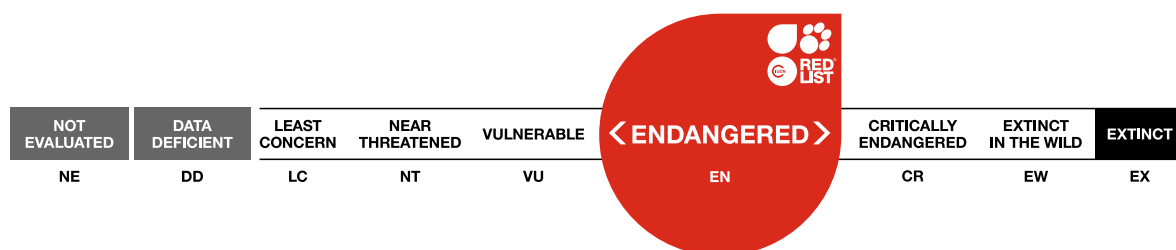


Semnopithecus vetulus ssp. vetulus, Southern Purple-faced Langur

Assessment by: Dittus, W. & Nekaris, K.A.I.



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Taxonomy

Kingdom	Phylum	Class	Order	Family
Animalia	Chordata	Mammalia	Primates	Cercopithecidae

Scientific Name: *Semnopithecus vetulus ssp. vetulus* (Erxleben, 1777)

Synonym(s):

- *Cercopithecus cephalopterus* Boddaert, 1785
- *Cercopithecus kephalopterus* Zimmermann, 1780
- *Cercopithecus latibarbatus* E. Geoffroy, 1812
- *Cercopithecus leucoprymnus* Otto, 1825
- *Cercopithecus vetulus* Erxleben, 1777
- *Kasi senex ssp. vetulus* Pocock, 1939
- *Pithecus vetulus ssp. vetulus* Pocock, 1939
- *Presbytis cephalopterus* Kelaart, 1856
- *Presbytis senex ssp. vetulus* Erxleben, 1777
- *Semnopithecus fulvogriseus* Desmoulins, 1825
- *Semnopithecus kelaarti* Schlegel, 1876
- *Simia veter* Shaw, 1800
- *Trachypithecus vetulus ssp. vetulus* (Erxleben, 1777)

Parent Species: See *Semnopithecus vetulus*

Common Name(s):

- English: Southern Purple-faced Langur, Southern Purple Faced Leaf Monkey

Taxonomic Notes:

Mitochondrial DNA studies now classify *Trachypithecus vetulus* 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*. An additional subspecies, *S. v. harti*, is also recognized by some experts, but is here included as a synonym of *S. v. philbricki* (Groves 2001).

Southern Purple Faced Langur, *Semnopithecus vetulus vetulus* (Erxleben 1777): Southwestern Sri Lanka in the Wet Zone, from Kalu Ganga (River) to Ranna in the south up to an elevation of 1,000 m.

Assessment Information

Red List Category & Criteria: Endangered A2cd+3cd [ver 3.1](#)

Year Published: 2020

Date Assessed: November 22, 2015

Justification:

This species is listed as Endangered as the population is suspected to have undergone a decline of more than 50% over the last three generations (36 years) due to logging, expanding human settlements, agriculture, plantations, and ill-conceived capture and releases, which have increased human-primate

conflicts. If appropriate steps are not taken this subspecies is suspected to decline at the current rate over the next three generations, mainly due to ongoing and increasing habitat loss and negative human-primate interactions.

Previously Published Red List Assessments

2008 – Endangered (EN)

<https://dx.doi.org/10.2305/IUCN.UK.2008.RLTS.T39842A10275899.en>

2004 – Endangered (EN)

2000 – Endangered (EN)

Geographic Range

Range Description:

