

## Wildcat (*Felis silvestris*)



**Also known as:** African wildcat, Asian steppe wildcat, Asian wildcat, Asiatic wildcat, Chinese alpine steppe cat, Chinese desert cat, Chinese mountain cat, European wildcat, forest wildcat, Indian desert cat, wild cat

**French:** Chat Orné

**Spanish:** Gato Silvestre

**Kingdom:** Animalia

**Phylum:** Chordata

**Class:** Mammalia

**Order:** Carnivora

**Family:** Felidae

**Genus:** *Felis* (1)

**Size:** Head-body length: 50 - 75 cm (2)  
Tail length: 21 - 35 cm (2)

**Weight:** 3 - 8 kg (2)

### STATUS

The wildcat is classified as Least Concern (LC) on the IUCN Red List (1) and is listed on Appendix II of CITES (3). It is also listed on Annex IV of the EC Habitats Directive (4), and on Appendix II of the Bern Convention (5).

The Chinese alpine steppe cat (*Felis silvestris bieti*) **subspecies** is classified as Vulnerable (VU) on the IUCN Red List (1).

### DESCRIPTION

The wild ancestor of the domestic cat, the wildcat (*Felis silvestris*) bears a striking resemblance to its tame relatives. In fact, domesticated cats have undergone few changes since their ancestral split from the wildcat, causing problems in distinguishing this species and its many different **subspecies**. The wildcat is hugely variable in appearance across its large range and, consequently, it has been the subject of much **taxonomic** debate (6). However, there is currently thought to be at least five different **subspecies**: the European wildcat (*Felis silvestris silvestris*), the African wildcat (*F. s. lybica*), the Southern African wildcat (*F. s. cafra*), the Asian wildcat (*F. s. ornata*), and the Chinese alpine steppe cat (*F. s. bieti*) (1) (7). The domestic cat is sometimes considered an additional **subspecies** with the name *Felis silvestris catus* (7) (8).

Displaying the appearance of an oversized, muscular tabby, the European wildcat has a long, thick coat, broad head, and comparatively flat face. It is rather compact, with short legs, wide set ears and a tail that usually exceeds just half of its head and body length. The attractive coat has well-defined dark stripes on the head, neck, limbs and along the back, while the thick, blunt-ended tail is marked with dark rings and a black tip (8) (9). The Scottish wildcat, occasionally referred to as *Felis silvestris grampia*, is the largest and heaviest built of all the wildcat populations (10) (11).

The African wildcat is slenderer with a long tail and longer legs than the other **subspecies**. The high shoulder blades give it a distinctive walk, similar to that of a cheetah, and it adopts a near vertical posture when sitting. The coat of the African wildcat is extremely variable, ranging from grey to red, often with dense spotting that forms bars or stripes. However, a characteristic rich red-brown on the back of the ears is retained. Generally, paler forms live in drier habitats and darker, more heavily spotted and striped forms occur in humid, forested areas (8).

The Southern African wildcat has only recently been recognised as a separate **subspecies**, as it was formerly considered **conspecific** with the African wildcat (7). It is extremely similar in appearance to this near relative.

The Asian wildcat is normally a pale yellow colour, although it is often reddish or yellowish-grey, and is marked with small spots that tend to form vertical lines down the trunk and **flanks**. The coat tends to be short, but this varies both with age and location. The tail has a short black tip, and a small tuft of hair grows from the tip of each ear (8) (9).

The Chinese alpine steppe cat, the least-known of all wildcat **subspecies**, is uniformly pale yellow-grey, with longer, dark brown **guard hairs**. Faint dark stripes may run along the outside of the short limbs, along with two distinct stripes on each cheek, above and below the eye. The backs of the ears are yellow-grey, with dark brown ear tufts. Three or four rings encircle the end of the fairly short, black-tipped tail (8) (9).

