



Pallas's cat (*Otocolobus manul*)



Also known as: Manul
Synonyms: *Felis manul*

French: Chat Manul
Spanish: Gato De Pallas, Gato Manul

Kingdom Animalia
Phylum Chordata
Class Mammalia
Order Carnivora
Family Felidae
Genus *Otocolobus* (1)
Size Head-body length: 50 – 65 cm (2)
 Tail length: 21 – 31 cm (2)
Weight 2.5 – 5 kg (2) (3)

STATUS

Pallas's cat is classified as Near Threatened (NT) on the IUCN Red List (1), and listed on Appendix II of CITES (4).

DESCRIPTION

Pallas's cat (*Otocolobus manul*) is about the size of a domestic cat but looks much larger due to its stocky build and long, dense coat, which helps shield it from the cold in its frosty habitat (2) (5). The fur, which is nearly twice as long on the underparts and tail as it is on the top and sides (5), seasonally changes colour, from a frosted grey in winter to a grey/fox-red in the spring. Hair length and density also varies seasonally, being longer and heavier in the cold seasons (6). The short, stocky legs are marked with indistinct black bands and the bushy black-tipped tail is encircled with dark rings towards the end (5). Contrasting patches of pale white-cream fur exists on the chin, throat, inner ears and just beneath the eye, while two dark stripes run diagonally across each cheek and the crown is patterned with little black spots (5). The colour and patterning of the hair provides Pallas's cat with a high level of camouflage and amongst rocks it can remain perfectly concealed (6). The small, rounded ears are set low on the sides of the short, broad head, an adaptation to stalking prey in open country where there is little cover (3) (5). Unlike other small cats, the pupils in the large eyes of Pallas's cat contract to small circles rather than slits (3).

RANGE

Widely distributed but rare, Pallas's cat is found from the Caspian Sea in the west through Kazakhstan, Pakistan and northern India to parts of China and Mongolia (4). The species is now thought to be most abundant on the cold grasslands of Mongolia, Inner Mongolia and the Tibetan Plateau. Elsewhere it is considered vulnerable to rare and uncommon (5).

HABITAT

Pallas's cat is adapted to cold, arid habitats in upland hilly areas, such as stony alpine desert and **steppe** grassland with rocky outcrops, but is generally absent from lowland sandy desert basins (1) (2) (5) (7). Pallas's cat seems to prefer rocky areas and ravines to the open **steppe**, providing protection from predators in what is otherwise a very open and exposed habitat (6). Although the species has been found up to 4,800 metres above sea level, most records come from much lower elevations, and areas with deep snow cover are generally avoided (1).

BIOLOGY

Solitary and secretive, Pallas's cat is slow but purposeful in its movements, using its environment to conceal itself and blend into its background. Pallas's cat has **crepuscular** activity peaks but can be active at any time during the day and night. It shelters in small caves or rock crevices and most commonly in the abandoned burrows of marmots and other animals (6). This species occurs at very low densities with as few as 8 to 11 cats within 100 square kilometres. Home ranges can be from 8 to 100 square kilometres with males occupying larger areas than females and overlapping those of several females (6). This adept predator hunts by stalking and ambushing its prey, walking at speed and opportunistically pouncing on prey. It will also wait at entrances to burrows and pounce when a small mammal exits. Pallas's cat feeds primarily on rodents and small mammals such as mouse hares, pikas, murines, voles and ground squirrels, but also small birds, lizards and grasshoppers (2) (3) (4) (6).

Pallas's cat is a seasonal breeder, with most litters born in April and May (5). Males follow a female for three to four days while mating, perhaps guarding her from other males while she is sexually receptive. Injuries found on males during this period suggest that fights break out between males wanting the same female (6). Litters of three to six kittens are born after a **gestation** period of nine to ten weeks (5). Those born in April or May will disperse by the end of August and are the size of small adults by October. Both male and female Pallas's cats breed at an age of 10 to 11 months (6).

THREATS

Pallas's cat has long been hunted for its luxurious fur, with large annual harvests in China and Mongolia (5). With declining numbers in the wild and increasing restrictions, international trade in the animal's pelt has thankfully declined in recent years (1). Significant threats also exist in the form of large scale poisoning of pika and vole populations, an important prey item. This occurs in parts of the Russian Federation, where the pika is considered vermin that carries and transmits the plague, and in parts of China, where it is thought to compete with domestic stock for food (5). Pallas's cats, and particularly its young kittens, are also highly susceptible to toxoplasmosis, a disease caught from the rodents on which it feeds (8). While there is currently low incidence of disease in its habitat, this could increase with climate change and global warming and give cause for concern. Lastly, habitat fragmentation and development is an increasing issue within the range of Pallas's cats. This may result in local extinction of this already rare species through habitat destruction and increased incidence of domestic dogs which prey heavily on Pallas's cats (6). Human alteration of the **steppe** ecosystem is also likely to result in adverse changes to the ecological community in which it lives (3).

CONSERVATION

Hunting of this species is prohibited in Armenia, Azerbaijan, China, India, Iran, Kazakhstan, Kyrgyzstan, Mongolia, Pakistan, Russia, Turkmenistan and Uzbekistan (1). Its listing on Appendix II of the Convention on International Trade in Endangered Species (CITES) strictly regulates international trade of its pelt (4), although many of the countries in which Pallas's cat is found are short of funds for adequate law enforcement and protection (3).

FIND OUT MORE

Learn more about the conservation of Pallas's cat and other cat species:

- IUCN/SSC Cat Specialist Group (CSG):
www.catsg.org
- Big Cat Rescue:
www.bigcatrescue.org

AUTHENTICATION

Authenticated (31/03/08) by Steve Ross, Mammal Research Unit, University of Bristol, UK.
<http://www.bio.bris.ac.uk/research/mammal/people.html>

GLOSSARY

- **Crepuscular:** active at dusk and/or dawn.
- **Gestation:** the state of being pregnant; the period from conception to birth.
- **Steppe:** a biome (or subdivision of the Earth's surface) that is composed of a swathe of temperate grassland stretching from Romania to China.
- **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.

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5. Nowell, K. and Jackson, P. (1996) *Wild Cats: Status Survey and Conservation Action Plan*. IUCN, Gland, Switzerland.
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