



Jaguar Fact Sheet



Panthera onca (Linnaeus, 1758)

Regional names^{1,2}:

Jaguar, Jaguareté, Tigre, Yaguar – Spanish-speaking countries

Onça, Onça pintada, Onça canguçu – Brazil

Otorongo – Peru

Penitigri – Surinam

Tig marqué – French Guiana

Tiger – Belize

Tigre mariposo – Colombia

Chak mo'ol – Yucatan peninsula of Mexico

Zac-bolay – modern Maya-speaking regions

The species is called *iawa*, or *iawaraté* by several Amazonian native peoples, including the Achuar and Tupi.³ It may be that this is the root that gave rise to the name jaguar.



Description

Taxonomic

Kingdom-Animalia (Animals)

Phylum-Chordata (Animals with a physically supported dorsal nerve cord)

Class-Mammalia (Endothermic [warm-blooded] vertebrate animals with hair, a muscular diaphragm separating the thoracic and abdominal cavities, that produce milk and, in most cases, that give live birth to their young.)

Order-Carnivora (Mammals with dental, sensory and digestive adaptations specialized for consuming other animals as prey.)

Family-Felidae (Carnivores with physical and behavioral adaptations making them identifiable as cats.)

Genus-*Panthera* (Traditional big cats, with vocal adaptations allowing them to roar but not purr. The genus includes lions, tigers, leopards, snow leopards and jaguars.)

Species-*Panthera onca* (The only American big cat.)

Physical^{2,4}

The jaguar is the largest cat in the Americas, with a record weight of over 347 pounds (158kg). The largest jaguars have been found in the Brazilian Pantanal region, where in one study the average weight of males was 220 pounds (100kg). Head and body length, without the tail may be up to six feet (1.85m), and the tail can measure 30 inches (75cm) more. Height at the shoulder may be up to 30 inches (75cm).

The jaguar's coat color ranges from pale yellow to reddish brown, with a much paler (often white) underbelly. It has spots on the neck, body and limbs that form rosettes, which contain black markings within them. On the head and underparts, the spots are simple black dots. Black jaguars are not uncommon, and even they possess darker rosette markings that are visible in bright light.

Compared to a leopard, the jaguar is stocky and more powerfully built. The square jaw and prominent cheeks, along with robust, muscular limbs give evidence of immense strength. It has been said that the jaguar is built for power, not speed. While true, this cat also demonstrates surprising stealth and grace in movement.



Habitat/Distribution^{4, 5, 6, 7}

First appearing in the fossil record around 2 million years ago, the jaguar has been an American species at least that long. Found throughout what is now the southern United States until about 10,000 years ago, it was eliminated from the US around 1900. In the late 1990s, several sightings in Arizona occurred, prompting renewed interest in the jaguar's northernmost habitat and distribution. The southern edge of its range is now in northern Argentina, but once extended into Uruguay.

Range countries: Argentina, Belize, Bolivia, Brazil, Colombia, Costa Rica, Ecuador, French Guiana, Guatemala, Guyana, Honduras, Mexico, Nicaragua, Panama, Paraguay, Peru, Suriname, United States, Venezuela. Now extinct in El Salvador and Uruguay.

Habitat is variable for the species. It is found from lowland jungle to montane forest, at altitudes of up to 6,500 feet (2,000m) but is seen in wet grassland and arid scrub as well. A preference for water seems evident. The jaguar is an excellent swimmer, and has also been known to patrol ocean beaches preying on buried sea turtle eggs.

Major habitats include Grassland, Lowland tropical rainforest, Montane tropical rainforest, Succulent and thorn scrub, Temperate broadleaf forest, Tropical monsoon and dry forest, Tropical savannah woodland.



Biology^{1, 2, 4, 6}

The jaguar is a primary predator, at the top of any ecological community in which it resides. Capybara and peccaries are usually listed as its major food source, but tapirs, crocodilians, fish, snakes, birds and many additional species of small mammals are taken, too. One probable reason that the jaguar occurs over such a wide geographic range, and in a broad variety of habitats is that it is equipped to exploit large and small prey, in water and on land. Unlike its African and Asian cousins, the jaguar is noted for killing prey via a crushing bite to the skull. Its large canines and powerful jaws are also able to break open the shells of turtles and tortoises.

One important cause of the species' persecution by humans is its ability to prey on cattle. It is thought that jaguar populations actually grew during the period when cattle ranches were first established in tropical America. For that reason, many large ranches have employed full-time jaguar hunters to prevent losses of cattle.

Jaguars are mature at approximately three years of age. Like tigers and cougars, females seem to inhabit home ranges of about 15 to 23 mi² (25 to 38km²). Ranges overlap somewhat, and resident males inhabit territories about twice that size, patrolling through the ranges of several females at a time. Basically solitary, they come together for breeding. Females have an estrous cycle of approximately four weeks, and can breed at any time of year. Gestation is listed as between 93 and 105 days. Litter size is usually fewer than four cubs. Life expectancy in captivity is among the longest of any cat, and lifespans of 23 years have been recorded.

