

Leopardus tigrinus, Northern Tiger Cat

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Taxonomy

Kingdom	Phylum	Class	Order	Family
Animalia	Chordata	Mammalia	Carnivora	Felidae

Taxon Name: *Leopardus tigrinus* (Schreber, 1775)

Common Name(s):

- English: Northern Tiger Cat
- French: Chat tigre du nord
- Spanish: Tigrillo, tirica, gato tigre

Taxonomic Notes:

Taxonomy is currently under review by the IUCN SSC Cat Specialist Group (2016). Genetic analyses found a level of divergence between *L. tigrinus* from Costa Rica (*L. tigrinus oncilla*) and from central (*L. tigrinus tigrinus*) and southern Brazil (*L. guttulus*) comparable to that between species in the *Leopardus* group, suggesting that these populations have been isolated, perhaps by the Amazon River, for approximately 3.7 million years. More analysis of geographic partitioning, with additional samples from other parts of the range, is needed to confirm whether this taxon should be further split into two species (Johnson *et al.* 1999, Eizirik *et al.* 2007, Trigo *et al.* 2013a).

There is also evidence of hybridization between *L. tigrinus* and *L. colocolo* (Johnson *et al.* 1999, Trigo *et al.* 2013a) in areas where their range overlaps.

Assessment Information

Red List Category & Criteria: Vulnerable A2c [ver 3.1](#)

Year Published: 2016

Date Assessed: May 25, 2016

Justification:

Leopardus tigrinus has recently been split into two species: *L. tigrinus* and *L. guttulus* (Trigo *et al.* 2013a). The present concept applies only to the former, distributed from North Eastern Brazil through the majority of northern South America to what seem as disjunct populations in Panama and the Central Cordillera of Costa Rica (Hunter and Barrett 2011, Trigo *et al.* 2013a). *L. tigrinus* and *L. guttulus* show no evidence of ongoing gene flow, whereas *L. tigrinus* and Pampas cat (*L. colocolo*) have not developed complete intrinsic reproductive barriers, which has allowed them to hybridize (Trigo *et al.* 2013a). Furthermore, there is also considerable evidence that the Central American population, suggested as *L. t. oncilla* also represents a different species (Johnson *et al.* 1999, Trigo *et al.* 2008). *Leopardus tigrinus* is widespread and rare everywhere, including their reported habitats to date: Andean montane and mist forests, Central American forests, Amazon forests, Rupununi Savannas and, Brazil's Cerrado and Caatinga domains (Moreno *et al.* 2011, Oliveira 2011, Payán and Gonzalez-Maya 2011, Oliveira *et al.* 2013). In the Brazilian Cerrado and Caatinga, densities are also very low, typically around

