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Supplementary

Table A. Hematological parameters in mammalian species.

Animal	species	HCT/ Pcv %	Hb %	Rbc # X 106 µL-1	Mcv fL	Wbc # µL-1	references
Sub-class Prototheria							
Order Monotremata							
Platypus	Ornithorhynchus anatinus	49	18	8.97	52	30,500	Mean of Clark, 2004 and Geraghty et al., 2011
Short-beaked Echida	Tachyglossus aculeatus	42.9	15.9	6.7	66.6	10,700	mean 9 studies cited in Clark, 2004
Long beaked Echida	Zaglossus bruijnii	29	12.6	1.5	198		Cited Clark, 2004
Mean		40.3 3 5.93	15.5 + (3) 1.57	5.72 + (3) 2.21	105.5 + (3) 46.5	20,600 + (2) 10,000	
Sub-class Marsuliala							
Order Dasyuromorphia							
Family Dasyuridae							
Brown Antechinus	Antechinus stuartii	44.6	14.1	9. 34	42.2	5,425	Mean 3 studies cited in Clark, 2004
Eastern Quoll	Dasyurus viverrinus	45	16.9	10.3	43.3	4,967	Mean from 4 studies cited in Clark, 2004
Northern Quoll	Dasyurus hallucatus	46.2	15.6	-		11,300	Mean from 3 studies cited in Clark, 2004
Western Quoll	Dasyurus geoffroii	40.9	14.5	7.91	53	7,112	Mean from 4 studies cited in Clark, 2004
Fat-tailed Dunnart	Sminthopsis crassicaudata	34.5	11.4	6.75	39.4	3,300	Mean from 3 studies cited in Clark, 2004
Striped-faced Dunnart	Sminthopsis macroura	-	-	6.65	-	8,550	Mean from 3 studies cited in Clark, 2004
Kowari	Dasyuroides byrnei	55	16.7	8.1	64	-	Clark, 2004
Red-tailed phascogale	Phascogale calura	47.5	16.4	11.15	45	3,900	Mean from 2 studies cited in Clark, 2004
Brush-tailed phascogale	Phascogale tapoatafa	46	16.15	9.2	51	3,150	Clark, 2004
Tasmanian devil	Sarcophilus harrisii	41.3	15.46	6.42	67	11,887	Mean 5 studies cited in Clark, 2004
Mean family and order		44.6 + (9) 1.86	15.25 + (9) 0.58	8.31 + (9) 0.59	50.6 + (8) 3.62	6621 + (9) 1,107	
Order Didelphimorphia							
Family Didelphidae							
American Woolly Opossum	Caluromys derbianus	37	13.8	4.7	78.8	11,800	Rothstein and Hunsaker, 1972
Grayshort-tailed Opossum	Monodelphis domestica	34.9	13.1	6.61	53	15,190	Evans et al., 2010
Virginia Opossum	Didelphis virginiana	39	11.2	4.9	82	10,000	Youatt et al., 1961
Mean family		37 + (3) 1.19	12.7 + (3) 0.78	5.4 + (3) 0.61	71.3 + (3) 9.19	12,330 + (3) 1523	
Order Diprotodontia							
Family Macropodidae							
Agile Wallaby	Macropus agilis	49	16.7	5.38	92.5	6,080	Clark, 2004
Antilopine Kangaroo	Macropus antilopinus	45	15.3	7.37	61	8,500	Cited in Clark, 2004

Black Striped Wallaby	Macropus dorsalis	52	17.3	6.84	76	5,350	Clark, 2004
Common Wallaroo	Macropus robustus	42	12.4	7.37	78	7,100	mean 5 studies cited in Clark, 2004
Eastern Grey Kangaroo	Macropus giganteus	45.1	15.3	5.86	81	10, 130	mean 5 studies cited in Clark, 2004
Parma Wallaby	Macropus parma	47.2	14.8	7.11	68.7	5,100	Clark et al., 2003; Clark, 2004
Red Kangaroo	Macropus rufus	44.3	16.4	4.95	94.7	4,500	Mean from 9 studies cited in Clark, 2004
Red-necked Wallaby	Macropus rufogriseus	47.3	16.47	5.42	87.5	4,975	Mean 6 studies cited in Clark, 2004
Tammar Wallaby	Macropus eugenii	37.5	14.2	5.9	73.2	4.75	Mean 6 studies cited in Clark, 2004
Western Grey Kangaroo	Macropus fuliginosus	47.5	16.6	5.25			Cited in Clark, 2004
Whip-tail Wallaby	Macropus parryi	52	17.4	4.93	113	4,200	Clark, 2004
Bridled Nail-tail Wallaby	Onychogalea fraenata	51	17.1	5.65	91	9,520	Clark, 2004
Northern Nail-tail Wallaby	Onychogalea unguifera	62	21.7	5.8	107	3,310	Clark, 2004
Swamp Wallaby	Wallabia bicolor	52	17.3	6.86	71	6,400	Clark, 2004
Allied Rock-wallaby	Petrogale assimilis	41.2	13.5	5.01	82.5	6,380	Mean 3 studies cited in Clark, 2004
Brush-tailed Rock-Wallaby	Petrogale penicillata	42	14.9	5.9	70	7,400	Barnes et al., 2008
Proserpine Rock-wallaby	Petrogale persephone	46	14.9	6.81	65	7,680	Clark, 2004
Purple-necked Rock-wallaby	Petrogale purpureicollis	55	18.9	5.87	94	7,610	Clark, 2004
Unadorned Rock-wallaby	Petrogale inornata	37	11.6	5.09	72	6,230	Clark, 2004
Yellow-footed Rock-wallaby	Petrogale xanthopus	44	14.6	5.54	79	7,800	Clark, 2004
Rufous Hare-Wallaby	Lagorchestes hirsutus	55	18.9	8	69	-	Clark, 2004
Spectacled Hare-Wallaby	Lagorchestes conspicil-latus	51.5	17.5	6.65	69	5,269	Clark, 2004
Quokka	Setonix brachyurus	41	14.3	6.19	62.2	13,000	Mean 9 studies cited in Clark, 2004
Red-legged Pademelon	Thylogale stigmatica	52	17.03	7.36	70	4,985	Mean 3 studies cited in Clark, 2004
Tasmanian Pademelon	Thylogale billardierii	46.5	16.22	6.32	77.2		Mean 2 studies cited in Clark, 2004
Goodfellow's Tree-kangaroo	Dendrolagus goodfel-lowi	50	17.5	6.1	81.4	6,800	Clark, 2004
Lumholtz's tree-kangaroo	Dendrolagus lumholtzi	46	15.5	5.72	81	8,030	Clark, 2004
Matschie's Tree- kangaroo	Dendrolagus matschiei	46.2	17	6.18	77	5,700	Mean 2 studies cited in Clark, 2004
Family Mean		47.4 + (28) 1.05	16.1 + (28) 0.39	6.09 + (28) 0.16	79.8 + (28) 2.53	6540 + (28) 515	
Family Phascolarctidae							
Koala	Phascolarctos cinereus	38.96	12.19	3.54	112.2	7,125	Mean 13 studies cited in Clark, 2004
Family Phalangeridae							
Common Brush-tailed Possum	Trichosurus vulpecula	40.6	13.3	6.09	67	8,027	mean 9 studies cited in Clark, 2004
Mountain Brushtail Pos-sum	Trichosurus cunning-hami	36	12.3	4.95	74.1	4,450	Clark, 2004
Scaly-tailed Possum	Wyulda squamicaudat	43	14	-	-	4,400	mean 2 studies cited in Clark, 2004
Family Potoroidae							
Boodie	Bettongia lesueur	40	10.7				Clark, 2004
Gilbert's Potoroo	Potorous gilbertii	36	12.58	6.2	61.8	3,120	Vaughan et al., 2009 (9.2)
Long-nosed Potoroo	Potorous tridactylus	49	15.7	8.95	-	7,630	Mean 3 studies cited in Clark, 2004
Rufous Rat-kangaroo	Aepyprymnus rufescens	50	16.5	6.08	83	6,490	Clark, 2004
Family Mean		42.7 + (4) 3.42	13.9 + (4) 1.35	7.08 + (4) 0.94			
Family Pseudocheiridae							

