[Template:Other uses](/wiki/Template:Other_uses" \o "Template:Other uses) [Template:Pp-move-indef](/wiki/Template:Pp-move-indef) [Template:Automatic taxobox](/wiki/Template:Automatic_taxobox)

The **leopard** (*Panthera pardus*) ([Template:IPA-en](/wiki/Template:IPA-en)) is one of the five "[big cats](/wiki/Big_cat)" in the [genus](/wiki/Genus_(biology)) [*Panthera*](/wiki/Panthera). It is a member of the [family](/wiki/Family_(biology)) [Felidae](/wiki/Felidae) with a wide range in [sub-Saharan Africa](/wiki/Sub-Saharan_Africa) and parts of [Asia](/wiki/Asia).<ref name=msw3>[Template:MSW3 Wozencraft](/wiki/Template:MSW3_Wozencraft)</ref> Fossil records found in Italy suggest that in the [Pleistocene](/wiki/Pleistocene) it ranged as far as Europe[[1]](#cite_note-1) and [Japan](/wiki/Japan).<ref name=JapanMammals>Ohdachi S.,Ishibashi Y., Iwasa A.M., Fukui D., Saitohet T. et al., 2015, [The Wild Mammals of Japan](https://www.researchgate.net/publication/280721253_The_Wild_Mammals_of_Japan_2nd_ed), Shoukadoh, ISBN 978-4-87974-691-7</ref>

Compared to other members of Felidae, the leopard has relatively short legs and a long body with a large skull. It is similar in appearance to the [jaguar](/wiki/Jaguar), but is smaller and more lightly built. Its fur is marked with [rosettes](/wiki/Rosette_(zoology)) similar to those of the jaguar, but the leopard's rosettes are smaller and more densely packed, and do not usually have central spots as the jaguar's do. Both leopards and jaguars that are [melanistic](/wiki/Melanistic) are known as [black panthers](/wiki/Black_panther).

The leopard's success in the wild is due to its well camouflaged fur; its [opportunistic](/wiki/Generalist_and_specialist_species) hunting behaviour, broad diet, and strength to move heavy carcasses into [trees](/wiki/Tree); its ability to adapt to various habitats ranging from [rainforest](/wiki/Rainforest) to [steppe](/wiki/Steppe) and including [arid](/wiki/Arid) and [montane](/wiki/Montane) areas; and to run at speeds up to [Template:Convert](/wiki/Template:Convert).<ref name=CAP/>

It is listed as [vulnerable](/wiki/Vulnerable_species) on the [IUCN Red List](/wiki/IUCN_Red_List) because leopard populations are declining in large parts of their range.[[2]](#cite_note-2) They are threatened by [habitat loss](/wiki/Habitat_loss) and pest control. Their habitats are fragmented and they are illegally hunted so that their pelts may be sold in [wildlife trade](/wiki/Wildlife_trade) for medicinal practices and decoration.[[3]](#cite_note-3) They have been [extirpated](/wiki/Extirpate) in [Hong Kong](/wiki/Hong_Kong), [Singapore](/wiki/Singapore), [Kuwait](/wiki/Kuwait), [Syria](/wiki/Syria), [Libya](/wiki/Libya), [Tunisia](/wiki/Tunisia) and most likely [Morocco](/wiki/Morocco).<ref name=iucn>[Template:Cite journal](/wiki/Template:Cite_journal)</ref>

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## Etymology[[edit](/index.php?title=(none)&action=edit&section=1)]

The common name "leopard" ([Template:IPA-en](/wiki/Template:IPA-en))<ref name=mw2>[Template:MerriamWebsterDictionary](/wiki/Template:MerriamWebsterDictionary)</ref> is a [Greek](/wiki/Greek_language) [compound](/wiki/Compound_(linguistics)) of [Template:Lang](/wiki/Template:Lang) *leōn* ("lion") and [Template:Lang](/wiki/Template:Lang) *pardos* ("male panther"). The Greek word is related to [Sanskrit](/wiki/Sanskrit_language) [Template:Lang](/wiki/Template:Lang) [Template:IAST](/wiki/Template:IAST) ("snake", "tiger" or "panther"), and probably derives from a [Mediterranean](/wiki/Mediterranean_region) language, such as [Egyptian](/wiki/Egyptian_language).[[4]](#cite_note-4)[[5]](#cite_note-5) The name was first used in the 13th century.<ref name=mw2/> Other vernacular names for the leopard include graupanther, panther and several regional names such as *tendwa* in India.<ref name=mammal/> The term "black panther" refers to leopards with [melanistic](/wiki/Melanism) [genes](/wiki/Gene).<ref name=mw>[Template:MerriamWebsterDictionary](/wiki/Template:MerriamWebsterDictionary)</ref>

The [scientific name](/wiki/Scientific_name) of the leopard is *Panthera pardus*. The [generic name](/wiki/Generic_name_(biology)) *Panthera* derives from [Latin](/wiki/Latin_language) via Greek πάνθηρ (*pánthēr*).[[6]](#cite_note-6) The term "panther", whose first recorded use dates back to the 13th century AD, generally refers to the leopard, and less often to the [cougar](/wiki/Cougar) and the [jaguar](/wiki/Jaguar).<ref name=mw/> Alternative origins suggested for *Panthera* include an [Indo-Iranian](/wiki/Indo-Iranian_languages) word meaning "white-yellow" or "pale". In Sanskrit, this could have been derived from पाण्डर *pāṇḍara* ("tiger"), which in turn comes from पुण्डरीक *puṇḍárīka* (with the same meaning).[[5]](#cite_note-5)[[6]](#cite_note-6) The [specific name](/wiki/Specific_name_(zoology)) *pardus* is derived from the Greek [Template:Lang](/wiki/Template:Lang) (*pardos*) ("male panther").[[7]](#cite_note-7)

