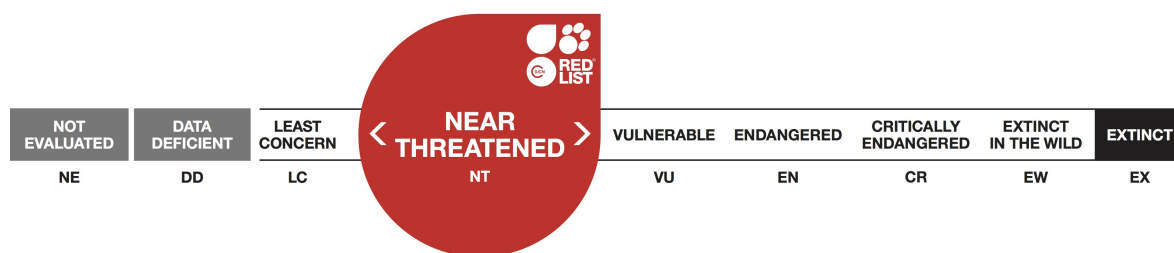


Leopardus colocolo, Pampas Cat

Assessment by: Lucherini, M., Eizirik, E., de Oliveira, T., Pereira, J. & Williams, R.S.R.



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Taxonomy

Kingdom	Phylum	Class	Order	Family
Animalia	Chordata	Mammalia	Carnivora	Felidae

Taxon Name: *Leopardus colocolo* (Molina, 1782)

Synonym(s):

- *Lynchailurus colocolo* (Molina, 1782)
- *Oncifelis colocolo* (Molina, 1782)

Common Name(s):

- English: Pampas Cat, Chilean Pampa Cat
- French: Chat des Pampas
- Spanish: Gato de los Pajonales, Gato Pajero

Taxonomic Notes:

The taxonomy is currently under review by the IUCN SSC Cat Specialist Group. Garcia Perea (1994) proposed that this species be subdivided into three separate species (*Lynchailurus colocolo*, *L. pajeros*, and *L. braccatus*) based on morphological traits. This was provisionally followed by Wozencraft (2005). However, genetic analysis supports the existence of populations subdivision in this species, but not at the species level (Johnson *et al.* 1999). The genetic partitioning (Uruguay and southern Brazil; Bolivia and northern Chile; and western Argentina and central Chile: Johnson *et al.* 1999) is somewhat different from the divisions recognized by Garcia-Perea (1994) on the basis of morphology (central Chile; the Andes from Ecuador and south to through Argentina; and Uruguay, Paraguay and Brazil). Moreover, Cossios and Angers (2007) found six highly divergent clades in genetic analysis of Andean populations (Peru, Bolivia and Argentina). Subspeciation and geographic divisions in this species requires further study. Placed in the genus *Leopardus* by Johnson *et al.* (2006).

A zone of hybridization between *L. colocolo* and *L. tigrinus* has been found through genetic analyses of specimens from central Brazil (Johnson *et al.* 1999, Eizirik *et al.* 2007).

Note: This is an amended assessment to correct the name of the last Assessor from "Wallace, R." to "Williams, R.S.R."

Assessment Information

Red List Category & Criteria: Near Threatened [ver 3.1](#)

Year Published: 2016

Date Assessed: April 22, 2014

Justification:

Pampas Cat is generally rare or very rare (0.05-0.2 individuals/km²) and localized throughout most of its range, and appears to be declining in several parts of its extent of occurrence because of extensive loss or reduction in quality of its habitat. Predation by dogs, hunting and road kills are additional threats.

Population decline caused by loss of habitat is widespread and is a primary concern. Although little data is available on the rate of loss of natural habitats across the Pampas Cat range, we have some information from the Gran Chaco region that covers a large portion of Pampas Cat's distribution range. The Gran Chaco forest extends over parts of northern Argentina, western Paraguay, eastern Bolivia, and western Brazil and occupies an approximate area of 1,141,000 km². Deforestation started in the 1970s and accelerated in 2002-2006. Following the global increase in commodity prices, it is likely that the rates of deforestation have maintained or increased in the last decade. Based on the data from the dry Chaco region, a portion of the whole Gran Chaco covering 790,000 km² the yearly rate of transformation of forest into cropland (a habitat type where Pampas Cat do not occur) ranges from 0.63 to 1.75% (Clark *et al.* 2010). Thus, adopting a generation length of seven years (Pacifi *et al.* 2013) and assuming that transformed habitat becomes unavailable to the Pampas Cat, populations of this species could be suffering a 36.5% declination rate over three generations.

