The IUCN Red List of Threatened Species™
ISSN 2307-8235 (online)
IUCN 2020: T39843A17988254
Scope(s): Global
Language: English

Semnopithecus vetulus ssp. monticola, Highland Purple-faced Langur

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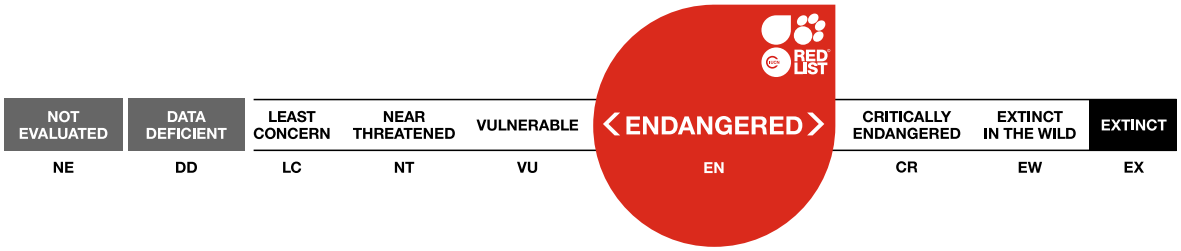

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Citation: Rudran, R., Dittus, W., Gamage, S.N. & Nekaris, K.A.I. 2020. *Semnopithecus vetulus* ssp. *monticola*. *The IUCN Red List of Threatened Species* 2020: e.T39843A17988254. https://dx.doi.org/10.2305/IUCN.UK.2020-2.RLTS.T39843A17988254.en

Taxonomy

Kingdom	Phylum	Class	Order	Family
Animalia	Chordata	Mammalia	Primates	Cercopithecidae

Scientific Name: *Semnopithecus vetulus ssp. monticola* (Kelaart, 1850)

Synonym(s):

- *Trachypithecus vetulus* ssp. *monticola* (Kelaart, 1850)

Parent Species: See *Semnopithecus vetulus*

Common Name(s):

- English: Highland Purple-faced Langur, Highland Purple-faced Leaf Monkey, Montane Purple-faced Langur
- French: Semnopithèque Blanchâtre
- Spanish; Castilian: Langur De Cara Roja

Taxonomic Notes:

Mitochondrial DNA studies now classify *Trachypithecus vetlus* and *Trachypithecus johnii* under the genus *Semnopithecus* (Osterholz *et al*. 2008, Wang *et al*. 2012). Four subspecies of *Semnopithecus vetulus* are recognized, namely: *vetulus, monticola, nestor, and philbricki.*

Highland Purple Faced Langur, *Semnopithecus vetulus monticola* (Kelaart, 1850: Central Sri Lanka (1,000-2,200 m)

Assessment Information

Red List Category & Criteria: Endangered A2cd+3cd ver 3.1

Year Published: 2020

Date Assessed: December 21, 2015

Justification:

This species is listed as Endangered as it has undergone a decline of more than 50% over the last 3 generations (36 years) due to logging, expanding human settlements, agriculture, plantations, forest dieback, fuelwood extraction by the rural poor, and due to increasing levels of negative interactions with humans, wrongly conducted translocation exercises, and persecution of the taxon by the locals. If appropriate steps are not taken this subspecies is suspected to decline at the current rate over the next three generations.

Previously Published Red List Assessments

2008 – Endangered (EN)
https://dx.doi.org/10.2305/IUCN.UK.2008.RLTS.T39843A10276071.en

2004 – Endangered (EN)

https://dx.doi.org/10.2305/IUCN.UK.2020-2.RLTS.T39843A17988254.en

2000 – Endangered (EN)