0.01–0.05/km² (Oliveira *et al.* 2010, 2013). In the Amazon, the species' occurrence might be marginal and restricted to some small isolated enclaves. The Northern Tiger Cat was absent from all of the extensive camera-trap studies that totalled 56,837 trap-days throughout all of the Amazon Basin and was considered the rarest carnivore there (Oliveira *et al.* unp. data). Abundance estimates of this small felid are lower than that reported for the much larger jaguar, puma and ocelot, and there is evidence suggestive of population fluctuations or declines of unknown reasons, in some areas, estimated at 10–40% (Oliveira 2011, unp. data). It has been suggested that high Ocelot population numbers negatively affect the Northern Tiger Cat population (Oliveira *et al.* 2010, Oliveira 2011). Probably most of the population of *L. tigrinus* occurs outside protected areas, and outside the Amazon basin lowland rainforest (Oliveira 2011), in habitats which are undergoing variable rates of loss due to habitat conversion to agriculture. Extreme examples include the Brazilian Cerrado and Caatinga (with losses of 50% or more depending on the source; Klink and Machado 2005, IBAMA/MMA 2011a, CI 2012) and the Brazilian Amazon (with deforestation of more than 20%/10,000km²/yr in recent years; Morton *et al.* 2006) and an overall loss of 90% of cloud forest in the northern Andes (Bubb *et al.* 2004, Garavito *et al.* 2012). Loss of habitats from conversion to agricultural lands is certainly its main threat to survival also in Panama, Venezuela, Colombia, Brazil and the deforestation frontier of the Amazon basin. Other threats include retaliatory hunting from depredation on poultry and the skin and pet trade, competition and disease spread by domestic dogs, and road kills (Oliveira *et al.* 2013, Marinho 2015). There is also hybridization with Pampas Cat in central/northeastern Brazil, which may be a natural or anthropogenic process whose extent as a threat is unknown (Trigo *et al.* 2013a). If further taxonomic species splits are indeed confirmed, the sub-populations are to be even smaller. High rates of habitat loss, fragmentation and isolation in Brazil (Klink and Machado 2005, Morton *et al.* 2006) depict habitat suppression, not degraded habitat, which should reflect equivalent species population declines, for example. The estimated species area of occupancy (AOO) for subspecies *L. t. tigrinus* and *L. t. pardinoides* was estimated from 893,200 to 1,020,800 km² of the total current available habitat (Payán and Gonzalez-Maya 2011). This includes applying a 20–30% reduction to compensate for inclusion of tiny fragments (which were considerable in many Areas; IBAMA/MMA 2011 a,b). A Population in semi-arid Caatinga scrub/dry forest mosaic area in Bahia State, Brazil, showed an observed abundance reduction of 25.9% from 2012 to 2015 (L. P. de Castro Meira, T. G. de Oliveira, pers. comm.). The decline of the Northern Tiger Cat over three generations was modelled with a maximum entropy algorithm for 52 *Leopardus tigrinus* records in Colombia and 19 bioclimatic variables and found a 12.7% population loss over three generations for the species (i.e. 15 years). The decline for Brazil, which holds the majority of the species range, was estimated at 36.8% in three generations (Oliveira *et al.* 2013, MMA/IBAMA 2014). Including a stable population for Central America the overall reduction is estimated to be 31.7%. The species is therefore classified as Vulnerable VU A2c. The overall range-wide population size is estimated to be less than 10–11,000 individuals, the species will continue to decline, and there is a lack of conservation actions destined to the species.

Geographic Range

Range Description:

The distribution range of the Northern Tiger Cat expands from Costa Rica and Panama in Central America into South America up to Central Brazil. Its southern limits are not yet well known, as well as the extent of a possible overlap with the populations of the Southern Tiger Cat (*L. guttulus*) (T. Oliveira pers. comm.). Furthermore, there is also considerable evidence that the Central American population, suggested as *L. t. oncilla* also represents a different species (Johnson *et al.* 1999, Trigo *et al.* 2008).