Common Ringtail Possum	Pseudocheirus peregrinus	44	14.25	5.57	79.25	6,450	mean 2 studies cited in Clark, 2004
Herbert River Ringtail Possum	Pseudochirulus herbertensis					4,900	Clark, 2004
Greater Glider	Petauroides volans	37	12.15	5.4	66	3,950	Clark, 2004
Sugar Glider	Petaurus breviceps	45.5	14.5	7.4	64	15,950	Clark, 2004
Scaly-tailed possum	Wyulda squamicaudata	43	14.05	-	-	4,400	mean 2 studies cited in Clark, 2004
Family Vombatidae							
Common Wombat	Vombatus ursinus	38.08	12.6	5.438	69.1	11,800	Mean 6 studies cited in Clark, 2004
Northern Hairy-nosed Wombat	Lasiorhinus krefftii	36.5	12.3	4.27	85.5	7490	Reiss et al., 2008
Southern Hairy-nosed Wombat	Lasiorhinus latifrons	41	13.5	5.04	80.5	11,800	Mean 5 studies cited in Clark, 2004
Mean Order		45.2 +(43) 0.91	15.1 +(43) 0.35	5.98 +(39) 0.17	78.9 + (38) 2.17	6793 + (39) 470	
Order Peramelemorphia							
Family Thalacomyidae							
Bilby	Macrotis lagotis	55	17.1	7.47	73	13,500	Clark, 2004
Family Peramelidae							
Eastern Barred Bandicoot	Perameles gunnii	45	16.1	-	-	2,800	Clark, 2004
Northern Brown Bandicoot	Isoodon macrourus	41	-	-	-	15,150	Mean 2 studies cited in Clark, 2004
Southern Brown Bandicoot	Isoodon obesulus	44	14.6	-	-	3,700	Clark, 2004
Mean Order		46.2 + (4) 3.04	15.9 + (4) 0.73			8788 + (4) 3220	
Super-order Afrotheria							
Order Proboscidea							
African Elephant	Loxadonta africana		7.08	3.77		11,000	Debbie and Clausen, 1975
Asian Elephant	Elephas maximus	38	12.7	3.2	118	18,000	Silva and Kuruwita, 1993
Order Hyracoidea							
Rock hyraxes	Procavia capensis	31.4	8.3	4.66	69.5	16	Aroch et al., 2007
Order Sirenia							
West Indian Manatee	Trichechus manatus	35.1	11.2	2.76	128	5980	Harvey et al., 2009
Super-order Xenarthra							
Order Cingulata							
Big Hairy Armadillo	Chaetophractus villosus	34.7	19.95	3.83	91.6	9,717	Casanave and Polini, 1999
Nine-banded armadillo	Dasypus novemcinctus	38		3		12,287	Deem et al., 2009
Three-Banded armadillo	Tolypeutes matacus	33		3.1		10,048	Deem et al., 2009
Pichi	Zaedyus pichiy	49.3	16	4.3	120.2	4700	Superina et al., 2008
Order Pilosa							
Hoffmann's Two-Toed Sloths	Choloepus hoffmanni	39.9	14.25	3.15	122.7	13,500	Wallace and Oppenheim, 1996
Southern Two -toed Sloth	Choloepus didactylus	35.7	11.5	2.6	135.9	18,600	Vogel et al., 1999
Giant Anteater	Myrmecophaga tridactyla	37.7	11.8	2.36	165.2	11,870	Sanches et al., 2013
Collared Anteater	Tamandua tetradactyla	34.8	10.73	3.15	116.1	8,070	Sanches et al., 2013
Order means		37.0 + -4 1.13	12.1 + -4 0.76	2.81 +(4) 0.20	135 + (4) 10.9	13,010 4 2183	
Super-order Xenarthra mean		37.9 + -8 1.81	14.0 + -6 1.43	3.17 +(4) 0.22	125.3 +(4) 9.93	11,099 +(4) 1,447	
Order Cetacea							
Family Balaenopteridae							
Blue Whale	Balaenoptera musculus		9.6	3.84			Clark, 2004

Bryde's Whale	Balaenoptera edeni	48	15.4	3.6	133	6,000	Priddel and Wheeler, 1998
Bowhead whale	Balaena mysticetus	59	20.3	3.3	178		Castellini et al., 2010
Common Minke Whale	Balaenoptera acuto-rostrata	50	18.25				Clark, 2004
Fin Whale	Balaenoptera physalus					9,550	Clark, 2004
Sei Whale	Balaenoptera borealis		15.6				Clark, 2004
Family Eschrichtiidae							
Gray Whale	Eschrzchtzus robustus	48	14	3.3	129		Cited in Priddel and Wheeler, 1998
Family Delphinidae							
Killer Whale	Orcinus orca	44.4	15.9	4.03	110.8	8,550	mean 7 studies summarized in Clark, 2004
False Killer Whale	Pseudorca crassidens	48	15.2	4.43	108	7,900	Clark, 2004
Short-finned Pilot Whale	Globicephala macro-rhynchus	43.3	15.7	3.69	116	8,530	mean 3 studies summarized in Clark, 2004
Common Bottlenose Dolphin	Tursiops truncatus	44.7	15.4	3.9	115.2	9,002	mean 9 studies Clark, 2004
Hector's Dolphin	Cephalorhynchus hectori		19.45			6,350	Clark, 2004
Pacific White-sided Dolphin	Lagenorhynchus obliquidens	48.9	17.1	5.32	92.4	5,928	Shirai and Sakai, 1998
Risso's Dolphin	Grampus griseus	51.5	21.4	4.63	112.5	5,000	mean 2 studies Clark, 2004
Short-beaked Common Dolphin	Delphinus delphis	50.5	17.7	4.75	107	4,730	Clark, 2004
Striped Dolphin	Stenella coeruleoalba	56.5	20.9	-	-	-	Clark, 2004
Family mean		48.5 + (8) 1.56	17.6 + (9) 0.80	4.39 + (7) 0.21	108.8 + (7) 3.02	6999 + (8) 602	
Family Monodontidae							
Beluga whale	Delphinapterus leucas	53	19.9	3.7	145.4	18,500	Norman et al., 2012
Family Physeteridae							
Sperm whale	Physeter macrocephalus	42	15.1	2.1	195		Clark, 2004
Pygmy Sperm Whale	Kogia breviceps	50	15.7				Clark, 2004
Mean Order		49.3 + (15) 1.25	16.8 + (18) 0.68	3.89 + (13) 0.22	128.5 + (12) 8.81	8,185 + (11) 1,201	
Order Carnivora							
Family Phocidae							
Crab-eater Seal	Lobodon carcinophaga		20	4.31			mean 5 studies Clark, 2004
Harbor Seal	Phoca vitulina	57.8	19.8	5.81	102	8100	Gregg et al., 2010
Harp Seal	Phoca groenlandica	55	23	3.85	135	7400	Boily et al., 2006
Hooded Seal	Cystophora cristata	61.5	26.3	3.88	141.5	7800	Boily et al., 2006
Leopard Seal	Hydrurga leptonyx	50	18.9	4.59	105.5		mean 2 studies Clark, 2004
Northern Elephant Seal	Mirounga angustirostris	57	22.3	2.5	225	10,612	Yochem et al., 2008
Southern Elephant Seal	Mirounga leonina	59.5	19.5	5.38	184.7	15,300	Mean 6 studies cited in Clark, 2004
Ringed Seal	Pusa hispida	51	26	4.2	122		Castellini et al., 2010
Weddell Seal	Leptonychotes weddellii	50.1	21.4	3.73	168		Mean 6 studies cited in Clark, 2004
Mean Family		55.2 + (8) 1.58	21.9 + (9) 0.92	4.25 + (9) 0.32	148 + (8) 14.9	9842 + (5) 1476	
Family Otariidae							
Antarctic Fur Seal	Arctocephalus gazella	49	-	6.2	78.5	-	Fayolle et al., 2000
Australian Sea Lion	Neophoca cinerea	56.3	19	5.53	102.9	11,300	Needham et al., 1980
California Seal Lion	Zalophus californianus	48.5	17.5	4.5	106.5	7350	Calculated from Norberg et al., 2011
New Zealand Sea lion	Phocarctos hookeri	51	-	-	-	-	
Northern Fur Seal	Callorhinus ursinus	46	15.1	4.6	101	9,310	Norberg et al., 2011

