	80	carnivore
<i>Cnemidophorus inornatus heptagrammus</i>	reptile	running	ectotherm	0.004	80	6.75	80	carnivore
<i>Cnemidophorus sexlineatus</i>	reptile	running	ectotherm	0.2	101	29	101	carnivore
<i>Cnemidophorus tigris marmoratus</i>	reptile	running	ectotherm	0.0179	80	8.64	80	carnivore
<i>Cnemidophorus tigris punctilinealis</i>	reptile	running	ectotherm	0.0112	80	9.53	80	carnivore
<i>Coleonyx brevis</i>	reptile	running	ectotherm	0.0018	80	5.36	80	carnivore
<i>Coleonyx variegatus</i>	reptile	running	ectotherm	0.0044	80	5.51	80	carnivore
<i>Cophosaurus texanus</i>	reptile	running	ectotherm	0.00994	27	13.72	27	carnivore
<i>Crotaphytus collaris</i>	reptile	running	ectotherm	0.04015	27	12.10	27	carnivore
<i>Ctenophorus nuchalis</i>	reptile	running	ectotherm	0.0138	80	9.23	80	omnivore
<i>Ctenotus regius</i>	reptile	running	ectotherm	0.0055	80	3.56	80	carnivore
<i>Ctenotus taeniolatus</i>	reptile	running	ectotherm	0.0045	80	4.25	80	carnivore
<i>Ctenotus uber</i>	reptile	running	ectotherm	0.0054	80	5.94	80	carnivore
<i>Dendroaspis polylepis</i>	reptile	running	ectotherm	1.4	101	23	73	carnivore
<i>Dendroaspis polylepis</i>	reptile	running	ectotherm	1.4	101	32.2	101	carnivore
<i>Dipsosaurus dorsalis</i>	reptile	running	ectotherm	0.398	11	26.28	11	herbivore
<i>Egernia cunninghami</i>	reptile	running	ectotherm	0.268	80	9.69	80	herbivore
<i>Egernia whitii</i>	reptile	running	ectotherm	0.0251	80	3.92	80	omnivore
<i>Elgaria kingii</i>	reptile	running	ectotherm	0.00973	27	4.21	27	carnivore
<i>Eremias lineoocellata</i>	reptile	running	ectotherm	0.0042	80	9.47	80	carnivore
<i>Eremias lugubris</i>	reptile	running	ectotherm	0.004	80	5.69	80	carnivore
<i>Eremias namaquensis</i>	reptile	running	ectotherm	0.0025	80	9.65	80	carnivore
<i>Eremiascincus fasciolatus</i>	reptile	running	ectotherm	0.0125	80	2.99	80	carnivore
<i>Eublepharis macularius</i>	reptile	running	ectotherm	0.0495	80	2.38	80	carnivore
<i>Eulamprus kosciuskoi</i>	reptile	running	ectotherm	0.0083	80	3.74	80	carnivore
<i>Eulamprus quoyi</i>	reptile	running	ectotherm	0.0211	80	5.47	80	carnivore
<i>Eulamprus tympanum</i>	reptile	running	ectotherm	0.0144	80	5.36	80	carnivore
<i>Gallotia atlantica</i>	reptile	running	ectotherm	0.0054	80	6.55	80	omnivore
<i>Gallotia caesaris</i>	reptile	running	ectotherm	0.0098	80	7.74	80	omnivore
<i>Gallotia simonyi</i>	reptile	running	ectotherm	0.23	80	8.28	80	omnivore
<i>Gallotia stehlini</i>	reptile	running	ectotherm	0.208	80	11.34	80	omnivore

<i>Gambelia wislizenii</i>	reptile	running	ectotherm	0.01981	27	11.81	27	omnivore
<i>Gekko gecko</i>	reptile	running	ectotherm	0.0381	80	5.44	80	carnivore
<i>Gonatodes concinnatus</i>	reptile	running	ectotherm	0.0023	80	3.74	80	carnivore
<i>Hemidactylus frenatus</i>	reptile	running	ectotherm	0.0033	80	7.96	80	carnivore
<i>Hemidactylus turcicus</i>	reptile	running	ectotherm	0.0028	80	5.90	80	carnivore
<i>Hemiergis decresiensis</i>	reptile	running	ectotherm	8.00E-04	80	2.30	80	carnivore
<i>Hemiergis peronii</i>	reptile	running	ectotherm	0.0015	80	1.76	80	carnivore
