

Table S1. Species included in analyses of continental carnivore guilds. Extant species is based on Nowak (1999) and extinct species on Martin & Klein 1989, Turner (1997), Koch & Barnosky (2006), and Prevosti & Vazcaino (2006).

Scientific name	Common name	Functional group*	IUCN category**	Threat category
AFRICA				
Canidae				
<i>Lyacon pictus</i>	Wild dog	BCu	Endangered	Threatened
<i>Canis simensis</i>	Ethiopian wolf	P	Critically endangered	Threatened
<i>Canis adustus</i>	Side-striped jackal	P	Least concern	Not threatened
<i>Canis mesomelas</i>	Black backed jackal	P	Least concern	Not threatened
<i>Canis aureus</i>	Golden jackal	P	Least concern	Not threatened
Mustelidae				
<i>Mellivora capensis</i>	Honey badger	SO	Least concern	Not threatened
Ursidae				
<i>Ursus ursus</i>	Brown bear	SO	Extinct	Extinct
Felidae				
<i>Homotherium latidens</i>	Scimitar cat	AS	Extinct	Extinct
<i>Pantera leo</i>	Lion	SA	Vulnerable	Threatened
<i>Panthera pardus</i>	Leopard	SA	Least concern	Not threatened
<i>Acinonyx jubatus</i>	Cheetah	SA	Vulnerable	Threatened
<i>Felis caracal</i>	Caracal	SA	Least concern	Not threatened
<i>Felis serval</i>	Serval	SA	Least concern	Not threatened
Hyaenidae				
<i>Crocuta crucutta</i>	Spotted hyaena	BCa	Conservation dependent	Not threatened
<i>Hyaena brunnea</i>	Brown hyaena	BCa	Near threatened	Not threatened
<i>Hyaena hyaena</i>	Striped hyaena	BCa	Near threatened	Not threatened
<i>Proteles cristatus</i>	Aardwolf	SO	Least concern	Not threatened
Viverridae				
<i>Civettictis civetta</i>	Civet	SO	Least concern	Not threatened
EUROPE				
Canidae				
<i>Canis lupus</i>	Grey wolf	BCu	Least concern	Not threatened
<i>Canis aureus</i>	Golden jackal	P	Least concern	Not threatened
Mustelidae				
<i>Gulo gulo</i>	Wolverine	SO	Vulnerable	Threatened
<i>Meles meles</i>	Badger	SO	Least concern	Not threatened

Ursidae

<i>Ursus spelaeus</i>	Cave bear	SO	Extinct	Extinct
<i>Ursus arctos</i>	Brown bear	SO	Least concern	Not threatened
<i>Ursus maritimus</i>	Polar bear	SO	Vulnerable	Threatened

Felidae

<i>Homotherium latidens</i>	Scimitar cat	AS	Extinct	Extinct
<i>Panthera spelaea</i>	Cave lion	SA	Extinct	Extinct
<i>Panthera gombaszoegensis</i>	European jaguar	SA	Extinct	Extinct
<i>Acinonyx pardinensis</i>	European cheetah	SA	Extinct	Extinct
<i>Lynx lynx</i>	Lynx	SA	Near threatened	Not threatened
<i>Lynx pardinus</i>	Iberian lynx	SA	Critically endangered	Threatened

Hyaenidae

<i>Crocota spelaea</i>	Cave hyaena	BCa	Extinct	Extinct
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ASIA**Canidae**

<i>Canis lupus</i>	Grey wolf	BCu	Least concern	Not threatened
<i>Cuon alpinus</i>	Dhole	BCu	Endangered	Threatened
<i>Canis aureus</i>	Golden jackal	P	Least concern	Not threatened

Mustelidae

<i>Gulo gulo</i>	Wolverine	SO	Vulnerable	Threatened
<i>Meles meles</i>	Badger	SO	Least concern	Not threatened
<i>Arctonyx collaris</i>	Hog badger	SO	Least concern	Not threatened
<i>Mellivora capensis</i>	Honey badger	SO	Least concern	Not threatened

Ursidae

<i>Ursus tibethanus</i>	Asian black bear	SO	Vulnerable	Threatened
<i>Ursus arctos</i>	Brown bear	SO	Least concern	Not threatened
<i>Ursus maritimus</i>	Polar bear	SO	Vulnerable	Threatened
<i>Ursus malayanus</i>	Sun bear	SO	Vulnerable	Threatened
<i>Ursus ursinus</i>	Sloth bear	SO	Vulnerable	Threatened
<i>Ailuropoda melanoleuca</i>	Giant panda	SO	Endangered	Threatened