Another issue is that possibly the Pampas Cat should not be assessed as a single evolutionary unit. The taxonomy of this species is not yet resolved but the available evidence (morphological, genetic and ecological) indicates that there are clear differences among regional subpopulations, which have been proposed to represent distinct subspecies or even species. It is reasonable to consider the conservation status of these regional populations separately, because there may be little (or even no) historical and/or current gene flow among some of them, implying that limited genetic connectivity may further threaten the long term viability of the species as a whole.

Because of all the above and because the reasons for its rarity and population numbers are not known, the limited information available indicates Near Threatened as the most likely category (it almost qualifies for a threatened listing under criterion A2c). Nevertheless, it may qualify as Vulnerable in the near future and hence requires monitoring.

Previously Published Red List Assessments

2015 – Near Threatened (NT) – <http://dx.doi.org/10.2305/IUCN.UK.2015-4.RLTS.T15309A50656743.en>

2008 – Near Threatened (NT) – <http://dx.doi.org/10.2305/IUCN.UK.2008.RLTS.T15309A4511796.en>

2002 – Near Threatened (NT)

1996 – Lower Risk/least concern (LR/lc)

1994 – Indeterminate (I)

Geographic Range

Range Description:

The Pampas Cat, named after Argentine grasslands, ranges throughout most of Argentina and Uruguay beyond into the dry forests (chaco, cerrado) of Bolivia, Paraguay and Brazil, and north through the Andes mountain chain through Ecuador and possibly marginally into southwestern Colombia (Silveira 1995, Ruiz-Garcia *et al.* 2003, Nowell and Jackson 1996, Dotta *et al.* 2007).

The suggestion by Pereira *et al.* (2002) that the species can be considered extinct in the Pampas of central Argentina has been confirmed by more recent surveys.

The most recent information indicates that this species is rare throughout a very large portion of its distribution range, such as the Patagonia, Monte, Espinal, Yungas, and Mesopotamia in Argentina, the Pampas and Pantanal in Brazil, the dry forests of Bolivia, as well as in Uruguay and Peru.

Country Occurrence:

Native: Argentina; Bolivia, Plurinational States of; Brazil; Chile; Ecuador; Paraguay; Peru; Uruguay

Distribution Map

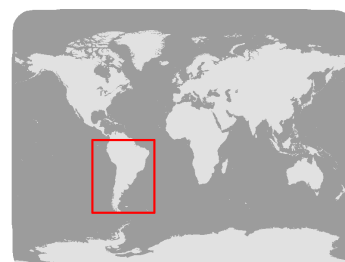
Leopardus colocolo



Range

Extant (resident)

Compiled by:
IUCN (International Union for
Conservation of Nature)



The boundaries and names shown and the designations used on this map do not imply any official endorsement, acceptance or opinion by IUCN.



Population

The Pampas Cat populations living in the High Andes and Puna eco-regions appear to be able to reach relatively high densities (0.74-0.78 individuals/km²) in the most productive habitat patches (Gardner *et al.* 2010). The population appears to be stable in these regions of Argentina and in slight decline in Bolivia and Peru because of decreasing habitat quality caused by increased anthropogenic modification.

The Pampas Cat is a naturally rare species in most of Patagonia, where records of its presence are scarce in comparison with those of other felids (e.g. Geoffroy's Cat, Puma).

In the Argentine Mesopotamia (Corrientes province), a couple of records (road-killed animals) were obtained during the last decade, but almost no evidence was recorded through camera trapping for the Iberá wetlands in spite of intensive trapping effort, thus suggesting that the species is rare in this region.

