

Supporting information for ”‘The comparative energetics of the carnivorans’”

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This document presents the list of species of carnivorans and pangolins included in the study. For each species we provide the type of data used as well as references (excluding webpages) that underlie the data used. The data and code are downloadable, free access, via the webportal: https://debtheory.fr/add_my_pet/index.html.

Table 1: Carnivora species that are included in the AmP collection at 2021/12/12, the data types as extracted from the literature and selected references. Besides these references, websites for have used to get data, which are presented on the AmP website. The codes of the data types are presented in Table 2

species	data	references
<i>Acinonyx jubatus</i>	tg, ax, ap, am, Wwb, Wwx, Wwi, Ri, t-Ww	Wack et al. (1991)
<i>Ailuropoda melanoleuca</i>	tg, ax, ap, am, Wwb, Wwx, Wwi, Ri, t-Ww	Che et al. (2015)
<i>Ailurus fulgens</i>	tg, ax, ap, am, Wwb, Wwx, Wwi, Ri, t-Ww	Roberts (1974)
<i>Aonyx cinerea</i>	tg, ax, ap, am, Wwb, Wwi, Ri, t-Ww	Heap et al. (2009), Reed-Smith et al. (2009)
<i>Arctictis binturong</i>	tg, ax, ap, am, Wwb, Wwx, Wwi, Ri, t-Ww	Schoknecht (1984)
<i>Arctocephalus australis</i>	tg, ax, ap, am, Lb, Li, Wwb, Wwi, Ri, t-L, t-Ww	Lima and Paez (1995)
<i>Arctocephalus forsteri</i>	tg, ax, ap, am, Wwb, Wwi, Ri, t-Ww	Mattlin (1981)
<i>Arctocephalus gazella</i>	tg, ax, ap, am, Wwb, Wwi, Ri, t-Ww	Kerley (1985), Payne (1979)
<i>Arctocephalus philippii</i>	tg, ax, ap, am, Wwb, Wwi, Ri, t-L, t-Ww	Gallo-Reynoso and Figueroa-Carranza (2010)
<i>Arctocephalus pusillus</i>	tg, ax, ap, am, Wwb, Wwi, Ri, t-Ww, t-L, t-JX	Arnould and Hindell (2002), Stewardson et al. (2009)
<i>Arctocephalus tropicalis</i>	tg, ax, ap, am, Wwb, Wwi, Ri, t-Ww	Guinet and Georges (2000)
<i>Atilax paludinosus</i>	tg, ax, ap, am, Wwb, Wwx, Wwi, Ri	
<i>Bassariscus astutus</i>	tg, ax, ap, am, Wwb, Wwx, Wwi, Ri, t-L	Richardson (1942)
<i>Callorhinus ursinus</i>	tg, ax, ap, am, Lb, Lp, Li, Wwb, Wwp, Wwi, Ri, t-L	du Dot (2011), Reeves et al. (1992)
<i>Canis aureus</i>	tg, ax, ap, am, Wwb, Wwi, Ri, t-Ww	Dhoot et al. (2003)
<i>Canis familiaris</i>	tg, ax, ap, am, Wwb, Ri, t-Ww	Hawthorne et al. (2004)
<i>Canis latrans</i>	tg, ax, ap, am, Wwb, Wwx, Wwi, Ri, t-Ww	Barnum et al. (1979)
