

Alouatta palliata, Mantled Howler Monkey

Amendment version

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Taxonomy

Kingdom	Phylum	Class	Order	Family
Animalia	Chordata	Mammalia	Primates	Atelidae

Scientific Name: *Alouatta palliata* (Gray, 1849)

Infra-specific Taxa Assessed:

- [Alouatta palliata ssp. aequatorialis](#)
- [Alouatta palliata ssp. coibensis](#)
- [Alouatta palliata ssp. mexicana](#)
- [Alouatta palliata ssp. palliata](#)
- [Alouatta palliata ssp. trabeata](#)

Common Name(s):

- English: Mantled Howler Monkey, Ecuadorian Mantled Howling Monkey, South Pacific Blackish Howling Monkey
- Spanish; Castilian: Aullador De La Costa, Mono Aullador, Mono Congo, Saraguato
- German: Mantelbrüllaffe

Taxonomic Notes:

The taxonomy of the howlers of Mesoamerica, the Pacific coasts of Colombia and Ecuador and the Tumbes region of Northern Peru is based on Lawrence (1933), and recently revised by Cortés-Ortiz *et al.* (2015a). Through a comprehensive study of Mesoamerican howlers based on cranial features and pelage colouration patterns, Lawrence (1933) considered all Mesoamerican howlers to be subspecies of *A. palliata*, including: *A. p. mexicana*, *A. p. palliata*, *A. p. aequatorialis*, *A. p. pigra*, *A. p. luctuosa*, *A. p. coibensis*, and *A. p. trabeata*. Smith (1970) analysed pelage colouration patterns, and cranial and dental features of 238 specimens from across the range of *A. palliata* (including those studied by Lawrence, 1933) and compared them with a population sample of two sympatric forms of howler monkeys from the state of Tabasco, Mexico. He determined that the two (partially sympatric) forms from his sample constituted two well-differentiated species, and thus recommended *A. pigra* to be considered full species and separated from *A. palliata*. He considered *A. p. luctuosa* Lawrence, 1933 as junior synonym of *A. pigra*.

Froehlich and Froehlich (1986, 1987), analysed the dermal ridge patterns of howler monkeys from Nicaragua, Costa Rica, and Panama and suggested that the forms *coibensis* and *trabeata* be treated as subspecies of a distinct species, *A. coibensis*. Groves (2001, 2005) followed Froehlich and Froehlich and recognized *A. palliata* (Gray, 1849) and *A. coibensis* Thomas, 1902 as distinct species, but did not distinguish any subspecies.

Using mtDNA markers, Cortés-Ortiz *et al.* (2003) found that the Mantled Howler Monkeys from Mexico to Panama comprise a monophyletic group that is distinct from the clade of black howler monkeys (*A. pigra*). However, individuals from Coiba Island were found to share mitochondrial haplotypes with mantled howler monkeys from Costa Rica and Mexico, and howler monkeys from Azuero peninsula in Panama shared haplotypes with those from central and eastern Panama. In general, the divergence among mitochondrial lineages of individuals from Mexico, Costa Rica, Coiba Island, Azuero Peninsula

and the rest of Panama was minimal and did not justify separating them into distinct species.

Assessment Information

Red List Category & Criteria: Vulnerable A4cd [ver 3.1](#)

Year Published: 2021

Date Assessed: January 26, 2015

Justification:

Alouatta palliata is considered Vulnerable (VU A4cd), as a population reduction of 30% or more is inferred over the course of 30 years or three generations. This is based upon Global Forest Watch data for southeastern Mexico south through Central America, into western Colombia and Ecuador, and extreme northern Peru. The data suggests that, should forest loss continue at the same rate that has impacted the previous generation (2003-2018), 19% of this species' suitable habitat is likely to be lost by the year 2048. Combined with continued evidence of hunting, both for the pet trade and for bushmeat, these threats put *Alouatta palliata* above the threshold for Vulnerable status.