Geographic Range

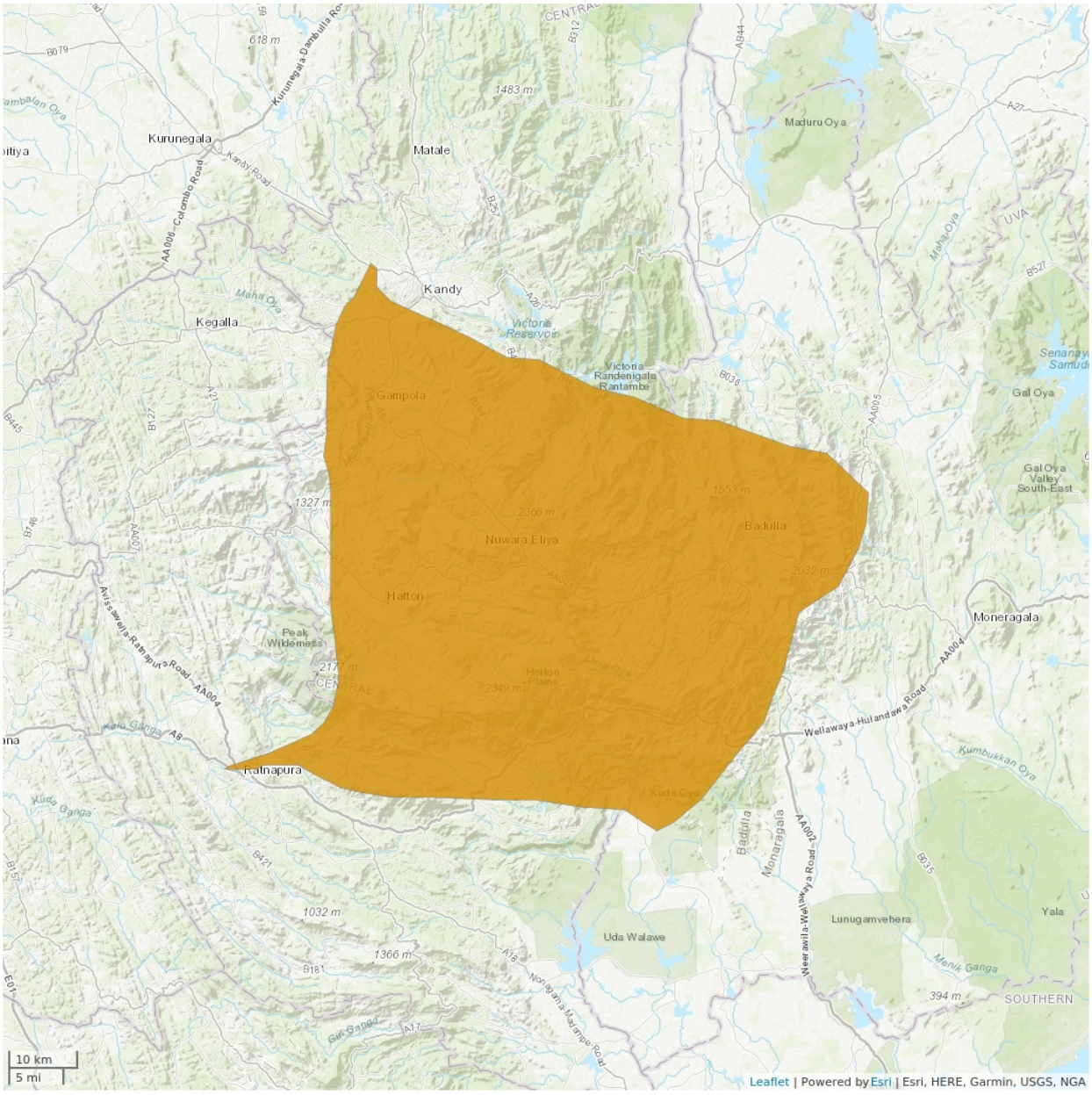
Range Description:

Semnopithecus vetulus monticola is found in Sri Lanka's central highlands (Rudran 1973a,b; Groves, 2001). Rudran (1973a,b), Molur *et al*. (2003), and W. Dittus (pers. comm.) report that it is found from 1,000 to 2,200 m in elevation.

Country Occurrence:

Native, Extant (resident): Sri Lanka

Distribution Map



Legend

EXTANT (RESIDENT)

Compiled by:

IUCN (International Union for Conservation of Nature) 2020

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

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Population

Population counts are scarce but extensive habitat destruction suggests that the species is in serious decline. Average group size is 8.9 individuals (range 3-14, n=27) in *Semnopithecus vetulus monticola* (Rudran 1970).