<i>Canis lupus</i>	tg, ax, ap, am, Wwb, Wwx, Wwi, Ri, t-Ww	MacNulty et al. (2009)
<i>Canis mesomelas</i>	tg, ax, ap, am, Wwb, Wwi, Ri, t-L, t-Ww	Lombaard (1971)
<i>Caracal caracal</i>	tg, ax, ap, am, Wwb, Wwi, Ri, t-Ww	Grobler (1991)
<i>Catopuma temminckii</i>	tg, ax, ap, am, Wwb, Wwi, Ri, t-Ww	Andrews (2003)
<i>Cerdocyon thous</i>	tg, ax, ap, am, Wwb, Wwi, Ri, t-Ww	Brady (1978)
<i>Chrysocyon brachyurus</i>	tg, ax, ap, am, Wwb, Wwi, Ri, t-Ww	Rosenthal and Dunn (1995)
<i>Civettictis civetta</i>	tg, ax, ap, am, Wwb, Wwx, Wwi, Ri, t-Ww	Mallisoïn (1973)
<i>Crocuta crocuta</i>	tg, ax, ap, am, Li, Wwb, Wwx, Wwi, Ri, t-L, t-Ww	Binder and Valkengurgh (2000), Kinsey and Kreider (1990)

Continuation of Table 1		
species	data	references
<i>Cryptoprocta ferox</i>	tg, ax, ap, am, Wwb, Wwi, Ri, t-Ww	Albignac (1975)
<i>Cystophora cristata</i>	tg, ax, ap, am, Lb, Li, Wwb, Wwx, Wwi, Ri, t-L	Miller et al. (1999)
<i>Eira barbara</i>	tg, ax, ap, am, Wwb, Wwi, Ri, t-Ww	Poglayen-Neuwall (1978)
<i>Enhydra lutris</i>	tg, ax, ap, am, Wwb, Wwx, Wwi, Ri, t-L	Hutchinson et al. (2015)
<i>Erignathus barbatus</i>	tg, ax, ap, am, Lb, Lp, Li, Wwb, Wwx, Wwi, Ri, t-L, t-Ww	Andersen et al. (1999)
<i>Eumetopias jubatus</i>	tg, ax, ap, am, Lb, Li, Wwb, Wwx, Wwi, Ri, t-L, t-Ww	Winship et al. (2001)
<i>Felis catus</i>	tg, ax, ap, am, Wwb, Wwi, Ri, JXi, t-Ww	Festing and Bleby (1970)
<i>Felis chaus</i>	tg, ax, ap, am, Wwb, Wwx, Wwi, Ri, t-Ww	Schauenberg (1979)
<i>Felis manul</i>	tg, ax, ap, am, Wwb, Wwi, Ri, t-Ww	Andrews (2003)
<i>Felis margarita</i>	tg, ax, ap, am, Wwb, Wwi, Ri, t-Ww	Andrews (2003)
<i>Felis nigripes</i>	tg, ax, ap, am, Wwb, Wwi, Ri, JXi, t-Ww	Armstrong (1975)
<i>Felis silvestris</i>	tg, ax, ap, am, Wwb, Wwi, Ri, t-Ww	Volf (1968)
<i>Galictis cuja</i>	tg, ax, ap, am, Wwb, Wwi, Ri, t-Ww	Passini et al. (2021)
<i>Galidia elegans</i>	tg, ax, ap, am, Wwb, Wwx, Wwi, Ri, t-L, t-Ww	Larkin and Roberts (1979)
<i>Genetta genetta</i>	tg, ax, ap, am, Wwb, Wwi, Ri, t-Ww.f	Volf (1959)
<i>Gulo gulo</i>	tg, ax, ap, am, Wwb, Wwi, Ri, t-Ww	Blomqvist and Larsson (1990), Shilo and Tamarovskaya (1981)
<i>Halichoerus grypus</i>	tg, ax, ap, am, Li, Wwb, Wwx, Wwi, Ri, t-L, t-Ww	Hauksson (2007)
<i>Helarctos malayanus</i>	tg, ax, ap, am, Wwb, Wwi, Ri, t-Ww.f	Group (2019)
<i>Herpestes javanicus</i>	tg, ax, ap, am, Wwb, Wwx, Wwi, Ri	