Previously Published Red List Assessments

2020 – Vulnerable (VU)

<https://dx.doi.org/10.2305/IUCN.UK.2020-2.RLTS.T39960A17925090.en>

2008 – Least Concern (LC)

<https://dx.doi.org/10.2305/IUCN.UK.2008.RLTS.T39960A10280447.en>

2003 – Least Concern (LC)

2000 – Lower Risk/least concern (LR/LC)

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

Geographic Range

Range Description:

Alouatta palliata is distributed from the southern portion of the state of Veracruz in Mexico, and extends south through the Mexican states of Oaxaca, Chiapas and Tabasco, throughout Central America and the Pacific Coast and western slopes of the Andes in Colombia and Ecuador, reaching the Tumbes region in northern Peru.

There are five recognized subspecies:

Alouatta palliata palliata

This subspecies is distributed from southern Guatemala to western Panama. However, the limits separating *A. p. palliata* from *A. p. aequatorialis* are not clear. Lawrence (1933) cited a specimen of *A. p. palliata* from Cotó, extreme western Panama, and Hill (1962, p.106) mentioned that specimens from Sevilla Island, western Panama, collected by J. H. Batty were “manifestly” *A. p. palliata*. Hall (1981), on the other hand, lists Sevilla Island, and Puerto Cortez, Costa Rica, as marginal records for *A. p. aequatorialis*. Lawrence (1933) comments that many individuals from Panama are intermediate. Based

on mitochondrial DNA analyses, Cortés-Ortiz *et al.* (2003) reported two clades separating *A. p. palliata* /*A. p. coibensis*/ *A. p. mexicana* from *A. p. trabeata*/*A. p. aequatorialis*, and mentioned that these two clades were divided around the Sona Peninsula in western Panama (Cortés-Ortiz *et al.* 2003). Consistent with this view, recent analyses of individuals from Limones in Punta Burica Panama (Cortés-Ortiz unpubl.) show that their mitochondrial DNA haplotypes cluster with those from *A. p. palliata* from Costa Rica. To the north, *A. p. palliata* extends through Costa Rica, Nicaragua and Honduras reaching the south margin of Rio Dulce in southern Guatemala, where it may be sympatric with *A. pigra* (Curdts 1993, Baumgarten and Williamson 2007). It is not known to currently occur in El Salvador (Burt and Stirton 1961), but it is likely that it occurred there in the past (Daugherty 1972).

Alouatta palliata mexicana

The distribution of *A. p. mexicana* ranges from southern Veracruz state in Mexico extending southeast to northeastern Oaxaca (Ortiz-Martínez *et al.* 2008), western Tabasco, and northern Chiapas (see Serio-Silva *et al.* 2006). In Tabasco *A. p. mexicana* is sympatric with *A. pigra* (Smith 1970) and hybridization has been confirmed in that region (Cortés-Ortiz *et al.* 2007, 2015b). Serio-Silva *et al.* (2006) reported the presence of *A. p. mexicana* in Campeche, Mexico, based on the observation of individuals with atypical white hairs on the flanks of their bodies. Cortés-Ortiz *et al.* (in prep.) have analysed mitochondrial and nuclear DNA from individuals in Campeche with similar coloration patterns and concluded that they are *A. pigra*, and not *A. palliata* or hybrid individuals. The reason for the presence of white hairs in the pelage of *A. pigra* individuals remains unclear. Although several published maps include the range of this subspecies extending into the highlands of Chiapas and north-central Guatemala, a study by A. Cuarón (unpublished) revealed that its range is restricted to western Chiapas, central and western Tabasco, southern Veracruz, and northeastern Oaxaca. Baumgarten and Williamson (2007) argued that *A. palliata* could have occurred on the Pacific side of the highland massif of northern Central America. There are historical records that suggest the presence of *A. palliata* (putatively *A. p. mexicana*) in this region in Mexico (Estrada and Coates-Estrada 1984) and Guatemala (Handley 1950), but no current populations are reported.

Alouatta palliata aequatorialis

Alouatta palliata aequatorialis occurs in eastern Panama extending through the Serranía del Darién (Anthony 1916, Lawrence 1933) to western Colombia, Ecuador and into the Tumbes region of northwestern Peru (Aquino and Encarnación 1994; Encarnación and Cook 1998; Tirira 2001, 2007). In northern Colombia *A. p. aequatorialis* is sympatric with *A. seniculus* in the left banks of the Peye and Atrato rivers in the department of Chocó and perhaps east of the Atrato River, south to the río Sinú (Zuñiga Leal and Defler 2013).