## Taxonomy[[edit](/index.php?title=(none)&action=edit&section=2)]

[thumbnail|left|Two cladograms proposed for](/wiki/File:Two_cladograms_for_Panthera_(including_Neofelis).png) [*Panthera*](/wiki/Panthera). The upper cladogram is based on the 2006 and 2009 studies, while the other is based on the 2010 and 2011 studies. The leopard is one of the five extant [species](/wiki/Species) of the [genus](/wiki/Genus_(biology)) [*Panthera*](/wiki/Panthera), which also includes the [jaguar](/wiki/Jaguar) (*P. onca*), the [lion](/wiki/Lion) (*P. leo*), the [snow leopard](/wiki/Snow_leopard) (*P. uncia*; sometimes placed in *Uncia*, a separate genus of its own) and the [tiger](/wiki/Tiger) (*P. tigris*). This genus, along with the genus [*Neofelis*](/wiki/Neofelis) - which consists of the [clouded leopard](/wiki/Clouded_leopard) (*N. nebulosa*) and the [Sunda clouded leopard](/wiki/Sunda_clouded_leopard) (*N. dardi*) - forms the [subfamily](/wiki/Subfamily) [Pantherinae](/wiki/Pantherinae) of the [Felidae](/wiki/Family_(biology)).<ref name=MSW3>[Template:MSW3](/wiki/Template:MSW3)</ref><ref name=itisgov>[Template:ITIS](/wiki/Template:ITIS)</ref> The leopard was first described by Swedish zoologist [Carl Linnaeus](/wiki/Carl_Linnaeus) in the [10th edition of *Systema Naturae*](/wiki/10th_edition_of_Systema_Naturae) (1758). Linnaeus named the leopard as *Felis pardus*, placing it in the genus [*Felis*](/wiki/Felis) along with the [domestic cat](/wiki/Domestic_cat), the jaguar, the [Eurasian lynx](/wiki/Eurasian_lynx), the lion, the [ocelot](/wiki/Ocelot) and the tiger.[[8]](#cite_note-8) In the 18th and 19th centuries, most naturalists and [taxonomists](/wiki/Linnaean_taxonomy) followed his example. In 1816, [Lorenz Oken](/wiki/Lorenz_Oken) proposed a definition of the genus *Panthera*, with a [subgenus](/wiki/Subgenus) Panthera using *F. pardus* as a [type species](/wiki/Type_species). Oken's classification, however, was not widely accepted, and until the early 20th century continued using *Felis* or [*Leopardus*](/wiki/Leopardus) when describing leopard subspecies.[[9]](#cite_note-9) In 1916, British zoologist [Reginald Innes Pocock](/wiki/Reginald_Innes_Pocock) accorded *Panthera* generic rank defining *Panthera pardus* as species.[[10]](#cite_note-10) The leopard is part of the *Panthera* lineage, one of the eight lineages of Felidae. This lineage comprises the species of *Panthera* and *Neofelis*. The clouded leopard diverged first from the lineage, followed by the snow leopard. Subsequent branching began two to three million years ago, but the details of this are disputed. [[11]](#cite_note-11) A 2006 [phylogenetic](/wiki/Phylogenetic) study by Warren E. Johnson (of the [National Cancer Institute](/wiki/National_Cancer_Institute)) and colleagues, based on [nDNA](/wiki/NDNA) and [mtDNA](/wiki/MtDNA) analysis, showed that the leopard is [sister](/wiki/Sister_taxon) to two [clades](/wiki/Clade) within *Panthera* - one consisting of the tiger and the snow leopard, and the other of the lion and the jaguar.[[12]](#cite_note-12) This was seconded by a 2009 study by [Lars Werdelin](/wiki/Lars_Werdelin) and colleagues.[[13]](#cite_note-13) However, the results obtained in a 2010 study by Brian W. Davis (of the [Texas A&M University](/wiki/Texas_A&M_University)) and colleagues and a 2011 study by Ji H. Mazák (of the [Shanghai Science and Technology Museum](/wiki/Shanghai_Science_and_Technology_Museum)) and colleagues showed a swapping between the leopard and the jaguar in the cladogram.[[14]](#cite_note-14)[[15]](#cite_note-15) Results of a 2001 [phylogenetic](/wiki/Phylogenetic) analysis of chemical secretions amongst cats suggested, however, that the leopard is closely related to the lion.[[16]](#cite_note-16)

### Subspecies[[edit](/index.php?title=(none)&action=edit&section=3)]

As many as 27 leopard subspecies were subsequently described by naturalists from 1794 to 1956. Since 1996, only eight subspecies have been considered valid on the basis of [mitochondrial](/wiki/Mitochondrial) analysis.<ref name=Miththapala1996>[Template:Cite journal](/wiki/Template:Cite_journal)</ref> Later analysis revealed a ninth valid subspecies, the [Arabian leopard](/wiki/Arabian_leopard). Because of limited sampling of [African leopards](/wiki/African_leopard), this number might be an underestimation.<ref name=Uphyrkina/>

The nine subspecies recognised by IUCN are:<ref name=iucn/><ref name=Uphyrkina/><ref name=Khorozyan2006/>