<i>Histiophoca fasciata</i>	tg, ax, ap, am, Li, Wwb, Wwx, Wwi, Ri, t-L	Quakenbush and Citta (2008)
<i>Hyaena brunnea</i>	tg, ax, ap, am, Wwb, Wwx, Wwi, Ri, t-Ww	Mills (1982)
<i>Hydrictis maculicollis</i>	tg, ax, ap, am, Wwb, Wwi, Ri, t-Ww	Reed-Smith et al. (2009)
<i>Ictonyx striatus</i>	tg, ax, ap, am, Wwb, Wwx, Wwi, Ri, t-Ww	Rowe-Rowe (1978)
<i>Leopardus pajeros</i>	tg, ax, ap, am, Wwb, Wwi, Ri, t-Ww	Andrews (2003)
<i>Leopardus pardalis</i>	tg, ax, ap, am, Wwb, Wwx, Wwi, Ri, t-Ww	Andrews (2003)
<i>Leopardus wiedii</i>	tg, ax, ap, am, Wwb, Wwi, Ri, t-Ww	Andrews (2003), Edwards and Hawes (1997)
<i>Leptailurus serval</i>	tg, ax, ap, am, Wwb, Wwi, Ri, t-Ww	Andrews (2003)
<i>Leptonychotes weddellii</i>	tg, ax, ap, am, Lb, Li, Wwb, Wwx, Wwi, Ri, t-L, t-Ww	Bryden et al. (1984)
<i>Lobodon carcinophaga</i>	tg, ax, ap, am, Wwb, Wwi, Ri, t-Ww	Laws et al. (2003)
<i>Lontra canadensis</i>	tg, ax, ap, am, Wwb, Wwx, Wwi, Ri, t-Ww	Reed-Smith (2008)
<i>Lutra lutra</i>	tg, ax, ap, am, Wwb, Wwx, Wwi, Ri, t-Ww	Stephens (1957)
<i>Lutrogale perspicillata</i>	tg, ax, ap, am, Wwb, Wwx, Wwi, Ri, t-Ww	Badham (1973)
<i>Lycaon pictus</i>	tg, ax, ap, am, Wwb, Wwi, Ri, t-Ww	Thomas et al. (2011)
<i>Lynx canadensis</i>	tg, ax, ap, am, Wwb, Wwi, Ri, t-Ww	Andrews (2003)
<i>Lynx lynx</i>	tg, ax, ap, am, Wwb, Wwx, Wwi, Ri, t-Ww	Kunc (1970)
<i>Lynx pardinus</i>	tg, ax, ap, am, Wwb, Wwi, Ri, t-Ww	Yerga et al. (2014)
<i>Lynx rufus</i>	tg, ax, ap, am, Wwb, Wwx, Wwi, Ri, t-Ww	Crowe (1975)
<i>Manis crassicaudata</i>	tg, ax, ap, am, Lx, Li, Wwb, Wwi, Ri	
<i>Manis javanica</i>	tg, tx, tp, am, Li, Wwb, Wwp, Wwi, Ri, L-Ww, t-Ww.f, t-L	Cabana et al. (2019), Chong et al. (2020), Sulaiman et al. (2017), Yan et al. (2021)
<i>Manis pentadactyla</i>	tg, ax, ap, am, Wwb, Wwp, Wwi, Ri, JO, t-Ww	Heath and Hammel (1986), Masui (1967), Zhang et al. (2016)
<i>Martes americana</i>	tg, ax, ap, am, Wwb, Wwx, Wwi, Ri, t-Ww	Markley and Bassett (1942)
<i>Martes martes</i>	tg, ax, ap, am, Wwb, Ri, t-Ww	Markley and Bassett (1942)
<i>Martes melampus</i>	tg, ax, ap, am, Wwb, Wwi, Ri, t-Ww	Tatara (1994)
<i>Martes pennanti</i>	tg, ax, ap, am, Wwb, Ri, t-Ww	Frost and Krohn (2005)

Continuation of Table 1		
species	data	references
<i>Martes zibellina</i>	tg, ax, ap, am, Wwb, Wwx, Wwi, Ri, t-Ww	Markley and Bassett (1942)
<i>Meles meles</i>	tg, ax, ap, am, Lb, Li, Wwb, Wwi, Ri, t-Ww	Gucwinska and Gucwinski (1969)