<i>Holbrookia elegans</i>	reptile	running	ectotherm	0.00405	27	10.62	27	carnivore
<i>Lacerta agilis</i>	reptile	running	ectotherm	0.0091	80	6.04	80	carnivore
<i>Lacerta bedriagae</i>	reptile	running	ectotherm	0.0096	80	6.43	80	carnivore
<i>Lacerta monticola</i>	reptile	running	ectotherm	0.0077	80	5.64	80	carnivore
<i>Lacerta schreiberi</i>	reptile	running	ectotherm	0.0212	80	6.43	80	carnivore
<i>Lacerta viridis</i>	reptile	running	ectotherm	0.0284	80	9.64	80	carnivore
<i>Lacerta vivipara</i>	reptile	running	ectotherm	0.0028	80	3.24	80	carnivore
<i>Laudakia stellio</i>	reptile	running	ectotherm	0.04854	27	10.91	27	carnivore
<i>Laudakia stellio</i>	reptile	running	ectotherm	0.0401	80	9.72	80	carnivore
<i>Laudakia stellio</i>	reptile	running	ectotherm	0.0411	80	9	80	carnivore
<i>Laudakia stellio</i>	reptile	running	ectotherm	0.0419	80	8.28	80	carnivore
<i>Laudakia stellio</i>	reptile	running	ectotherm	0.0551	80	8.64	80	carnivore
<i>Leiolepis belliana</i>	reptile	running	ectotherm	0.04	80	7.92	80	omnivore
<i>Lepidodactylus lugubris</i>	reptile	running	ectotherm	0.0011	80	5.54	80	carnivore
<i>Nucras tessellata</i>	reptile	running	ectotherm	0.0047	80	7.38	80	carnivore
<i>Petrosaurus mearnsi</i>	reptile	running	ectotherm	0.0113	80	8.46	80	omnivore
<i>Phrynosoma cornutum</i>	reptile	running	ectotherm	0.03362	27	6.34	27	carnivore
<i>Phrynosoma mcallii</i>	reptile	running	ectotherm	0.01146	27	5.54	27	carnivore
<i>Phrynosoma modestum</i>	reptile	running	ectotherm	0.00595	27	4.5	27	carnivore
<i>Phrynosoma platyrhinos</i>	reptile	running	ectotherm	0.01626	27	5.58	27	carnivore
<i>Plestiodon fasciatus</i>	reptile	running	ectotherm	0.00735	27	6.48	27	carnivore
<i>Plestiodon skiltonianus</i>	reptile	running	ectotherm	0.0052	80	2.74	80	carnivore
<i>Podarcis bocagei</i>	reptile	running	ectotherm	0.0033	80	5.12	80	carnivore
<i>Podarcis hispanica</i>	reptile	running	ectotherm	0.0025	80	7.30	80	carnivore
<i>Podarcis hispanica atrata</i>	reptile	running	ectotherm	0.0076	80	5.50	80	carnivore
<i>Podarcis lilfordi</i>	reptile	running	ectotherm	0.0078	80	8.41	80	carnivore

<i>Podarcis muralis</i>	reptile	running	ectotherm	0.0031	80	7.69	80	carnivore
<i>Podarcis pityusensis</i>	reptile	running	ectotherm	0.0098	80	9.14	80	carnivore
<i>Podarcis sicula</i>	reptile	running	ectotherm	0.00539	27	8.64	27	carnivore
<i>Podarcis sicula</i>	reptile	running	ectotherm	0.0071	80	6.01	80	carnivore
<i>Podarcis tiliguerta</i>	reptile	running	ectotherm	0.0048	80	8.68	80	carnivore
<i>Psammodromus algirus</i>	reptile	running	ectotherm	0.011	80	9.09	80	carnivore
<i>Psammodromus hispanicus</i>	reptile	running	ectotherm	0.0014	80	5.40	80	carnivore
<i>Pseudemoia entrecasteauxii</i>	reptile	running	ectotherm	0.0033	80	3.20	80	carnivore
<i>Pseudemoia entrecasteauxii</i>	reptile	running	ectotherm	0.0047	80	4.25	80	carnivore
<i>Sceloporus clarkii</i>	reptile	running	ectotherm	0.012	80	6.80	80	carnivore
<i>Sceloporus cowlesi</i>	reptile	running	ectotherm	0.00451	27	7.92	27	carnivore
<i>Sceloporus graciosus</i>	reptile	running	ectotherm	0.00703	27	8.35	27	carnivore