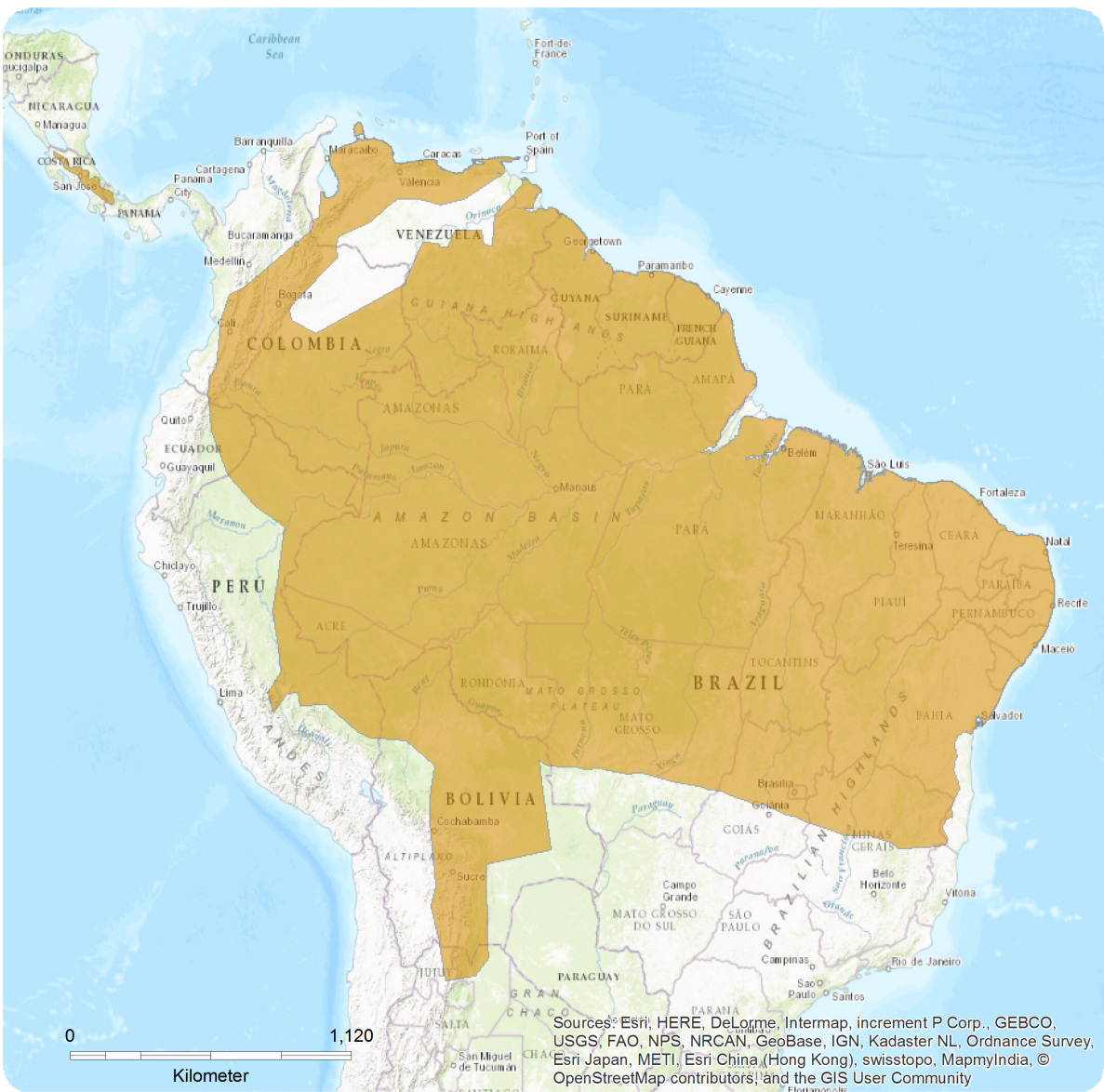
Additionally, it is also possible that the northern South American population, described as *L. t. pardinoides*, will also comprise a separate species (Nascimento 2010), or be together with *L. t. oncilla*. from northwestern South America a clearly distinctive species from *L. t. tigrinus* (T. Oliveira pers. comm.). There are records from the Amazon basin, but the distribution could be discontinuous and patchy, and the species extremely rare (Oliveira 2004). *L. tigrinus* has been described as one of the rarest species in Amazonia, being absent in all of the 12 extensive camera-trap studies assessed along all of the basin. Its occurrence there might be marginal and restricted to some enclaves (Oliveira unp. data). The species is absent from the Llanos (Payan *et al.* 2007) and from the Darien Peninsula connecting Central and South America. From Ecuador and Peru only few museum specimens exist and only in 2000 the species was formally confirmed in Bolivia through live-trapping. Although the Northern Tiger Cat has been collected as high as 4,800 m (Cuervo *et al.* 1986), this is probably an outlier, as there are very few records at or slightly above 3,000 m (T. Oliveira pers. comm.). However, in Costa Rica, in the Chirripó National Park, the species was recorded at 3,625 m (González-Maya and Schipper 2008). In Colombia it seems to be restricted to elevation above 1,500 m, however in Brazil most of the records were below 500 m (Oliveira *et al.* 2008). It seems that the bulk of the species' distribution would be the cloud forests of Costa Rica for *L. t. oncilla*, at 1,500-3,000 m in the northern Andes for *L. t. pardinoides*, and the dry-lands of the Cerrado and Caatinga domains and adjacent deciduous forest in north-central Brazil for *L. t. tigrinus*. All other areas seem to be marginal for the species (Oliveira unp. data/in prep.). Although the extent of occurrence is rather broad, the actual area of occupancy (AOO) is considerably restricted, especially because large portions of the high Andes, or of the Brazilian Cerrado (ca. 50%) and Caatinga (ca. 46%) have already been suppressed and converted to agriculture-pasture, where the species is known to be absent (Klink and Machado 2005; Oliveira *et al.* 2008; IBAMA/MMA 2011a, b; Payán and Gonzalez-Maya 2011; CI 2012). Thus, based on and using the remaining available cover estimates as the expected AOO (and compensating for inclusion of unsuitable areas and the tiny fragments), should be somewhere around 893,200–1,020,800 km², and is continually declining (Morton *et al.* 2006, Mulligan 2010). Additionally, if the Northern Tiger Cat tends to avoid the more open formations and proximity to rural settlements as Marinho (2015) reported for the Caatinga and Oliveira *et al.* (2014) noticed for the Cerrado, then the "de facto" AOO should be even smaller.