Alouatta palliata coibensis

This howler monkey is known only from Coiba Island and neighbouring Jicarón Island, off the Pacific coast of Panama (Milton and Mittermeier 1977, Méndez-Carvajal 2012).

Alouatta palliata trabeata

This subspecies is endemic to the Azuero Peninsula, Panama (Froehlich and Froehlich 1987, Rowe 2000, Mendes-Carvajal 2005).

Country Occurrence:

Native, Extant (resident): Colombia (Colombia (mainland)); Costa Rica (Costa Rica (mainland)); Ecuador

(Ecuador (mainland)); Guatemala; Honduras (Honduras (mainland)); Mexico (Campeche, Chiapas, Oaxaca, Tabasco, Veracruz); Nicaragua (Nicaragua (mainland)); Panama; Peru

Distribution Map

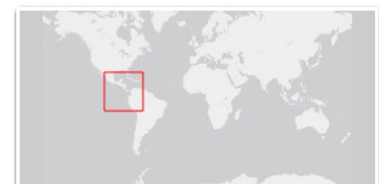


Legend

■ 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

Alouatta palliata is patchily distributed throughout its range and its densities vary widely. In Mexico a number of studies have reported variable densities between 23.29 (Estrada 1982) and 105 ind./km² (Serio-Silva & Rico-Gray 2002). In Costa Rica, population densities between 4.9 and 30 ind./km² have been estimated for *A. p. palliata* (see Di Fiore *et al.* 2011) and 0.2 and 0.1 groups/km² were reported in protected areas (see Glander 2013). In Nicaragua this subspecies is known to occur in densities of 0.21 individuals/ha in fragmented habitats (Williams-Guillen *et al.* 2008). Densities above 90 ind./km² are reported for *A. p. palliata* and *A. p. aequatorialis* in Panama (Chiriqui 1,050, Baldwin and Baldwin 1972, 1976; and BCI 91.7, Milton 1982, respectively). In Colombia, Ramírez-Orjuela and Sánchez-Deñás (2005) estimated between 0.7 and 1.5 ind./km² for *A. p. aequatorialis*, but Glander (2013) comments that there are reports of 20 ind./km² in the same general region in Colombia. Population density of *A. p. trabeata* in the Azuero Peninsula shows great variability, with some areas holding up to 42 ind./km², whereas other areas having as low as 0.5 ind./km² (Average 5.2 ind./km², Méndez-Carvajal 2013). The density of the Coiba Island howler (*A. p. coibensis*) was estimated to an average of 4.1 groups/km² (17.6 ind./km²) and a total population of 472 individuals (Mendez-Carvajal 2012).

A population reduction of 30% or more is inferred over the course of three generations. This is based upon Global Forest Watch data (Global Forest Watch 2020) for southeastern Mexico south through Central America, into western Colombia and Ecuador, and extreme northern Peru. The data suggests that, should forest loss continue at the same rate that has been seen since 2003, close to 30% of this species' suitable habitat is likely to be lost by the year 2048. In addition, the species is threatened by hunting.

Current Population Trend: Decreasing

Habitat and Ecology (see Appendix for additional information)

Alouatta palliata occupies several distinct vegetation types, including mature evergreen forests, deciduous and riparian forests, mangroves, and anthropogenically disturbed forests (Neville *et al.* 1988, Baumgarten and Williamson 2007). Although mantled howlers spend most of their time resting (65–74%), their daily activities vary considerably according to season and food availability (Glander 2013).

The diets of Mantled Howler Monkeys have been extensively studied across the distribution range of the species in Central America. In average mantled howlers spend 21% of their time feeding (range 8–40 %, Dias and Negrin 2015). They mainly consume fruits and leaves, but the relative proportions vary by study site, with some populations being mostly folivorous while others have a more equal share of fruits and leaves in their diets. Other food items include flowers, petioles, buds, etc. (see Dias and Negrin 2015 for a detailed review of howler diets).

