



Margay (*Leopardus wiedii*)



Also known as: Tree ocelot

Synonyms: *Felis wiedii*

Spanish: Gato Montés, Gato Pintado

Kingdom Animalia

Phylum Chordata

Class Mammalia

Order Carnivora

Family Felidae

Genus *Leopardus* (1)

Size Head-body length: 42.5 - 79 cm (2) (3)
Tail length: 30 - 51 cm (2) (3)

Weight 2.6 - 9 kg (2) (4)

STATUS

Classified as Near Threatened (NT) on the IUCN Red List (1) and listed on Appendix I of CITES (5).

DESCRIPTION

A beautifully patterned small cat, somewhat larger than a large house cat (6), the margay varies in colour from tawny yellow to greyish brown, and the coat is marked with rows of dark spots and open rosettes (2) (3) (6) (7) (8). The head, neck and throat bear black lines, and the backs of the ears are black with a central white spot. The underparts are whitish, and the long, rather bushy tail is marked with dark rings (3) (6) (7). The fur of the margay is relatively thick and soft (3) (6) (7) (8), and, unusually, grows 'reversed' on the back of the neck, where it slants forwards (3) (6). The margay shows much individual variation in coat pattern (3) (6), and a number of **subspecies** are recognised (9) (10). The male and female margay are similar in size and appearance (3) (7).

Often confused with the closely related ocelot, *Leopardus pardalis*, the margay can be distinguished by its smaller size, more slender build, proportionately large eyes, and the longer tail, which, unlike in the ocelot, is longer than the hindleg (2) (3) (6) (7). The margay can also be difficult to distinguish from the oncilla, or little spotted cat (*Leopardus tigrinus*), from which it differs by its slightly larger size, its larger, less solid spots, and the backward-growing fur on the neck (3) (6) (7).

RANGE

The margay occurs from northern Mexico, through Central America, and into South America, east of the Andes, as far south as northern Argentina and Uruguay (1) (3) (6) (7) (9). There is one record of the species from Texas, but its presence in the United States is uncertain (1) (3) (7) (9).

HABITAT

Although occasionally reported outside forested areas, such as in shaded cocoa or coffee plantations, the margay is more strongly associated with forest habitat than any other tropical American cat. It occurs in a range of forest types, and appears to be less tolerant of human settlement and altered habitat than other species such as the ocelot, although it may occur in disturbed areas with sufficient tree cover (1) (3) (7) (8).

BIOLOGY

The margay is largely **arboreal**, although it will also hunt and travel on the ground. An agile and acrobatic climber, its broad feet, flexible toes and large claws give a secure grip, and the long tail aids balance. In addition, the hind feet can rotate inwards through 180°, allowing the margay to turn the feet to grip a tree trunk, and making it the only cat capable of climbing headfirst down vertical trees. In addition, the margay is able to hang onto branches by the hindfeet while manipulating an object in the front feet (2) (3) (6) (7) (8). Usually active at night, resting in a tree or a vine tangle during the day (3) (6) (7) (8), the margay mainly hunts small **arboreal** mammals and birds, but will also take reptiles, some insects and fruit, and sometimes larger prey such as young deer or agoutis (2) (3) (4) (6) (7). Adult margays are solitary (6) (7).

The margay may breed year-round in tropical areas, although breeding may be more seasonal elsewhere (3) (7). The female usually gives birth to a single young, or sometimes to twins, in a den in a hollow log or burrow. The **gestation** period is unusually long for a small cat species, lasting up to about 84 days (2) (3) (7) (8), and the young are relatively large at birth (7). The young margay, which is fully spotted (6), opens its eyes at about two weeks, and begins to leave the den at about five weeks. Weaning takes places at around eight weeks, but the margay does not reach adult size until nearly a year, and usually does not begin to breed until two to three years old (3) (7). A female margay is thought to produce a litter only once every two years. Lifespan in captivity has been recorded as up to 24 years (7).

THREATS

The status of the margay across its range is not well known, but it appears to occur at naturally low densities, and may not be as abundant as previously thought (1) (7) (8). A few decades ago, the margay was one of the most heavily exploited Latin American cats for the international fur trade, particularly after concerns began to arise over the level of exploitation of the ocelot (1) (3) (7) (8). The margay's small size meant that at least 15 skins were needed to make a single fur coat (7), and around 14,000 margays were traded annually between 1976 and 1984 (8). In addition, although margay fur is less valuable than that of the ocelot, margays may be caught in traps set for ocelots (6). Despite the introduction of legal protection, illegal hunting is a continuing problem in some areas, and the margay is also taken illegally for the pet trade (1) (2) (3) (8).