Steller Sea lion	Eumetopias jubatus		17.6	4.3	115.2		Calculated from Richmond et al., 2005
Mean Family		50.2 + (5) 1.73	17.3 + (4)	5.03 + (4) 0.36	100.8 + (5)	9320	
					6.08	+ (3)	
			8.1			1142	
Family Mustelidae							
Eurasian otter	Lutra lutra	54.7	15.1	6.4	85.2	7,320	Fernández-Morán et al., 2001
North American River Otter	Lontra Canadensis	47.6	15.1	10.99	43.3	11,300	Tocidlowski et al., 2000
Sea Otter	Enhydra lutris	55.4	17.92	5.11	110.2	8,660	Williams and Pulley, 1983
Giant Otter	Pteronura brasiliensis	50.7	16.4	6.42	74.6	5,400	Rosas et al., 2008
European Badger	Meles meles	33.2	11.2	7.1	46.2	6,600	Mahmood et al., 1988
Ferret	Mustela putorius	45.9	15.1			8597	Lee et al., 1982
Long-tailed Weasel	Mustela frenata	44	12.3	7.4	36	8,800	Youatt et al., 1961
American Mink	Mustela vison	46.6	15.5	7.9	59	5,885	Weiss et al., 1994
Family Feverridae							
Common Palm Civet	Paradoxurus hermaph-roditus	41.7	13.3	13.3	32.5	6,262	Salakij et al., 2007
Family Ursidae							
American Black Bear	Ursus americanus	45.5	15.3	6.75	67.5	14,810	Schoeder, 1987
Andean Bear	Tremarctos ornatu	43	14.4	7.87	53.2	9,110	Castellanos et al., 2010
Asiatic Black Bear	Ursus thibetanus	43.2	15.3	6.44	66.4	8,934	Pospísil et al., 1987a;
							Chang et al., 2006
Brown Bear	Ursus arctos	46.7	15.7	6.48	71.9	12,900	Kusak et al., 2005
Malayan Sun Bear	Helarctos malayanus	36.7	13	5.06	73.6	10,140	Bush et al., 1980
Sloth Bear	Melursus ursinus	42.25	15.2	5.92	73.8	12,460	Mean Bush et al., 1980; Shan-mugam et al., 2008
Spectacled Bear	Tremarctos ornatus	44.3	15.4	8.43	50.4	6,320	Bush et al., 1980
Family mean		43.1 + (7) 1.21	14.9 + (7) 0.35	6.71 + (7) 0.43	65.3 + (7) 3.64	10,668 + (7) 1091	
Family Ailuridae							
Red Panda	Ailurus fulgens	42.4		9		7050	Wolff et al., 1990
Ailurus fulgens							
Family Mephitidae							
Striped Skunk	Mephitis mephitis	38.8	12.2	7.33	53	7,670	Mustonen et al., 2013
Western Spotted Skunk	Spilogale gracilis	33.6	10.4	7.54	44.2	8540	Crooks et al., 2003
Family Procyonidae							
Raccoon	Procyon lotor	31	8.3	8.7	37	11,300	Youatt et al., 1961
Family Felidae							
Canada Lynx	Lynx canadensis	39	14	7.4	52	9300	Moen et al., 2010
Eurasian Lynx	Lynx lynx	39.2	14.8	8.51	46.4	7920	Pospísil et al., 1987b
Domestic cat	Felis domesticus						O'Brien et al., 1998
European Wildcat	Felis silvestris	37.7	12.1	9.38	40.4	14,670	Marco et al., 2000
Sand Cat	Felis margarita	46.2	13.6	9.4		6,800	Chege et al., 2013
Bobcat	Felis rufus	36.44	11.88	8.03	44.42	11,880	Miller et al., 1999
Fishing Cat	Felis viverrina	41.5	12.1	6.9	63.1	7,070	Prihirunkit et al., 2007
Cougar	Felis concolor	43	16.39	8.51	46.3	7730	Pospísil et al., 1987b
Jungle Cat	Felis chaus	36	12	6.14	58.3	12,580	Salakij et al., 2010
Pampas Cat	Leopardus colocolo	47.8		6.8		8,400	Beltrán et al., 2009
Flat-headed Cat	Prionailurus planiceps*	27.5	9.15	6	45.9	13,900	Salakij et al., 2008b
* Infected with Hepatozoa HCT, Hb, rbc# excluded from calculations as outside mean +/- 2SD and wbc # excluded due to diseased state							

Clouded Leopard	Neofelis nebulosa	41.4	13.53	7.09	58.6	14,550	Mean: Pospísil et al., 1987b; Singh et al., 1999; Salakij et al., 2008a
Jaguar	Panthera onca	36.65	12.255	7.96	46.3	16,175	Mean: Pospísil et al., 1987b; Mussart et al., 2009
Tiger	Panthera tigris	53.4	15.7	8.7	54.45	12,557	Mean: Pospísil et al., 1987b; Singh et al., 1999; Sajjad et al., 2012
Leopard	Panthera pardus	44.9	14.6	8.58	53.55	10,700	Mean: Pospísil et al., 1987b; Singh et al., 1999
Lion	Panthera leo	40.85	13.85	8.47	48.8	14,375	Mean: Pospísil et al., 1987b; Maas et al., 2013
Cheetah	Acinonyx jubatus	38.45	13.375	7.445	52	9,850	Mean: Pospísil et al., 1987b; Bechert et al., 2002
Mean Family		41.5 + (15) 1.26	13.6 + (14) 0.38	7.95 + (15) 0.25	51.1 + (13) 1.8	10,970 + (15) 800	
				Or	50.8 + (14) 1.7	including	Flat-headed Cat
Family Herpestidae							
Egyptian Mongoose	Herpestes	41.7	14.9	8.6	48.3	13,900	Paromares et al., 1992
	Ichneumon						
Family Hyaenidae							
Striped Hyena	Hyaena hyaena	44.5	17.8	8.11	51.2	13,800	Pospísil et al., 1987a
Family Canidae							
Hunting Dog	Lycaon pictus	43.3	17.34	8.45	50.95	12,880	Pospísil et al., 1987a
Grey Wolf	Canus lupus	46.5	17.2	7.45	63.8	7,330	Pospísil et al., 1987a
stray dogs		40.1	12.4	6.1	78.2	1000	55.9
Coyote	Canis latrans	49	14.7	7.7	63.4	8,900	Gates and Goering, 1976
Golden Jackal	Canis aureus	38.4	12.6	6.28	60	16,800	Aroch et al., 2005
Asian Wild Dog	Cuon alpinus					16,375	Salakij et al., 2000
Maned Wolf	Chrysocyon brachyurus	40.7	13.1	5	82.1	10,200	May-Júnior et al., 2009
Crab-eating Fox	Cerdocyon thous	38.1	12.9	4.27	89.8	7,350	Mattoso et al., 2012
Ranch Gray Fox	Urocyon cinereoargenteus	48	17	10.8		9,300	Benn et al., 1986
Family Eupleridae							
Fossa	Cryptoprocta ferox	48.4	15.2	9.6	51.3	9300	Langer et al., 2013
Order Pholidota							
Tree Pangolin	Manis tricuspis	40.4	10	4.2	97.7	4,800	Oyewale et al., 1997b
Order Rodentia							
Family Cricetidae							
Hispid Cotton Rat	Sigmodon hispidus	34.4	10.5	4.8	70.3		Robel et al., 1996
Norwegian Lemming	Lemmus lemmus	41.9	14.4	9.91	42.3	2,535	Wiger, 1977
Muskrat	Ondatra zibethicus	46.6	16.1	5.95	78.3	10,780	Ahlers et al., 2011
Pine Vole	Microtus pinetorum	40.8	15	11	37.5	4,102	Harvey et al., 2008
Family Dipodidae							
Northern Birch Mouse	Sicista betulina	43.8	14.7	9.85	45.4	1,655	Wolk, 1985
Family Erethizontidae							
Brazilian Porcupine	Coendou prehensilis	33.75	11	3.6	94	7,900	Moreau et al., 2003
Black-tailed Hairy Dwarf Porcupine	Coendou melanurus	33	10.8	3.5	93.7	8,400	Moreau et al., 2003
Bristle-spined Rat or Thin-spined Porcupine Family Muridae	Chaetomys subspinosus	33.2	10.3	3.45	100.8	8,350	de Almeida Curi et al., 2012
Algerian mouse	Mus spretus	47	13.2	7	70.1	3,677	Mira and da luz Mathias, 1994
Carpentarian Rock-rat	Zyzomys palatalis	40	11.8	5.99	67	1,300	Old et al., 2007
Central Rock-rat	Zyzomys pedunculatus	51	12.2	6.22	64	8,550	Old et al., 2005