|  |  |  |
| --- | --- | --- |
| Subspecies of leopard | | |
| **Subspecies** | **Description** | **Image** |
| [**African leopard**](/wiki/African_leopard) (*P. p. pardus*) | Lives in [Sub-Saharan Africa](/wiki/Sub-Saharan_Africa). It is the most widespread subspecies of leopards.   * [North Africa](/wiki/North_Africa): extinct in [Algeria](/wiki/Algeria), [Libya](/wiki/Libya),and [Tunisia](/wiki/Tunisia) with [relict population](/wiki/Relict_(biology)) in [Morocco](/wiki/Morocco) and south-eastern [Egypt](/wiki/Egypt)[[17]](#cite_note-17)\*[West Africa](/wiki/West_Africa): [Benin](/wiki/Benin), [Burkina Faso](/wiki/Burkina_Faso), [Ghana](/wiki/Ghana), [Guinea](/wiki/Guinea), [Guinea-Bissau](/wiki/Guinea-Bissau), [Ivory Coast](/wiki/Ivory_Coast), [Liberia](/wiki/Liberia), [Mali](/wiki/Mali), [Mauritania](/wiki/Mauritania), [Niger](/wiki/Niger), [Nigeria](/wiki/Nigeria), [Senegal](/wiki/Senegal), [Sierra Leone](/wiki/Sierra_Leone), [Togo](/wiki/Togo) * [East Africa](/wiki/East_Africa): [Burundi](/wiki/Burundi), [Djibouti](/wiki/Djibouti), [Eritrea](/wiki/Eritrea), [Ethiopia](/wiki/Ethiopia), [Kenya](/wiki/Kenya), [Tanzania](/wiki/Tanzania), [Somalia](/wiki/Somalia), [South Sudan](/wiki/South_Sudan), [Sudan](/wiki/Sudan), [Rwanda](/wiki/Rwanda), [Uganda](/wiki/Uganda) * [Central Africa](/wiki/Central_Africa): [Cameroon](/wiki/Cameroon), [Central African Republic](/wiki/Central_African_Republic), [Chad](/wiki/Chad), [Democratic Republic of the Congo](/wiki/Democratic_Republic_of_the_Congo), [Gabon](/wiki/Gabon), [Republic of the Congo](/wiki/Republic_of_the_Congo), * [Southern Africa](/wiki/Southern_Africa): [Angola](/wiki/Angola), [Botswana](/wiki/Botswana), [Malawi](/wiki/Malawi), [Mozambique](/wiki/Mozambique), [Namibia](/wiki/Namibia), [South Africa](/wiki/South_Africa), [Swaziland](/wiki/Swaziland), [Zambia](/wiki/Zambia), and [Zimbabwe](/wiki/Zimbabwe) | [150px](/wiki/File:Leopard_(Panthera_pardus).jpg) |
| [**Indian leopard**](/wiki/Indian_leopard) (*P. p. fusca*) | Native to the [Indian Subcontinent](/wiki/Indian_Subcontinent). It is widespread in [India](/wiki/India), [Nepal](/wiki/Nepal), [Bangladesh](/wiki/Bangladesh) and [Bhutan](/wiki/Bhutan).   * [South Asia](/wiki/South_Asia): [Bangladesh](/wiki/Bangladesh), [Bhutan](/wiki/Bhutan), [India](/wiki/India), [Nepal](/wiki/Nepal), and [Pakistan](/wiki/Pakistan); extinct in [China](/wiki/China) | [150px](/wiki/File:Nagarhole_Kabini_Karnataka_India,_Leopard_September_2013.jpg) |
| [**Arabian leopard**](/wiki/Arabian_leopard) (*P. p. nimr*), also known as **Erythrean leopard** | Native to the [Arabian Peninsula](/wiki/Arabian_Peninsula). It lives in arid areas of [Saudi Arabia](/wiki/Saudi_Arabia), [Israel](/wiki/Israel), [Jordan](/wiki/Jordan), and the [United Arab Emirates](/wiki/United_Arab_Emirates). It is the smallest leopard subspecies.   * [West Asia](/wiki/West_Asia): [Israel](/wiki/Israel), [Kuwait](/wiki/Kuwait), [Lebanon](/wiki/Lebanon), [Jordan](/wiki/Jordan), [Oman](/wiki/Oman), [Saudi Arabia](/wiki/Saudi_Arabia), [Syria](/wiki/Syria), [United Arab Emirates](/wiki/United_Arab_Emirates), and [Yemen](/wiki/Yemen); extinct in the [Sinai Peninsula](/wiki/Sinai_Peninsula) of Egypt | [150px](/wiki/File:PikiWiki_Israel_14861_judean_desert_leopard_cropped.JPG) |
| [**Persian leopard**](/wiki/Persian_leopard) (*P. p. saxicolor*), also known as **Central Asian leopard** or **Caucasian leopard** | Inhabits the [Caucasus](/wiki/Caucasus), [Turkmenistan](/wiki/Turkmenistan), [Afghanistan](/wiki/Afghanistan), and northern [Iran](/wiki/Iran).<ref name=Khorozyan2006/> It is the largest leopard subspecies.   * [West Asia](/wiki/West_Asia): [Armenia](/wiki/Armenia), [Azerbaijan](/wiki/Azerbaijan), [Iran](/wiki/Iran), [Iraq](/wiki/Iraq), [Georgia](/wiki/Georgia_(country)), [Russia](/wiki/Russia), and [Turkey](/wiki/Turkey) * [Central Asia](/wiki/Central_Asia): [Turkmenistan](/wiki/Turkmenistan) and [Uzbekistan](/wiki/Uzbekistan) * [South Asia](/wiki/South_Asia): [Afghanistan](/wiki/Afghanistan) and Pakistan | [150px](/wiki/File:Leopard3.jpg) |
| [**North-Chinese leopard**](/wiki/North-Chinese_leopard) (*P. p. japonensis*), also simply known as the **Chinese leopard** | Only native to central to northern China. It is among the medium-sized leopard subspecies.   * [East Asia](/wiki/East_Asia): [China](/wiki/China) | [150px](/wiki/File:Panthera_pardus_japonensis_JdP.jpg) |
| [**Amur leopard**](/wiki/Amur_leopard) (*P. p. orientalis*), also known as **Far Eastern leopard** or **Siberian leopard** | Found today only in the cold regions of [Russian Far East](/wiki/Russian_Far_East) and [Northeast China](/wiki/Northeast_China). It is the most [critically endangered](/wiki/Critically_endangered_species) leopard subspecies, and one of the most endangered animals in the world. It is currently extinct in the [Korean Peninsula](/wiki/Korean_Peninsula).   * [North Asia](/wiki/North_Asia): [China](/wiki/China) and [Siberia](/wiki/Siberia); extinct in [North Korea](/wiki/North_Korea) and [South Korea](/wiki/South_Korea) | [150px](/wiki/File:Leopard_in_the_Colchester_Zoo.jpg) |
| [**Indochinese leopard**](/wiki/Indochinese_leopard) (*P. p. delacouri*), also known as **South-Chinese leopard** | Widespread in [mainland Southeast Asia](/wiki/Indochina) and [South China](/wiki/South_China).   * [Southeast Asia](/wiki/Southeast_Asia): [China](/wiki/China), [Cambodia](/wiki/Cambodia), [Laos](/wiki/Laos), [Malaysia](/wiki/Malaysia), [Myanmar](/wiki/Myanmar), [Thailand](/wiki/Thailand), [Vietnam](/wiki/Vietnam) | [150px](/wiki/File:Indochinese_leopard.jpg) |
| [**Javan leopard**](/wiki/Javan_leopard) (*P. p. melas*) | The only subspecies native to [Indonesia](/wiki/Indonesia). It is found in the Indonesian Island of [Java](/wiki/Java). It is among the most [critically endangered](/wiki/Critically_endangered_species) leopard subspecies.   * [Southeast Asia](/wiki/Southeast_Asia): [Indonesia](/wiki/Indonesia) | [150px](/wiki/File:Panthera_pardus_melas_(Tierpark_Berlin)_-_1006-888-(118).jpg) |
| [**Sri Lankan leopard**](/wiki/Sri_Lankan_leopard) (*P. p. kotiya*) | Found only in [Sri Lanka](/wiki/Sri_Lanka).   * [South Asia](/wiki/South_Asia): [Sri Lanka](/wiki/Sri_Lanka) | [150px](/wiki/File:Slleo1.jpg) |
|  |  |  |

[thumbnail|upright 1.4|Map of approximate distribution of leopard subspecies](/wiki/File:Panthera_pardus_subspecies_map.png)

A morphological analysis of characters of leopard skulls implies the validity of two more subspecies:<ref name=Khorozyan2006>[Template:Cite journal](/wiki/Template:Cite_journal)</ref>

* [Anatolian leopard](/wiki/Anatolian_leopard) (*P. p. tulliana*) ([Valenciennes](/wiki/Achille_Valenciennes), 1856) inhabits Western [Turkey](/wiki/Turkey)
* [Balochistan leopard](/wiki/Balochistan_leopard) (*P. p. sindica*) (Pocock, 1930) inhabits [Pakistan](/wiki/Pakistan), and possibly also parts of [Afghanistan](/wiki/Afghanistan) and [Iran](/wiki/Iran)

The following African leopard populations used to be considered subspecies until 1996:[[18]](#cite_note-18)<ref name=Uphyrkina/>

* [Barbary leopard](/wiki/Barbary_leopard) (*P. p. panthera*) ([Schreber](/wiki/Johann_Christian_Daniel_von_Schreber), 1777)
* [Sinai leopard](/wiki/Sinai_leopard) (*P. p. jarvasi*) (Pocock, 1932)
* [Zanzibar leopard](/wiki/Zanzibar_leopard) (*P. p. adersi*) (Pocock, 1932)

The smallest leopard subspecies is the Arabian leopard. Adult females weigh as little as [Template:Convert](/wiki/Template:Convert).[[19]](#cite_note-19) Large subspecies, in which males weigh up to [Template:Convert](/wiki/Template:Convert), are the Sri Lankan leopard and the Persian leopard. Such larger leopards inhabit areas which lack tigers and lions, so that leopards are at the top of the food chain with no competitive restriction from large prey.[[20]](#cite_note-20)

## Evolution[[edit](/index.php?title=(none)&action=edit&section=4)]

The last common ancestor of the *Panthera* and *Neofelis* species is believed to have occurred about 6.37 million years ago. The clouded leopard was the first to diverge from the rest of the *Panthera* lineage, followed by the snow leopard. The genus *Panthera* is believed to have emerged in Asia, from where they subsequently emigrated to Africa. The tiger-snow leopard clade diverged from the rest of *Panthera* around 2.9 million years ago.<ref name=davis2010/><ref name=mazak2011/> Johnson and colleagues suggest that the leopard diverged next, and followed by the lion-jaguar clade.<ref name=johnson2006/>

Fossils of ancestors of the leopard have been found in [East Africa](/wiki/East_Africa) and [South Asia](/wiki/South_Asia), dating back to the [Pleistocene](/wiki/Pleistocene) between 2 and 3.5 million years ago. The modern leopard is suggested to have evolved in Africa 0.5 to 0.8 million years ago and to have [radiated](/wiki/Radiation_(biology)) across Asia 0.2 to 0.3 million years ago.<ref name=Uphyrkina>[Template:Cite journal](/wiki/Template:Cite_journal)</ref>