The main threat to the margay is now considered to be habitat destruction through deforestation, with much of the Amazon being cleared for agriculture, pasture, and road building (1) (2) (3) (7) (8). The **arboreal** nature of the margay, combined with its naturally low densities and low reproductive output, make it particularly vulnerable to this threat (2) (7). Populations of margay within the Amazon are expected to become more fragmented and isolated over the next ten years, and protected areas outside the Amazon are not expected to retain viable margay populations. In light of all these threats, the IUCN warn that the species is likely to qualify as Vulnerable in the near future (1).

CONSERVATION

International trade in the margay is banned under its listing on Appendix I of the Convention on International Trade in Endangered Species (CITES) (5), and the species is legally protected across most of its range (1) (7) (8), although the effectiveness of this protection varies between countries (4) (7). Although it occurs in a number of protected areas (3) (8), the populations within these areas are expected to be low because of the negative impact of higher ocelot densities (the 'ocelot effect') (1) (11). The species is listed as Endangered by the U.S. Fish and Wildlife Service (12), and further studies are recommended into its ecology, life history, populations, and the threats it faces (1).

Little is often known about small cat species, but modern research techniques such as camera traps and radio tracking are helping to shed new light on their ecology and behaviour (4). Initiatives such as Project Wild Cats of Brazil (Projecto Gatos do Mato - Brasil), launched in 2004, are aiming to improve our knowledge of some of these species, so helping to provide a baseline for the conservation of these beautiful but little-known cats (11).

FIND OUT MORE

To find out more about the margay and about the conservation of wild cat species, see:

- Nowell, K. and Jackson, P. (1996) *Wild Cats: Status Survey and Conservation Action Plan*. IUCN/SSC Cat Specialist Group, IUCN, Gland, Switzerland and Cambridge, UK. Available at: <http://carnivoractionplans1.free.fr/wildcats.pdf>
- de Oliveira, T.G. (1998) *Leopardus wiedii*. *Mammalian Species*, **579**: 1-6. Available at: <http://www.science.smith.edu/departments/Biology/VHAYSSSEN/msi/pdf/i0076-3519-579-01-0001.pdf>
- IUCN/SSC Cat Specialist Group: <http://www.catsg.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: arkive@wildscreen.org.uk

GLOSSARY

- **Arboreal**: an animal which lives or spends a large amount of time in trees.
- **Gestation**: the state of being pregnant; the period from conception to birth.

- **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.

REFERENCES

1. IUCN Red List (September, 2009)
<http://www.iucnredlist.org/>
2. Nowak, R.M. (1991) *Walker's Mammals of the World*. The Johns Hopkins University Press, Baltimore and London.
3. de Oliveira, T.G. (1998) *Leopardus wiedii*. *Mammalian Species*, **579**: 1 - 6. Available at:
<http://www.science.smith.edu/departments/Biology/VHAYSSSEN/msi/pdf/i0076-3519-579-01-0001.pdf>
4. Macdonald, D.W. (2006) *The Encyclopedia of Mammals*. Oxford University Press, Oxford.
5. CITES (September, 2009)
<http://www.cites.org>
6. Emmons, L.H. (1997) *Neotropical Rainforest Mammals: A Field Guide. Second Edition*. University of Chicago Press, Chicago.
7. Sunquist, M. and Sunquist, F. (2002) *Wild Cats of the World*. University of Chicago Press, Chicago.
8. Nowell, K. and Jackson, P. (1996) *Wild Cats: Status Survey and Conservation Action Plan*. IUCN/SSC Cat Specialist Group, IUCN, Gland, Switzerland and Cambridge, UK. Available at:
<http://carnivoractionplans1.free.fr/wildcats.pdf>
9. Wilson, D.E. and Reeder, D.M. (2005) *Mammal Species of the World. A Taxonomic and Geographic Reference. Third Edition*. The Johns Hopkins University Press, Baltimore. Available at:
<http://www.bucknell.edu/MSW3/>
10. Integrated Taxonomic Information System (ITIS) (September, 2009)
<http://www.itis.gov/>
11. de Oliveira, T.G. (2006) Project Wild Cats of Brazil. *Wild Cat News*, **2**: 12 - 19. Available at:
<http://www.cougarnet.org>
12. U.S. Fish and Wildlife Service: Species Profile - Margay (*Leopardus wiedii*) (September, 2009)
<http://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?sPCODE=A042>