## RANGE

With a broad distribution that extends through much of Europe, Africa, West, South and Central Asia, the wildcat has the largest range of any wild felid (8).

The European wildcat ranges from as far north as Scotland to south-eastern Europe, including several Mediterranean islands (9), although its distribution is extremely fragmented as a result of persecution and habitat loss (1).

The African wildcat is found over much of Africa, ranging from northern Africa, southwards around the Sahara, along the east African coast, avoiding the equatorial rainforests and, largely, true desert, and across the Arabian Peninsula to the Caspian Sea. The boundary between this **subspecies** and the South African wildcat is currently unclear, but it is thought to occur in the south-east of the continent, around Tanzania and Mozambique (1).

The Asian wildcat occurs from the eastern side of the Caspian Sea into western India, Kazakhstan, southern Mongolia and western China, where it is then replaced by the Chinese alpine steppe cat (1).

## HABITAT

An extremely adaptable and opportunistic species, the wildcat is found in almost every habitat within its range, from deserts and scrub grassland, to dry and mixed forest. However, it is typically absent from cultivated areas and tropical rainforest, and it is usually thinly distributed in true desert (1).

European wildcats are mostly found in undisturbed broadleaved or mixed forests, but it also occurs in Mediterranean shrubland, **riparian** forest, along the boundaries of marshes and along coastal areas. African and Southern African wildcats are found in all habitats outside tropical rainforest and, largely, true desert (1).

The Chinese alpine steppe cat is found primarily in alpine meadow habitats, from elevations of 2,500 to 5,000 metres, on the eastern edge of the Tibetan plateau, while the Asian wildcat is most typically associated with scrub desert up to elevations of approximately 3,000 metres (1).

## BIOLOGY

An adaptable, primarily **nocturnal carnivore**, the wildcat mainly catches rodents, but survives on a varied diet that includes small birds, frogs and insects. Occasionally larger prey items are taken, such as rabbits, hares and young deer or antelope. It hunts almost exclusively on the ground, where it moves slowly and quietly, watching and listening for signs of prey (8). It has extremely sensitive hearing and is able to detect the slightest movements of its prey, as well as excellent night vision that is thought to be around seven times better than humans (10). Relative to its size, the wildcat is as powerful as any other cat species, capable of reaching speeds of up to 30 miles per hour. Its prey is brought down with razor sharp claws and killed with a lethal bite to the neck or by suffocation (10). Everything is consumed, including fur or feathers and bones (10).

The wildcat is a shy, solitary animal that viciously defends a **home range**, with males tending to have a larger **home range** than females (8) (10). During the breeding season the female may foray out of its normal range for one to six days at a time to find a mate. Scent is the principal mode of communication and faeces are left in conspicuous places, such as on grass tussocks, and urine is sprayed on trees to mark range boundaries (8). The female comes into **oestrous** several times a year, but it is common for just a single litter of three to six kittens to be produced (8). The young are raised in a den amongst rocks, or in an abandoned fox den, badger sett or rabbit warren. The kittens are born blind and helpless, first opening their eyes at 7 to 12 days of age and becoming mobile at around four weeks, when they begin to play outside the den (8). To teach the kittens the vital skills needed to kill prey, the female brings live food to the den, and stops feeding the young with her milk after six to seven weeks. The young start to follow the female on hunting trips when they are around ten weeks old, becoming independent and searching for their own **home range** at around five to six months of age. Both the male and female wildcat breed at around a year of age, although males in particular are unlikely to breed until they have established their own **home range** (12).