House Mouse	Mus musculus domesticus	51.2	13.5	7.13	67.8	3,675	Mira and da luz Mathias, 1994
Libyan Jird	Meriones libycus	39.9	12.4	6.36	45.9	8535	Mean of Madjdzadeh et al., 2011; Alagaili et al., 2013
Persian Jird	Meriones persicus			3.87		3,817	Madjdzadeh et al., 2011
Dusky-footed Wood Rat	Neotoma fuscipes	36.96	11.23	7.72	48.4	10,858	Weber et al., 2002
Plains Rat	Pseudomys australis	42	13.3	7.25	58	6,100	Old et al., 2005
Short-tailed Bandicoot Rat	Nesokia indica			4.51		4,828	Madjdzadeh et al., 2011
Spinifex Hopping-mouse	Notomys alexis	38	12.8	7.78	48.7	3200	Old et al., 2005
Indian Gerbil	Tatera indica			4.07		4,067	Madjdzadeh et al., 2011
Lab Rat				4.78		4,775	Madjdzadeh et al., 2011
Sand Rat	Psammomys obesus	41.15	11.9	6.72	61.8	5,345	Kane et al., 2012
Swamp rat	Rattus lutreolus	48	18.9	7.1	70	13,500	Clark, 2004
Wood Mouse	Apodemus sylvaticus	48	17.3	10.1	47.9	7,340	Rogival et al., 2006
Family Myocastoridae							
Coypu	Myocastor coypus	43	9.6	4.5	96.8	11,550	Martino et al., 2012
Family Nesomyidae							
Gambian Pouched Rat	Cricetomys gambianus	48.3	14.36	5.9	86.8	7,560	Oyewale et al., 1998
Family Sciuridae							
American Red Squirrel	Tamiasciurus hudsonicus	43	11.5	8.9	50	900	Youatt et al., 1961
Grey Squirrel	Sciurus carolinensis						Hoff et al., 1976
Fox Squirrel	Sciurus niger	44	11.4	8.5	58	3,600	Youatt et al., 1961
Woodchuck	Marmota monax	41	11.6	7.4	35	10,900	Youatt et al., 1961
Family Thryonomyidae							
Greater Cane Rat	Thryonomys swinderianus	41.5	14.2	8.4	71.9	10,733	Opara et al., 2006
Order Lagomorpha							
Eastern Cottontail Rabbit	Sylvilagus floridanus	43	11.5	6.3	69	7,900	Youatt et al., 1961
European Brown Hare	Lupus europaeus	60	20.8	10	60.5	3,190	Marco et al., 2003
Riparian Brush Rabbit	Sylvilagus bachmani	37.75	12.1	5.95	63.7	8050	Black et al., 2009
Order Artiodactyla							
Family Cervidae							
Axis deer	Axis axis	38	14.2	12.5	30.3	3,900	Hawkey and Hart, 1985
Barasingha	Cervus duvauceli	43	15.3	8.7	48.8	4,300	Hawkey and Hart, 1985
Elk	Cervus canadensis	67.2	19.2	11	62	8,628	Pedersen and Pedersen, 1975
Red Deer	Cervus elaphus	48.8	16.3	9.8	49.5	8,070	Shideler et al., 2002
Fallow deer	Dama dama	41.4	15.9	9.6	43.4	4,690	English and Lepherd, 1981
Persian Fallow Deer	Dama mesopotamica		15	7.76	49.9	3,260	Mohri et al., 2000
Marsh deer	Blastocerus dichotomus	41	14.09	4.75	48.1	9,450	Szabó et al., 2005
Moose	Alces alces	46	16.1	6.8	69	3,200	Rostal et al., 2012
Mule Deer	Odocoileus hemionus	48	18.2	13	37	3,900	DelGiudice et al., 1990
White-tailed Deer	Odocoileus virginianus	32	11.7	11.96	26.5	3980	Presidente et al., 1973
Père David's Deer	Elaphus davidianus	42	15.2	8.3	50.3	3,600	Hawkey and Hart, 1985
Pudú	Pudu pudu	51.7	19.7	11.2	48.2	7.997	
Reindeer	Rangifer tarandus	44	17.2	9.29	47.8	6,330	Catley et al., 1990.
Roe Deer	Capreolus capreolus	44	16.7	12.42	35.9	4,817	Montane et al., 2002
Rusa Deer	Cervus timorensis	35	13.3	6.2	58.1	7,000	Tomkins and Jonsson, 2005
Sambar Deer	Cervus unicolor	42	13.1	9.6	44.3	4,500	Gono, 1993
Sika Deer	Cervus nippon	28	10.7	9	31	2,300	Yamanaka, 1989.
Eld's Deer	Panolia eldii	397	12.3				Nimitsuntiwong et al., 2000
Family mean		42.0 + (15) 1.57	15.1 + (16) 0.60	9.65 + (14) 0.61	44 + (14)2.84	4,420 + (14) 601	
Family Bovidae							
Sub-family Aepycerotinae							
Impala	Aepyceros melampus	44.2	15	22.89		5,600	Drevemo et al., 1974
Sub-family Antilopinae							
Erlanger's Gazelle	Gazella erlangeri	50.8	18.97	12.98	39.3	6140	Aljumaah and Hussein, 2011

Goitered Gazelle	Gazella subgutturosa	51.6	18.85	11.7	45.1	10,080	Yaralioğlu et al., 2004
Grant's Gazelle	Gazella granti	40.9	15.7	9.64		2,580	Drevemo et al., 1974
Speke's Gazelle	Gazella spekei	46.6	17.5				Travis and Eby, 2006
Thompson's Gazelle	Gazella thomsonii	44.9	16.7	10.22		3,030	Drevemo et al., 1974
Sub-family Bovinae							
African Buffalo	Syncerus caffer	30.5	11.6	9.38	36	10,455	Mean of Drevemo et al., 1974; Beechler et al., 2009
American Bison	Bison bison	50	17.2			6,985	Marler, 1975
Greater Kudu	Tragelaphus strepsiceros	42	15.5	7.09	61.3	3,020	Pospísil et al., 1984a
Subfamily Caprinae							
Spanish Ibex	Capra pyrenaica	39.5	14	17.16	23	14,700	Casas-Díaz et al., 2008
Mountain Goat	Oreamnos americanus	41.5	13.3	9.7	43.5	9,500	Rice and Hall, 2007
Rocky Mountain Bighorn Sheep	Ovis Canadensis	53.1	18.6	10.1		8,824	Woolf and Kradel, 1970; McDonald et al., 1981
Stone Sheep	Ovis dalli	50.6	18.5	6,842		5,400	261
Big horn Sheep	Ovis canadensis			-		10,800	228
Domestic Sheep	Ovis aries	35	12.3	9		4,700	98
Family Giraffidae							
Giraffe	Giraffa camelopardalis	43	14.4	10.15			Drevemo et al., 1974
Sub-family Hippotraginae							
Roan Antelope	Hippotragus equinus	38	13.5	11.5	35.1	4,700	Pospísil et al., 1984a
Sable Antelope	Hippotragus niger	44	15.6	15.5	28.8	4,300	Pospísil et al., 1984a
Mountain Reedbuck	Redunca fulvorufula	53	17.87	8.69	59.9	3,520	Pospísil et al., 1984b
Waterbuck	Kobus ellipsiprymnus	44.7	15.35	11.24	40.7	4,890	Pospísil et al., 1984b
Lechwe	Kobus leche	53.8	19.61	8.39	68.8	4,500	Pospísil et al., 1984b
Mrs Gray's Waterbuck	Kobus megaceros	46.6	17.31	8.77	51.8	-	Pospísil et al., 1984b
Springbok	Antidorcas marsupialis	48	15.59	11.06	43.3	7,170	Pospísil et al., 1984b
Adax Antelope	Addax nasomaclatus	47.7	16.46	10.37	45.4	7,170	Pospísil et al., 1984a
Gemsbok Oryx	Oryx gazella	43	14.75	12.62	34.05	7,080	Pospísil et al., 1984a
Scimitar-horned Oryx	Oryx dammah	48.3	12.1	11.36	43.5	4,580	Pospísil et al., 1984a
Nyala	Tragelaphus angasii	48.8	14.87	9.93	55.1	4,050	Pospísil et al., 1984a
Common Eland	Taurotragus oryx	40.1	13.3	8.28	49.4	5245	Mean of Drevemo et al., 1974; Pospísil et al., 1984a
Bongo	Tragelaphus eurycerus	42	10.55	6.44	65.4	4,760	Pospísil et al., 1984a
Mountain Reedbuck	Redunca fulvorupula	43.3	15.4	8.34		2,200	Drevemo et al., 1974
Blue Wildebeest	Connochaetes taurinus	43	15.9	14.96		4610	Drevemo et al., 1974
Coke's Hartebeest	Alcelaphus buselaphus	41.5	16.1	9.49		4330	Drevemo et al., 1974
Topi	Damaliscus korrigum	38	13.6	11.76		3,560	Drevemo et al., 1974
Order Perissodactyla							
Feral horse	Equus caballus	47.5	17.7	9.3	50.7	6,900	Seal et al., 1985
Grevy's Zebra	Equus grevyi	45	14.3	9.5	49.1	7,600	Pospísil et al., 1985
Mountain Zebra	Equus zebra	43	16.6	9.7	45	12,800	Pospísil et al., 1985
Ongar	Equus hemionus	36.9	10.2	6.38	52.1	7,680	Jani et al., 2004
Plains Zebra	Equus quagga	40	11.9	8.4	48.5	7,600	Pospísil et al., 1985
Baird's Tapir	Tapirus bairdii	25.7				6,130	Hernandez-Divers et al., 2005
Sumatran Rhinoceros	Dicerorhinus sumatrensis	39	13.2	5.1		7100	Andriansyah et al., 2013
Black Rhinoceros	Diceros bicornis	43	16.1	5.26	82.5	11,500	97.2
Order Chiroptera							
Sub-order Microchiroptera							
Family Emballonuridae							
Black-bearded Tomb Bat	Taphozous melanopogon	59.2	16	8.9	59.3	9214	Ratnasooriya et al., 2005
Proboscis Bat	Rhynchonycteris naso	62.2				2265	Schinnerl et al., 2011
Greater sac-winged Bat	Saccopteryx bilineata	54.6				2290	Schinnerl et al., 2011
Bonda mastiff bat	Molossus bondae	64				1714	Schinnerl et al., 2011
Sinaloan Mastiff Bat	Molossus sinaloae	65.8				1974	Schinnerl et al., 2011