In Europe, the leopard is known at least since the Pleistocene. Fossil bones and teeth dating from the [Pliocene](/wiki/Pliocene) were found in [Perrier](/wiki/Perrier,_Puy-de-Dôme) in [France](/wiki/France), northeast of [London](/wiki/London), and in [Valdarno](/wiki/Valdarno) ([Italy](/wiki/Italy)). Similar fossils dating back to the [Pleistocene](/wiki/Pleistocene) were excavated mostly in [loess](/wiki/Loess) and caves at 40 sites in the continent - from near [Lisbon](/wiki/Lisbon), near [Gibraltar](/wiki/Gibraltar), and [Santander Province](/wiki/Santander_Province) in northern [Spain](/wiki/Spain) to several sites in France, [Switzerland](/wiki/Switzerland), Italy, [Austria](/wiki/Austria), [Germany](/wiki/Germany), in the north up to [Derby](/wiki/Derby) in [England](/wiki/England), in the east to [Přerov](/wiki/Přerov) in the [Czech Republic](/wiki/Czech_Republic), and the [Baranya](/wiki/Baranya_(region)) in southern [Hungary](/wiki/Hungary).[[21]](#cite_note-21) The Pleistocene leopards of Europe can be divided into four subsequent subspecies. The first European leopard subspecies *P. p. begoueni* is known from the beginning of the early Pleistocene and was replaced about 0.6 million years ago by *P. p. sickenbergi*, which in turn was replaced by *P. p. antiqua* around 0.3 million years ago. The most recent form, the [Late Pleistocene Ice Age leopard](/wiki/Late_Pleistocene_Ice_Age_leopard) (*P. p. spelaea*), appeared at the beginning of the [Late Pleistocene](/wiki/Late_Pleistocene) and survived until about 24,000 years ago in several parts of Europe.[[22]](#cite_note-22) Pleistocene fossils have also been excavated in [Japanese Archipelago](/wiki/Japanese_Archipelago).<ref name=JapanMammals/>

## Genetics[[edit](/index.php?title=(none)&action=edit&section=5)]

The [diploid](/wiki/Diploidy) number of [chromosomes](/wiki/Chromosome) in the leopard is 38, the same as in any other felid, save for the [ocelot](/wiki/Ocelot) and the [margay](/wiki/Margay), whose diploid number of chromosomes is 36.[[23]](#cite_note-23) The chromosomes include four [acrocentric](/wiki/Centromere#Acrocentric), five [metacentric](/wiki/Centromere#Metacentric), seven [submetacentric](/wiki/Centromere#Submetacentric) and two [telocentric](/wiki/Centromere#Telocentric) pairs.[[24]](#cite_note-24)

### Hybrids[[edit](/index.php?title=(none)&action=edit&section=6)]

[thumb|upright|](/wiki/File:Pumapard-1904.jpg)[Pumapard](/wiki/Pumapard), 1904 [Template:Main](/wiki/Template:Main) [Crossbreeding](/wiki/Crossbreeding) between the leopard and the other members of the *Panthera* has been documented. In 1953, a lioness and a male leopard were mated in the Hanshin Park in [Nishinomiya, Japan](/wiki/Nishinomiya,_Japan). The first litter from this pairing was born on 2 November 1959, consisting of a male and a female. Another litter was born in 1961, in which all the offspring were spotted and bigger than juvenile leopard. The hybrid came to be known as "leopon". Unsuccessful attempts were made to mate a leopon with a tigress.[[25]](#cite_note-25) Although lions and leopards may come into contact in sub-Saharan Africa, they are generally not known to interbreed naturally. However, there have been anecdotal reports of felids larger than the cheetah but smaller than the lion, with a lion-like face, from the Central African Republic, Kenya, Rwanda and Uganda. This animal, known as the marozi and by several other names, is covered with grayish spots or rosettes on the back, the flanks and the legs. However, there have been no confirmed sightings of the marozi since the 1930s.[[26]](#cite_note-26) A pumapard is a hybrid animal resulting from a mating between a leopard and a [puma](/wiki/Puma_(animal)) (a member of the genus *Puma*, not the genus *Panthera*). Three sets of these hybrids were bred in the late 1890s and early 1900s by [Carl Hagenbeck](/wiki/Carl_Hagenbeck) at his animal park in [Hamburg, Germany](/wiki/Hamburg,_Germany). While most of these animals did not reach adulthood, one of these was purchased in 1898 by the [Berlin Zoo](/wiki/Berlin_Zoo). A similar hybrid in the Berlin Zoo purchased from Hagenbeck was a cross between a male leopard and a female puma. A specimen in the [Hamburg Zoo](/wiki/Zoological_Garden_of_Hamburg) (in the photo at right) was the reverse pairing, fathered by a puma bred to an Indian leopardess. The pumapard is characterised by a long body like the puma's, but with shorter legs. The hybrid is in general dwarf, smaller than either parent. The coat is variously described as sandy, tawny or greyish with brown, chestnut or faded rosettes.[[27]](#cite_note-27)

### Variant colouration[[edit](/index.php?title=(none)&action=edit&section=7)]

[thumb|](/wiki/File:Blackleopard.JPG)[Melanistic](/wiki/Melanism) leopard or "[black panther](/wiki/Black_panther)" [Template:Main](/wiki/Template:Main) Melanistic leopards, known, like the melanistic jaguars, as "black panthers". Pseudomelanism (abundism) also occurs in leopards.[[28]](#cite_note-28)Melanism in leopards is inherited as a trait relatively [recessive](/wiki/Recessive_trait) to the spotted form.<ref name=Eizirik>[Template:Cite journal](/wiki/Template:Cite_journal)</ref> Interbreeding in melanistic leopards produces a significantly smaller litter size than is produced by normal pairings.[[29]](#cite_note-29) The black panther is common in the [equatorial rainforest](/wiki/Equatorial_rainforest) of [Malaya](/wiki/Malay_Peninsula) and the [tropical rainforest](/wiki/Tropical_rainforest) on the slopes of some African mountains such as [Mount Kenya](/wiki/Mount_Kenya).[[30]](#cite_note-30)Between January 1996 and March 2009, [Indochinese leopards](/wiki/Indochinese_leopard) were photographed at 16 sites in the [Malay Peninsula](/wiki/Malay_Peninsula) in a sampling effort of more than 1000 [trap](/wiki/Camera_trap) nights. Of the 445 photographs of melanistic leopards, 410 came from study sites south of the [Kra Isthmus](/wiki/Kra_Isthmus), where the non-melanistic morph was never photographed. This data suggests the near fixation of the dark allele in the region. The expected time for the fixation of this recessive allele due to [genetic drift](/wiki/Genetic_drift) alone ranged from about 1,100 years to about 100,000 years.[[31]](#cite_note-31)[[32]](#cite_note-32) A rare "strawberry" leopard was photographed in South Africa's Madikwe Game Reserve. This condition was probably caused by [erythrism](/wiki/Erythrism), a little-understood genetic condition that causes either an overproduction of red pigments or an underproduction of dark pigments.[[33]](#cite_note-33) Pseudomelanism has also been reported in leopard.[[34]](#cite_note-34)