Due, in large part, to much of the jaguar's range being inaccessible to researchers, much remains to be learned about the biology of the species.



Behavior^{1, 2, 4, 6}

Solitary except when raising cubs, the jaguar patrols its territory or home range searching for food. Traditionally thought of as being nocturnal, radio-collar tracking indicates that jaguars are active around-the-clock but mostly in the hours around sunrise and sunset. An excellent climber, jaguars make good use of trees. They often drag kills to a secluded or sheltered spot for consumption but do not cover or bury them, as cougars do. It has been said that the jaguar is the only big cat that does not roar, but this is incorrect. The jaguar has an array of vocalizations including mews, grunts and a deep, repetitive “coughing” roar.



Protection and Population Status^{1,7}

The jaguar is listed under CITES (Convention on International Trade in Endangered Species) Appendix I. This means that all international trade in jaguars or their parts is prohibited.

The International Union for the Conservation of Nature (IUCN) lists jaguars as Lower Risk, near-threatened.

US Fish & Wildlife Service lists jaguars as Endangered.

Major threats to the species are population fragmentation, deforestation and deliberate elimination.

Overall the trend in population is a decline.

Specifically in range countries, any hunting of jaguars is prohibited in Argentina, Colombia, French Guiana, Honduras, Nicaragua, Panama, Paraguay, Suriname, United States, Uruguay and Venezuela.

Hunting of jaguars is restricted to “problem animals” in Brazil, Costa Rica, Guatemala, Mexico and Peru.

Trophy hunting is permitted in Bolivia.

The species has no legal protection in Ecuador or Guyana.

Central American populations:

In 1991, Rabinowitz estimated a jaguar population in Belize of 600 to 1000 animals. Aranda estimated in 1990 that 125-180 jaguars were living in Mexico's 4,000 km² (2,400 mi²) Calakmul Biosphere Reserve, and additional 465-550 animals in the adjoining Maya Biosphere Reserve in Guatemala, an area measuring 15,000 km² (9,000 mi²).

The same researcher has also estimated that some 350 jaguars may be living in several areas of Chiapas state, Mexico.

South American populations:

The Pantanal is a seasonally flooded wetland covering more than 100,000 km² (60,000 mi²) in Brazil, Bolivia and Paraguay. A rough population density estimate by Quigley and Crawshaw, in 1992, of 1.4 resident adults per 100 km² means that only about 1,400 jaguars may exist in that area.

Population estimates in the Amazon Basin and Orinoco Basin vary, and are difficult to obtain. In some regions, jaguars are said to be very common and in others the species has disappeared completely.

Overall, it seems that jaguars are not in immediate peril of extinction. However, their current geographic range is somewhere between one-third and half its historical size.



Importance to people

Economic impact

Since the implementation of CITES in 1975, legal international trade in the pelts of spotted cats has disappeared.

The October, 2001, issue of *National Geographic Magazine* quoted cattle ranchers in South America as claiming that certain herds face losses of up to 10 percent due to jaguar predation.

The jaguar is often cited as a draw to ecotourism. However, due to its normally reclusive nature jaguars are not often seen by tourists. Tour guides themselves may go years without a sighting (Eduardo Nycander, Rainforest Expeditions, personal comment).

Wildlife in culture^{8, 9, 10, 11}

Jaguars elicit a wide range of responses from people. Through history they have been both deified and vilified. The image of the species has been commercialized more than once. It played an important and varied role in pre-Columbian American culture.

The Maya had the only written language in the Americas before European contact. Both verbal and visual puns played roles in their complex world-view. The name *Xbalanque*, one of their Hero Twins whose exploits before the creation of humanity explain many natural phenomena, translates literally as "sun's hidden aspect." Within his name is a verbal pun on *balam*, Classic Mayan for "jaguar." The Jaguar God of the Underworld, responsible for the sun's nightly passage beneath the earth, is literally the sun's hidden aspect.

In Quiche Maya lore, three of the first four humans were named *B'alam K'itze* (Jaguar Cedar), *B'alam Aq'ab* (Jaguar Night) and *Ik'ib'alam* (Dark Jaguar).

As a symbol of royal power, a jaguar pelt was often worn by kings. Carved stone stelae depict the presentation of regalia, including helmets in the shape of a jaguar head. As many as fifteen sacrificed jaguars have been discovered in Mayan royal tombs.

Aztec culture also featured animals in art, architecture and religion. *Tezcatlipoca*, god of darkness and evildoers, was often disguised as a jaguar. His spotted skin represented the stars in the night sky. The two highest Aztec military orders took as their emblems the top predators of sky and earth: the Orders of the Eagle and Jaguar.

Shamans in many cultures claim the ability to change into animal form. Stealthy and powerful, the jaguar is an often-assumed guise.

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