

**Table 2. Small intestine (SI) length and nominal surface area (NSA) of omnivorous birds and eutherian mammals [common names were extracted from the Integrated Taxonomic Information System (ITIS; [www.itis.gov](http://www.itis.gov)) and ref. 1]**

Species Common name	Scientific name	Order	Family	Body mass, g	SI length, cm	SI NSA, cm <sup>2</sup>	Source
<b>BIRDS</b>							
Mottled duck	<i>Anas fulvigula</i>	Anseriformes	Anatidae	742	135.85		2, 3
Mallard	<i>Anas platyrhynchos</i>	Anseriformes	Anatidae	1,237.2	122.9	160	3-6
Lesser scaup	<i>Aythya affinis</i>	Anseriformes	Anatidae	718	172.1		6, 7
Greater scaup	<i>Aythya marila</i>	Anseriformes	Anatidae	892	169.6		6, 7
Muscovy duck	<i>Cairina moschata</i>	Anseriformes	Anatidae	585	127.8		3
Herring gull	<i>Larus argentatus</i>	Charadriiformes	Laridae	787.9	90		3
Ring-billed gull	<i>Larus delawarensis</i>	Charadriiformes	Laridae	359.7	69		3
Glaucous gull	<i>Larus hyperboreus</i>	Charadriiformes	Laridae	1,132	116.5		3
Pigeon	<i>Columba livia</i>	Columbiformes	Columbidae	270.4	60.3	68.6	3, 4, 8, 9
Northern bobwhite	<i>Colinus virginianus</i>	Galliformes	Odontophoridae	166.7	50.3	63.84	3, 10, 11
Montezuma quail	<i>Cyrtonyx montezumae</i>	Galliformes	Odontophoridae	186	46		11
Rock partridge	<i>Alectoris graeca</i>	Galliformes	Phasianidae	576	77.5		11
Scaled quail	<i>Callipepla squamata</i>	Galliformes	Phasianidae	175	59		11
Japanese quail	<i>Coturnix coturnix japonica</i>	Galliformes	Phasianidae	169.1	37.4	29.85	12, 13
Chicken	<i>Gallus g. domesticus</i>	Galliformes	Phasianidae	2,481	188.4	550	3, 9
Gambel's quail	<i>Lophortyx gambelii</i>	Galliformes	Phasianidae	188	81		11
Wild turkey	<i>Meleagris gallopavo</i>	Galliformes	Phasianidae	7,050	222		3, 11
Mountain quail	<i>Oreortyx picta</i>	Galliformes	Phasianidae	250	76.5		11
Hungarian partridge	<i>Perdix perdix</i>	Galliformes	Phasianidae	395	59		11
Ring-necked pheasant	<i>Phasianus colchicus</i>	Galliformes	Phasianidae	938.3	97.8	130	3-5, 11
American coot	<i>Fulica americana</i>	Gruiformes	Rallidae	491	73.8	75.5	3, 4
Purple gallinule	<i>Porphyrrula martinica</i>	Gruiformes	Rallidae	163.9	42.9		3
Waxwing	<i>Bombycilla garrulus</i>	Passeriformes	Bombycillidae	62.1	29.19		14
Raven	<i>Corvus corax</i>	Passeriformes	Corvidae	874	103.5		3
Rook	<i>Corvus frugilegus</i>	Passeriformes	Corvidae	359.5	61.75		15
Blue jay	<i>Cyanocitta cristata</i>	Passeriformes	Corvidae	61	33.3		3

<b>Species</b>	<b>Common name</b>	<b>Scientific name</b>	<b>Order</b>	<b>Family</b>	<b>Body mass, g</b>	<b>SI length, cm</b>	<b>SI NSA, cm<sup>2</sup></b>	<b>Source</b>
Song sparrow	<i>Melospiza melodia</i>	Passeriformes	Fringillidae	21.2	18.4	16.87	16	
Pine grosbeak	<i>Pinicola enucleator</i>	Passeriformes	Fringillidae	52.6	100.99		14	
Rufous-sided towhee	<i>Pipilo erythrrophthalmus</i>	Passeriformes	Fringillidae	41.5	19.49	18.29	5, 16, 17	