Chestnut Short-tailed Bat	Carollia castanea	55				6135	Schinnerl et al., 2011
Seba's Short-tailed Bat	Carollia perspicillata	58.9				5395	Schinnerl et al., 2011
Sowell's Short-tailed Bat	Carollia sowelli	55.3				5573	Schinnerl et al., 2011
Commissaris's Long-tongued Bat	Glossophaga commissarisi	56.4				4070	Schinnerl et al., 2011
Hairy Big-eared Bat	Micronycteris hirsuta	56.1				3813	Schinnerl et al., 2011
Striped Hairy-nosed Bat	Mimon crenulatum	55.9				4505	Schinnerl et al., 2011
Pale Spear-nosed Bat	Phyllostomus discolor	51.8				5035	Schinnerl et al., 2011
Fringe-lipped Bat	Trachops cirrhosus	51.8				7339	Schinnerl et al., 2011
Jamaican Fruit Bat	Artibeus jamaicensis	54				5401	Schinnerl et al., 2011
Thomas's Fruit-eating Bat	Artibeus watsoni	57.2				5291	Schinnerl et al., 2011
Honduran White Bat	Ectophylla alba	57.2				836	Schinnerl et al., 2011
Elegant Myotis	Myotis elegans	56.5				2045	Schinnerl et al., 2011
Chestnut Sac-winged Bat	Cormura brevirostris	56.8				2248.7	Schinnerl et al., 2011
Big Naked-backed Bat	Pteronotus gymnonotus	63.3				1357	Schinnerl et al., 2011
Great Fruit-eating Bat	Artibeus lituratus	53.3				4510	Schinnerl et al., 2011
Common Vampire Bat	Desmodus rotundus	57				-	Schinnerl et al., 2011
Underwood's Long-tongued Bat	Hylonycteris underwoodi	60.5				2237	Schinnerl et al., 2011
Greater Spear-nosed Bat	Phyllostomus hastatus	55.7				5701	Schinnerl et al., 2011
Heller's Broad-nosed Bat	Platyrrhinus helleri	64.3				5463	Schinnerl et al., 2011
Stripe-headed Round-eared Bat	Tonatia saurophila	55.85				3960	Schinnerl et al., 2011
Striped Yellow-eared Bat	Vampyressa nymphaea	60.9				2438	Schinnerl et al., 2011
Black Myotis	Myotis nigricans	49.5				5133	Schinnerl et al., 2011
Indian Roundleaf Bat	Hipposideros lankadiva	59.2		8.9	70	9,500	Ratnasooriya et al., 2005
Family Vespertilionidae							
Common Bent-wing Bat	Miniopterus schreibersii	50.5	18.5	10.9	49.3	14,346	Mean of Clark, 2004 and Ratnasooriya et al., 2005
Gould's Wattled Bat	Chalinolobus gouldii	52	-	-	-	-	Clark, 2004
Lesser Long-eared Bat	Nyctophilus geoffroyi	54.5	-	-	-	-	Clark, 2004
Sub-order Megachiroptera							
Family Pteropodidae							
Grey-headed Flying-fox	Pteropus poliocephalus	48.5	17.85	8.8	56.5	16,500	mean 2 studies cited in Clark, 2004
Little Red Flying -fox	Pteropus scapulatus	52	18.15	10.75	50.5	13,000	mean 2 studies cited in Clark, 2004
Malaysian Flying-fox	Pteropus vampyrus	44	14.6	8.88	49.1	12,550	Heard and Whittier, 1997
Rodriguez Island Flying-fox	Pteropus rodricensis	43	14.2	7.95	54.4	6460	Heard and Whittier, 1997
Small Flying-fox	Pteropus hypomelanus	46.2	11.5	8.6	51.5	15,168	Mean Heard and Whittier, 1997 and 4 studies cited in Clark, 2004
Mean family		46.6 + (6) 1.32	15.1 + (6) 1.14	8.95 + (6) 0.38	52.1 + (6) 1.14	12,684 + (6) 1487	
Red ruffed Lemur	Varecia rubra	45.7				8,550	Dutton et al., 2008
Ring-tailed lemur	Lemur catta	45	-	6.5	-	6,400	Moresco et al., 2012
White-Footed Tamarin	Saguinus leucopus	49	16.1	6.74	73.6	9,560	Fox et al., 2008
Order Erinaceomorpha	Laurasiatheria						
European Hedgehog	Erinaceous europaeus	33	12.5	8.1	40.6	7,400	Lewis et al., 2002
Eastern Mole	Scalopus aquaticus	56.4	19.2	12.6	46	-	Campbell et al., 2010
Coast Mole	Scapanus orarius	46.8	17.4	10.5	42.6	-	Campbell et al., 2010
Order Pholidota							
Tree Pangolin	Manis tricuspis	40.4	10	4.2	97.7	4,800	Oyewale et al., 1997

Table B. Differential leukocytes percentages in mammalian species.

Animal	species	Neutro-	lympho	mono	eosino	baso	references
Sub-class Prototheria							
Order Monotremata							
Tasmanian platypuses	Ornithorhynchus anatinus	44.4	49.8	4.5	1.3	0	Geraghty et al., 2011
Short-beaked Echida	Tachyglossus aculeatus	41.7	56.2	2.5		0	mean 9 studies cited in Clark, 2004
Long beaked Echida	Zaglossus bruijnii	54	39	1.5	5	0	Cited Clark, 2004
Mean							
Sub-class Marsuliala							
Order Dasyuromorphia							
Family Dasyuridae							
Brown Antechinus	Antechinus stuartii	31.25	62	7	0	0	Mean 4 seasons in one study cited in Clark, 2004
Eastern Quoll	Dasyurus viverrinus	48.3	42.6	5.7	3.4	0	Calculated from 3 studies cited in Clark, 2004
Western Quoll	Dasyurus geoffroii	43.7	39.9	2.6	12. 6	1.2	Calculated from 4 studies cited in Clark, 2004
Fat-tailed Dunnart	Sminthopsis crassicaudata	41.9	51.5	2.1	0	0	Mean from 2 studies cited in Clark, 2004
Striped-faced Dunnart	Sminthopsis macroura	41.7	51.2	0.4	0	0	Mean from 2 studies cited in Clark, 2004
Red-tailed phascogale	Phascogale calura	43.6	52.6	3.8	0	0	Calculated from 2 studies cited in Clark, 2004
Brush-tailed phascogale	Phascogale tapoatafa	42.5	44.5	11.5	0.5	0	Calculated from Clark, 2004
Tasmanian devil	Sarcophilus harrisii	62.3	33.5	3.2	1	0	Mean 3 studies cited in Clark, 2004
Mean Family and Order		44.4	47.2	4.5	0.7	0.15	
		+ (8)	8	8	8	8	
		3.1	3.1	1.2	0.16	0.15	
Order Didelphimorphia							
Family Didelphidae							
American Woolly Opossum	Caluromys derbianus	33.6	57	1.2	6	0.8	Rothstein and Hunsaker, 1972
Gray Short-tailed Opossum	Monodelphis domestica	25.5	50	16.5	8	0.33	Evans et al., 2010
Virginia Opossum	Didelphis virginiana	37	54	2	7	0	Youatt et al., 1961
Mean Family and Order		32 + (3) 3.4	53.7 + (3) 2	6.6 + (3) 5	7 + (3) 0.6	0.4 + (3) 0.2	
Order Diprotodontia							
Family Macropodidae							
Agile Wallaby	Macropus agilis	32.4	56.7	1.24	9.61	0	Calculated from Clark, 2004
Antilopine Kangaroo	Macropus antilopinus	48.3	48.3	0.08	3.31	0	Calculated from Clark, 2004
Black Striped Wallaby	Macropus dorsalis	16.2	78.1	1.74	2.26	1.74	Calculated from Clark, 2004
Common Wallaroo	Macropus robustus	37.9	54.2	0	7.9	0	Calculated from Clark, 2004
Eastern Grey Kangaroo	Macropus giganteus	39	51.6	1.46	1.27	6.63	Calculated from Clark, 2004
Red Kangaroo	Macropus rufus	57.9	36.5	2.6	2.85	0.1	Calculated from 2 studies in Clark, 2004
Red-necked Wallaby	Macropus rufogriseus	50	39.9	3.42	4.79	1.9	Calculated from 5 studies in Clark, 2004
Tammar Wallaby	Macropus eugenii	37.66	55.3	4.2	2.47	0.36	Calculated from 3 studies in Clark, 2004
Whip-tail Wallaby	Macropus parryi	28.5	60.1	3.13	5.74	2.61	Calculated from Clark, 2004
Bridled Nail-tail Wallaby	Onychogalea fraenata	20.9	72.3	1.8	4.86	0.1	Calculated from Clark, 2004
Northern Nail-tail Wallaby	Onychogalea unguifera	40.8	44.1	1.2	13.51	0.3	Calculated from Clark, 2004
Allied Rock-wallaby	Petrogale assimilis	41.85	50.71	2.76	2.23	2.46	Calculated from 3 studies in Clark, 2004
Brush-tailed Rock-wallaby	Petrogale penicillata	35.7	53	4.18	6.58	0.51	Calculated from Barnes et al., 2008
Proserpine Rock-wallaby	Petrogale persephone	23.81	67.7	1.59	6.22	0.66	Calculated from Clark, 2004
Purple-necked Rock-wallaby	Petrogale purpureicollis	28.5	68.2	0	3.31	0	Calculated from Clark, 2004
Yellow-footed Rock-wallaby	Petrogale xanthopus	20.3	74.4	1.11	3.69	0.46	Calculated from Clark, 2004
Spectacled Hare-Wallaby	Lagorchestes conspicillatus	41.89	55.6	2.28	0.23	0	Calculated from Clark, 2004