<i>Sceloporus jarrovi</i>	reptile	running	ectotherm	0.0153	80	6.23	80	carnivore
<i>Sceloporus magister</i>	reptile	running	ectotherm	0.03101	27	11.20	27	carnivore
<i>Sceloporus merriami</i>	reptile	running	ectotherm	0.0042	80	7.01	80	carnivore
<i>Sceloporus merriami</i>	reptile	running	ectotherm	0.0048	80	7.64	80	carnivore
<i>Sceloporus occidentalis</i>	reptile	running	ectotherm	0.0074	80	6.95	80	carnivore
<i>Sceloporus undulatus</i>	reptile	running	ectotherm	0.0056	80	6.23	80	carnivore
<i>Sceloporus undulatus</i>	reptile	running	ectotherm	0.0059	80	5.83	80	carnivore
<i>Sceloporus undulatus hyacinthus</i>	reptile	running	ectotherm	0.01	80	7.70	80	carnivore
<i>Sceloporus virgatus</i>	reptile	running	ectotherm	0.00523	27	6.34	27	carnivore
<i>Sceloporus woodi</i>	reptile	running	ectotherm	0.0028	80	8.93	80	carnivore
<i>Scincella lateralis</i>	reptile	running	ectotherm	8.00E-04	80	1.37	80	carnivore
<i>Takydromus septentrionalis</i>	reptile	running	ectotherm	0.0055	80	2.92	80	carnivore
<i>Tiliqua scincoides</i>	reptile	running	ectotherm	0.438	80	3.85	80	omnivore
<i>Trachylepis occidentalis</i>	reptile	running	ectotherm	0.0137	80	6.23	80	carnivore
<i>Trachylepis spilogaster</i>	reptile	running	ectotherm	0.0095	80	8.53	80	carnivore
<i>Trachylepis striata</i>	reptile	running	ectotherm	0.0158	80	7.56	80	carnivore
<i>Trachylepis variegata</i>	reptile	running	ectotherm	0.0013	80	4.90	80	carnivore
<i>Trapelus savignyi</i>	reptile	running	ectotherm	0.022	80	9.72	80	carnivore
<i>Uma rufopunctata</i>	reptile	running	ectotherm	0.02967	27	11.92	27	carnivore
<i>Uma scoparia</i>	reptile	running	ectotherm	0.0185	80	8.57	80	carnivore
<i>Urosaurus graciosus</i>	reptile	running	ectotherm	0.0036	80	6.37	80	carnivore

<i>Urosaurus nigricaudus</i>	reptile	running	ectotherm	0.0023	80	6.44	80	carnivore
<i>Urosaurus ornatus</i>	reptile	running	ectotherm	0.00347	27	8.24	27	carnivore
<i>Urosaurus ornatus</i>	reptile	running	ectotherm	0.0035	80	7.60	80	carnivore
<i>Uta stansburiana</i>	reptile	running	ectotherm	0.00383	27	7.81	27	carnivore
<i>Uta stansburiana</i>	reptile	running	ectotherm	0.003	80	6.66	80	carnivore
<i>Varanus acanthurus</i>	reptile	running	ectotherm	0.0589	18	10.98	18	carnivore
<i>Varanus brevicauda</i>	reptile	running	ectotherm	0.0206	18	5.72	18	carnivore
<i>Varanus caudolineatus</i>	reptile	running	ectotherm	0.0181	18	8.42	18	carnivore
<i>Varanus eremius</i>	reptile	running	ectotherm	0.0485	18	13.36	18	carnivore
<i>Varanus giganteus</i>	reptile	running	ectotherm	2.9667	18	31.57	18	carnivore
<i>Varanus gilleni</i>	reptile	running	ectotherm	0.0271	18	8.028	18	carnivore
<i>Varanus glauerti</i>	reptile	running	ectotherm	0.0357	18	11.12	18	carnivore
<i>Varanus gouldii</i>	reptile	running	ectotherm	0.4294	18	20.59	18	carnivore
<i>Varanus kingorum</i>	reptile	running	ectotherm	0.0183	18	9.36	18	carnivore
<i>Varanus mertensi</i>	reptile	running	ectotherm	1.0323	18	12.85	18	carnivore
<i>Varanus mitchelli</i>	reptile	running	ectotherm	0.1513	18	12.35	18	carnivore
<i>Varanus panoptes</i>	reptile	running	ectotherm	2.425	18	21.24	18	carnivore