Scarlet tanager	<i>Piranga olivacea</i>	Passeriformes	Fringillidae	31.4	17.9	20.52	16	
Scarlet-rumped tanager	<i>Ramphocelus passerini</i>	Passeriformes	Fringillidae	30.3	14.8	16.4	16	
Variable seedeater	<i>Sporophila aurita</i>	Passeriformes	Fringillidae	10.4	11	6.11	16	
Silver-throated tanager	<i>Tangara icterocephala</i>	Passeriformes	Fringillidae	22	12.3	12.47	16	
Blue-gray tanager	<i>Thraupis virens</i>	Passeriformes	Fringillidae	34	11.5	12.71	16	
Red-winged blackbird	<i>Agelaius phoeniceus</i>	Passeriformes	Icteridae	57.5		15.5	18	
Streak-backed oriole	<i>Icterus pustulatus</i>	Passeriformes	Icteridae	28.2		7.08	C. Martínez del Rio, personal communication	
Orchard oriole	<i>Icterus spurius</i>	Passeriformes	Icteridae	18.5		6.57	C. Martínez del Rio, personal communication	
Brown-headed cowbird	<i>Molothrus ater</i>	Passeriformes	Icteridae	40.8		12.9	C. Martínez del Rio, personal communication	
Boat-tailed grackle	<i>Quiscalus major</i>	Passeriformes	Icteridae	178.2	46.2		3	
Great-tailed grackle	<i>Quiscalus mexicanus</i>	Passeriformes	Icteridae	95.9		30.4	C. Martínez del Rio, personal communication	
Common grackle	<i>Quiscalus quiscula</i>	Passeriformes	Icteridae	81.1	32.3		3	
Gray catbird	<i>Dumetella carolinensis</i>	Passeriformes	Mimidae	32	17	18.7	19	
Northern mockingbird	<i>Mimus polyglottos</i>	Passeriformes	Mimidae	51.9	20.4	27.74	16	
British robin	<i>Erythacus rubecula</i>	Passeriformes	Muscicapidae	16.3	14.82		20, 21	
North American thrush	<i>Hylocichla guttata</i>	Passeriformes	Muscicapidae	31	17.6	23.87	16	

<b>Species</b>	<b>Common name</b>	<b>Scientific name</b>	<b>Order</b>	<b>Family</b>	<b>Body mass, g</b>	<b>SI length, cm</b>	<b>SI NSA, cm<sup>2</sup></b>	<b>Source</b>
Clay-colored robin	<i>Turdus grayi</i>	Passeriformes	Muscicapidae/ Turdidae	74.7	19.1	29.51	16	
Tufted titmouse	<i>Parus bicolor</i>	Passeriformes	Paridae	21.3	17.6	19.9	16	
Carolina chickadee	<i>Parus carolinensis</i>	Passeriformes	Paridae	10.1	9.1	6.43	16	
Great tit	<i>Parus major</i>	Passeriformes	Paridae	16.2	14.2	7.11	21, 22	
Yellow-rumped warbler	<i>Dendroica coronata</i>	Passeriformes	Parulidae	11.9	12.37	5.83	23, 24	
Pine warbler	<i>Dendroica pinus</i>	Passeriformes	Parulidae	11.7	13.7	6	25	
Orange-crowned warbler	<i>Vermivora celata</i>	Passeriformes	Parulidae	8.2		5.4	26	
House sparrow	<i>Passer domesticus</i>	Passeriformes	Passeridae	26.6	17	11.8	4, 27	
Thrush-like manakin	<i>Schiffornis turdinus</i>	Passeriformes	Pipridae/ Cotingidae	32	17.8	16.26	16	
Tree sparrow	<i>Passer montanus</i>	Passeriformes	Ploceidae	25	16.12	5.96	28	
Goldcrest	<i>Regulus regulus</i>	Passeriformes	Regulidae	5.1	6.17		20	
White-breasted nuthatch	<i>Sitta carolinensis</i>	Passeriformes	Sittidae	20.9	16.2	14.65	16	
European starling	<i>Sturnus vulgaris</i>	Passeriformes	Sturnidae	73	32.24	29.05	5, 14, 18, 19	