Group size varies considerably, with some locations reporting sizes of 40 or more individuals in a single group (in Mexico and Costa Rica), although the average group size is 15.2 individuals (Dias and Negrin 2015). Groups include multiple males and females, with a sex ration of 1.79 females per male (Chapman and Balcomb 1998). Group home ranges vary between 8 and 75 ha (see Arroyo-Rodriguez *et al.* 2015, and references therein).

Mean adult male weight ranges from 5.80 ± 0.69 kg in Mexico (Kelaita *et al.* 2011), 5.79 ± 0.58 kg in La

Pacifica, Costa Rica, 6.57 ± 0.48 kg in Santa Rosa, Costa Rica, and 7.56 ± 0.73 kg in BCI, Panama (Glander 2006), while mean adult female weight ranges from 4.39 ± 0.48 kg in Mexico (Kelaita *et al.* 2011), 4.73 ± 0.62 kg in La Pacifica, Costa Rica, 5.16 ± 0.54 kg in Santa Rosa, Costa Rica, and 6.45 ± 0.55 kg in BCI, Panama (Glander 2006).

Behavioural and ecological field studies have been carried out mostly in Mexico, Costa Rica, and Panama and at a lesser extent in Nicaragua and Ecuador (see recent reviews in Kowalewski *et al.* 2015a,b).

Systems: Terrestrial

Use and Trade

This species is hunted for bushmeat and also live captured for the pet trade. Pet trade is a common and well-known threat to howler monkeys.

Threats (see Appendix for additional information)

Threats to this species include habitat loss and fragmentation, as a consequence of economic activities, as well as hunting for the pet trade.

Credits

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External Resources

For [Supplementary Material](#), and 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 -> 1.5. Forest - Subtropical/Tropical Dry	-	Suitable	Yes
1. Forest -> 1.6. Forest - Subtropical/Tropical Moist Lowland	-	Suitable	Yes
1. Forest -> 1.7. Forest - Subtropical/Tropical Mangrove Vegetation Above High Tide Level	-	Suitable	Yes
1. Forest -> 1.8. Forest - Subtropical/Tropical Swamp	-	-	-
1. Forest -> 1.9. Forest - Subtropical/Tropical Moist Montane	-	-	-

Use and Trade

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

End Use	Local	National	International
Pets/display animals, horticulture	Yes	No	No
Food - human	Yes	No	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	-	-	Low impact: 3
	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	-	-	Low impact: 3
	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	-	-	Low impact: 3
	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	-	-	Low impact: 3
	Stresses:	1. Ecosystem stresses -> 1.1. Ecosystem conversion		

1. Ecosystem stresses -> 1.2. Ecosystem degradation				
5. Biological resource use -> 5.1. Hunting & trapping terrestrial animals -> 5.1.1. Intentional use (species is the target)	Ongoing	-	-	Low impact: 3
Stresses:		2. Species Stresses -> 2.1. Species mortality		
5. Biological resource use -> 5.3. Logging & wood harvesting -> 5.3.5. Motivation Unknown/Unrecorded	Ongoing	-	-	Low impact: 3
Stresses:		1. Ecosystem stresses -> 1.2. Ecosystem degradation		

Conservation Actions in Place

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

Conservation Action in Place
In-place land/water protection
Conservation sites identified: Yes, over entire range
In-place education
Subject to recent education and awareness programmes: Yes
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 Action Needed
2. Land/water management -> 2.1. Site/area management
3. Species management -> 3.1. Species management -> 3.1.1. Harvest management
4. Education & awareness -> 4.3. Awareness & communications

Research Needed

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

Research Needed
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): 2,000
Population
Continuing decline of mature individuals: Yes
Extreme fluctuations: No
Population severely fragmented: No
Continuing decline in subpopulations: Yes
Extreme fluctuations in subpopulations: No
All individuals in one subpopulation: No
Habitats and Ecology
Generation Length (years): 9.79

Amendment

Amendment reason: The order of the Assessor names have been corrected in this assessment, and some previously missing initials have been added. The distribution map has also been corrected.

The IUCN Red List Partnership



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