Country Occurrence:

Native: Bolivia, Plurinational States of; Brazil; Colombia; Costa Rica; Ecuador; French Guiana; Guyana; Panama; Peru; Suriname; Venezuela, Bolivarian Republic of

Distribution Map

Leopardus tigrinus

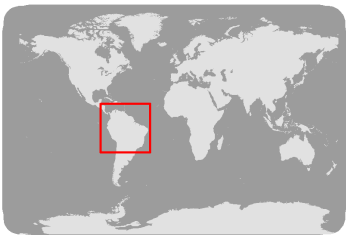


Range

Extant (resident)

Compiled by:

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



Population

Relative abundance and estimated population densities vary greatly, and the northern *Leopardus tigrinus* is less abundant than the southern *Leopardus guttulus* and also the rarest of the tropical species of Neotropical cat (Oliveira 2011). *Leopardus tigrinus* is rare everywhere, including their reported habitats to date: Andean montane and cloud forests, Central American forests, Amazon forests, Rupununi Savannas and, Brazil's Cerrado and Caatinga domains (Moreno *et al.* 2011, Oliveira 2011, Payán and Gonzalez-Maya 2011, Oliveira *et al.* 2013). In the Amazon, density is very low, expected at approximately 0.01/100 km². Camera-trap surveys in other portions of its range indicate that the species generally occurs in densities between 1-5/100 km² or lower (Oliveira *et al.* 2010, 2013). In Central America the species rarely shows up in camera traps even where they are known to occur, suggesting that they either avoid traps or are naturally rare and elusive in that area (Schipper pers. comm.). A similar trend is also found in several areas in Brazil, where authors found it in most areas in intrinsically low numbers, and apparently those numbers are not owed to camera-trap shyness (Oliveira pers. comm.). The species was absent from all extensive camera-trap studies in the llanos of Colombia and all of the Amazon, depicting its extreme rarity there (Oliveira, Payán pers. comm.). The Northern Tiger Cat is negatively impacted by Ocelot numbers and does not seem to attain effective population size for long term persistence in any Conservation Unit possibly due to the "Ocelot effect" (Oliveira *et al.* 2010, Oliveira 2011). It seems that where Ocelots are rare or absent the average population density of tiger cats ranges from 5-20 ind./100 km² but expected to be much lower than 5/100 km² where Ocelots are present (high density estimates, ca. 20/100 km², are obtained only in very few and isolated areas) (Oliveira *et al.* 2010, Oliveira 2011). *Leopardus tigrinus* is classified as Vulnerable in Colombia (MAVDT 2005, Rodriguez-Mahecha *et al.* 2006) and as Endangered in Brazil (IBAMA/MMA 2014). The estimated species area of occupancy (AOO) for subspecies *L. t. tigrinus* and *L. t. pardinoides* was estimated from 893,200 to 1,020,800 km² of the total current available habitat (Oliveira *et al.* submitted, Payán and Gonzalez-Maya 2011). This includes applying a 20–30% reduction to compensate for inclusion of tiny fragments (which were considerable in many areas) (IBAMA/MMA 2011 a,b). Extrapolated population estimation based on the above distribution estimates and also estimated densities (0.01/km²), results in an expected total population size ranging from 8,932 to 10,208 adult individuals. Decline based on deforestation rates of the species' habitat is certainly above 10% over the next decades (Morton *et al.* 2006, Mulligan 2010, Garavito *et al.* 2012). It seems that the savannas of Mirador State Park and the complex of protected areas around Nascentes do Rio Parnaíba National Park in the Brazilian mid-north and the Andean protected areas in Colombia are the most important areas for the species conservation (Oliveira *et al.* 2008, 2014; Payán and Gonzalez-Maya 2011).