<i>Varanus pilbarensis</i>	reptile	running	ectotherm	0.0303	18	10.19	18	carnivore
<i>Varanus rosenbergi</i>	reptile	running	ectotherm	1.025	18	18.97	18	carnivore
<i>Varanus scalaris</i>	reptile	running	ectotherm	0.1021	18	9.94	18	carnivore
<i>Varanus storri</i>	reptile	running	ectotherm	0.0269	18	9.18	18	carnivore
<i>Varanus tristis</i>	reptile	running	ectotherm	0.0983	18	14.22	18	carnivore
<i>Varanus varius</i>	reptile	running	ectotherm	7.7	18	14.51	18	carnivore
<i>Euphausia superba</i>	arthropod	swimming	ectotherm	0.002	91	1.66	48	herbivore
<i>Aptenodytes forsteri</i>	bird	swimming	endotherm	29.75	56	10.8	49	carnivore
<i>Aptenodytes patagonicus</i>	bird	swimming	endotherm	14	101	12.1	101	carnivore
<i>Pygoscelis adeliae</i>	bird	swimming	endotherm	3.36	11	13.68	11	carnivore
<i>Pygoscelis antarcticus</i>	bird	swimming	endotherm	4.5	101	32	101	carnivore
<i>Pygoscelis papua</i>	bird	swimming	endotherm	8.2	101	36	101	carnivore
<i>Acanthocybium solandri</i>	fish	swimming	ectotherm	13.31	11	77.4	11	carnivore
<i>Acanthocybium solandri</i>	fish	swimming	ectotherm	16.64	79	77	101	carnivore
<i>Alburnus alburnus</i>	fish	swimming	ectotherm	0.001	5	1.8	5	carnivore
<i>Alosa finita</i>	fish	swimming	ectotherm	0.0297	5	2.7	5	carnivore

<i>Alosa pseudoharengus</i>	fish	swimming	ectotherm	0.27	11	15.84	11	carnivore
<i>Anguilla anguilla</i>	fish	swimming	ectotherm	2.16	8	4.1	8	carnivore
<i>Argyrosomus regius</i>	fish	swimming	ectotherm	0.0295	5	4.07	5	carnivore
<i>Barbatula barbatula</i>	fish	swimming	ectotherm	0.0177	78	3.89	78	carnivore
<i>Carassius auratus</i>	fish	swimming	ectotherm	0.00343	11	2.7	11	carnivore
<i>Carassius auratus</i>	fish	swimming	ectotherm	0.020	8	10.8	8	carnivore
<i>Carassius auratus</i>	fish	swimming	ectotherm	0.276	6	7.2	6	carnivore
<i>Carassius leucas</i>	fish	swimming	ectotherm	9.53	5	14.59	5	carnivore
<i>Carassius leucas</i>	fish	swimming	ectotherm	40.07	5	18.76	5	carnivore
<i>Carcharodon carcharias</i>	fish	swimming	ectotherm	800	101	40	101	carnivore
<i>Clupea harengus</i>	fish	swimming	ectotherm	0.15625	8	6.12	8	carnivore
<i>Clupea harengus</i>	fish	swimming	ectotherm	7.57E-05	90	0.5004	90	carnivore
<i>Clupea harengus</i>	fish	swimming	ectotherm	1.30E-04	90	0.5472	90	carnivore
<i>Cottus gobio</i>	fish	swimming	ectotherm	0.0190	78	4.032	78	carnivore
<i>Cottus gobio</i>	fish	swimming	ectotherm	0.0688	78	4.92	78	carnivore
<i>Cyprinus carpio</i>	fish	swimming	ectotherm	0.0483	78	3.72	78	omnivore
<i>Cyprinus carpio</i>	fish	swimming	ectotherm	0.3277	78	4.83	78	omnivore
<i>Cyprinus carpio</i>	fish	swimming	ectotherm	0.0055	5	2.00	5	omnivore
<i>Cyprinus carpio</i>	fish	swimming	ectotherm	0.087	5	6.12	5	omnivore
<i>Esox lucius</i>	fish	swimming	ectotherm	0.145	5	7.56	5	carnivore
<i>Esox lucius</i>	fish	swimming	ectotherm	1.18	5	5.33	5	carnivore
<i>Gadus morhua</i>	fish	swimming	ectotherm	1.76	8	7.56	8	carnivore
<i>Gadus morhua</i>	fish	swimming	ectotherm	2.18E-05	90	0.288	90	carnivore
<i>Galeocerdo cuvier</i>	fish	swimming	ectotherm	550	101	32	101	carnivore