Garden warbler	<i>Sylvia borin</i>	Passeriformes	Sylviidae	18.5	15		21, 29	
Orange-billed nightingale-thrush	<i>Catharus aurantiirostris</i>	Passeriformes	Turdidae	25.2		9.12	C. Martínez del Rio, personal communication	
Hermit thrush	<i>Catharus guttatus</i>	Passeriformes	Turdidae	33		11.2	30	
Gray-cheeked thrush	<i>Catharus minimus</i>	Passeriformes	Turdidae	43.5		14.8	30	
American robin	<i>Turdus migratorius</i>	Passeriformes	Turdidae	78.4	26.97	33.79	3, 5, 16, 19	
Fieldfare	<i>Turdus pilaris</i>	Passeriformes	Turdidae	102.7	41.08		14	
Rufous-backed robin	<i>Turdus naumanniellus</i>	Passeriformes	Turdidae	70.4		24.23	C. Martínez del Rio, personal communication	
Yellow-bellied elenia	<i>Elaenia flavogaster</i>	Passeriformes	Tyrannidae	23.5	12.5	14.99	16	

<b>Species</b>	<b>Common name</b>	<b>Scientific name</b>	<b>Order</b>	<b>Family</b>	<b>Body mass, g</b>	<b>SI length, cm</b>	<b>SI NSA, cm<sup>2</sup></b>	<b>Source</b>
Western flycatcher	<i>Empidonax difficilis</i>	Passeriformes	Tyrannidae	10.9		4.74	C. Martínez del Rio, personal communication	
Ochre-bellied flycatcher	<i>Mionectes oleagineus/ Pipromorpha oleaginea</i>	Passeriformes	Tyrannidae	10.8	15.3	11.24	16	
Great kiskadee	<i>Pitangus sulphuratus</i>	Passeriformes	Tyrannidae	73.3		21.58	C. Martínez del Rio, personal communication	
Tropical kingbird	<i>Terenotriccus erythrurus</i>	Passeriformes	Tyrannidae	7.5	6.1	4.56	16	
Yellow-breasted chat	<i>Icteria virens</i>	Passeriformes	Tyrannidae	39.8	19		16	
Blue-headed vireo	<i>Vireo solitarius</i>	Passeriformes	Vireonidae	21.9		10.82	C. Martínez del Rio, personal communication	
Lesser honeyguide	<i>Indicator minor</i>	Piciformes	Indicatoridae	17	13.2	11.9	16	
<b>TERRESTRIAL EUTHERIAN MAMMALS</b>								
Pig	<i>Sus scrofa</i>	Artiodactyla	Suidae	111,850		10,047	32, 33	
Dog	<i>Canis familiaris</i>	Carnivora	Canidae	9,782.5	271	907	32-37	
Red fox	<i>Vulpes vulpes</i>	Carnivora	Canidae	6,320	210	939.2	32, 34	
Leopard	<i>Panthera pardus</i>	Carnivora	Felidae	15,700		1,580	32	
African golden cat	<i>Profelis aurata</i>	Carnivora	Felidae	5,230		404	32	
African palm civet	<i>Nandinia binotata</i>	Carnivora	Nandiniidae	2,363.3		370	32	
Servaline genet	<i>Genetta servalina</i>	Carnivora	Viveridae	1,480		274	32	
African lionsang	<i>Poiana richardsoni</i>	Carnivora	Viveridae	510		184	32	
South American squirrel monkey	<i>Saimiri sciureus</i>	Primates	Cebidae	675.4	114.88		38	
Grey-cheeked mangabey	<i>Cercocebus albigena</i>	Primates	Cercopithecidae	3,700		453	32	

<b>Species</b>	<b>Common name</b>	<b>Scientific name</b>	<b>Order</b>	<b>Family</b>	<b>Body mass, g</b>	<b>SI length, cm</b>	<b>SI NSA, cm<sup>2</sup></b>	<b>Source</b>
Vervet monkey	<i>Cercopithecus aethiops</i>	Primates	Cercopithecidae	4,700		643.5	39	
Western black-and-white colobus	<i>Colobus polykomos</i>	Primates	Cercopithecidae	6,500		925	32	