## Characteristics[[edit](/index.php?title=(none)&action=edit&section=8)]

[thumb|left|upright|African leopard at](/wiki/File:Leopard_africa.jpg) [Serengeti National Park](/wiki/Serengeti_National_Park), [Tanzania](/wiki/Tanzania) The leopard is a [big cat](/wiki/Big_cat) distinguished by its robust build and muscular but relatively shorter limbs, a broad head and a [coat](/wiki/Coat_(animal)) covered by spots arranged in [rosettes](/wiki/Rosette_(zoology)). Males stand [Template:Convert](/wiki/Template:Convert) at the shoulder, while females are [Template:Convert](/wiki/Template:Convert) tall. The head-and-body length is typically between [Template:Convert](/wiki/Template:Convert). While males weigh [Template:Convert](/wiki/Template:Convert), females weigh [Template:Convert](/wiki/Template:Convert);[[35]](#cite_note-35) these measurements vary geographically.<ref name=mammal/> The maximum recorded weight for a leopard is [Template:Convert](/wiki/Template:Convert).[[36]](#cite_note-36)[[37]](#cite_note-37) [Sexually dimorphic](/wiki/Sexually_dimorphic), males are larger and heavier than females.[[38]](#cite_note-38) Basically pale yellow to yellowish brown or golden (except for the melanistic forms), the coat is spotted and rosetted; spots fade toward the white underbelly and the insides and lower parts of the legs. Rosettes are most prominent on the back, flanks and hindquarters.<ref name=Hoath/> The pattern of the rosettes is unique to each individual.[[39]](#cite_note-39)[[40]](#cite_note-40)[[41]](#cite_note-41) Juveniles have woolly fur, and appear dark due to the densely arranged spots.<ref name=estes/> The white-tipped tail, [Template:Convert](/wiki/Template:Convert) long, white underneath, displays rosettes except toward the end, where the spots form incomplete bands.<ref name=Hoath/><ref name=Schutze/>

The texture and colour of the fur varies by climate and geography; leopards in forests are observed to be darker than those in deserts.<ref name=Schutze/> The guard hairs (the layer of hairs that protect the basal hairs) are the shortest ([Template:Convert](/wiki/Template:Convert)) on the face and the head, and increase in length toward the flanks and the underparts ([Template:Convert](/wiki/Template:Convert)). The fur is generally soft and thick; the fur on the underparts is notably softer than that on the back.<ref name=Skinner/> A few geographical variations have been noted in the colour and texture of the fur. Leopards in forests tend to be darker than those in deserts;<ref name=Hoath/> the fur tends to grow longer in populations living in colder climates.<ref name=mammal/> The rosettes, circular in eastern African populations, tend to be squarish in southern Africa and larger in Asian populations. Their yellow coat tends to be more pale and cream coloured in desert populations, more gray in colder climates, and of a darker golden hue in [rainforest](/wiki/Rainforest) habitats.<ref name=CAP>[Template:Cite book](/wiki/Template:Cite_book)</ref>

The leopard is often confused with the [cheetah](/wiki/Cheetah); however, the cheetah is marked with small round spots instead of the larger rosettes.[[42]](#cite_note-42) Moreover, the leopard lacks the facial tear streaks characteristic of the cheetah.[[43]](#cite_note-43) Other similar species are the [clouded leopard](/wiki/Clouded_leopard) and [jaguar](/wiki/Jaguar). The clouded leopard can be told apart by the diffuse "clouds" of spots compared to the smaller and distinct rosettes of the leopard, longer legs and thinner tail.[[44]](#cite_note-44) The jaguar has rosettes that typically have spots within them, while those of leopards often do not. Moreover, the jaguar has larger and rounder foot pads and a larger and stronger skull.<ref name=mammal/>

## Distribution and habitat[[edit](/index.php?title=(none)&action=edit&section=9)]

[thumb|Leopards on the](/wiki/File:Sousse_museum_Smirat-retouched.jpg) [Magerius Mosaic](/wiki/Magerius_Mosaic) from modern Tunisia. Numerous Roman mosaics from North African sites depict fauna now found only in [tropical Africa](/wiki/Tropical_Africa).[[45]](#cite_note-45) [thumb|left|A leopard and her cub on the tree in the Serengeti savanna.](/wiki/File:A_leopard_on_the_tree_in_the_Serengeti_Plain.JPG) Leopards have the largest distribution of any wild cat, occurring widely in [Africa](/wiki/Africa) as well as eastern and southern [Asia](/wiki/Asia), although populations have shown a declining trend and are fragmented outside of [sub-Saharan Africa](/wiki/Sub-Saharan_Africa). Within sub-Saharan Africa, the species is still numerous and even thriving in marginal habitats where other large cats have disappeared. Populations in [North Africa](/wiki/North_Africa) may be [extinct](/wiki/Extinct).<ref name=CAP/> Data on their distribution in [Asia](/wiki/Asia) are not consistent. Populations in southwest and central Asia are small and fragmented; in the northeast, they are critically endangered. In the [Indian subcontinent](/wiki/Indian_subcontinent), [Southeast Asia](/wiki/Southeast_Asia), and [China](/wiki/China), leopards are still relatively abundant. Of the species as a whole, its numbers are greater than those of other *Panthera* species, all of which face more acute conservation concerns.<ref name=iucn/><ref name=Gavashelishvili4/>

Leopards are exceptionally adaptable, although associated primarily with [savanna](/wiki/Savanna) and [rainforest](/wiki/Rainforest). Populations thrive anywhere in the species range where [grasslands](/wiki/Grassland), [woodlands](/wiki/Woodland), and riverine forests remain largely undisturbed. In the [Russian Far East](/wiki/Russian_Far_East), they inhabit [temperate forests](/wiki/Temperate_coniferous_forest) where winter temperatures reach a low of [Template:Convert](/wiki/Template:Convert).<ref name=Uphyrkina/> They are equally adept surviving in some of the world's most humid rainforests and even semi-arid desert edges.

Leopards in west and central Asia try to avoid deserts, areas with long-duration snow cover and areas that are near urban development.<ref name=Gavashelishvili4>[Template:Cite journal](/wiki/Template:Cite_journal)</ref> In [India](/wiki/India), leopard populations sometimes live quite close to human settlements and even in semi-developed areas.[[46]](#cite_note-46) Although occasionally adaptable to human disturbances, leopards require healthy prey populations and appropriate vegetative cover for hunting for prolonged survival and thus rarely linger in heavily developed areas.[[46]](#cite_note-46) Due to the leopard's superlative stealthiness, people often remain unaware that big cats live in nearby areas.[[46]](#cite_note-46)

## Ecology and behaviour[[edit](/index.php?title=(none)&action=edit&section=10)]

[thumb|right|Leopard resting on a tree](/wiki/File:Leopard_on_the_tree.jpg) Leopards, like lions and tigers,[[47]](#cite_note-47)<ref name=Schaller1972>[Template:Cite book](/wiki/Template:Cite_book)</ref> tend to be [nocturnal](/wiki/Nocturnality) (active mainly at night).[[48]](#cite_note-48)[[49]](#cite_note-49) However, leopards in western African forests have been observed to be largely [diurnal](/wiki/Diurnality) and hunt during twilight, when their prey animals are active; activity patterns may even vary by season.[[50]](#cite_note-50) Leopards generally are active mainly from dusk till dawn, and rest for most of the day and for some hours at night in thickets, among rocks or over tree branches. Leopards have been observed walking [Template:Convert](/wiki/Template:Convert) across their range at night; they may even wander up to [Template:Convert](/wiki/Template:Convert) if disturbed.<ref name=estes/><ref name=nowak/>

Leopards are known for their ability in climbing, and have been observed resting on tree branches during the day, dragging their kills up trees and hanging them there, and descending from trees headfirst.<ref name=CMBC>[Template:Cite web](/wiki/Template:Cite_web)</ref> They are powerful swimmers, although are not as disposed to swimming as some other big cats, such as the tiger. They are very agile, and can run at over [Template:Convert](/wiki/Template:Convert), leap over [Template:Convert](/wiki/Template:Convert) horizontally, and jump up to [Template:Convert](/wiki/Template:Convert) vertically.[[51]](#cite_note-51) They produce a number of vocalizations, including grunts, roars, growls, meows, and purrs.<ref name=estes>[Template:Cite book](/wiki/Template:Cite_book)</ref>