Current Population Trend: Decreasing

Habitat and Ecology (see Appendix for additional information)

This species is diurnal, highly arboreal and territorial. During intergroup encounters it emits loud whoop calls accompanied by spectacular jump displays between branches (Rudran 1970, 2012; Pethiyagoda 2012). Reproductively active social groups vary in size from 3 to 26 individuals and often include a single male, several adult females and their offspring. Predominantly-male groups with several adult and immature males and a few immature females have also been documented in *S. v. philbrickii, S.v. monticola* and *S.v. nestor* (Rudran 1970, 1973 a & b, 2012; Dela 1998). Males from such groups invade reproductively active units and periodically succeed in taking over the adult females, and evicting the resident male and his immature offspring of both sexes from their natal groups (Rudran 1973b). Infants of the resident male may get killed in these violent takeovers.

Semnopithecus vetulus monticola inhabits the short statured montane forests (Rudran 1970, 1973a,b) with slow rates of recovery from habitat destruction. Diet: 39% young leaves, 40% mature leaves, 10% flowers and 10% fruits and seeds. Breeding occurs throughout the year. Interbirth interval of 16-17 months. Average group size is 8.9 individuals (range3-14, n=27). Home range size varies from 1.1-10.9 ha (average 5.8 ha) (Rudran 1970, 2012).

Systems: Terrestrial

Use and Trade (see Appendix for additional information)

The taxon is persecuted for negative interactions with humans, hence hunted, but not for use or trade.

Threats (see Appendix for additional information)

According to government data the country lost more than 50% of its forest cover between 1956 and 2003. Continuing loss of forested areas in the last 36 years at the same rate is still the most serious threat to the survival of the species and all four subspecies. Conflicts with humans have recently become a serious issue as well. Other threats identified by Molur *et al*. (2003) such as selective logging, expanding human settlements, agriculture, plantations, ill-conceived capture and releases, which have increased human-primate conflicts are also evident today.

When 80% of hill country forests were lost to tea plantations in the 19th century this taxon lost a large proportion of its natural habitat. More recently its habitat has been reduced by deforestation within protected areas. Habitat loss through firewood extraction by the rural poor and forest die-backs have also undermined the survival of this subspecies. Recent surveys in 2012-14 (S. Gamage pers. comm.) indicate that fuelwood extraction by the rural poor has led to extensive deforestation.

Conservation Actions (see Appendix for additional information)

Semnopithecus vetulus is listed in CITES Appendix II. To promote the conservation of all four subspecies, Molur *et al*. (2003) recommended several actions like habitat management, scientific research, population monitoring, viability analyses, implementation of extant conservation laws and public education. Meanwhile, there was growing awareness that the size of Sri Lanka's forests was inadequate for the country's environmental stability, and led to a Presidential decree that forest cover must be increased from 27% to 36% of the land area (Rajapakse 2010, Yatwara 2011). The decree also stipulated the use of native species to increase forest cover.

While the above investigation was underway, interactions with people living around the study site revealed that increasing forest cover would not be possible without the support of impoverished local communities. Therefore, a comprehensive conservation awareness program was added to the research initiative. This program included a schools lecture and nature walk initiative to promote conservation awareness among the next generation of environmental stewards. It also included vocational training programs for adults to improve their opportunities for employment and income generation. The needs of community elders were addressed as well, through a health clinics initiative that provided medicines for old age problems like diabetes, hypertension, arthritis and spectacles and free cataract surgery for seniors with visual impairments. The success of this program led to its replication at a locality within the range of *S. v. monticola* where a reforestation project and initiatives to prevent firewood extraction from natural habitats were also underway. While conservation actions during the past six years were limited to two areas, several newspaper articles were published to promote conservation awareness throughout the country.

Future conservation actions will include field surveys of the known ranges of this subspecies with the objective of identifying two or more sites within each range that could be developed as protected areas. The above-mentioned activities will then be launched in nearby communities, and people will also be trained in protected area administration and management, nature guiding and interpretation, small business management and other vocations that help to promote the sustainable use of their protected area under the supervision of the government's Department of Wildlife Conservation. Efforts to mitigate human-monkey conflicts with active participation of local communities will also be an important component of future conservation actions.