Long-tailed macaque	<i>Macaca fascicularis</i>	Primates	Cercopithecidae	3,216.7		1,024.3	32	
Rhesus macaque	<i>Macaca mulatta</i>	Primates	Cercopithecidae	13,885		768.67	32, 40	
Talapoin monkey	<i>Miopithecus talapoin</i>	Primates	Cercopithecidae	915		522.5	32	
Mandrill	<i>Papio sphinx</i>	Primates	Cercopithecidae	14,450		2,644.5	32	
Greater dwarf lemur	<i>Cheirogaleus major</i>	Primates	Chirogaleidae	230		42	32	
Fork-crowned lemur	<i>Phaner furcifer</i>	Primates	Chirogaleidae	270		95	32	
Demidoff's dwarf bushbaby	<i>Galago demidovii</i>	Primates	Galagonidae	60		36	32	
Human	<i>Homo sapiens</i>	Primates	Hominidae	70,000-78,300	600	5897.5	33, 34, 41, 42	
Calabar potto	<i>Arctocebus calabarensis</i>	Primates	Loridae	176.7		103	32	
Potto	<i>Perodicticus potto</i>	Primates	Loridae	1,160		200	32	
Northern jumping mouse	<i>Zapus hudsonius</i>	Rodentia	Dipodidae	20		23	43	
Spiny mouse	<i>Acomys spinosissimus</i>	Rodentia	Muridae	17.2	25.99	20.53	44	
Cape short-eared gerbil	<i>Desmodillus auricularis</i>	Rodentia	Muridae	86.2	37.51		44	
Griselda's striped grass mouse	<i>Lemniscomys griselda</i>	Rodentia	Muridae	54.9	24.38	29.99	44	
Gerbil	<i>Meriones unguiculatus</i>	Rodentia	Muridae	70.1	30.5	34.3	33, 36	
Syrian hamster	<i>Mesocricetus auratus</i>	Rodentia	Muridae	122.6	41	56.7	33, 35, 36, 46, 47	
Harvest mouse	<i>Micromys minutus</i>	Rodentia	Muridae	8.9		14.2	33	
Pygmy mouse	<i>Mus minutoides</i>	Rodentia	Muridae	4.7	17.45	13.96	44	

<b>Species</b>	<b>Scientific name</b>	<b>Order</b>	<b>Family</b>	<b>Body mass, g</b>	<b>SI length, cm</b>	<b>SI NSA, cm<sup>2</sup></b>	<b>Source</b>
Mouse	<i>Mus musculus</i>	Rodentia	Muridae	38.2	45	43	33, 34, 48; R. Ferraris and J.M. Diamond, personal communication
Long-tailed deer mouse	<i>Peromyscus leucopus</i>	Rodentia	Muridae	25		39	43
Woodland deer mouse	<i>Peromyscus maniculatus</i>	Rodentia	Muridae	20		24	43
Laboratory rat	<i>Rattus norvegicus</i>	Rodentia	Muridae	305	95.1	119.2	4, 33-35, 49-53
House rat	<i>Rattus rattus</i>	Rodentia	Muridae	105.2	95.64		44
Four-striped grass mouse	<i>Rhabdomys pumilio</i>	Rodentia	Muridae	46.2	29.35	32.29	44
Acacia rat	<i>Thallomys paedulcus</i>	Rodentia	Muridae	55.2	31.3	36	44
Nutria	<i>Myocastor coypus</i>	Rodentia	Myocastoridae	5,358.4		1,040.1	33, 36, 54
Woodland dormouse	<i>Graphiurus murinus</i>	Rodentia	Myoxidae	20.9	17.01	17.01	44
Pouched mouse	<i>Saccostomus campestris</i>	Rodentia	Nesomyidae	82.9	38.93	51.78	44
Fat mouse	<i>Steatomys pratinensis</i>	Rodentia	Nesomyidae	31.5	25.69	23.12	44
Ebien squirrel	<i>Epixerus ebii</i>	Rodentia	Sciuridae	560		208.5	32
Red squirrel	<i>Sciurus vulgaris</i>	Rodentia	Sciuridae	600	174	306.5	32, 34
Belding's ground squirrel	<i>Spermophilus beldingi</i>	Rodentia	Sciuridae	318	80		W.H.K., unpublished data
<b>FLYING EUTHERIAN MAMMALS (BATS)</b>							
Mariana sheath-tailed bat	<i>Emballonura semicaudata</i>	Chiroptera	Emballonuridae	7	9		55