### Social organisation and territories[[edit](/index.php?title=(none)&action=edit&section=11)]

[Template:Multiple image](/wiki/Template:Multiple_image)

The leopard is solitary and [territorial](/wiki/Territory_(animal)), as are several other felids; individuals associate appreciably only in the mating season, though mothers may continue to interact with their offspring even after weaning. Mothers have been observed sharing kills with their offspring when they can not obtain any meal.<ref name=estes/> In [Kruger National Park](/wiki/Kruger_National_Park), most leopards tend to keep [Template:Convert](/wiki/Template:Convert) apart.<ref name=nowak/> Fathers may interact with their partners and cubs at times.[[52]](#cite_note-52) Aggressive encounters are rare, typically limited to defending territories from intruders.<ref name=mammal/> In a South African reserve, a male was wounded in a male–male territorial battle over a carcass.<ref name=hunter03>[Template:Cite journal](/wiki/Template:Cite_journal)</ref> A few instances of [cannibalism](/wiki/Cannibalism_(zoology)) have been reported.[[53]](#cite_note-53)[[54]](#cite_note-54) Males occupy territories that often overlap with a few smaller female territories, probably as a strategy to enhance access to females. A radio-collar analysis in the [Ivory Coast](/wiki/Ivory_Coast) found a female home range completely enclosed within a male's.<ref name=Ivory>[Template:Cite journal](/wiki/Template:Cite_journal)</ref> Female live with their cubs in territories that overlap extensively – probably due to the association between mothers and their offspring. There may be a few other fluctuating territories, belonging to young individuals. It is not clear if male territories tend to overlap among themselves as much as those of females do. Individuals will try to drive away intruders of the same sex.<ref name=estes/><ref name=nowak/>

A study of leopards in the Namibian farmlands showed that the size of territories was not significantly affected by sex, rainfall patterns or season; it concluded that the higher the prey availability in an area, the greater the population density of leopards and the smaller the size of territories, but territories tend to expand if there is human interference (which has been notably high in the study area).[[55]](#cite_note-55) Territorial sizes vary geographically; they can be as small as [Template:Convert](/wiki/Template:Convert) for males and [Template:Convert](/wiki/Template:Convert) for females in forests and rocky terrain (such as in the [Serengeti](/wiki/Serengeti) or Kruger National Park),[[56]](#cite_note-56)[[57]](#cite_note-57) or as large as [Template:Convert](/wiki/Template:Convert) for males and [Template:Convert](/wiki/Template:Convert) for females in northeastern Namibia[[58]](#cite_note-58) (they might be even larger in deserts and montane areas).<ref name=mammal/> Territories recorded in Nepal, [Template:Convert](/wiki/Template:Convert) for males and [Template:Convert](/wiki/Template:Convert) for females, are smaller than those generally observed in Africa.[[59]](#cite_note-59)

### Hunting and diet[[edit](/index.php?title=(none)&action=edit&section=12)]

[Template:Multiple image](/wiki/Template:Multiple_image)

The leopard is an [omnivore](/wiki/Omnivore) that prefers medium-sized prey with a body mass ranging from [Template:Convert](/wiki/Template:Convert) and also feeds on grasses such as [*Isachne buettneri*](/wiki/Isachne_buettneri) and [*Streptogyna crinita*](/wiki/Streptogyna_crinita). A study noted that prey animals in this weight range tend to occur in dense habitat, form small herds and can be easily captured by the leopard; on the other hand, animals that prefer open areas and have developed significant anti-predator strategies are hardly preferred.<ref name=Hayward2006/> Prey as heavy as [Template:Convert](/wiki/Template:Convert) (such as [greater kudu](/wiki/Greater_kudu) and giraffe) may be hunted if larger carnivores such as lions are absent;<ref name=Hayward2006>[Template:Cite journal](/wiki/Template:Cite_journal)</ref>[[60]](#cite_note-60) the largest prey killed by a leopard was reportedly a [Template:Convert](/wiki/Template:Convert) male [eland](/wiki/Taurotragus).[[61]](#cite_note-61) Leopards can feed on a broad variety of prey, mainly [antelopes](/wiki/Antelope), [deer](/wiki/Deer) and [rodents](/wiki/Rodent); these include: cattle, [chital](/wiki/Chital), [duiker](/wiki/Duiker), [dung beetle](/wiki/Dung_beetle), [hartebeest](/wiki/Hartebeest), [hyrax](/wiki/Hyrax), [impala](/wiki/Impala), [muntjac](/wiki/Muntjac), [nyala](/wiki/Nyala), [porcupine](/wiki/Porcupine), [primates](/wiki/Primate), rat, [reedbuck](/wiki/Reedbuck), [springbok](/wiki/Springbok), squirrel, [waterbuck](/wiki/Waterbuck), [warthog](/wiki/Warthog) and [wildebeest](/wiki/Wildebeest).<ref name=Hayward2006/>[[62]](#cite_note-62)[[63]](#cite_note-63) Mothers primarily target smaller prey.<ref name=mammal/>

A study at [Wolong Reserve](/wiki/Wolong_Reserve) in China demonstrated variation in the leopards' diet over time; over the course of seven years, the vegetative cover receded, and the animals opportunistically shifted from primarily consuming [tufted deer](/wiki/Tufted_deer) to pursuing [bamboo rats](/wiki/Bamboo_rat) and other smaller prey.[[64]](#cite_note-64) A study estimated average daily consumption rates at [Template:Convert](/wiki/Template:Convert) for males and [Template:Convert](/wiki/Template:Convert) for females.[[65]](#cite_note-65) A study of leopards in the southern [Kalahari](/wiki/Kalahari_Desert) showed that water requirements are met by the bodily fluids of the prey, [succulent plants](/wiki/Succulent_plant) and water bodies; they drink water every two to three days, and feed infrequently on moisture-rich plants such as [gemsbok cucumbers](/wiki/Gemsbok_cucumber) (*Acanthosicyos naudinianus*), [tsamma melon](/wiki/Tsamma_melon) (*Citrullus lanatus*) and [Kalahari sour grass](/wiki/Schmidtia_kalahariensis) (*Schmidtia kalahariensis*).[[66]](#cite_note-66) A few instances of [cannibalism](/wiki/Cannibalism_(zoology)) have been reported.[[53]](#cite_note-53) The leopard depends mainly on its acute sense of hearing and vision for hunting.<ref name=Mills>[Template:Cite book](/wiki/Template:Cite_book)</ref> Hunting is primarily a nocturnal activity in most areas,<ref name=estes/> though leopards in western African forests and Tsavo have been observed hunting by the day.<ref name=hamilton76>[Template:Cite thesis](/wiki/Template:Cite_thesis)</ref> It will stalk the prey and try to approach as close as possible (typically within [Template:Convert](/wiki/Template:Convert)) to the target, and finally pounce on it with its forepaws (unlike the lion, that pounces as the prey starts escaping) and kill it by suffocation. Small prey are killed with a bite on the back of the neck, while larger animals are held strongly by the neck and strangled.<ref name=estes/><ref name=nowak/>