Current Population Trend: Decreasing

Habitat and Ecology (see Appendix for additional information)

This species is found in a broad range of habitats, from the lowland semi-arid Caatinga to cloud forests in the Andes. In Costa Rica the species is almost entirely confined to montane forests along the flanks of volcanoes and other high mountains from 1,000 m up to the treeline (paramo) and occupy cloud forest and high elevation elfin forests (J. Schipper pers. comm.). Their distribution pattern in Costa Rica and Panama closely resembles that of the oak (*Quercus* sp.) dominated forests (J. Schipper pers. comm.). While in Central America and parts of northern South America it may be most common in montane cloud forest, it is mostly found in lowland areas in Brazil, being reported from rainforests to dry deciduous forest, savannas, semi-arid thorny scrub, in both pristine and disturbed areas. However, the

species appears absent in the llanos but present from a few records from Rupununi savannahs in Guyana (Payán pers. obs.). In disturbed habitats, it can occur even close to human settlements, as long as there is natural cover and prey base (Oliveira *et al.* 2008). However, Marinho (2015) has shown that the species' occurrence is favoured by denser woody cover and distance from rural settlements in the dry Caatinga of northeast Brazil. Although it can be found in a few and localized areas of the Amazon Basin (Oliveira 2004), the use of lowland Amazonian forests is practically unknown and requires research attention. After an enormous effort of 56,837 camera trap-days, at 12 different study sites throughout the Basin, no record of the species was obtained (Oliveira *et al.* unp. data).

The Northern Tiger Cat is a poorly known small-sized (2.4 kg) solitary felid, with an average litter size of 1.12 kittens (1–4) (Oliveira and Cassaro 2005). Diel activity pattern is mostly nocturno-crepuscular, but with considerable amount of daytime activity. However, it could also be highly diurnal in some areas of Brazil. *Leopardus tigrinus* diet is still very poorly studied, but is known to be based on small mammals (< 100 g; Trigo *et al.* 2013b), birds and reptiles (especially lizards). Limited data on home range shows that they are much larger than would be expected by its small body size. It ranges from 1 to 17 km² (Oliveira *et al.* 2010). Northern Tiger Cats are typically rare to uncommon, occurring at low population densities throughout most of its range, especially on what would be expected by a felid of its size. Densities are typically 1-5/100 km², but can reach 15-25/100 km² in a few and localized areas where ocelots are either rare or absent (Oliveira 2011, Oliveira *et al.* 2010). Its numbers/densities are strongly negatively impacted by the larger Ocelot, its potential intraguild predator/competitor (Oliveira *et al.* 2008, 2010; Oliveira 2011).