<i>Mellivora capensis</i>	tg, ax, ap, am, Wwb, Wwi, Ri, t-Ww	Johnstone-Scott (1975)
<i>Melursus ursinus</i>	tg, ax, ap, am, Wwb, Wwi, Ri, t-Ww_f	Group (2019)
<i>Mephitis mephitis</i>	tg, ax, ap, am, Wwb, Wwx, Wwi, Ri, t-Ww	Renard et al. (2009)
<i>Mirounga angustirostris</i>	tg, ax, ap, am, Li, Wwb, Wwx, Wwi, Ri, t-L	Clinton (1994)
<i>Mirounga leonina</i>	tg, ax, ap, am, Li, Wwb, Wwx, Wwi, Ri, t-Ww	Bryden (1969)
<i>Monachus monachus</i>	tg, ax, ap, am, Lb, Li, Wwb, Wwi, Ri, t-L	Murphy et al. (2012)
<i>Mustela erminea</i>	tg, ax, ap, am, Wwb, Wwx, Wwi, Ri	King (1989)
<i>Mustela frenata</i>	tg, ax, ap, am, Wwb, Wwx, Wwi, Ri, t-Ww	Sanderson (1949)
<i>Mustela lutreola</i>	tg, ax, ap, am, Wwb, Wwi, Ri, t-Ww	Vargas and Anderson (1996)
<i>Mustela nigripes</i>	tg, ax, ap, am, Wwb, Wwi, Ri, t-Ww	
<i>Mustela nivalis</i>	tg, ax, ap, am, Wwb, Wwx, Wwi, Ri, t-Ww	
<i>Mustela putorius</i>	tg, ax, ap, am, Wwb, Wwi, Ri, t-Ww	Sørensen et al. (2003)
<i>Mustela vison</i>	tg, ax, ap, am, Wwb, Wwx, Wwi, Ri, t-Ww_f	
<i>Nandinia binotata</i>	tg, tx, tp, am, Wwb, Wwp, Wwi, Ri	Nájera et al. (2015)
<i>Neofelis nebulosa</i>	tg, ax, ap, am, Wwb, Wwi, Ri, t-Ww	
<i>Neomonachus schauinslandi</i>	tg, ax, ap, am, Lb, Li, Wwb, Wwx, Wwi, Ri, t-L_f	Baker et al. (2014)
<i>Neophoca cinerea</i>	tg, ax, ap, am, Lb, Li, Wwb, Wwx, Wwi, Ri, t-L, t-Ww	Goldsworthy et al. (2009)
<i>Neovison vison</i>	tg, ax, ap, am, Wwb, Ri, t-Ww_f	Sørensen et al. (2003)
<i>Nyctereutes procyonoides</i>	tg, ax, ap, am, Li, Wwb, Wwx, Wwi, Ri, t-L, t-Ww	Kauhala (1993)
<i>Odobenus rosmarus divergens</i>	tg, ax, ap, am, Wwb, Wwx, Wwi, Ri, t-L, L-Ww	Kastelein et al. (2003)
<i>Odobenus rosmarus rosmarus</i>	tg, ax, ap, am, Lb, Li, Wwb, Wwx, Wwi, Ri, t-L, L-Ww	Garlich-Miller and Stewart (1998)
<i>Otaria flavescens</i>	tg, ax, ap, am, Lb, Li, Wwb, Wwi, Ri, JXi, t-L	Rosas et al. (1993)
<i>Pagophilus groenlandicus</i>	tg, ax, ap, am, Lb, Lp, Wwb, Wwx, Wwi, Ri, t-L, t-Ww	Innes et al. (1981), Kovacs and Lavigne (1985), Miller and Burton (2001)
<i>Panthera leo</i>	tg, ax, ap, am, Li, Wwb, Wwx, Wwi, Ri, t-Ww_f	Erasmus (2008), Smuts et al. (2009)
<i>Panthera onca</i>	tg, ax, ap, am, Wwb, Wwx, Wwi, Ri, t-Ww	Johnson (2016)
<i>Panthera pardus</i>	tg, ax, ap, am, Wwb, Wwx, Wwi, Ri, t-Ww	Koivisto et al. (1977)