Small kills are eaten immediately, while larger carcasses are dragged over several hundred metres and safely cached to be consumed later on trees, in bushes or even caves. The way the kill is stored to be consumed later depends on the local topography and individual preferences; while trees are preferred in Kruger National Park, bushes are preferred in the plain terrain of the Kalahari.[[67]](#cite_note-67) Kills are cached up to [Template:Convert](/wiki/Template:Convert) apart.<ref name=Kingdon/> Although they are smaller than most other members of its genus, leopards are able to take large prey due to their massive skulls that facilitate powerful jaw muscles.[[36]](#cite_note-36)[[68]](#cite_note-68) Leopards are strong enough to drag carcasses heavier than themselves up trees; an individual was seen to haul a young giraffe, nearly [Template:Convert](/wiki/Template:Convert), up [Template:Convert](/wiki/Template:Convert) into a tree.[[69]](#cite_note-69)

### Enemies and competitors[[edit](/index.php?title=(none)&action=edit&section=13)]

Leopards must compete for food and shelter with other large predators such as [tigers](/wiki/Tiger), [lions](/wiki/Lion), [spotted hyenas](/wiki/Spotted_hyena), [striped hyenas](/wiki/Striped_hyena), [brown hyenas](/wiki/Brown_hyena), up to five species of [bear](/wiki/Bear) and both [African](/wiki/African_wild_dog) and [Asiatic wild dogs](/wiki/Dhole). These animals may steal the leopard's kill, devour its young or even kill adult leopards. Leopards co-exist alongside these other large predators by hunting for different types of prey and by avoiding areas frequented by them. Leopards may also retreat up a tree in the face of direct aggression from other large carnivores but leopards have been seen to either kill or prey on competitors such as black-backed jackal, African wild cat and the cubs of lions, cheetahs, hyenas, and wild dogs.<ref name=CAP/> [left|thumb|Lioness stealing a leopard kill](/wiki/File:Lioness_vs_Leopard_9_July_2016_Latest_Sightings_1.png) Resource partitioning occurs where leopards share their range with [tigers](/wiki/Tiger). Leopards tend to take smaller prey, usually less than [Template:Convert](/wiki/Template:Convert), where tigers are present.<ref name=CAP/> In areas where the leopard is sympatric with the tiger, coexistence is reportedly not the general rule, with leopards being few where tigers are numerous.[[70]](#cite_note-70) The mean leopard density decreased significantly (from 9.76 animals/100km2 to 2.07 animals/100km2) when the mean density of tigers increased (from 3.31 animals/100km2 to 5.81 animals/100km2) from 2004-5 to 2007-8 in the [Rajaji National Park](/wiki/Rajaji_National_Park) in [India](/wiki/India) following the relocation of pastoralists out of the park.[[71]](#cite_note-71) There, the two species have high dietary overlap, and an increase in the tiger population resulted in a sharp decrease in the leopard population and a shift in the leopard diet to small prey (from 9% to 36%) and domestic prey (from 6.8% to 31.8%).[[71]](#cite_note-71) In the Primore region of the [Russian Far East](/wiki/Russian_Far_East), Amur leopards were absent or very rarely encountered at places where Siberian tigers reside.[[72]](#cite_note-72) However, in the [Chitwan National Park](/wiki/Chitwan_National_Park) in [Nepal](/wiki/Nepal), both species coexist because there is a large prey biomass, a large proportion of prey is of the smaller sizes, and dense vegetation exists.[[73]](#cite_note-73) Here leopards killed prey ranging from less than [Template:Convert](/wiki/Template:Convert) to [Template:Convert](/wiki/Template:Convert) in weight with most kills in the [Template:Convert](/wiki/Template:Convert) range; tigers killed more prey in the [Template:Convert](/wiki/Template:Convert) range.[[73]](#cite_note-73) There were also differences in the microhabitat preferences of the individual tiger and leopard followed over 5-month (December to April) period in this study - the tiger used roads and (except in February) forested areas more frequently, while the leopard used recently burned areas and open areas more frequently [[74]](#cite_note-74) Usually when a tiger began to kill baits at sites formerly frequented by leopards, the leopards would no longer come and kill there.[[75]](#cite_note-75) In the tropical forests of India's [Nagarhole National Park](/wiki/Nagarhole_National_Park), tigers selected prey weighing more than [Template:Convert](/wiki/Template:Convert), whereas leopards selected prey in the [Template:Convert](/wiki/Template:Convert) range.[[76]](#cite_note-76) In tropical forest they do not always avoid the larger cats by hunting at different times. With relatively abundant prey and differences in the size of prey selected, tigers and leopards seem to successfully coexist without competitive exclusion or inter-species dominance hierarchies that may be more common to the leopard's co-existence with the [lion](/wiki/Lion) in savanna habitats.[[77]](#cite_note-77) In areas with high tiger populations, such as in the central parts of India's [Kanha National Park](/wiki/Kanha_National_Park), leopards are not permanent residents, but transients. They were common near villages at the periphery of the park and outside the park.[[75]](#cite_note-75) In some areas of Africa, troops of large [baboon](/wiki/Baboon) species (potential leopard prey themselves) will kill and sometimes eat leopard young if they discover them.[[78]](#cite_note-78) Occasionally, [Nile crocodiles](/wiki/Nile_crocodile) may prey on leopards of any age. For example, one large adult leopard was grabbed and consumed by a large crocodile while attempting to hunt along a bank in [Kruger National Park](/wiki/Kruger_National_Park).[[79]](#cite_note-79)[[80]](#cite_note-80)[[81]](#cite_note-81) [Mugger crocodiles](/wiki/Mugger_crocodile) may also on rare occasions kill an adult leopard in [India](/wiki/India).[[82]](#cite_note-82) [Lions](/wiki/Lion) are occasionally successful in climbing trees and fetching leopard kills,[[67]](#cite_note-67) but leopards are also known to kill or prey on cubs of lions.<ref name=CAP/> In the [Kalahari](/wiki/Kalahari) desert, leopards frequently lose kills to the [brown hyena](/wiki/Brown_hyena), if the leopard is unable to move the kill into a tree. Single brown hyenas have been observed charging at and displacing male leopards from kills.[[83]](#cite_note-83)[[84]](#cite_note-84) [Burmese pythons](/wiki/Burmese_python) have been known to prey on leopards, with an adult cat having been recovered from the stomach of a [Template:Convert](/wiki/Template:Convert) specimen.[[85]](#cite_note-85) Two cases of leopards killing cheetahs have been reported in 2014.[[86]](#cite_note-86)[[87]](#cite_note-87)

### Reproduction and life cycle[[edit](/index.php?title=(none)&action=edit&section=14)]

Depending on the region, leopards may mate all year round. In Manchuria and Siberia, they mate during January and February. The [estrous cycle](/wiki/Estrous_cycle) lasts about 46 days and the female usually is in heat for 6–7 days.[[88]](#cite_note-88) Gestation lasts for 90 to 105 days.[[89]](#cite_note-89) Cubs are usually born in a litter of 2–4 cubs.[[90]](#cite_note-90) Mortality of cubs is estimated at 41–50% during the first year.[[65]](#cite_note-65) Females give birth in a cave, crevice among boulders, hollow tree, or thicket to make a den. Cubs are born with closed eyes, which open four to nine days after birth.[[61]](#cite_note-61) The fur of the young tends to be longer and thicker than that of adults. Their pelage is also more gray in colour with less defined spots. Around three months of age, the young begin to follow the mother on hunts. At one year of age, leopard young can probably fend for themselves, but remain with the mother for 18–24 months.<ref name=CMBC/>