<i>Helicolenus dactylopterus</i>	fish	swimming	ectotherm	0.493	5	3.53	5	carnivore
<i>Istiompax indica</i>	fish	swimming	ectotherm	150	10	130	10	carnivore
<i>Istiophorus albicans</i>	fish	swimming	ectotherm	90	101	110	101	carnivore
<i>Istiophorus albicans</i>	fish	swimming	ectotherm	90	101	108	10	carnivore
<i>Isurus oxyrinchus</i>	fish	swimming	ectotherm	105	101	67.68	103	carnivore
<i>Isurus oxyrinchus</i>	fish	swimming	ectotherm	300	101	50	101	carnivore
<i>Leuciscus leuciscus</i>	fish	swimming	ectotherm	0.01	11	4.68	11	herbivore
<i>Leuciscus leuciscus</i>	fish	swimming	ectotherm	0.03375	11	6.3	11	herbivore
<i>Leuciscus leuciscus</i>	fish	swimming	ectotherm	0.08	11	7.92	11	herbivore

<i>Leuciscus leuciscus</i>	fish	swimming	ectotherm	0.279	6	8.64	6	herbivore
<i>Leuciscus leuciscus</i>	fish	swimming	ectotherm	0.184	5	6.12	5	herbivore
<i>Makaira nigricans</i>	fish	swimming	ectotherm	153.5	95	75	10	carnivore
<i>Melanogrammus aeglefinus</i>	fish	swimming	ectotherm	0.741	8	6.48	8	carnivore
<i>Merlangius merlangus</i>	fish	swimming	ectotherm	0.08	8	5.76	8	carnivore
<i>Merluccius merluccius</i>	fish	swimming	ectotherm	0.0237	5	2.84	5	carnivore
<i>Micropterus salmoides</i>	fish	swimming	ectotherm	0.276	5	3.17	5	carnivore
<i>Mugil cephalus</i>	fish	swimming	ectotherm	0.026	5	2.20	5	omnivore
<i>Perca fluviatilis</i>	fish	swimming	ectotherm	0.0184	5	2.38	5	carnivore
<i>Platichthys flesus</i>	fish	swimming	ectotherm	1.21E-05	90	0.234	90	carnivore
<i>Pleuronectes platessa</i>	fish	swimming	ectotherm	3.57E-04	11	0.2304	11	carnivore
<i>Pleuronectes platessa</i>	fish	swimming	ectotherm	5.71E-04	11	0.4104	11	carnivore
<i>Pleuronectes platessa</i>	fish	swimming	ectotherm	0.15625	8	4.64	8	carnivore
<i>Pollachius virens</i>	fish	swimming	ectotherm	0.266	8	7.2	8	carnivore
<i>Rutilus rutilus</i>	fish	swimming	ectotherm	0.0057	78	2.34	78	omnivore
<i>Rutilus rutilus</i>	fish	swimming	ectotherm	0.1275	78	5.02	78	omnivore
<i>Salmo irideus</i>	fish	swimming	ectotherm	0.551	6	9.72	6	carnivore
<i>Salmo irideus</i>	fish	swimming	ectotherm	0.235	5	6.12	5	carnivore
<i>Salmo salar</i>	fish	swimming	ectotherm	0.0023	5	0.472	5	carnivore
<i>Salmo salar</i>	fish	swimming	ectotherm	0.0048	5	0.601	5	carnivore
<i>Salmo salar</i>	fish	swimming	ectotherm	0.0078	5	0.778	5	carnivore
<i>Salmo salar</i>	fish	swimming	ectotherm	6.66	5	21.6	5	carnivore
<i>Salmo salar</i>	fish	swimming	ectotherm	7.85	5	17.532	5	carnivore
<i>Salmo trutta</i>	fish	swimming	ectotherm	0.12167	8	8.424	8	carnivore
<i>Salmo trutta</i>	fish	swimming	ectotherm	0.54872	8	11.52	8	carnivore
<i>Salmo trutta</i>	fish	swimming	ectotherm	0.0341	5	3.312	5	carnivore
<i>Salmo trutta fario</i>	fish	swimming	ectotherm	0.0217	78	4.54	78	carnivore
<i>Salmo trutta fario</i>	fish	swimming	ectotherm	0.969	5	12.6	5	carnivore
<i>Scardinius erythrophthalmus</i>	fish	swimming	ectotherm	0.0188	5	4.104	5	omnivore
<i>Scardinius erythrophthalmus</i>	fish	swimming	ectotherm	0.299	5	4.68	5	omnivore
<i>Scomber scombrus</i>	fish	swimming	ectotherm	0.54872	8	5.72	8	carnivore
<i>Scomber scombrus</i>	fish	swimming	ectotherm	0.0252	5	2.92	5	carnivore