The Pampas Cat appears to be declining in central Argentina (Cordoba, San Luis), mainly due to habitat modification (i.e. soybean crop expansion), and is regionally extinct in the Pampas grasslands, where it only occurs in the southern and dry portion (Pereira *et al.* 2002 and recent unpublished surveys). In the Argentine Espinal, population numbers are low (0.11-0.17 individuals/ km², lower than for the Geoffroy's Cat, Caruso *et al.* 2012) and distribution is largely limited to grassland habitats that are threatened by human activities. Pampas cat are similarly rare in the adjacent southern part of the Monte eco-region (Pereira *et al.* 2011).

Pampas Cat records are very scarce in the Yungas eco-region of NW Argentina, where it is limited to the high-altitude grasslands (Di Bitetti *et al.* 2011).

A survey on small cats has found no records of Pampas Cats in the Bolivian Chaco dry forest (Cuellar *et al.* 2006).

In Brazil, the Pampas Cat inhabits open areas, such as the grasslands of the Pampas, the marshy Pantanal, and particularly the savannas of the Cerrado (Araujo Bagno 2004). The species is considered typically rare and with low population densities, typically of 0.01–0.05 individuals/km² (or lower), throughout these regions, but may be relatively common in a few areas, usually protected, such as Emas National Parks in the Cerrado (Godoi *et al.* 2010), and Mirador State Park, where densities of 0.1–0.2 individuals/km² are reached (Oliveira *et al.* 2010, Oliveira 2011).

In the Brazilian Pampas (southern portion of Rio Grande do Sul [RS] state), this felid is considered to occur only in well-preserved habitats areas (whose remaining area covers ca. 81,500 km²), and is always rarer than Geoffroy's Cat.

Habitat loss and population decline is expected to be 14% in the next 21 years or three generations (assuming the same generation length of seven years). Because of this, the species was considered Vulnerable (C1) in Brazil (Queirolo *et al.* 2013). The situation is thought to be the same in Uruguay.

An interesting point revealed by recent molecular studies is that the populations in RS state (Brazilian pampas) and Uruguay are genetically distinct from those present in the Brazilian Cerrado and also from Argentinean populations, indicating that they have been demographically isolated for a considerable

period (Santos, Trigo and Eizirik, in preparation). Such a result indicates that this region constitutes a distinct conservation unit for this species, which should be taken into consideration when assessing its overall status.

In Peru, the Pampas Cat is generally uncommon or rare. A seemingly separate subpopulation of Pampas Cat occurs in the Tumbesian region of western Ecuador and northwestern Peru. Individuals here are small and well-marked compared with the Andean form. This form inhabits mainly forested habitats, favoring dense vegetation along permanent water-courses and even in mangroves. It also occurs in agricultural fields, especially sugar cane plantations and in sparse desert habitats with little vegetation along the coast where shorebirds congregate. In this region, the high level of human impacts and settlement has resulted in widespread forest loss and the Pampas Cat is now extremely rare, being primarily found in protected areas.

Most of its subpopulations, which could in fact end up being considered as genetically different species, would be Vulnerable individually.

Current Population Trend: Decreasing

Habitat and Ecology (see Appendix for additional information)

The Pampas Cat has a wide distribution outside the moist forests of South America, being associated with more open habitats. It typically inhabits dry scrub and grassland, but can also be found in dry woodland as well as swampy wetland and rocky areas (Silveira 1995, Nowell and Jackson 1996, Pereira *et al.* 2002, Tellaeche 2015). Its prey includes small mammals as well as ground-dwelling birds (Nowell and Jackson 1996, Silveira *et al.* 2005). In the high Andes the diet is based on mountain viscacha and small rodents (Walker *et al.* 2007, Napolitano *et al.* 2008, Fajardo *et al.* 2014). In Brazil's Emas National Park, Pampas cats are primarily diurnal with some crepuscular and occasionally nocturnal activity. Home ranges (90% MCP) averaged 19.47 +/- 3.64 km² (Silveira *et al.* 2005). In the High Andes 71% of camera trap photos were taken at night and more than 20% during the day (Lucherini *et al.* 2009) and average home range size (95% Kernel) was 14.9 km² (Tellaeche 2015).