The average typical life span of a leopard is between 12 and 17 years.[[91]](#cite_note-91) The oldest recorded spotted leopard was a female named Roxanne living in captivity at McCarthy's Wildlife Sanctuary in The Acreage, Palm Beach County, Florida. She died August 8, 2014 at the age of 24 years, 2 months and 13 days. This has been verified by the Guinness World Records.[[92]](#cite_note-92) In Sri Lanka's [Yala National Park](/wiki/Yala_National_Park), leopards have been ranked by visitors to be among the least visible of all animals in the park despite their high concentration in the reserve.<ref name=fao>Weerasinghe, U.M.I.R.K., Kariyawasm, D. and M. De Zoysa (2003). [Ruhuna (Yala) National Park in Sri Lanka: Visitors, Visitation, and Eco-Tourism](http://www.fao.org/DOCREP/ARTICLE/WFC/XII/0116-A1.HTM). Contribution to the XII World Forestry Congress, Quebec.</ref>

In South Africa, safaris are offered in the [Sabi Sand Game Reserve](/wiki/Sabi_Sand_Game_Reserve). In Sri Lanka, wildlife tours are available in the Yala and [Wilpattu National Parks](/wiki/Wilpattu_National_Park). In India, safaris are offered in the [Madhya Pradesh](/wiki/Madhya_Pradesh) and [Uttarakhand](/wiki/Uttarakhand) national parks as well as in the [Pali](/wiki/Pali) district of western [Rajasthan](/wiki/Rajasthan).[[99]](#cite_note-99)

### Man-eating[[edit](/index.php?title=(none)&action=edit&section=18)]

[Template:Main](/wiki/Template:Main) [thumb|right|The](/wiki/File:PanarManeater.jpg) [Panar Leopard](/wiki/Panar_Leopard), shot by [Jim Corbett](/wiki/Jim_Corbett) in 1910 after allegedly killing 400 people Most leopards avoid people, but humans may occasionally be targeted as prey. Most healthy leopards prefer wild prey to humans, but injured, sickly, or struggling cats or those with a shortage of regular prey may resort to hunting humans and become habituated to it. Although usually slightly smaller than humans, an adult leopard is much more powerful and easily capable of killing them. Two extreme cases occurred in India: the first leopard, "the [Leopard of Rudraprayag](/wiki/Leopard_of_Rudraprayag)", killed more than 125 people; the second, the "[Panar Leopard](/wiki/Panar_Leopard)", was believed to have killed more than 400. Both were killed by the renowned hunter [Jim Corbett](/wiki/Jim_Corbett).[[100]](#cite_note-100) Man-eating leopards are considered bold and difficult to track by feline standards and may enter human settlements for prey, more so than lions and tigers.[[101]](#cite_note-101) Author and big game hunter [Kenneth Anderson](/wiki/Kenneth_Anderson_(writer)) had first-hand experience with many man-eating leopards, and described them as far more threatening than tigers:

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## In popular culture[[edit](/index.php?title=(none)&action=edit&section=19)]

* In [antiquity](/wiki/Classical_antiquity), a leopard was believed to be a [hybrid](/wiki/Hybrid_(biology)) of a [lion](/wiki/Lion) and a [panther](/wiki/Panther_(legendary_creature)), as is reflected by its name.[[4]](#cite_note-4)[[5]](#cite_note-5)\* The 1938 film [*Bringing up Baby*](/wiki/Bringing_up_Baby) prominently features a pet leopard.
* [Rudyard Kipling's](/wiki/Rudyard_Kipling) novel [The Jungle Book](/wiki/The_Jungle_Book) features a black leopard named Bagheera.
* In [Disney's](/wiki/Disney) [*Tarzan*](/wiki/Tarzan_(Disney_film)), the character Sabor is a leopardess. She kills both [Tarzan's](/wiki/Tarzan) biological parents and Kala's first child, before an adult Tarzan kills her in a fierce fight. She is voiced by [Frank Welker](/wiki/Frank_Welker), using sounds of big cats such as leopards, [lions](/wiki/Lions), [tigers](/wiki/Tigers), [jaguars](/wiki/Jaguars), and [cougars](/wiki/Cougars).
* [The Island of Doctor Moreau](/wiki/The_Island_of_Doctor_Moreau) by [H.G. Wells](/wiki/H.G._Wells) features a human-leopard hybrid known as Leopard-Man, and the film [The Island of Dr. Moreau (1996 film)](/wiki/The_Island_of_Dr._Moreau_(1996_film)) features a human-leopard hybrid named Lo-Mai.
* The mascot of the [2010 World Cup](/wiki/2010_World_Cup) in [South Africa](/wiki/South_Africa) was an anthropomorphic leopard called [Zakumi](/wiki/Zakumi).

## See also[[edit](/index.php?title=(none)&action=edit&section=20)]

* [List of solitary animals](/wiki/List_of_solitary_animals)

[Template:Portal bar](/wiki/Template:Portal_bar)

## References[[edit](/index.php?title=(none)&action=edit&section=21)]

[Template:Reflist](/wiki/Template:Reflist)

## Bibliography[[edit](/index.php?title=(none)&action=edit&section=22)]

* [Template:Cite book](/wiki/Template:Cite_book)

## Further reading[[edit](/index.php?title=(none)&action=edit&section=23)]

[Template:Refbegin](/wiki/Template:Refbegin)

* [Template:Cite book](/wiki/Template:Cite_book)
* [Template:Cite journal](/wiki/Template:Cite_journal)
* [Template:Cite journal](/wiki/Template:Cite_journal)
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## External links[[edit](/index.php?title=(none)&action=edit&section=24)]

[Template:Wikispecies](/wiki/Template:Wikispecies) [Template:Commons+cat](/wiki/Template:Commons+cat)

* [IUCN/SSC Cat Specialist Group : *Panthera pardus* in Africa](http://www.catsg.org/index.php?id=110) and [*Panthera pardus* in Asia](http://www.catsg.org/index.php?id=557)
* [Leopard Anthology: Research and conservation of leopards in Asia](http://leopards.wild-cat.org/)
* [Asian Leopard Specialist Society: Research, conservation and management of Asian leopard subspecies](http://www.leopardspecialists.com/)
* [The Animal Files: Leopard](http://www.theanimalfiles.com/mammals/carnivores/leopard.html)

[Template:Carnivora](/wiki/Template:Carnivora)

[Category:Leopards](/wiki/Category:Leopards) [Category:Animals described in 1758](/wiki/Category:Animals_described_in_1758) [Category:Articles containing video clips](/wiki/Category:Articles_containing_video_clips) [Category:Felids of Africa](/wiki/Category:Felids_of_Africa) [Category:Felids of India](/wiki/Category:Felids_of_India) [Category:Fauna of Central Africa](/wiki/Category:Fauna_of_Central_Africa) [Category:Fauna of East Africa](/wiki/Category:Fauna_of_East_Africa) [Category:Fauna of East Asia](/wiki/Category:Fauna_of_East_Asia) [Category:Fauna of South Asia](/wiki/Category:Fauna_of_South_Asia) [Category:Fauna of Western Asia](/wiki/Category:Fauna_of_Western_Asia) [Category:Fauna of Southern Africa](/wiki/Category:Fauna_of_Southern_Africa) [Category:Fauna of West Africa](/wiki/Category:Fauna_of_West_Africa) [Category:Megafauna of Africa](/wiki/Category:Megafauna_of_Africa) [Category:National symbols of Benin](/wiki/Category:National_symbols_of_Benin) [Category:National symbols of Malawi](/wiki/Category:National_symbols_of_Malawi) [Category:National symbols of Somalia](/wiki/Category:National_symbols_of_Somalia) [Category:National symbols of the Democratic Republic of the Congo](/wiki/Category:National_symbols_of_the_Democratic_Republic_of_the_Congo)