## THREATS

Throughout much of its range, the wildcat has long been thought of as vermin and a major predator of pheasant, grouse and rabbits, and gamekeepers have put great effort into exterminating the species. It is also accidentally caught in traps set to catch wolves and foxes (8). But as these activities have declined, the main threat to the wildcat has increasingly become **hybridisation** with domestic cats. Domestic cats readily breed with wildcats, polluting the species' gene pool and leaving few genetically distinct wildcat

populations. In Scotland, almost 90 percent of wildcats may be **hybrids** with **feral** domestic cats and as few as 400 genetically pure wildcats may remain. It is also increasingly challenging to find genetically pure populations of the African and Southern African wildcat. **Hybridisation** is particularly problematic around agricultural areas, where wildcats are drawn to by high rodent densities (1) (7). **Feral** domestic cats also compete with wildcats for prey and space (1), and there is also a high potential for the transmission of diseases, including feline leukaemia virus (13).

The wildcat is also threatened in Europe and the Near East by road collisions and habitat loss, fragmentation and degradation. In the past, the Asian wildcat was heavily hunted and traded for its soft, luxuriant fur and traders in India exported almost 42,000 wildcat pelts in 1979 (9).

The Chinese Alpine steppe cat has a very restricted range and is the least numerous of the wildcat **subspecies**. Large-scale poisoning campaigns have been conducted in China since 1958 in an attempt to control populations of pikas, which are thought to compete with livestock for grazing habitat. However, it has been found that the chemicals used also kill **carnivores** and there are fears that they have adversely affected populations of this rare wildcat **subspecies** (1) (9).

## CONSERVATION

As well as being listed on Appendix II of the Convention on the International Trade in Endangered Species (CITES) (3), meaning international trade must be carefully monitored, the wildcat receives protection from hunting across most of its range. Because of **hybridisation** concerns, the main conservation focus for this species is the identification and protection of genetically pure populations, rather than trying to establish new populations (1) (8). Attempts to augment existing populations with captive-bred wildcats have been conducted in the past, such as in Germany where 237 captive-born wildcats were released between 1984 and 1993, but such efforts have had limited success (8). Measures to prevent or limit **hybridisation** should also be conducted through the neutering and removal of **feral** domestic cats. However, this process is challenging due to difficulties in distinguishing between pure wildcats and **hybrids** (1) (8).

In Scotland, captive breeding programmes have become an increasingly integral part of plans to conserve the wildcat population there. The captive population not only provides a safety net against extinction in the wild, but acts as a captive resource for research that could positively impact this species in the wild (10) (11).

## FIND OUT MORE

More information on wildcat conservation:

- Highland Tiger:  
<http://www.highlandtiger.com/>
- Scottish Wildcat Association:  
<http://www.scottishwildcats.co.uk/>

Find out more about cat conservation:

- IUCN/SSC Cat Specialist Group:  
<http://www.catsg.org/>
- Panthera:  
<http://www.panthera.org/>
- International Society for Cat Conservation (ISEC) Canada:  
<http://www.wildcatconservation.org/>

## AUTHENTICATION

This information is awaiting authentication by a species expert, and will be updated as soon as possible.

If you are able to help please contact:

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## GLOSSARY

- **Carnivore:** an organism that feeds on flesh. The term can also be used to refer to a mammal in the order Carnivora.
- **Conspecific:** belonging to the same species.
- **Feral:** previously domesticated animals that have returned to a wild state.
- **Flanks:** the sides of the body between the ribs and the hips.
- **Guard hairs:** in some mammals, long, coarse hairs that protect the softer layer of fur below.
- **Home range:** the area occupied by an animal during routine activities, which is not actively defended.
- **Hybrid:** the offspring produced by parents of two different species or subspecies.
- **Hybridisation:** cross-breeding between two different species or subspecies.
- **Nocturnal:** active at night.
- **Oestrus:** the time of ovulation (release of an egg from the ovary) in female mammals, when the female becomes receptive to males, also known as 'heat'.
- **Riparian:** relating to the banks of watercourses.
- **Subspecies:** a population usually restricted to a geographical area that differs from other populations of the same species, but not to the extent of being classified as a separate species
- **Taxonomic:** relating to taxonomy, the science of classifying organisms, grouping together animals which share common features and are thought to have a common ancestor.

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