Felidae

<i>Homotherium latidens</i>	Scimitar cat	AS	Extinct	Extinct
<i>Neofelis nebulosa</i>	Clouded leopard	SA	Vulnerable	Threatened
<i>Panthera uncia</i>	Snow leopard	SA	Endangered	Threatened
<i>Acinonyx pardinensis</i>	European cheetah	SA	Extinct	Extinct
<i>Panthera tigris</i>	Tiger	SA	Endangered	Threatened
<i>Panthera pardus</i>	Leopard	SA	Endangered	Threatened

<i>Panthera leo</i>	Lion	SA	Critically endangered	Threatened
<i>Acinonyx jubatus</i>	Cheetah	SA	Critically endangered	Threatened
<i>Lynx lynx</i>	Lynx	SA	Near threatened	Not threatened

Hyaenidae

<i>Crocuta spelaea</i>	Cave hyaena	BCa	Extinct	Extinct
<i>Hyaena hyaena</i>	Striped hyaena	BCa	Least concern	Not threatened

Viverridae

<i>Arctictis binturong</i>	Binturong	SO	Least concern	Not threatened
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NORTH AMERICA

Canidae

<i>Canis dirus</i>	Dire wolf	BCu	Extinct	Extinct
<i>Canis lupus</i>	Grey wolf	BCu	Least concern	Not threatened
<i>Canis rufus</i>	Red wolf	P	Critically endangered	Threatened
<i>Canis latrans</i>	Coyote	P	Least concern	Not threatened

Mustelidae

<i>Gulo gulo</i>	Wolverine	SO	Vulnerable	Threatened
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Ursidae

<i>Ursus americanus</i>	American black bear	SO	Least concern	Not threatened
<i>Ursus ursus</i>	Brown bear	SO	Least concern	Not threatened
<i>Ursus maritimus</i>	Polar bear	SO	Vulnerable	Threatened
<i>Arctodus simus</i>	Short-faced bear	SO	Extinct	Extinct
<i>Arctodus pristinus</i>	Short-faced bear	SO	Extinct	Extinct
<i>Tremarctos floridanus</i>	Spectacled bear	SO	Extinct	Extinct

Felidae

<i>Smilodon fatalis</i>	Sabre toothed cat	AS	Extinct	Extinct
<i>Homotherium serum</i>	American scimitar cat	AS	Extinct	Extinct
<i>Miracinonyx trumani</i>	American cheetah	SA	Extinct	Extinct
<i>Panthera athrox</i>	American lion	SA	Extinct	Extinct
<i>Panthera onca</i>	Jaguar	SA	Near threatened	Not threatened
<i>Felis concolor</i>	Cougar	SA	Near threatened	Not threatened
<i>Lynx canadensis</i>	Lynx	SA	Least concern	Not threatened
<i>Lynx rufus</i>	Bobcat	SA	Least concern	Not threatened

SOUTH AMERICA

Canidae

<i>Chrysocyon brachyurus</i>	Maned wolf	P	Near threatened	Not threatened
<i>Canis dirus</i>	Dire wolf	BCu	Extinct	Extinct

<i>Canis dehringi</i>		BCu	Extinct	Extinct
Ursidae				
<i>Tremarctos ornatus</i>	Spectacled bear	SO	Vulnerable	Threatened
<i>Arctotherium tarijense</i>	Short-faced bear	SO	Extinct	Extinct
<i>Arctotherium bonaeriense</i>	Short-faced bear	SO	Extinct	Extinct
<i>Arctotherium brasiliense</i>	Short-faced bear	SO	Extinct	Extinct
<i>Arctotherium vetustum</i>	Short-faced bear	SO	Extinct	Extinct
Felidae				
<i>Felis concolor</i>	Cougar	SA	Near threatened	Not threatened
<i>Panthera onca</i>	Jaguar	SA	Near threatened	Not threatened
<i>Smilodon fatalis</i>	Sabre toothed cat	AS	Extinct	Extinct
<i>Smilodon populator</i>	Sabre toothed cat	AS	Extinct	Extinct

*) Functional groups are defined by ecomorphs suggested by Werdelin (1996): SO - Scavenger/Omnivores, BCa – Bone cracking, BCu – Bone crushing, SA – Stalk and ambush, AS - Ambush and slash, P - Pursuit

**) Conservation status according to the IUCN Red list of threatened species (IUCN 2007). When necessary, additional continental classifications were taken from published IUCN species accounts (Nowell & Jackson 1996; Mills & Hofer 1998; Servheen et al. 1998; Sillero-Zubiri et al. 2004)

***) Species were regarded as threatened if they fell in IUCN category "vulnerable", "endangered", or "critically endangered"

References for Table S1

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