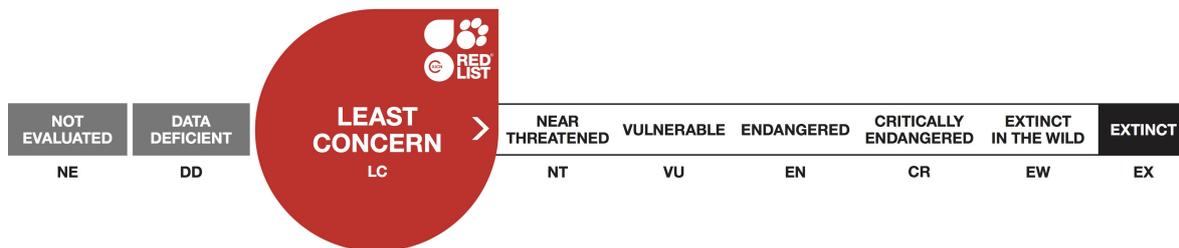


## *Leopardus geoffroyi*, Geoffroy's Cat

Assessment by: Pereira, J., Lucherini, M. & Trigo, T.



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## Taxonomy

Kingdom	Phylum	Class	Order	Family
Animalia	Chordata	Mammalia	Carnivora	Felidae

**Taxon Name:** *Leopardus geoffroyi* (d'Orbigny & Gervais, 1844)

### Synonym(s):

- *Oncifelis geoffroyi*

### Common Name(s):

- English: Geoffroy's Cat
- French: Chat de Geoffroy
- Spanish: Gato de Mato, Gato Montés Común

### Taxonomic Notes:

Taxonomy is currently under review by the IUCN SSC Cat Specialist Group. Included in the genus *Leopardus* by Johnson *et al.* (2006). No genetic evidence of geographic subspecific partitioning was found in an analysis by Johnson *et al.* (1999). A zone of hybridization was found in southern Brazil where the northern extent of *L. geoffroyi*'s range meets the southernmost extent of the range of the *Oncilla*, *L. tigrinus* (Eizirik *et al.* 2007).

## Assessment Information

**Red List Category & Criteria:** Least Concern [ver 3.1](#)

**Year Published:** 2015

**Date Assessed:** April 20, 2014

### Justification:

The Geoffroy's Cat is listed as Least Concern because it is widespread and abundant over most of its range. This felid typically ranks first in felid abundance in several habitat types such as the dry forests of the Bolivian Chaco (Cuéllar *et al.* 2006) and of the Argentine Espinal (Caruso *et al.* 2012), scrublands of the Monte (Pereira *et al.* 2011), relicts of the natural Pampas grasslands (Manfredi *et al.* 2006), lowland cropland areas of the Andean subtropical forests (Di Bitetti *et al.* 2011), and grasslands of southern Brazil (Trigo *et al.* 2013). Its distribution range is considered to be continuous, but it does not occur in the high elevation areas (above 3,750 m) of the Andes. In the northern and central part of its range, this felid appears to have been favoured by the conversion of sub-tropical forests into croplands, while it seem to be tolerant to some degree of habitat alteration produced by livestock management. A recent expansion of its distribution has been documented in northeastern Argentina (Rinas *et al.* 2014). However, it is considered rare in Chile, mostly because of its limited distribution in this country (Iriarte *et al.* 2013) and Vulnerable in Rio Grande do Sul, Brazil (Almeida *et al.* 2013). Anthropogenic mortality (e.g. road-kills, persecution due to poultry predation) is intense in several areas (e.g., Pampas grasslands) and potential negative impacts from current trends in climate change have been proposed (Canepuccia *et al.* 2008, Pereira and Novaro 2014). A hybrid zone between *L. geoffroyi* and *L. guttulus* was identified in southern Brazil where the two species meet (Trigo *et al.* 2008, 2013b). These studies

are currently indicating a possible natural origin for this event. In this case, this hybrid zone will be considered as an eligible process for conservation, by representing an important part of the evolutionary history of these species. However, specific studies are still needed to confirm this and evaluate whether anthropogenic influences such as human-induced changes in habitat or population densities in these areas could be influencing these hybridization events, and thus constituting a threat to these species by compromising their genetic integrity.