Proboscis bat	<i>Rhynchoycteris naso</i>	Chiroptera	Emballonuridae	4	12		55
Black-bearded tomb bat	<i>Taphozous melanopogon</i>	Chiroptera	Emballonuridae	22.7	53.6		55
Yellow-winged bat	<i>Lavia frons</i>	Chiroptera	Megadermatidae	23.4	16.1		55

<b>Species</b>	<b>Scientific name</b>	<b>Order</b>	<b>Family</b>	<b>Body mass, g</b>	<b>SI length, cm</b>	<b>SI NSA, cm<sup>2</sup></b>	<b>Source</b>
<b>Common name</b>							
Greater false vampire bat	<i>Megaderma lyra</i>	Chiroptera	Megadermatidae	35.3	15.7		55
Lesser false vampire bat	<i>Megaderma spasma</i>	Chiroptera	Megadermatidae	23.8	11.5		55
Hairless bat	<i>Cheiromeles torquatus</i>	Chiroptera	Molossidae	168.5	34		55
Pallas's mastiff bat	<i>Molossus major</i>	Chiroptera	Molossidae	10.7	12.3		56
Egyptian free-tailed bat	<i>Tadarida aegyptiaca</i>	Chiroptera	Molossidae	17.7	16.6		55
Brazilian free-tailed bat	<i>Tadarida brasiliensis</i>	Chiroptera	Molossidae	11.2	15.95		57
Ghost-faced bat	<i>Mormoops megalophylla</i>	Chiroptera	Mormoopidae	15.3		7.15	58
Parnell's moustached bat	<i>Pteronotus parnellii</i>	Chiroptera	Mormoopidae	20.1	14.7	7.04	57, 58
Greater bulldog bat	<i>Noctilio leporinus</i>	Chiroptera	Noctilionidae	59.2	34.2		57
Large slit-faced bat	<i>Nycteris grandis</i>	Chiroptera	Nycteridae	29.4	24.3		55
Egyptian slit-faced bat	<i>Nycteris thebaica</i>	Chiroptera	Nycteridae	8.95	11.7		55
Geoffrey's hairy-legged bat	<i>Anoura geoffroyi</i>	Chiroptera	Phyllostomidae	15.5		7.37	58
Fringed fruit-eating bat	<i>Artibeus fimbriatus</i>	Chiroptera	Phyllostomidae	63.9	34.68		57
Jamaican fruit-eating bat	<i>Artibeus jamaicensis</i>	Chiroptera	Phyllostomidae	39.3	31.3		55
Great fruit-eating bat	<i>Artibeus lituratus</i>	Chiroptera	Phyllostomidae	69.6	42.18	28.7	57, This study
Antillean fruit-eating bat	<i>Brachyphylla cavernarum</i>	Chiroptera	Phyllostomidae	46.8	30.3		55
Silky short-tailed bat	<i>Carollia brevicauda</i>	Chiroptera	Phyllostomidae	17.2		7.5	58
Short-tailed bat	<i>Carollia perspicillata</i>	Chiroptera	Phyllostomidae	16.1	20.85		56, 57
Wrinkle-faced bat	<i>Centurio senex</i>	Chiroptera	Phyllostomidae	26		15.01	58

<b>Species</b>	<b>Common name</b>	<b>Scientific name</b>	<b>Order</b>	<b>Family</b>	<b>Body mass, g</b>	<b>SI length, cm</b>	<b>SI NSA, cm<sup>2</sup></b>	<b>Source</b>
Salvin's big-eyed bat	<i>Chiroderma salvini</i>	Chiroptera	Phyllostomidae	25	11.77	58		
Hairy big-eyed bat	<i>Chiroderma villosum</i>	Chiroptera	Phyllostomidae	24.8	37		55	
Godman's long-tailed bat	<i>Choeroniscus godmani</i>	Chiroptera	Phyllostomidae	10.1		3.89	58	
Big-eared woolly bat	<i>Chrotopterus auritus</i>	Chiroptera	Phyllostomidae	96.1	32		57	
Toltec fruit-eating bat	<i>Dermanura tolteca</i>	Chiroptera	Phyllostomidae	15.2		7.76	58	
Vampire bat	<i>Desmodus rotundus</i>	Chiroptera	Phyllostomidae	29	26.95	14.02	57, 58	