Systems: Terrestrial

Use and Trade

In Argentina, Bolivia, Chile and Perú people of Aymara origin, and in some cases Quechua, have similar beliefs regarding the Andean Cat and Pampas Cat (both known as titi or osqollo). A common tradition is the use of a skin or a stuffed cat during ceremonies that people perform for marking their domestic livestock, mainly llamas or alpacas; the titi is considered a sacred animal related with abundance and fertility of the livestock or quality of crops. It is important to note that both the Andean Cat and Pampas Cat are part of these traditions and beliefs, and in general, are used indistinctively. There are some local variations within and between countries and in some cases the influence of western culture has resulted in a total or partial loss of the values of Andean cultures and the distortion of ancestral customs regarding the titi (Villalba *et al.* 2004).

Cossios *et al.* (2007) also reported the hunting of Andean and Pampas Cats for food and for traditional medicine in central Peru.

Threats (see Appendix for additional information)

Habitat loss (to agricultural cropland) and degradation (by livestock grazing) is considered the major threat to this species throughout most of its range. Retaliatory killing for poultry depredation is also a threat, as are road kills.

In the High Andes of Bolivia and Peru the Pampas Cat is threatened by decreasing habitat quality caused by increased anthropogenic modification. In these regions, it is also actively persecuted by local people and often killed by dogs.

In Argentina, extensive habitat loss/modification due to the expansion of the agriculture frontier, mining, and oil extraction is the major threat.

The biggest threat to the species in Brazil is habitat loss, especially because of silviculture and agriculture expansion, as well as habitat conversion/degradation, mostly through fire. Given its rarity in Brazil, road kills are also considered a threat for some populations. In the Brazilian Pampas, predation by domestic dogs and hunting due to real or perceived conflicts, a problem that apparently has not been detected in the Cerrado yet (where it would be more incidental than widespread). A zone of hybridization between *L. colocolo* and *L. tigrinus* has been demonstrated by genetic analysis in central Brazil (Trigo *et al.* 2008).

In Peru, it is actively persecuted as it often kills chickens of local people, and is also impacted by dogs. Forest loss appears to be also an important threat.

Conservation Actions (see Appendix for additional information)

Included on CITES Appendix II. The species is protected by national legislation across most of its range, with hunting prohibited in Argentina, Bolivia, Chile, Paraguay, and Peru. It occurs in 13 National Protected Areas in Argentina (Pereira *et al.* 2002), eight in Bolivia (Noss *et al.* 2010), 11 in Brazil (Queirolo *et al.* 2013), 75 in Chile (A. Iriarte in litt.), and 11 in Peru (Fajardo and Pacheco 2011). The Pampas Cat is listed as Vulnerable by the national Red Lists of Argentina, Bolivia, and Brazil. In Peru is listed as Data Deficient. Research into its ecology, distribution, taxonomy, and threats is urgently needed.

Credits

Assessor(s): Lucherini, M., Eizirik, E., de Oliveira, T., Pereira, J. & Williams, R.S.R.

Reviewer(s): Nowell, K., Hunter, L., Schipper, J., Breitenmoser-Würsten, C., Lanz, T. & Breitenmoser, U.

Contributor(s): Leite-Pitman, M.R.P.

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Appendix

Habitats

(<http://www.iucnredlist.org/technical-documents/classification-schemes>)

Habitat	Season	Suitability	Major Importance?
1. Forest -> 1.5. Forest - Subtropical/Tropical Dry	-	Suitable	Yes
1. Forest -> 1.8. Forest - Subtropical/Tropical Swamp	-	Marginal	-
1. Forest -> 1.9. Forest - Subtropical/Tropical Moist Montane	-	Marginal	-
2. Savanna -> 2.1. Savanna - Dry	-	Suitable	Yes
3. Shrubland -> 3.4. Shrubland - Temperate	-	Suitable	Yes
3. Shrubland -> 3.5. Shrubland - Subtropical/Tropical Dry	-	Suitable	Yes
3. Shrubland -> 3.6. Shrubland - Subtropical/Tropical Moist	-	Suitable	Yes
3. Shrubland -> 3.7. Shrubland - Subtropical/Tropical High Altitude	-	Suitable	Yes
3. Shrubland -> 3.8. Shrubland - Mediterranean-type Shrubby Vegetation	-	Suitable	Yes
4. Grassland -> 4.5. Grassland - Subtropical/Tropical Dry	-	Suitable	Yes
4. Grassland -> 4.6. Grassland - Subtropical/Tropical Seasonally Wet/Flooded	-	Suitable	Yes
4. Grassland -> 4.7. Grassland - Subtropical/Tropical High Altitude	-	Suitable	Yes
8. Desert -> 8.2. Desert - Temperate	-	Suitable	Yes