### **Previously Published Red List Assessments**

2008 – Near Threatened (NT)

2002 – Near Threatened (NT)

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

## **Geographic Range**

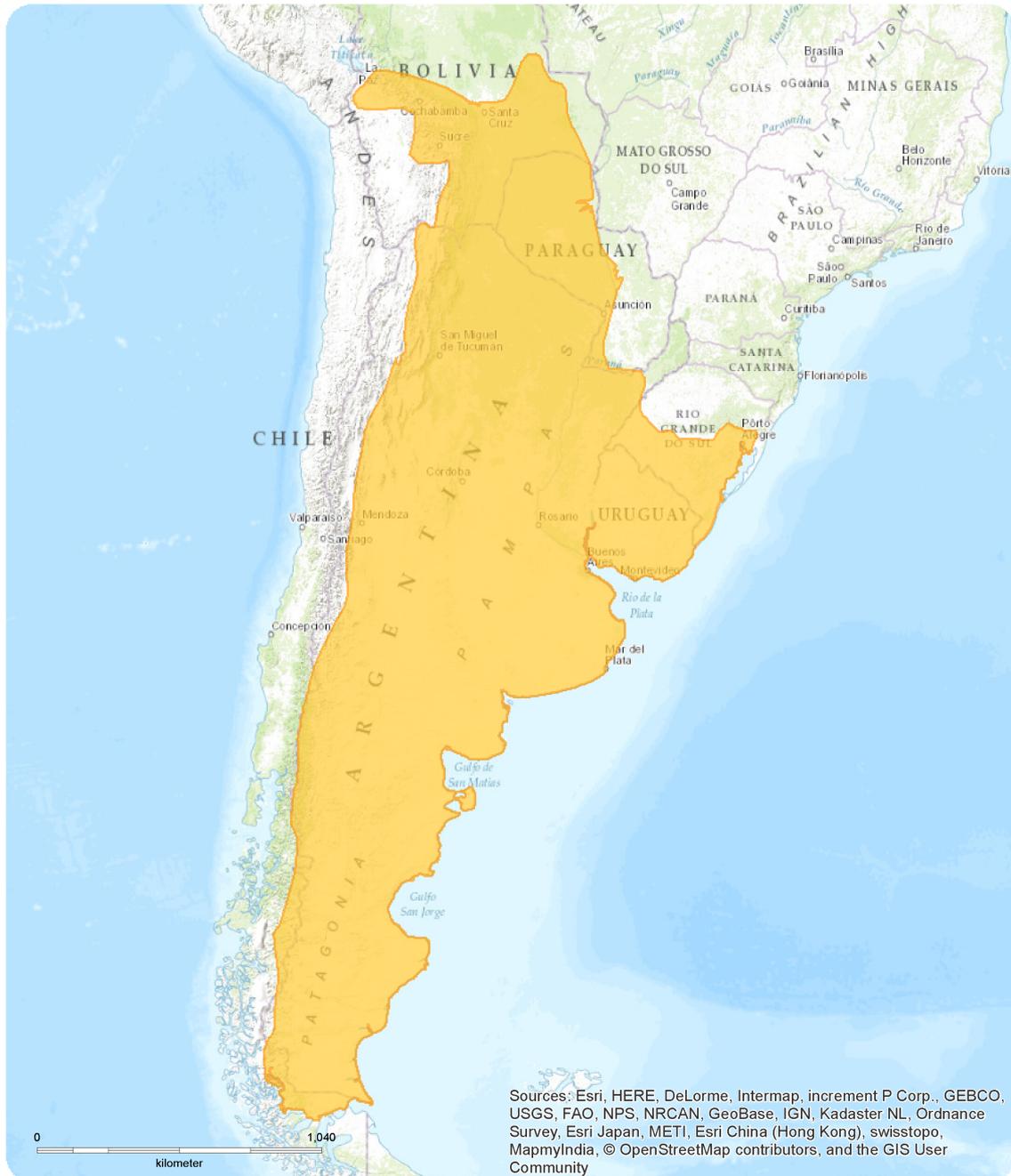
### **Range Description:**

The Geoffroy's Cat ranges from southeastern Bolivia, Paraguay and Argentina east of the Andes and southern Brazil (below *ca* 30°S), Uruguay all the way to the Strait of Magellan in Chile, from sea level to 3,800 m (Oliveira 1994, Nowell and Jackson 1996, Cuellar *et al.* 2006, Dotta *et al.* 2007, M. Da Silva pers. comm.).