Hairy-legged vampire bat	<i>Diphylla ecaudata</i>	Chiroptera	Phyllostomidae	27.8	20.5		57	
Pallas's long-tongued bat	<i>Glossophaga soricina</i>	Chiroptera	Phyllostomidae	10.2	11.75		57	
Lesser long-nosed bat	<i>Leptonycteris curasoae</i>	Chiroptera	Phyllostomidae	24.8	18	8.48	57, 58	
Waterhouse's leaf-nosed bat	<i>Macrotus waterhousii</i>	Chiroptera	Phyllostomidae	18.9		7.59	58	
Pale spear-nosed bat	<i>Phyllostomus discolor</i>	Chiroptera	Phyllostomidae	41.5		14.9	58	
Greater spear-nosed bat	<i>Phyllostomus hastatus</i>	Chiroptera	Phyllostomidae	87.1	38		57	
White-lined broad-nosed bat	<i>Platyrrhinus lineatus</i>	Chiroptera	Phyllostomidae	21.9	30.33		57	
Greater broad-nosed bat	<i>Platyrrhinus vittatus</i>	Chiroptera	Phyllostomidae	36.6	36.2		55	
Little yellow-shouldered bat	<i>Sturnira lilium</i>	Chiroptera	Phyllostomidae	16.8 - 21.9		9.58	57, 58	
Pygmy round-eared bat	<i>Toniata brasiliensis</i>	Chiroptera	Phyllostomidae	11.8		5.62	58	
Fringe-lipped bat	<i>Trachops cirrhosus</i>	Chiroptera	Phyllostomidae	33.5		11.29	58	
Little yellow-eared bat	<i>Vampyressa pusilla</i>	Chiroptera	Phyllostomidae	8.8	17.9		57	
Great stripe-faced bat	<i>Vampyrodes caraccioli</i>	Chiroptera	Phyllostomidae	31		15.64	58	

<b>Species</b>	<b>Common name</b>	<b>Scientific name</b>	<b>Order</b>	<b>Family</b>	<b>Body mass, g</b>	<b>SI length, cm</b>	<b>SI NSA, cm<sup>2</sup></b>	<b>Source</b>
Straw-colored fruit bat	<i>Eidolon helvum</i>	Chiroptera	Pteropodidae	266.8	170			55
Lesser dawn bat	<i>Eonycteris spelaea</i>	Chiroptera	Pteropodidae	51.6	35			57
Wahlberg's epauletted fruit bat	<i>Eponophorus wahlbergi</i>	Chiroptera	Pteropodidae	76	73.3	76.49		59
Franquet's epauletted bat	<i>Eponops franqueti</i>	Chiroptera	Pteropodidae	118.3	80			55
Hammer-headed fruit bat	<i>Hypsignathus monstrosus</i>	Chiroptera	Pteropodidae	324.6	115			55
Angola fruit bat	<i>Lisonycteris angolensis</i>	Chiroptera	Pteropodidae	76.9	72.2	45.05	59	
Black flying fox	<i>Pteropus alecto</i>	Chiroptera	Pteropodidae	540	163			60
Gray-headed flying fox	<i>Pteropus poliocephalus</i>	Chiroptera	Pteropodidae	630 - 645	169	215	57, 60, 61	
Egyptian fruit bat	<i>Rousettus aegyptiacus</i>	Chiroptera	Pteropodidae	126 - 168.3	103.45	33.3	57, This study	
Southern blossom bat	<i>Syconycteris australis</i>	Chiroptera	Pteropodidae	18.8	36.1			62
Trident leaf-nosed bat	<i>Asellia tridens</i>	Chiroptera	Rhinolophidae	12.8	11.7			55
Diadem roundleaf bat	<i>Hipposideros diadema</i>	Chiroptera	Rhinolophidae	43.6	24			55
Geoffroy's horseshoe bat	<i>Rhinolophus clivosus</i>	Chiroptera	Rhinolophidae	20.1	10.2			55
Greater horseshoe bat	<i>Rhinolophus ferrumequinum</i>	Chiroptera	Rhinolophidae	23.5	17.9			57
Lesser horseshoe bat	<i>Rhinolophus hipposideros</i>	Chiroptera	Rhinolophidae	4.6	8.05			55
Lesser mouse-tailed bat	<i>Rhinopoma hardwickei</i>	Chiroptera	Rhinopomatidae	12.9	5.27			55