Active participation of local communities in managing and deriving sustainable benefits from natural habitats is a new concept in Sri Lanka. It was presented and discussed during two workshops where it received favourable responses from government authorities and non-governmental organizations. Therefore, this idea has been incorporated into a Conservation Action Plan for all Sri Lankan monkey species that is currently being developed according to IUCN guidelines. When this Action Plan is completed it will be submitted to the Sri Lankan government and the IUCN for approval.

While a sensible conservation action plan has been developed its implementation will depend a great deal on political will, financial support and many unknowns about people and their environment. Therefore, even with unfettered financial and political support it may take several years to bring this action plan to fruition. However, a start has been made with the hope that the threat of endangerment and extinction of the Purple-faced Langur will be eliminated as soon as possible.

Credits

https://dx.doi.org/10.2305/IUCN.UK.2020-2.RLTS.T39843A17988254.en

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Reviewer(s): Molur, S. & Mittermeier, R.A.

Authority/Authorities: IUCN SSC Primate Specialist Group

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Disclaimer

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 -> 1.9. Forest - Subtropical/Tropical Moist Montane	-	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	Majority (50-90%)	Slow, significant declines	Medium impact: 6
	Stresses:	1. Ecosystem stresses -> 1.1. Ecosystem conversion 1. Ecosystem stresses -> 1.2. Ecosystem degradation 2. Species Stresses -> 2.2. Species disturbance		
2. Agriculture & aquaculture -> 2.2. Wood & pulp plantations -> 2.2.2. Agro-industry plantations	Ongoing	Majority (50-90%)	Slow, significant declines	Medium impact: 6
	Stresses:	1. Ecosystem stresses -> 1.1. Ecosystem conversion 1. Ecosystem stresses -> 1.2. Ecosystem degradation 2. Species Stresses -> 2.2. Species disturbance		
5. Biological resource use -> 5.1. Hunting & trapping terrestrial animals -> 5.1.3. Persecution/control	Ongoing	Majority (50-90%)	Slow, significant declines	Medium impact: 6
	Stresses:	2. Species Stresses -> 2.1. Species mortality 2. Species Stresses -> 2.2. Species disturbance		
5. Biological resource use -> 5.3. Logging & wood harvesting -> 5.3.3. Unintentional effects: (subsistence/small scale) [harvest]	Ongoing	Majority (50-90%)	Slow, significant declines	Medium impact: 6
	Stresses:	1. Ecosystem stresses -> 1.2. Ecosystem degradation		
7. Natural system modifications -> 7.3. Other ecosystem modifications	Ongoing	Majority (50-90%)	Slow, significant declines	Medium impact: 6
	Stresses:	1. Ecosystem stresses -> 1.1. Ecosystem conversion 1. Ecosystem stresses -> 1.2. Ecosystem degradation 2. Species Stresses -> 2.2. Species disturbance		

Conservation Actions in Place

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

Conservation Action in Place
In-place research and monitoring
Action Recovery Plan: No
Systematic monitoring scheme: No

Conservation Action in Place
In-place land/water protection
Conservation sites identified: No
Area based regional management plan: No
Occurs in at least one protected area: Yes
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 Action 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
4. Education & awareness -> 4.1. Formal education
4. Education & awareness -> 4.3. Awareness & communications
5. Law & policy -> 5.4. Compliance and enforcement -> 5.4.2. National level

Research Needed

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

Research Needed
1. Research -> 1.2. Population size, distribution & trends

Research Needed
1. Research -> 1.3. Life history & ecology
1. Research -> 1.5. Threats
2. Conservation Planning -> 2.1. Species Action/Recovery Plan
2. Conservation Planning -> 2.2. Area-based Management Plan
3. Monitoring -> 3.1. Population trends
3. Monitoring -> 3.4. Habitat trends

Additional Data Fields

Distribution
Lower elevation limit (m): 1,000
Upper elevation limit (m): 2,200
Population
Continuing decline of mature individuals: Yes
Extreme fluctuations: Unknown
Population severely fragmented: Yes
Habitats and Ecology
Continuing decline in area, extent and/or quality of habitat: Yes
Generation Length (years): 12

The IUCN Red List Partnership

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