Systems: Terrestrial

Threats (see Appendix for additional information)

The Tiger Cats were heavily exploited for the fur trade decades ago, following the decline of the Ocelot trade (Payan and Trujillo 2006). Although international trade ceased, there is still some localized illegal hunting, usually for the domestic market. Current threats to this species include habitat loss, fragmentation, disease, road-kill, illegal trade (pets and pelts), retaliatory killing due to depredation of poultry (Oliveira *et al.* 2008, 2013; Payán and Gonzalez-Maya 2011; Diaz-Pulido *et al.* 2013; Marinho 2015). By and large, the greatest threat is the rampant rate of habitat loss, fragmentation and isolation. In the Andes cloud forests deforestation is mostly due to conversion to agriculture but also includes oil, hydroelectric dams, urban sprawl and road building (Payán and Gonzalez-Maya 2011, CI 2012). In the Brazilian Cerrado and Caatinga, suppression to agriculture is by far the main threat. In these domains the rate is actually higher in the area called MATOPIBA (the states of Maranhão, Tocantins, Piauí and Bahia), where it is twice as high as in the other parts of the country and which also comprises the main and most important area for the species (IBAMA/MMA 2011a, b; Oliveira 2011). Thus, populations in the core range area of *Leopardus tigrinus* range are getting ever increasingly reduced and fragmented. Change in native species dynamics (predator/competitor) could represent another previously undetected potential threat (Oliveira 2011, Oliveira *et al.* 2013). Hybridization with Pampas cat in all of northeast and central Brazil (the main range area for *L. t. tigrinus*) was detected in 100% of all specimens evaluated. This may be a natural or anthropogenic process and the extent of this as a threat is unknown (Trigo *et al.* 2013a), but would probably already compromise about 70-80% of the entire species population, or even more. This high level of hybridization is unheard of for any extant cat species.

Conservation Actions (see Appendix for additional information)

Included on CITES Appendix I. Hunting of the species is prohibited in Brazil, Colombia, Costa Rica, French Guiana, Suriname and Venezuela (Nowell and Jackson 1996). In the Amazon, field records suggest that, where found, populations are extremely low - therefore these areas should not be perceived to be safeguards for the species as it is for other felids (Oliveira 2004). It is likely that the species presents only a marginal distribution there (Oliveira unp. data). Populations in protected areas are expected to be very low, probably because of the impact of higher Ocelot (*L. pardalis*) densities, so that conservation of Northern Tiger Cat populations should rely mostly on private lands (Oliveira *et al.* 2010, Oliveira 2011). It has been estimated that possibly only one complex of protected areas could maintain in isolation a minimum viable population of this species (Oliveira *et al.* 2008, Payán and Gonzalez-Maya 2011). Further studies are required on the species' ecology, demographics, natural history, and threats. This species needs to be evaluated at the subspecies level due to genetic diversity within the species. A reassessment on the taxonomy of this species is an urgent research priority as the northern portion of the population might be a distinct species (IUCN Cats Red List workshop 2007).

Credits

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

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External Resources

For [Images and External Links to Additional Information, please see the Red List website](#).