Greater mouse-tailed bat	<i>Rhinopoma microphyllum</i>	Chiroptera	Rhinopomatidae	27.1	7.73			55
Big brown bat	<i>Eptesicus fuscus</i>	Chiroptera	Vespertilionidae	18		16	43	
Serotine	<i>Eptesicus serotinus</i>	Chiroptera	Vespertilionidae	27		16.1	57	
Eastern red bat	<i>Lasiurus borealis</i>	Chiroptera	Vespertilionidae	12.2	8			57

Species	Common name	Scientific name	Order	Family	Body mass, g	SI length, cm	SI NSA, cm <sup>2</sup>	Source
Greater long-fingered bat	<i>Miniopterus inflatus</i>	Chiroptera	Vespertilionidae	8.9	19.6	9.13	59	
Schreibers's long-fingered bat	<i>Miniopterus schreibersii</i>	Chiroptera	Vespertilionidae	10.9	15.97		57	
Daubenton's bat	<i>Myotis daubentonii</i>	Chiroptera	Vespertilionidae	7.8	17.6		55	
Mouse-eared bat	<i>Myotis myotis</i>	Chiroptera	Vespertilionidae	25	17.55		57	
Whiskered bat	<i>Myotis mystacinus</i>	Chiroptera	Vespertilionidae	4.85	13		55	
Natterer's bat	<i>Myotis nattereri</i>	Chiroptera	Vespertilionidae	7.15	14.8		55	
Noctule bat	<i>Nyctalus noctula</i>	Chiroptera	Vespertilionidae	26	17.05		55	
Kuhl's pipistrelle	<i>Pipistrellus kuhlii</i>	Chiroptera	Vespertilionidae	6.3	9.3		55	
Common pipistrelle	<i>Pipistrellus pipistrellus</i>	Chiroptera	Vespertilionidae	6.6	9.6		57	
Brown big-eared bat	<i>Plecotus auritus</i>	Chiroptera	Vespertilionidae	11.4	12		57	
Lesser Asiatic yellow bat	<i>Scotophilus kuhlii</i>	Chiroptera	Vespertilionidae	19.6	20		55	
Parti-colored bat	<i>Vesperilio murinus</i>	Chiroptera	Vespertilionidae	33.3	25.5		55	

- Wilson DE, Reeder DM (1993) *Mammal Species of the World: A Taxonomic and Geographic Reference* (Smithsonian Institution, Washington, DC), 2nd Ed.
- Moorman TE, Baldassare GA, Richard DM (1992) *Condor* 94: 401-417.
- DeGolier TF, Mahoney SA, Duke GE (1999) *Condor* 101: 622-634.
- Lavin SR (2007) PhD thesis (University of Wisconsin, Madison).
- Karasov WH (1990) *Stud Avian Biol* 13: 391-415.
- Barnes GG, Thomas VG (1987) *Can J Zool* 65: 1812-1817.
- Kehoe FP, Ankney CD (1985) *Can J Zool* 63: 2339-2342.
- Verzar F, McDougall EJ (1936) *Absorption From the Intesine* (Longmans and Green, London).
- Obst BS, Diamond JM (1989) *J Exp Zool Suppl* 3: 117-126.
- Karasov WH, Afik D, Darken BW (1996) *Comp Biochem Physiol* 113A: 233-238.
- Leopold AS (1953) *J Wildl Manag* 2: 197-203.
- Christaki E, Babidis V, Florou-Paneri P, Kufidis D, Spais AB (1997) *Anim Feed Sci Tech* 65: 287-292.
- Starck JM, Rahmaan GHA (2003) *J Exp Biol* 206: 1887-1897.
- 13.

- Pulliainen E, Helle E, Tunkkari P (1981) *Orn Fem* 58: 21-28.
- Przystal'ski A (1985) *Zool Polon* 32: 14-21.
- Ricklefs RE (1996) *Condor* 98: 279-292.
- Davis J (1961) *Condor* 63: 313-321.
- Martínez del Rio C, Brugger KE, Rios JL, Vergara ME, Witmer M (1995) *Physiol Zool* 68: 490-511.
- Karasov WH, Levey DJ (1990) *Physiol Zool* 63: 1248-1270.
- Przystal'ski A (1984) *Act Biol Cracov* 26: 89-99.