<i>Sphyræna argentea</i>	fish	swimming	ectotherm	4.5	101	44	101	carnivore

<i>Sphyræna barracuda</i>	fish	swimming	ectotherm	26.56	5	43.89	5	carnivore
<i>Squalinus cephalus</i>	fish	swimming	ectotherm	0.0015	5	0.864	5	omnivore
<i>Tetrapturus audax</i>	fish	swimming	ectotherm	163	101	81	101	carnivore
<i>Thunnus albacares</i>	fish	swimming	ectotherm	9.41	11	74.88	11	carnivore
<i>Thunnus albacares</i>	fish	swimming	ectotherm	13.11	82	75	82	carnivore
<i>Thunnus orientalis</i>	fish	swimming	ectotherm	250	101	70	101	carnivore
<i>Thunnus thynnus</i>	fish	swimming	ectotherm	27.22	5	70.81	5	carnivore
<i>Trachinus vipera</i>	fish	swimming	ectotherm	0.0224	5	1.44	5	carnivore
<i>Trigla sp</i>	fish	swimming	ectotherm	0.21	5	4.72	5	carnivore
<i>Trisopterus luscus</i>	fish	swimming	ectotherm	0.0165	5	1.98	5	carnivore
<i>Xiphias gladius</i>	fish	swimming	ectotherm	98	101	97	101	carnivore
<i>Balaenoptera musculus</i>	mammal	swimming	endotherm	108400	11	37.08	11	carnivore
<i>Delphinapterus leucas</i>	mammal	swimming	endotherm	1380	56	22	59	carnivore
<i>Delphinus delphis</i>	mammal	swimming	endotherm	118	68	28.8	68	carnivore
<i>Delphinus delphis</i>	mammal	swimming	endotherm	95.32	11	37.08	11	carnivore
<i>Enhydra lutris</i>	mammal	swimming	endotherm	30	101	9	101	carnivore
<i>Megaptera novaeangliae</i>	mammal	swimming	endotherm	30000	101	27	101	carnivore
<i>Megaptera novaeangliae</i>	mammal	swimming	endotherm	30000	56	23.3	58	carnivore
<i>Orcinus orca</i>	mammal	swimming	endotherm	4100	101	48	101	carnivore
<i>Orcinus orca</i>	mammal	swimming	endotherm	4300	56	25	63	carnivore
<i>Orcinus orca</i>	mammal	swimming	endotherm	4300	56	55.44	99	carnivore
<i>Physeter catodon</i>	mammal	swimming	endotherm	10100	56	39	84	carnivore
<i>Pseudorca crassidens</i>	mammal	swimming	endotherm	1378.5	68	28.8	68	carnivore
<i>Pusa hispida</i>	mammal	swimming	endotherm	88.07	56	30	100	carnivore
<i>Tursiops truncatus</i>	mammal	swimming	endotherm	250	101	35	101	carnivore
<i>Tursiops truncatus</i>	mammal	swimming	endotherm	250	68	29.5	68	carnivore
<i>Zalophus californianus</i>	mammal	swimming	endotherm	158	56	40	97	carnivore
<i>Aequipecten opercularis</i>	mollusc	swimming	ectotherm	0.0143	50	0.9	72	omnivore
<i>Illex illecebrosus</i>	mollusc	swimming	ectotherm	0.6	61	5.04	61	carnivore
<i>Loligo vulgaris</i>	mollusc	swimming	ectotherm	0.35	72	7.2	72	carnivore
<i>Octopus vulgaris</i>	mollusc	swimming	ectotherm	17	101	40	101	carnivore
<i>Sepia officinalis</i>	mollusc	swimming	ectotherm	0.25	72	2.88	72	carnivore
<i>Dermochelys coriacea</i>	reptile	swimming	ectotherm	420	56	35.28	99	carnivore

When only body length was given, the following mass-lengths regressions were used to calculate body mass:

<i>terrestrial arthropods</i>	Jurkschat L. Allometric scaling relationships in the morphology of temperate and tropical arthropods. Master's Thesis. Univ. of Göttingen (2015)
<i>others</i>	Peters, R. H. <i>The ecological implications of body size</i> . 2 , (Cambridge University Press, 1986).

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