Quokka	Setonix brachyurus	67	30.8	1.36	0.88	0	Calculated from 2 studies cited in Clark, 2004
Red-legged Pademelon	Thylogale stigmatica	25	67.8	1.97	4.76	0.41	Calculated from 3 studies cited in Clark, 2004
Goodfellow's Tree-kangaroo	Dendrolagus goodfellowi	58	23.1	14. 5	4.35	0	Calculated from Clark, 2004
Lumholtz's Tree-kangaroo	Dendrolagus lumholtzi	43.9	46.5	1.79	7.68	0.13	Calculated from Clark, 2004
Matschie's Tree- kangaroo	Dendrolagus matschiei	54.7	34.8	3.99	5.81	0.69	Calculated from 2 studies cited in Clark, 2004
Family mean		38.7 + (22) 2.9	53.1 + (22) 3.1	2.6 + (22) 0.6	4.7 + (22) 0.7	0.8 + (22) 0.3	
Family Phascolarctidae							
Koala	Phascolarctos cinereus	33.5	57.6	3.4	4.8	0.65	Calculated from 9 studies cited in Clark, 2004
Family Phalangeridae							
Common Brush-tailed Possum	Trichosurus vulpecula	38.8	53.1	4.6	2.9	0.58	Calculated from 9 studies cited in Clark, 2004
Mountain Brushtail Possum	Trichosurus cunninghami	25.2	60	8.9	5.9	0	Calculated from Clark, 2004
Family Potoroidae							
Gilbert's Potoroo	Potorous gilbertii	33.3	58.4	1.7	2.7	1.4	Vaughan et al., 2009
Long-nosed Potoroo	Potorous tridactylus	38	50	9	3	0	Calculated from 2 studies cited in Clark, 2004
Family Pseudocheiridae							
Common Ringtail Possum	Pseudocheirus peregrinus	24.3	61.9	8.4	5.3	0	mean 2 studies cited in Clark, 2004
Herbert River Ringtail possum	Pseudochirulus herbertensis	27.1	52.2	33.8	2.2	0	Calculted from Clark, 2004
Greater Glider	Petauroides volans	27.6	67.8	3.4	1.1	0	Clark, 2004
Sugar Glider	Petaurus breviceps	6.7	89.4	0.7	3	0	Clark, 2004
Family Vombatidae							
Common Wombat	Vombatus ursinus	38.8	53.5	4.3	2.3	1.1	Calculated from 6 studies cited in Clark, 2004
Northern Hairy-nosed Wombat	Lasiorhinus krefftii	68.7	20.8	5.6	4.1	0.8	Calculated from Reiss et al., 2008
Southern Hairy-nosed Wombat	Lasiorhinus latifrons	44.5	49.9	1.2	4.4	0	Calculated from 5 studies cited in Clark, 2004
Mean Order							
Order Peramelemorphia							
Family Peramelidae							
Northern Brown Bandicoot	Isoodon macrourus	9.2	85.5	1.3	4	0	Mean 2 studies cited in Clark, 2004
Super-order Afrotheria							
Order Proboscidea							
African elephant	Loxadonta africana	20.17 (1.17)	69.1	8.17	1.33	0.11	Debbie and Clausen, 1975
Asian Elephant	Elephas maximus	23	44	27	5	0.03	Silva and Kuruwita, 1993
Order Hyracoidea	Order Hyracoidea						
Rock hyraxes	Procavia capensis	75.4	16.2	3.6	4.6	0.25	Aroch et al., 2007
Order Sirenia							
West Indian Manatee	Trichechus manatus	39	48.5	8.5	3.3	0.7	Harvey et al., 2009
Super-order Xenarthra							
Order Cingulata							
Big hairy armadillo	Chaetophractus villosus	51	36	6	5.4	1	Casanave and Polini, 1999
Pichi	Zaedyus pichiy	55.5	26.5	8.9	7.7	1.4	Superina et al., 2008
Nine-banded armadillo	Dasypus novemcinctus	70.7	24.7	4	0.7	0	Deem et al., 2009
Three-Banded armadillo	Tolypeutes matacus	54.4	40.6	1	1.15	0.29	Deem et al., 2009
Order Pilosa							
Captive Hoffmann's Two-Toed Sloths	Choloepus hoffmanni	24.2	69.7	2.3	3.2	1	Wallace and Oppenheim, 1996
Southern Two -toed Sloth	Choloepus didactylus	69.4	26.9	1.6	2.2	0.1	Vogel et al., 1999
Giant Anteater	Myrmecophaga tridactyla	72.6	18.8	1.7	6.9	0	Sanches et al., 2013
Collared Anteater	Tamandua tetradactyla	48.1	44.1	2	5.7	0	Sanches et al., 2013
Order Cetacea							
Family Balaenopteridae							
Bryde's Whale	Balaenoptera edeni	61	24	2	13	0	Priddel and Wheeler, 1998

Fin whale	Balaenoptera physalus	32.7	29.7	4.4	32.7	0	Cited in Priddel and Wheeler, 1998
Family Delphinidae							
Killer Whale	Orcinus orca	70.2	19.2	3	3.7	0	Calculated from 4 studies in Clark, 2004
False Killer Whale	Pseudorca crassidens	62.6	26	4.6	10.6	0	Clark, 2004
Short-finned Pilot Whale	Globicephala macrorhynchus	63.7	21	4.4	8.4	0	Calculated from 2 studies in Clark, 2004
Common Bottlenose Dolphin	Tursiops truncatus	60.9	19	2.7	16.4	0	Mean 6 studies Clark, 2004
Hector's Dolphin	Cephalorhynchus hectori	59.2	43.3	1.7	0.8	0	Clark, 2004
Pacific White-sided Dolphin	Lagenorhynchus obliquidens	61.9	21.6	3.9	10.3	0.9	Shirai and Sakai, 1998
Risso's Dolphin	Grampus griseus	68.6	19	8	0.4	0	mean 2 studies Clark, 2004
Short-beaked Common Dolphin	Delphinus delphis	65.2	11.9	4.5	18.4	0	Clark, 2004
Striped dolphin	Stenella coeruleoalba	56.3	41.3	1.6	0.8	0	Calculated from Clark, 2004
Family mean							
Family Monodontidae							
Beluga whale	Delphinapterus leucas	46.9	46.2	4.3	2.6	0	Norman et al., 2012
Order mean		59.1 + (12) 3	26.8 + -12 3.2	3.8 + -12 0.5	9.8 + -12 2.7	0.07 + (12) 0.07	
Order Sirenia							
West Indian Manatee	Trichechus manatus	39	48.5	8.5	3.3	0.7	Harvey et al., 2009
Order Carnivora							
Family Phocidae							
Harbor seal	Phoca vitulina	71.4	27.4	2	0	0	Gregg et al., 2010
Harp seal	Phoca groenlandica	59	26	8	7	0	Boily et al., 2006
Hooded seal	Cystophora cristata	68.9	10.5	2.6	6.6	1.3	Boily et al., 2006
Northern elephant seal	Mirounga angustirostris	72.1	14	7.5	6.4	0	Yochem et al., 2008
Southern Elephant Seal	Mirounga leonina	63	17	5	15	0	Clark, 2004
Mean Family		66.9 + (5)	19.0 +	5.0 +	7.0 +	0.26 + (5) 0.26	
		2.5	-5	-5	-5		
			3.3	1.22	2.38		
Family Otariidae							
Australian Sea lion	Neophoca	56.9	29.6	2	11.5	0	Needham et al., 1980
	cinerea						
California Sea	Zalophus	67	23.1	2.9	4.1	0.2	Calculated from Norberg et al., 2011
lion	californianus						
Northern fur seal	Callorhinus ursinus	70.2	14	3.2	12.4	0.1	Norberg et al., 2011
Family Mustelidae							
Sub-family Lutrinae							
Eurasian otter	Lutra lutra	68.9	20.6	5.1	5.5	0	Fernández-Morán et al., 2001
North American River Otter	Lontra Canadensis	80.8	11.4	4.1	2.8	0.8	Tocidlowski et al., 2000
Sea Otter	Enhydra lutris	56.2	32.2	3.9	7.5	0.16	Williams and Pulley, 1983
Giant otter	Pteronura brasiliensis	80	16.2	1.1	0.87	0.3	Rosas et al., 2008
Family Feverridae							
Common Palm Civet	Paradoxurus hermaphroditus	41.8	46.8	6.5	9	0.5	Salakij et al., 2007
Family Ursidae							
Andean bear	Tremarctos ornatu	72.1	24.5	1.4	1.8	0.1	Castellanos et al., 2010
Asiatic Black Bear	Ursus thibetanus	49.8	33.5	3.8	4.1	0.03	Pospísil et al., 1987a. Chang et al., 2006
Brown Bear	Ursus arctos	81.5	15.2	0.9	2.3	0.04	Kusak et al., 2005
Malayan Sun Bear	Helarctos malayanus	76	19	4.6	0	1	Bush et al., 1980
Sloth Bear	Melursus ursinus	72	17	1.8	8.7	0.7	Mean Bush et al., 1980; Shanmugam et al., 2008
Spectacled Bear	Tremarctos ornatus	67.3	29.2	0.3	1.7	1.4	Bush et al., 1980