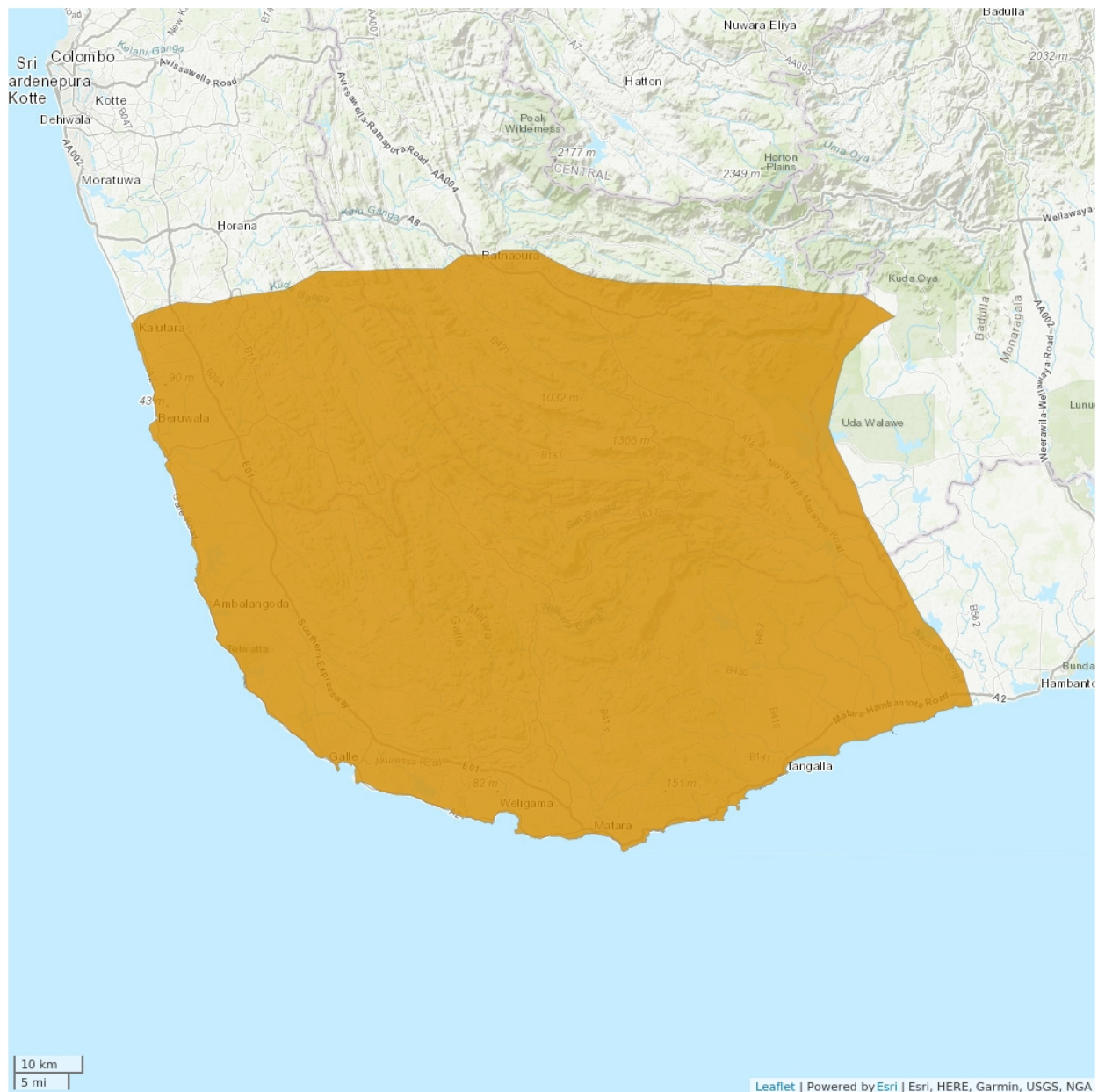
Semnopithecus vetulus vetulus is found in the severely fragmented lowland rainforest zone of southern Sri Lanka, from south of the Kalu Ganga (river) to about Ranna (Hill, 1934, Groves, 2001). It ranges in elevation up to 1,000 m, with an extent of occurrence (EOO) of 7,986 km². Within this area, it has an area of occupancy (AOO) of approximately 3,600 km², occurring in many severely fragmented locations (Molur *et al.* 2003).

Due to extensive destruction of its natural habitat this subspecies is often forced to enter home gardens where conflicts with humans threaten its survival. It is also hunted occasionally because of the belief that its meat has medicinal properties (Nahallege 2008). Based on these findings and earlier information (Molur *et al.* 2003) this subspecies is categorized as highly threatened

Country Occurrence:

Native, Extant (resident): Sri Lanka

Distribution Map

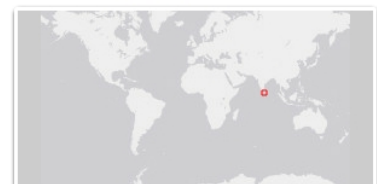


Legend

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.