<i>Panthera tigris</i>	tg, ax, ap, am, Wwb, Wwx, Wwi, Ri, t-Ww	Hughes (1977)
<i>Panthera tigris tigris</i>	tg, ax, ap, am, Wwb, Wwi, Ri, t-Ww	Veselovsky (1967)
<i>Paradoxurus hermaphroditus</i>	tg, ax, ap, am, Wwb, Wwx, Wwi, Ri, t-Ww	Acharjyo and Mohapatra (1978)
<i>Pardofelis marmorata</i>	tg, ax, ap, am, Wwb, Wwi, Ri, t-Ww	Barnes (1976)
<i>Phataginus tetradactyla</i>	tg, tx, tp, am, Li, Wwb, Wwp, Wwi, Ri	Maja et al. (2020)
<i>Phataginus tricuspis</i>	tg, tx, tp, am, Lb, Li, Wwb, Wwp, Wwi, Ri, JOp	Jansen et al. (2020), Sodeinde et al. (2002)
<i>Phoca largha</i>	tg, ax, ap, am, Lb, Li, Wwb, Wwx, Wwi, Ri, t-L	Quakenbush et al. (2009)
<i>Phoca vitulina</i>	tg, ax, ap, am, Lb, Li, Wwb, Wwx, Wwi, Ri, t-L, t-Ww, L-Ww	Kovacs and Lavigne (1986), Markussen et al. (1989)
<i>Phocarctos hookeri</i>	tg, ax, ap, am, Wwb, Wwi, Ri, t-L, t-Ww	Childerhouse et al. (2010)
<i>Poecilogale albinucha</i>	tg, ax, ap, am, Wwb, Wwx, Wwi, Ri, t-Ww	Rowe-Rowe (1978)
<i>Potos flavus</i>	tg, ax, ap, am, Wwb, Wwi, Ri, t-Ww	Bhatia and Desai (1972)
<i>Prionailurus bengalensis</i>	tg, ax, ap, am, Wwb, Wwi, Ri, t-Ww	Andrews (2003)
<i>Prionailurus rubiginosus</i>	tg, ax, ap, am, Wwb, Wwi, Ri, t-Ww	Andrews (2003), Dmoch (1997)
<i>Prionailurus viverrinus</i>	tg, ax, ap, am, Wwb, Wwi, Ri, t-Ww	Andrews (2003)

Continuation of Table 1		
species	data	references
<i>Prionodon linsang</i>	tg, tx, tp, am, Wwb, Wwi, Ri, t-Ww	
<i>Procyon lotor</i>	tg, ax, ap, am, Li, Wwb, Wwx, Wwi, Ri, t-L, t-Ww	Montgomery (1969), Okuyama et al. (2013)
<i>Profelis aurata</i>	tg, ax, ap, am, Wwb, Wwx, Wwi, Ri, t-Ww	Tonkin and Kohler (1978)
<i>Pteronura brasiliensis</i>	tg, ax, ap, am, Wwb, Wwx, Wwi, Ri, t-Ww	Londono and Munoz (2006)
<i>Puma concolor</i>	tg, ax, ap, am, Li, Wwb, Wwx, Wwi, Ri, t-L, t-Ww	Bartareau et al. (2013)
<i>Puma yagouaroundi</i>	tg, ax, ap, am, Wwb, Wwi, Ri, t-Ww	Buzas and Gulyas (2012)
<i>Pusa hispida</i>	tg, ax, ap, am, Li, Wwb, Wwx, Wwi, Ri, t-L.f, t-Ww.f	Krafft et al. (2006)
<i>Pusa sibirica</i>	tg, ax, ap, am, Lb, Li, Wwb, Wwi, Ri, t-L, t-Ww	Amano et al. (2000)
<i>Smutsia gigantea</i>	am, tg, tx, tp, Lb, Li, Wwb, Wwp, Wwi, Ri	Ayebare et al. (2020)
<i>Smutsia temminckii</i>	am, tg, tx, tp, Wwb, Wwp, Wwi, Ri, L-Ww	Heath and Coulson (1998), Pietersen1 et al. (2020), Swart et al. (1999)
<i>Speothos venaticus</i>	tg, ax, ap, am, Wwb, Wwi, Ri, t-Ww.f	Collier and Emerson (1973), Jantschke (1973)