- Herrera CM (1984) *Ecology* 65: 609-617.
- Przystal'ski A (1986) *Zool Polon* 35: 5-20.
- Afik D, Karasov WH (1995) *Ecology* 76: 2247-2257.
- Afik D, Darken BW, Karasov WH (1997) *Physiol Zool* 70: 213-221.
- Levey DJ, Place AR, Rey PJ, Martínez del Rio C (1999) *Physiol Biochem Zool* 72: 576-587.
- Schondube JE, Martínez del Rio C (2004) *J Comp Physiol B* 174: 263-273.
- Caviedes-Vidal E, Afik D, Martínez del Rio C, Karasov WH (2000) *Comp Biochem Physiol A-Mol Integr Physiol* 125: 11-24.
- Przystal'ski A (1987) *Act Biol Cracov* 29: 93-104.
- Hume ID, Biebach H (1996) *J Comp Physiol B* 166: 388-395.
- Witmer MC, Martínez del Rio C (2001) *Physiol Biochem Zool* 74: 584-593.
- Downs CT, van Dyk RJ, Ijji P (2002) *Comp Biochem Physiol A* 133: 125-134.
- Chivers DJ, Hladik CM (1980) *J Morph* 166: 337-386.
- Snipes RL (1997) *Adv Anat Embry Cell Biol* 138: 1-88.
- Pappenheimer JR (1998) *Comp Biochem Physiol* 121A: 45-58.
- Anderson JH, Taylor AB (1973) *J Morph* 141: 281-291.
- Snipes RL, Kriete A (1991) *Zeitschrift für Säugetierkunde* 56: 225-244.
- Fahay GC, Merchen NR Jr, Corbin AK, Hamilton AK, Hirakawa DA (1990) *J Anim Sci* 68: 4229-4235.
- Fooden J (1964) *Am J Phys Anthropol* 22: 227-231.
- Bruortton MR, Perrin MR (1991) *Zeitschrift für Säugetierkunde* 56: 65-71.
- Young Owl M (1982) *Allometry in Primate Digestive Systems* (University of California, Los Angeles).
- Marsh MN, Swift JA (1968) *Gut* 9: 727-728.
- Wilson TH (1962) *Intestinal Absorption* (Saunders, Philadelphia).
- Barry RE Jr (1976) *J Mammal* 57: 273-289.
- Perrin MR, Curtis BA (1980) *SAfr J Zool* 15: 22-33.
- Knight MH, Knight-Eloff AK (1987) *J Zool* 213: 7-22.
- Karasov WH, Solberg DH, Diamond JM (1985) *Am J Physiol* 249: G271-G283.
- Sakaguchi E, Itoh H, Uchida S, Horigome T (1987) *Br J Nutr* 58: 149-158.
- Diamond JM, Karasov WH (1984) *J Physiol* 349: 419-440.
- Wood HO (1944) *J Anat* 78: 103-105.

50. Palay SL, Karlin LJ (1959) *J Biophys Biochem Cytol* 5: 373-383.
51. Keegan DJ, Mödinger R (1979) *S Afr J Zool* 14: 220-223.
52. Mayhew TM, Middleton C (1985) *J Anat* 141: 1-17.
53. Clemens ET, Stevens CE (1980) *J Agric Sci* 94: 735-737.
54. Sakaguchi E, Nabata A (1982) *Comp Biochem Physiol A* 103: 601-604.
55. Jones KE, MacLarnon AM (2004) *Am Nat* 164: E20-E31.
56. Klite PD (1965) *J Bacteriol* 90: 375-379.
57. Cruz-Neto AP, Jones KE (2006) in *Functional and Evolutionary Ecology of Bats*, eds Zubaid A, McCracken G, Kunz TH (Oxford University Press, Oxford), pp 59-78.
58. Schondube JE, Herrera-M. LG, Martínez del Rio C (2001) *Zool-Anal Compl Syst* 104: 59-73.
59. Makanya AN, Maina JN, Mayhew TM, Tschanz SA, Burri PH (1997) *J Exp Biol* 200: 2415-2423.
60. Tedman RA, Hall LS (1985) *Aust J Zool* 33: 625-640.
61. Tedman RA, Hall LS (1985) *Aust Mammal* 8: 271-278.
62. Law BS (1992) *Funct Ecol* 6: 257-264.