Threats

(<http://www.iucnredlist.org/technical-documents/classification-schemes>)

Threat	Timing	Scope	Severity	Impact Score
1. Residential & commercial development -> 1.1. Housing & urban areas	Ongoing	-	-	-
	Stresses:	1. Ecosystem stresses -> 1.1. Ecosystem conversion 1. Ecosystem stresses -> 1.2. Ecosystem degradation		
2. Agriculture & aquaculture -> 2.1. Annual & perennial non-timber crops -> 2.1.2. Small-holder farming	Ongoing	-	-	-
	Stresses:	1. Ecosystem stresses -> 1.1. Ecosystem conversion 1. Ecosystem stresses -> 1.2. Ecosystem degradation		
2. Agriculture & aquaculture -> 2.1. Annual & perennial non-timber crops -> 2.1.3. Agro-industry farming	Ongoing	-	-	-
	Stresses:	1. Ecosystem stresses -> 1.1. Ecosystem conversion 1. Ecosystem stresses -> 1.2. Ecosystem degradation		

2. Agriculture & aquaculture -> 2.3. Livestock farming & ranching -> 2.3.2. Small-holder grazing, ranching or farming	Ongoing	-	-	-
	Stresses:	1. Ecosystem stresses -> 1.1. Ecosystem conversion 1. Ecosystem stresses -> 1.2. Ecosystem degradation		
2. Agriculture & aquaculture -> 2.3. Livestock farming & ranching -> 2.3.3. Agro-industry grazing, ranching or farming	Ongoing	-	-	-
	Stresses:	1. Ecosystem stresses -> 1.1. Ecosystem conversion 1. Ecosystem stresses -> 1.2. Ecosystem degradation		
4. Transportation & service corridors -> 4.1. Roads & railroads	Ongoing	-	-	-
	Stresses:	2. Species Stresses -> 2.1. Species mortality		
5. Biological resource use -> 5.1. Hunting & trapping terrestrial animals -> 5.1.1. Intentional use (species is the target)	Ongoing	-	-	-
	Stresses:	2. Species Stresses -> 2.1. Species mortality		
5. Biological resource use -> 5.1. Hunting & trapping terrestrial animals -> 5.1.2. Unintentional effects (species is not the target)	Ongoing	-	-	-
	Stresses:	2. Species Stresses -> 2.1. Species mortality		
5. Biological resource use -> 5.1. Hunting & trapping terrestrial animals -> 5.1.3. Persecution/control	Ongoing	-	-	-
	Stresses:	2. Species Stresses -> 2.1. Species mortality		

Conservation Actions in Place

(<http://www.iucnredlist.org/technical-documents/classification-schemes>)

Conservation Actions in Place
In-Place Land/Water Protection and Management
Occur in at least one PA: Yes
In-Place Education
Included in international legislation: Yes
Subject to any international management/trade controls: Yes

Conservation Actions Needed

(<http://www.iucnredlist.org/technical-documents/classification-schemes>)

Conservation Actions Needed
1. Land/water protection -> 1.1. Site/area protection

Research Needed

(<http://www.iucnredlist.org/technical-documents/classification-schemes>)

Research Needed
1. Research -> 1.1. Taxonomy
1. Research -> 1.2. Population size, distribution & trends
1. Research -> 1.3. Life history & ecology
1. Research -> 1.5. Threats
1. Research -> 1.6. Actions
3. Monitoring -> 3.1. Population trends

Additional Data Fields

Distribution
Lower elevation limit (m): 0
Upper elevation limit (m): 5000
Population
Population severely fragmented: Unknown
Habitats and Ecology
Generation Length (years): 7

The IUCN Red List Partnership



The IUCN Red List of Threatened Species™ is produced and managed by the [IUCN Global Species Programme](#), the [IUCN Species Survival Commission \(SSC\)](#) and [The IUCN Red List Partnership](#).

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