<i>Spilogale putorius</i>	tg, ax, ap, am, Wwb, Wwx, Wwi, Ri, t-L, t-Ww	Crabb (1944)
<i>Suricata suricatta</i>	tg, ax, ap, am, Wwb, Wwx, Wwi, Ri	
<i>Taxidea taxus</i>	tg, ax, ap, am, Wwb, Wwx, Wwi, Ri, t-Ww	Messick and Hornocker (1981)
<i>Tremarctos ornatus</i>	tg, ax, ap, am, Wwb, Wwx, Wwi, Ri	García-Rangel (2012)
<i>Uncia uncia</i>	tg, ax, ap, am, Wwb, Wwx, Wwi, Ri, t-Ww	Koivisto et al. (1977)
<i>Urocyon cinereoargenteus</i>	tg, ax, ap, am, Wwb, Wwx, Wwi, Ri, t-Ww	Grant (2011)
<i>Ursus americanus</i>	tg, ax, ap, am, Wwb, Wwx, Wwi, Ri, t-Ww	Hulley (1976)
<i>Ursus arctos</i>	tg, ax, ap, am, Li, Wwb, Wwx, Wwi, Ri, t-Ww	Swenson et al. (2007)
<i>Ursus arctos middendorffi</i>	tg, ax, ap, am, Wwb, Wwx, Wwi, Ri, t-Ww	Freiheit and Crotty (1969)
<i>Ursus maritimus</i>	tg, ax, ap, am, Li, Wwb, Wwx, Wwp, Wwi, Ri, t-Ww, t-L	Derocher and Wiig (2002)
<i>Ursus thibetanus</i>	tg, ax, ap, am, Wwb, Wwi, Ri, t-Ww.f	Ruriko et al. (2009)
<i>Viverricula indica</i>	tg, tx, tp, am, Wwb, Wwi, Ri, t-Ww	Balakrishnan and Sreedevi (2007)
<i>Vulpes lagopus</i>	tg, ax, ap, am, Wwb, Wwx, Wwi, Ri, t-Ww	Prestrud and Nilssen (1995)
<i>Vulpes velox</i>	tg, ax, ap, am, Wwb, Wwi, Ri, t-Ww	Kilgore (1969)
<i>Vulpes vulpes</i>	tg, ax, ap, am, Lb, Li, Wwb, Wwx, Wwi, Ri, t-L, t-Ww	Kolb and Hewson (1980)
<i>Vulpes zerda</i>	tg, ax, ap, am, Wwb, Wwi, Ri, t-Ww	Weiher (1976)
<i>Zalophus californianus</i>	tg, ax, ap, am, Lb, Li, Wwb, Wwx, Wwi, Ri, JXi, t-L, t-Ww	Kastelein et al. (2000)
<i>Zalophus wolfebaeki</i>	tg, ax, ap, am, Li, Wwb, Wwi, Ri, t-Ww	Mueller et al. (2011)

Table 2: The codes of the data types as presented in Table 1. Zero variate data left, uni-variate data right. Life history events: b birth, s settlement, j end of acceleration, p puberty, m death, i death. T stands for temperature.

code	description	code	description
tg	gestation time	t-L	time, length
ax	age at x	t-L_f	time, length (several f)
ap	age (or time since birth) at p	t-Ww	time, wet weight
am	age at death (life span)	t-Ww_f	time, wet weight (several f)
Lb	length at b	t-JX	time, ingestion rate
Lp	length at p	L-Ww	length, wet weight
Li	length at i		
Wwb	wet weight at b		
Wwx	wet weight at x		
Wwp	wet weight at p		
Wwi	wet weight at i		
Ri	reproduction rate at i		
JXi	food consumption at i		

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