		69.8 + (6) 4.4	23.0 + (6) 3.0	2.1 + (6) 0.69	3.1 + (6) 1.24	0.5 + (5) 0.24	
Red Panda	Ailurus fulgens	48.6	45.4	3.8	0.8	1.5	Wolff et al., 1990
Western Spotted Skunk	Spilogale gracilis	58.2	33.3	2.4	0.5	1	Crooks et al., 2003
Striped skunk	Mephitis mephitis	66.3	24	7.4	2	0.4	Mustonen et al., 2013
Ferret	Mustela putorius	37.1	53.4	5.9	2.8	0.8	Lee et al., 1982
Family Procyonidae							
Raccoon	Procyon lotor	67	30	2	1	0	Youatt et al., 1961
Family Felidae							
Canada lynx	Lynx canadensis	84	13	2.2	2.3	0	Moen et al., 2010
Eurasian Lynx	Lynx lynx	75.5 (0.7)	18.5	2.7	1.7	0.7	Pospísil et al., 1987b
Sand Cat	Felis margarita	53.5	41.5	3	-	-	Chege et al., 2013
Fishing cat	Felis viverrina	68.1 (1.3)	21.4	3.9	4.7	0.1	Prihirunkit et al., 2007
Jungle Cat	Felis chaus	70	23.8	1.2	4.5	0.1	Salakij et al., 2010
Pampas Cat	Leopardus colocolo	76	18.5	2	3	0.5	Beltrán et al., 2009
Cougar	Puma concolor	73.8 (1.1)	21.5	2.1	1.1	0.1	Pospísil et al., 1987b
Clouded Leopard	Neofelis nebulosa	73.1 (1.5)	17.45	1.9	4.7	1	Pospísil et al., 1987b
Jaguar	Panthera onca	63.1 (5.1)	28	2.1	3	0.1	Mean: Pospísil et al., 1987b; Mussart et al., 2009
Tiger	Panthera tigris	69 (3)	23	2	3	0	Pospísil et al., 1987b
Leopard	Panthera pardus	61 (4.0)	23	1	11	0	Pospísil et al., 1987b
Lion	Panthera leo	64.2 (6.7)	23.7	0.7	4.5	0	Pospísil et al., 1987b
Cheetah	Acinonyx jubatus	66.9	25.15	1.95	5.35	0	Mean: Pospísil et al., 1987b; Bechert et al., 2002
Flat-headed Cat	Prionailurus planiceps*	58.1	34.2	3.6	2.1	1.62	Salakij et al., 2008b
* Infected with Hepatozoa and excluded from analysis							
Family Felidae mean		69.1 + (13) 2.15	23.0+ (13) 1.88	2.06+ (13) 0.23	4.11+ (12) 0.74	0.22+ (12) 0.096	
Egyptian Mongoose	Herpestes Ichneumon	81.2	14	5	0	0	Paromares et al., 1992
Striped hyena	Hyaena hyaena	64 (1.5)	27.5	5.1	1.6	0.8	Pospísil et al., 1987a
Coyote	Canis latrans	69.7	20.9	3.3	5.9	0.1	Gates and Goering, 1976
Wolf	Canus lupus	57.8 (2.5)	24	4.8	10.3		Pospísil et al., 1987a
Golden Jackal	Canis aureussyriacus	70.9	15.3	5.4	7.6	0.8	Aroch et al., 2005
Asian Wild Dog	Cuon alpinus	62.2	18.2	3.5	13.7	1.9	Salakij et al., 2000
Hunting Dog	Lycaon pictus	72 (2.1)	15.6	3.6	4	0.5	Pospísil et al., 1987a
Fossa	Cryptoprocta ferox	71.1	20.4	2	6.3	0	Langer et al., 2013
Order Pholidota							
Tree Pangolin	Manis tricuspis	46.2	50.7	2.1	0.8	0.21	Oyewale et al., 1997
Order Rodentia							
Family Cricetidae							
Dusky-footed wood rat	Neotoma fuscipes	57.6	33	5	2.7	1.6	Weber et al., 2002
Hispid cotton rat	Sigmodon hispidus	50.4	21.8	24.1	0.8	3	Robel et al., 1996
Muskrat	Ondatra zibethicus	88.6	14.9	3.5	0.13	0.02	Ahlers et al., 2011
Norwegian Lemming	Lemmus lemmus	55.5	38.9	2.3	3.4	0	Wiger, 1977
Pine Vole	Microtus pinetorum	26.8	67.6	4.4	0.7	0.54	Harvey et al., 2008
Family Dipodidae	Northern Birch Mouse (Sicista betulina)	29.35	66.5	0.725	2.75	0	Wolk, 1985
Family Erethizontidae							
Brazilian Porcupine	Coendou prehensilis	63.8	33.9	1.1	1.2	0	Moreau et al., 2003
Black-tailed Hairy Dwarf Porcupine	Coendou melanurus	57.3	37.5	5.2	0	0	Moreau et al., 2003
Bristle-spined Rat or Thin-spined Porcupine	Chaetomys subspinosus	34.5	55	7.3	3.2	0	de Almeida Curi et al., 2012
Family Muridae							
Carpentarian Rock-rat	Zyzomys palatalis	29.5	62	2.3	6.2	0	Old et al., 2007
Central Rock-rat	Zyzomys pedunculatus	36.4	57	5.3	1.4	0	Old et al., 2005

