

Table S1. Estimates of $\dot{V}_{O_{2,\max}}$ and body mass in mammalian species

Species		N	M_b (kg)	$\dot{V}_{O_{2,\max}}$ (ml O ₂ min ⁻¹)	Reference
Pygmy mouse (A)	<i>Baiomys taylori</i>	4	0.0072	1.884	Seeherman et al. (1981)
European woodmouse (A)	<i>Apodemus sylvaticus</i>	4	0.02	5.28	Hoppeler et al. (1984)
Deer mouse (A)	<i>Peromyscus maniculatus</i>	211	0.022	4.928	Weibel et al. (2004); their table A1
Mouse	<i>Mus musculus</i>	425	0.026	3.884	Weibel et al. (2004); average of values from several sources in their table A1
Chipmunk (A)	<i>Tamias striatus</i>	2	0.09	21.486	Seeherman et al. (1981)
Mole rat	<i>Spalax ehrenbergi</i>	4	0.136	14.584	Weibel et al. (2004), their table A1
Rat	<i>Rattus norvegicus</i>	103	0.278	54.44	Weibel et al. (2004); average of values from several sources in their table A1
Dwarf mongoose	<i>Helogale parvula</i>	2	0.43	54.375	Mathieu et al. (1981)
Guinea pig	<i>Cavia porcellus</i>	5	0.584	32.587	Turner et al. (1995); control animals
Brush-tailed bettong (A)	<i>Bettongia penicillata</i>	2	1.1	194.1	Seeherman et al. (1981)
Banded mongoose	<i>Mungos mungo</i>	1	1.14	130	Mathieu et al. (1981)
Genet cat	<i>Genetta tigrina</i>	2	1.38	146.6	Mathieu et al. (1981)
Spring hare	<i>Pedetes capensis</i>	2	3	291.6	Seeherman et al. (1981)
Agouti	<i>Agouti pacá</i>	1	3.22	328.44	Hoppeler and Flück (2002)
Suni	<i>Nesotragus moschatus</i>	2	3.3	317.8	Mathieu et al. (1981)
Dik-dik	<i>Madoqua kirkii</i>	2	4.2	228.1	Mathieu et al. (1981)
Fox (A)	<i>Alopex lagopus</i>	5	4.51	882.655	Average of values from Longworth et al. (1989) and Weibel et al. (1983)
Grant's gazelle	<i>Gazella granti</i>	1	10.1	539.3	Mathieu et al. (1981)
Coyote (A)	<i>Canis latrans</i>	2	12.4	2280.579	Weibel et al. (1983)
Pig	<i>Sus scrofa</i>	2	18.5	1731.6	Seeherman et al. (1981)
African sheep	<i>Ovis aries</i>	2	21.8	1013.7	Mathieu et al. (1981)
Goat	<i>Capra hircus</i>	8	24.3	1344.7	Weibel et al. (2004); average of values from several sources in their table A1
Dog (A)	<i>Canis familiaris</i>	11	25.9	3825	Weibel et al. (2004); average of values from several sources in their table A1
Wolf (A)	<i>Canis lupus</i>	2	27.6	4322.965	Weibel et al. (1983)
Pronghorn (A)	<i>Antilocapra americana</i>	1	28.4	8435	Lindstedt et al. (1991); as reported in Weibel et al. (2004)
Red kangaroo (A)	<i>Macropus rufus</i>	1	20.4	3631	Kram and Dawson (1998)
Lion	<i>Panthera leo</i>	2	30	1800	Seeherman et al. (1981)
Wildebeest	<i>Connochaetes taurinus</i>	1	102	4468	Mathieu et al. (1981)
Waterbuck	<i>Kobus defassa</i>	2	110	5172	Mathieu et al. (1981)
Calf	<i>Bos taurus</i>	3	141	5135.22	Hoppeler et al. (1987)
Pony (A)	<i>Equus caballus</i>	3	171	15,185	Hoppeler et al. (1987)
Zebu cattle	<i>Bos indicus</i>	4	193	5486.25	Mathieu et al. (1981)
Eland	<i>Taurotragus oryx</i>	1	240	8640	Mathieu et al. (1981)
Horse (A)	<i>Equus caballus</i>	40	453	56,005	Weibel et al. (2004); average of values from several sources in their table A1
Steer	<i>Bos taurus</i>	3	475	24,225	Kayar et al. (1989)

$\dot{V}_{O_{2,\max}}$ data are graphed in Fig. 2.

Species labelled 'A' were categorised as athletic species for Fig. 2 and associated regression equations; the remainder were categorised as non-athletic.