### **Country Occurrence:**

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

# Distribution Map

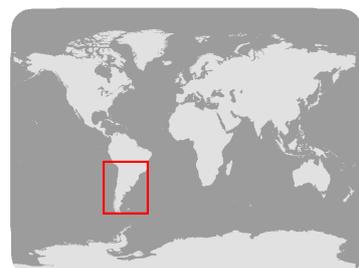


## *Leopardus geoffroyi*

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

It is relatively common throughout most of its range, although heavy commercial hunting pressure from the 1960s to the late 1980s is believed to have reduced populations (Nowell and Jackson 1996). The species was recently downgraded from Potentially Vulnerable to Least Concern in Argentina (Ojeda *et al.* 2012). It is considered Rare in Chile (CONAMA 2009), occurring only in small areas in the south and east. In Brazil, where the species inhabits only the southern state of Rio Grande do Sul, it is considered Vulnerable (Almeida *et al.* 2013), although relatively common and abundant in the pampas (T. Trigo pers. obs. 2014). In Bolivia it is considered the second most abundant felid after the Ocelot (Cuellar *et al.* 2006).

Density estimates include:

Bolivian Chaco (Kaa-Iya del Gran Chaco National Park ): 9-40/100 km<sup>2</sup> (Cuellar *et al.* 2006)

Argentine Monte (Lihué Calel National Park): up to 190-220/100 km<sup>2</sup> (Pereira *et al.* 2011), including several transient individuals

Argentine Espinal (altered dry shrublands): 45/100 km<sup>2</sup> (Caruso *et al.* 2012)

Chile (Torres del Paine National Park) 7-12/100 km<sup>2</sup> (W. Johnson pers. comm. in Nowell and Jackson 1996).

**Current Population Trend:** Stable

## Habitat and Ecology (see Appendix for additional information)

Described as occurring in a wide variety of habitat types of the subtropical and temperate Neotropics, including scrubby woodland, dry forests and savannas of the Chaco, Patagonian scrub, Monte desert/semi-desert, the Pampas grasslands, marshlands, etc. in both pristine and disturbed areas (Oliveira 1994, Pereira and Aprile 2012). It uses both open and closed habitats, but seems to be more associated with areas of denser cover in the predominately open areas of most of its range. Geoffroy's Cat is distributed throughout the pampas grasslands and arid Chaco shrub and woodlands, and up to 3,800 m in the Bolivian Andes (M. Da Silva pers. comm. 2014). Most of its range is arid or semi-arid (Pereira *et al.* 2006), but it also occurs in wetlands (e.g. Paraná River delta; Pereira *et al.* 2005). It is not found in either the tropical or temperate rainforests. It is sympatric throughout most of its range with the Pampas Cat (*L. colocolo*).

In a radiotelemetry study in wet pampas grassland of Argentina, Manfredi *et al.* (2006) found mean home range size from 2.5-3.4 km<sup>2</sup>, with male ranges 25% larger than females. In Chile's Torres del Paine National Park, in beech forest, home ranges were larger, at 2.3-6.5 km<sup>2</sup> for two females, and 3.9-12.4 km<sup>2</sup> for five males (Johnson and Franklin 1991). In Argentina's Lihue Calel National Park, Pereira *et al.* (2012) found male home ranges of 2-3 km<sup>2</sup>; whereas females occupied areas of 0.2-0.6 km<sup>2</sup>. Home ranges in adjacent cattle ranches scaled up to 4.4 km<sup>2</sup> for males and up to 3.7-4.9 km<sup>2</sup> for females. During a severe drought period in this same area, six radio-collared cats died of starvation when hare abundance fell from 5.6 to <0.8 per 10 km (Pereira *et al.* 2006).

Manfredi *et al.* (2004) found diet to vary by location in Argentina, consisting primarily of small rodent, but including other locally abundant species such as birds. In Chile, rodents and hares were primarily taken (Johnson and Franklin 1991). Plains Vizcachas are also prey (Branch 1995). In southern South America, where Vizcachas have become extinct, introduced European Hares (*Lepus europaeus*) are the

major prey, although densities of both hares and Geoffroy's Cats were observed to decline markedly during a drought period (Pereira *et al.* 2006). Fish and frog remains were found in the stomachs of Geoffroy's Cats from Uruguay and Brazil (Sunquist and Sunquist 2002). Bisceglia *et al.* (2008) found that small mammals were the most frequent prey of Geoffroy's Cats in Lihue Calel, representing at least the 63% of the food items throughout the year.