Appendix

Habitats

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

Habitat	Season	Suitability	Major Importance?
1. Forest -> 1.6. Forest - Subtropical/Tropical Moist Lowland	-	Suitable	No
1. Forest -> 1.9. Forest - Subtropical/Tropical Moist Montane	-	Suitable	Yes
3. Shrubland -> 3.6. Shrubland - Subtropical/Tropical Moist	-	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		
1. Residential & commercial development -> 1.2. Commercial & industrial 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 -> 2.1.3. Agro-industry farming	Ongoing	-	-	-
	Stresses:	1. Ecosystem stresses -> 1.1. Ecosystem conversion 1. Ecosystem stresses -> 1.2. Ecosystem degradation		
2. Agriculture & aquaculture -> 2.2. Wood & pulp plantations -> 2.2.2. Agro-industry plantations	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		
3. Energy production & mining -> 3.2. Mining & quarrying	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:	1. Ecosystem stresses -> 1.1. Ecosystem conversion 1. Ecosystem stresses -> 1.2. Ecosystem degradation 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		
5. Biological resource use -> 5.3. Logging & wood harvesting -> 5.3.5. Motivation Unknown/Unrecorded	Ongoing	-	-	-
	Stresses:	1. Ecosystem stresses -> 1.2. Ecosystem degradation		
7. Natural system modifications -> 7.1. Fire & fire suppression -> 7.1.3. Trend Unknown/Unrecorded	Ongoing	-	-	-
	Stresses:	1. Ecosystem stresses -> 1.2. Ecosystem degradation		
7. Natural system modifications -> 7.2. Dams & water management/use -> 7.2.11. Dams (size unknown)	Ongoing	-	-	-
	Stresses:	1. Ecosystem stresses -> 1.1. Ecosystem conversion 1. Ecosystem stresses -> 1.2. Ecosystem degradation		
8. Invasive and other problematic species, genes & diseases -> 8.1. Invasive non-native/alien species/diseases -> 8.1.1. Unspecified species	Ongoing	-	-	-
	Stresses:	2. Species Stresses -> 2.1. Species mortality		
9. Pollution -> 9.2. Industrial & military effluents -> 9.2.3. Type Unknown/Unrecorded	Ongoing	-	-	-
	Stresses:	1. Ecosystem stresses -> 1.2. Ecosystem degradation		

Conservation Actions in Place

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

Conservation Actions in Place
In-Place Research, Monitoring and Planning
Action Recovery plan: No
Systematic monitoring scheme: No
In-Place Land/Water Protection and Management
Conservation sites identified: Yes, over part of range
Occur in at least one PA: Yes
Area based regional management plan: No
Invasive species control or prevention: No

Conservation Actions in Place
In-Place Species Management
Harvest management plan: No
Successfully reintroduced or introduced benignly: No
Subject to ex-situ conservation: No
In-Place Education
Subject to recent education and awareness programmes: No
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
1. Land/water protection -> 1.2. Resource & habitat protection
2. Land/water management -> 2.1. Site/area management
2. Land/water management -> 2.3. Habitat & natural process restoration
3. Species management -> 3.2. Species recovery
3. Species management -> 3.3. Species re-introduction -> 3.3.1. Reintroduction
3. Species management -> 3.4. Ex-situ conservation -> 3.4.1. Captive breeding/artificial propagation
3. Species management -> 3.4. Ex-situ conservation -> 3.4.2. Genome resource bank
5. Law & policy -> 5.4. Compliance and enforcement -> 5.4.2. National level
5. Law & policy -> 5.4. Compliance and enforcement -> 5.4.3. Sub-national level

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

Research Needed
2. Conservation Planning -> 2.1. Species Action/Recovery Plan
3. Monitoring -> 3.1. Population trends

Additional Data Fields

Distribution
Estimated area of occupancy (AOO) (km ²): 893200-1020800
Continuing decline in area of occupancy (AOO): Yes
Estimated extent of occurrence (EOO) (km ²): 13406366
Continuing decline in extent of occurrence (EOO): Yes
Extreme fluctuations in extent of occurrence (EOO): No
Continuing decline in number of locations: Yes
Extreme fluctuations in the number of locations: No
Lower elevation limit (m): 0
Upper elevation limit (m): 3626
Population
Number of mature individuals: 8932-10208
Continuing decline of mature individuals: Yes
Extreme fluctuations: No
Population severely fragmented: Yes
Continuing decline in subpopulations: No
Extreme fluctuations in subpopulations: No
All individuals in one subpopulation: No
Habitats and Ecology
Continuing decline in area, extent and/or quality of habitat: Yes
Generation Length (years): 5
Movement patterns: Not a Migrant

The IUCN Red List Partnership



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