Plains Rat	Pseudomys australis	1.6	95.1	0.3	0	0.2	Old et al., 2005
Sand Rat	Psammomys obesus	19.5	63.1	13.8	1.7	1.73	Kane et al., 2012
Spinifex hopping-mouse	Notomys alexis	26.5	58.5	15	0	0	Old et al., 2005
Family Myocastoridae							
Coypu	Myocastor coypus	45.9	53.6	2.5	0.9	0	Martino et al., 2012
Family Nesomyidae							
Gambian pouched rat	Cricetomys gambianus	19.6	67.9	5.7	2.8	4.1	Oyewale et al., 1998
Family Sciuridae							
Fox squirrel	Sciurus niger	77	21	2	0	0	Youatt et al., 1961
Woodchuck	Marmota monax	69	28	2	1	0	Youatt et al., 1961
Family Thryonomyidae							
Greater Cane Rat	Thryonomys swinderianus	35.2	62.7	1.2	0.6	0.3	Opara et al., 2006
Order Lagomorpha							
Eastern cottontail rabbit	Sylvilagus floridanus	33.3	60.3	1.9	0.6	1.1	Youatt et al., 1961; Jacobson et al., 1978
Riparian Brush Rabbit	Sylvilagus bachmani	24.4	67.7	4.1	1.7	2.1	Black et al., 2009
Order Artiodactyla							
Family Cervidae							
Axis deer	Axis axis	46.8	46.8	1.3	3.9	1.3	Hawkey and Hart, 1985
Barasingha	Cervus duvauceli	48.2	43.4	3.6	2.4	2.4	Hawkey and Hart, 1985
Elk	Cervus canadensis	67.6	24.55	4.35	2.7		Pedersen and Pedersen, 1975
Red Deer	Cervus elaphus	37	44	3	13	1.1	Shideler et al., 2002
Rusa Deer	Cervus timorensis	29.9	68.8	-	1.1	0.1	Tomkins and Jonsson, 2005
Fallow Deer	Dama dama	56.8	32	5.8	5.3	0	English and Lepherd, 1981
Moose	Alces alces	45.7	43	1.7	3.1	5.1	Rostal et al., 2012
Persian Fallow Deer	Dama mesopotamica	41.8	43.2	1.6	11.1	2.3	Mohri et al., 2000
Père David's deer	Elaphus davidianus	39	36.4	3.9	16.9	3.9	Hawkey and Hart, 1985
Reindeer	Rangifer tarandus	50.4	31.8	1.6	12.5	3.8	Catley et al., 1990.
Roe Deer	Capreolus capreolus	54.7	40.3	1.7	3.3	0.1	Montane et al., 2002
Sambar deer	Cervus unicolor	26.3	71.6	0.4	1.3	0.41	Calculated from Gono, 1993
Pudú	Pudu pudu	34	59.8	2.3	3.8	0	Montes et al., 2004
Mountain Goat	Oreamnos americanus	28.1	54.9	1	11	3	Rice and Hall, 2007
Big horn Sheep	Ovis canadensis	63	26	5	2		McDonald et al., 1981
Domestic Sheep	Ovis aries	62	34	1	2		McDonald et al., 1981
Rocky Mountain Bighorn	Ovis Canadensis	47.6	44.7	2.2	4.4		Woolf and Kradel, 1970
Erlanger's gazelles	Gazalla erlangeri		54.4	8.8			Aljumaah and Hussein, 2011
Goitered Gazelle	Gazella subgutturosa	67.6	24.55	4.35	2.7	0	Yaralioğlu et al., 2004
Mountain Reedbuck	Redunca fulvorufula	45.8	50.1	3.4	0.5	0.2	Pospísil et al., 1984b
Waterbuck	Kobus ellipsiprymnus	60.35	33.55	1.3	3.05	5.75	Pospísil et al., 1984b
Lechwe	Kobus leche	38.2	56.3	3.7	1.5	0.7	Pospísil et al., 1984b
Mrs Gray's Waterbuck	Kobus megaceros	53	43.4	1.4	1.6	0	Pospísil et al., 1984b
Springbok	Antidorcas marsupialis	66	27.8	0.9	1.2	0	Pospísil et al., 1984b
Roan antelope	Hippotragus equinus	61.7	29.6	4.6	3.3	0	Pospísil et al., 1984a
Sable antelope	Hippotragus niger	60.3	32.8	3.6	3.2	0.1	Pospísil et al., 1984a
Adax antelope	Addax nasomaclatus	52.7	43.2	2.5	10.2	0.2	Pospísil et al., 1984a
Gemsbok Oryx	Oryx gazella	73.7	19.4	3.1	2	0	Pospísil et al., 1984a
Scimitar-horned Oryx	Oryx dammah	64.5	27.2	4	3.5	0.5	Pospísil et al., 1984a
Nyala	Tragelaphus angasii	57.7	38.1	1.7	1.2	0.9	Pospísil et al., 1984a
Greater Kudu	Tragelaphus strepsiceros	66.6	29.1	3.7	1.5	0	Pospísil et al., 1984a
Common Eland	Taurotragus oryx	54	37.4	4.6	3.4	0.6	Pospísil et al., 1984a
Bongo	Tragelaphus eurycerus	64.5	31.5	2	1	0.1	Pospísil et al., 1984a
African Buffalo	Syncerus caffer	42.6	53.1	2.1	1.5	0.7	Beechler et al., 2009
American bison	Bison bison	46	44	10	1	0	Marler, 1975
Spanish Ibex	Capra pyrenaica	33.9	61.6	2.1	2.4	0	Casas-Díaz et al., 2008
Order Chiroptera							
Sub-order Microchiroptera							
Proboscis Bat	Rhynchonycteris naso	38.4	57.7	0.7	2.8	0.4	Schinnerl et al., 2011
Greater sac-winged Bat	Saccopteryx bilineata	33.9	62.7	0.3	3.1	0	Schinnerl et al., 2011

Bonda mastiff bat	Molossus bondae	52.9	42.5	0.8	2.2	1.7	Schinnerl et al., 2011
Sinaloan Mastiff Bat	Molossus sinaloae	49.6	49.6	0	0.6	0.6	Schinnerl et al., 2011
Chestnut Short-tailed Bat	Carollia castanea	25.2	69.7	0.5	4.3	0.1	Schinnerl et al., 2011
Seba's Short-tailed Bat	Carollia perspicillata	21.2	73.4	1	3.8	0.5	Schinnerl et al., 2011
Sowell's Short-tailed Bat	Carollia sowelli	25.5	63.2	1.4	7.7	3.6	Schinnerl et al., 2011
Commissaris's Long-tongued Bat	Glossophaga commissarisi	16.9	77.1	1.1	2.8	2.1	Schinnerl et al., 2011
Chestnut Sac-winged Bat	Cormura brevirostris	23.7	61	0	3.5	0	Schinnerl et al., 2011
Big Naked-backed Bat	Pteronotus gymnonotus	24	71	1	3	1	Schinnerl et al., 2011
Common Vampire Bat	Desmodus rotundus	44.5	53.5	0	0	2	Schinnerl et al., 2011
Underwood's Long-tongued Bat	Hylonycteris underwoodi	10	88	1	1	0	Schinnerl et al., 2011
Hairy Big-eared Bat	Micronycteris hirsuta	39.7	56.8	0.3	3.7	0	Schinnerl et al., 2011
Great Fruit-eating Bat	Artibeus lituratus	31.7	56.5	1	8.2	2.7	Schinnerl et al., 2011
Striped Yellow-eared Bat	Vampyressa nymphaea	28.3	68	0	3.3	0.3	Schinnerl et al., 2011
Stripe-headed Round-eared Bat	Tonatia saurophila	32.5	63	0.5	3.5	0.5	Schinnerl et al., 2011
Heller's Broad-nosed Bat	Platyrrhinus helleri	16	80.3	0.3	4.3	0	Schinnerl et al., 2011
Greater Spear-nosed Bat	Phyllostomus hastatus	16.5	73	1	7.5	2	Schinnerl et al., 2011
Striped Hairy-nosed Bat	Mimon crenulatum	25.7	66.1	0.8	5.9	1.6	Schinnerl et al., 2011
Pale Spear-nosed Bat	Phyllostomus discolor	20.6	69.7	0.9	7.2	1.8	Schinnerl et al., 2011
Fringe-lipped Bat	Trachops cirrhosus	21.5	72.7	0.8	4.1	1	Schinnerl et al., 2011
Jamaican Fruit Bat	Artibeus jamaicensis	34.1	58.9	2.8	3.1	1.6	Schinnerl et al., 2011
Thomas's Fruit-eating Bat	Artibeus watsoni	37	57.2	1.1	2	2.8	Schinnerl et al., 2011
Honduran White Bat	Ectophylla alba	58.1	39.6	0.2	1.1	1	Schinnerl et al., 2011
Elegant Myotis	Myotis elegans	22.3	70.6	1.1	4.3	1.8	Schinnerl et al., 2011
Sub-order Megachiroptera							
Family Pteropodidae							
Grey-headed Flying-fox	Pteropus poliocephalus	39	53.5	6.5	4.5	1.5	Calculated from Clark, 2004
Indian Flying fox	Pteropos giganteus	89.5	6.6	3.8	0.1	0	McLaughlin et al., 2007
Island Flying-fox	Pteropus hypomelanus	28.1	68	1.8	2.2	0	Mean of Heard and Whittier, 1997 and 3 studies from Clark, 2004
Little Red Flying fox	Pteropus scapulatus	53	31	7.5	7.5	0.5	Calculated from Clark, 2004
Malaysian Flying-fox	Pteropus vampyrus	34.8	64	0.7	0.5	0	Heard and Whittier, 1997
Rodriguez Island Flying-fox	Pteropus rodricensis	79.6	19.1	0.8	0.2	0	Heard and Whittier, 1997
Mean Order		34.0 + (29) 3.35	60.5 + (29) 3.14	0.89 + (29) 0.15	3.26 + (29) 0.43	1 + (31) 0.19	
Order Eulipotyphla							
European Hedgehog	Erinaceous europaeus	40.1	50.7	2.2	5.9	1.1	Lewis et al., 2002
Long-eared Hedgehog	Hemiechinus auritus	23.9	64.3	1.8	9	1	Özparlak et al., 2011
Southern White-breasted Hedgehog	Erinaceus concolor	23.3	65.5	2.3	7.6	1.3	Özparlak et al., 2011
Mean Order		29.1 + (3) 5.5	60.2 + (3) 4.8	2.1 + (3) 0.15	7.5 + (3) 0.9	1.1 + (3) 0.09	
Order Perissodactyla							
Ongar	Equus hemionus	56	39.2	0.9	3.7	0	Jani et al., 2004
Grevy's Zebra	Equus grevyi	55	37.7	2.7	1.8	2.8	Pospísil et al., 1985
Mountain Zebra	Equus zebra	54.8	37.6	3.7	1.3	2.6	Pospísil et al., 1985
Plains Zebra	Equus quagga	60	32	3.5	2.2	2.3	Pospísil et al., 1985
Baird's tapir	Tapirus bairdii	54	32.1	2.1	8.4		Calculated from Hernandez-Divers et al., 2005
Black rhinoceros	Diceros bicornis	52.9	34.5	6	5.6	0.9	Kock et al., 1990
Red ruffed lemurs	Varecia rubra	62.8	30.5	2.68			Dutton et al., 2008
Ring-tailed lemur	Lemur catta	36.75	52.5	6.2	1.5	0.35	Moresco et al., 2012
White-Footed Tamarins	Saguinus leucopus	46.6	51.1	0	0	0	Fox et al., 2008
African elephant	Loxadonta africana	20.17 (1.17)	69.1	8.17	1.33	0.11	Debbie and Clausen, 1975

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