Geoffroy's Cat is a small solitary felid (4.3 kg), with an average litter size of 1.5 kittens, and predominantly nocturnal activity pattern. It seems to be the most abundant felid of the temperate Neotropics (Oliveira and Cassaro 2005, Lucherini *et al.* 2006, Pereira and Novaro 2014).

**Systems:** Terrestrial

## **Use and Trade (see Appendix for additional information)**

For details on Use and Trade see under Threats.

## **Threats (see Appendix for additional information)**

Large numbers of pelts were exported from South America for the international fur trade from the 1960s to 1980s, but little trade took place after 1988 and the species was upgraded to CITES Appendix I in 1992 (Nowell and Jackson 1996). Cats are still killed as pests or poultry predators, and these pelts may be seen in local illegal trade. Currently, habitat loss and fragmentation, and retaliatory killing remains as the main threats. Potential negative impacts from current trends in climate change have been proposed (Canepuccia *et al.* 2008, Pereira *et al.* 2014)

During a health evaluation of Geoffroy's Cats (Uhart *et al.* 2012) at two different protected areas in Argentina (Campos del Tuyu Wildlife Reserve and Lihué Calel National Park), antibodies to infectious peritonitis, feline panleukopenia, canine distemper virus, feline callicivirus, toxoplasmosis and dirofilariasis were found in tested animals. Adult parasites recovered from necropsied animals and eggs in fresh faeces revealed the presence of various nematode families, including Ascarididae, Trichuridae, Capillariidae, Rictulariidae, Spiruridae and Ancylostomatidae; cestodes from families Taenidae and Anaplocephaliidae and oocysts of Eimeriidae (Beldomenico *et al.* 2005). These results suggest exposure (recent or past) to common domestic carnivore diseases, and indicate a potential risk to these Geoffroy's Cats.

Human-related mortality accounted for most of Geoffroy's Cat deaths recorded on cattle ranches near Lihué Calel National Park, with poaching, predation by dogs, and vehicle collision being the main causes of mortality (Pereira *et al.* 2010).

## **Conservation Actions (see Appendix for additional information)**

Included in CITES Appendix I. The species is fully protected across its range, with hunting and trade prohibited in Argentina, Bolivia, Brazil, Chile, Paraguay and Uruguay (Nowell and Jackson 1996). It occurs in a number of protected areas.

## **Credits**

**Assessor(s):** Pereira, J., Lucherini, M. & Trigo, T.

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

**Contributor(s):** de Oliveira, T. & Acosta-Jamett, G.

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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	Resident	Suitable	Yes
2. Savanna -> 2.1. Savanna - Dry	Resident	Suitable	Yes
2. Savanna -> 2.2. Savanna - Moist	Resident	Suitable	Yes
3. Shrubland -> 3.5. Shrubland - Subtropical/Tropical Dry	Resident	Suitable	Yes
3. Shrubland -> 3.6. Shrubland - Subtropical/Tropical Moist	Resident	Suitable	Yes
3. Shrubland -> 3.7. Shrubland - Subtropical/Tropical High Altitude	Resident	Suitable	Yes
4. Grassland -> 4.5. Grassland - Subtropical/Tropical Dry	Resident	Suitable	Yes

### Use and Trade

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

End Use	Local	National	International
Wearing apparel, accessories	Yes	Yes	No
Handicrafts, jewellery, etc.	Yes	Yes	No

### 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		
8. Invasive & other problematic species & genes -> 8.2. Problematic native species	Ongoing	-	-	-
	Stresses:	1. Ecosystem stresses -> 1.2. Ecosystem degradation		
11. Climate change & severe weather -> 11.2. Droughts	Future	-	-	-
	Stresses:	1. Ecosystem stresses -> 1.2. Ecosystem degradation		

## Conservation Actions in Place

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

<b>Conservation Actions in Place</b>
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>)

<b>Conservation Actions Needed</b>
------------------------------------

1. Land/water protection -> 1.1. Site/area protection
---

## Research Needed

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

<b>Research Needed</b>
------------------------

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

<b>Distribution</b>
---------------------

Lower elevation limit (m): 0
------------------------------

Upper elevation limit (m): 3800
---------------------------------

<b>Population</b>
-------------------

Population severely fragmented: No
------------------------------------

## The IUCN Red List Partnership



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