Population

Population counts are scarce but extensive habitat destruction suggests that the subspecies is in serious decline.

Current Population Trend: Decreasing

Habitat and Ecology (see Appendix for additional information)

This subspecies is diurnal, highly arboreal and territorial. During intergroup encounters it emits loud whoop calls accompanied by spectacular jump displays between branches (Rudran 1970, 2013; 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. Infants of the resident male may get killed in these violent takeovers.

This subspecies inhabits Sri Lanka's lowland and midland tropical rainforests and human modified areas of this habitat (Molur *et al.* 2003). It occupies low to middle elevation rainforests, commercial plantations, home gardens and rocky and treeless coastal slopes of Galle. In forest fragments bordering tea plantations and home gardens thirty white colour morphs were observed mixed with the standard *S. vetulus vetulus* morph (Pethiyagoda 2012; Roscoe *et al.* 2013).

Where the natural habitat has been destroyed, groups take refuge in home gardens and plantation forests. However, stability of these habitats is also unpredictable and offers no long-term survival prospects for the taxon.

Systems: Terrestrial

Use and Trade

Occasionally hunted for meat and pelts for making drums.

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.

Semnopithecus vetulus vetulus is also threatened by selective logging and deforestation for the establishment of human-settlements, agriculture, and commercial plantations are the most serious threats to this taxon. Occasional hunting for meat and pelts for drums also serve as threats.

Conservation Actions (see Appendix for additional information)

This species 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, Given

these recommendations a field survey was conducted within the range of *S. v. nestor*, the critically endangered subspecies (Rudran, 2007). This survey confirmed that habitat loss due to deforestation was the most serious threat to *S.v. nestor*'s survival. 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. 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.

Future conservation actions will include field surveys of the known ranges of all four 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

Assessor(s): Dittus, W. & Nekaris, K.A.I.

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

Authority/Authorities: IUCN SSC Primate Specialist Group

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External Resources

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Appendix

Habitats

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

Habitat	Season	Suitability	Major Importance?
1. Forest -> 1.6. Forest - Subtropical/Tropical Moist Lowland	Resident	Suitable	Yes
1. Forest -> 1.9. Forest - Subtropical/Tropical Moist Montane	Resident	Suitable	Yes
14. Artificial/Terrestrial -> 14.3. Artificial/Terrestrial - Plantations	Resident	Marginal	-
14. Artificial/Terrestrial -> 14.4. Artificial/Terrestrial - Rural Gardens	Resident	Marginal	-
14. Artificial/Terrestrial -> 14.5. Artificial/Terrestrial - Urban Areas	Resident	Marginal	-
14. Artificial/Terrestrial -> 14.6. Artificial/Terrestrial - Subtropical/Tropical Heavily Degraded Former Forest	Resident	Marginal	-

Use and Trade

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

End Use	Local	National	International
Food - human	No	No	Yes
Other (free text)	No	No	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. 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 -> 5.3.1. Intentional use: (subsistence/small scale) [harvest]	Ongoing	-	Slow, significant declines	Low impact: 4

Stresses:	1. Ecosystem stresses -> 1.1. Ecosystem conversion 1. Ecosystem stresses -> 1.2. Ecosystem degradation 2. Species Stresses -> 2.2. Species disturbance
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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
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
2. Land/water management -> 2.3. Habitat & natural process restoration
3. Species management -> 3.2. Species recovery
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
1. Research -> 1.3. Life history & ecology
1. Research -> 1.4. Harvest, use & livelihoods
1. Research -> 1.5. Threats
2. Conservation Planning -> 2.1. Species Action/Recovery Plan
3. Monitoring -> 3.1. Population trends
3. Monitoring -> 3.4. Habitat trends

Additional Data Fields

Distribution
Estimated extent of occurrence (EOO) (km ²): 7986
Lower elevation limit (m): 50
Upper elevation limit (m): 1,000
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
Movement patterns: Not a Migrant

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