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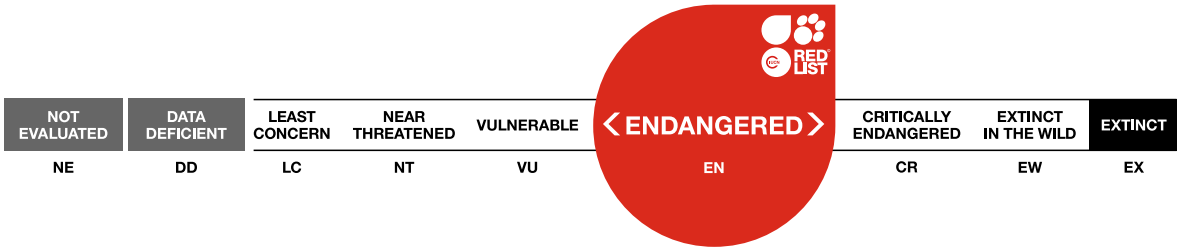
Scope(s): Global
Language: English

# *Semnopithecus vetulus ssp. philbricki,* Northern 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. philbricki* (Phillips, 1927)

**Synonym(s):**

- *Trachypithecus vetulus* ssp. *philbricki* (Phillips, 1927)

**Parent Species:** See *Semnopithecus vetulus*

**Common Name(s):**

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

**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*. 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).

# 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 it 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, ill-conceived capture and releases, persecution, and occasional hunting for meat. If appropriate steps are not taken this taxon is suspected to decline at the current rate over the next three generations, mainly due to ongoing habitat loss and persecution.

**Previously Published Red List Assessments**

2008 – Endangered (EN)
https://dx.doi.org/10.2305/IUCN.UK.2008.RLTS.T39845A10276438.en

2004 – Endangered (EN)

2000 – Endangered (EN)

# Geographic Range

**Range Description:**

*Semnopithecus vetulus philbricki* is found in the north and east of Sri Lanka in the dry zone, up to 800 m

in East Matale and Madukelle Hills (Rudran, 1970, 1973a,b; Groves 2001; Molur *et al*. 2003; Vandercone *et al.* 2012, W. Dittus *et al*. pers. comm). Its extent of occurrence (EOO) is approximately 20,300 km², but only a fraction of the moist forests in this area is suitable for this subspecies; its area of occupancy (AOO) is approximately 3,300 km². It is known from fewer than 40, severely fragmented locations.

## Country Occurrence:

**Native, Extant (resident):** Sri Lanka


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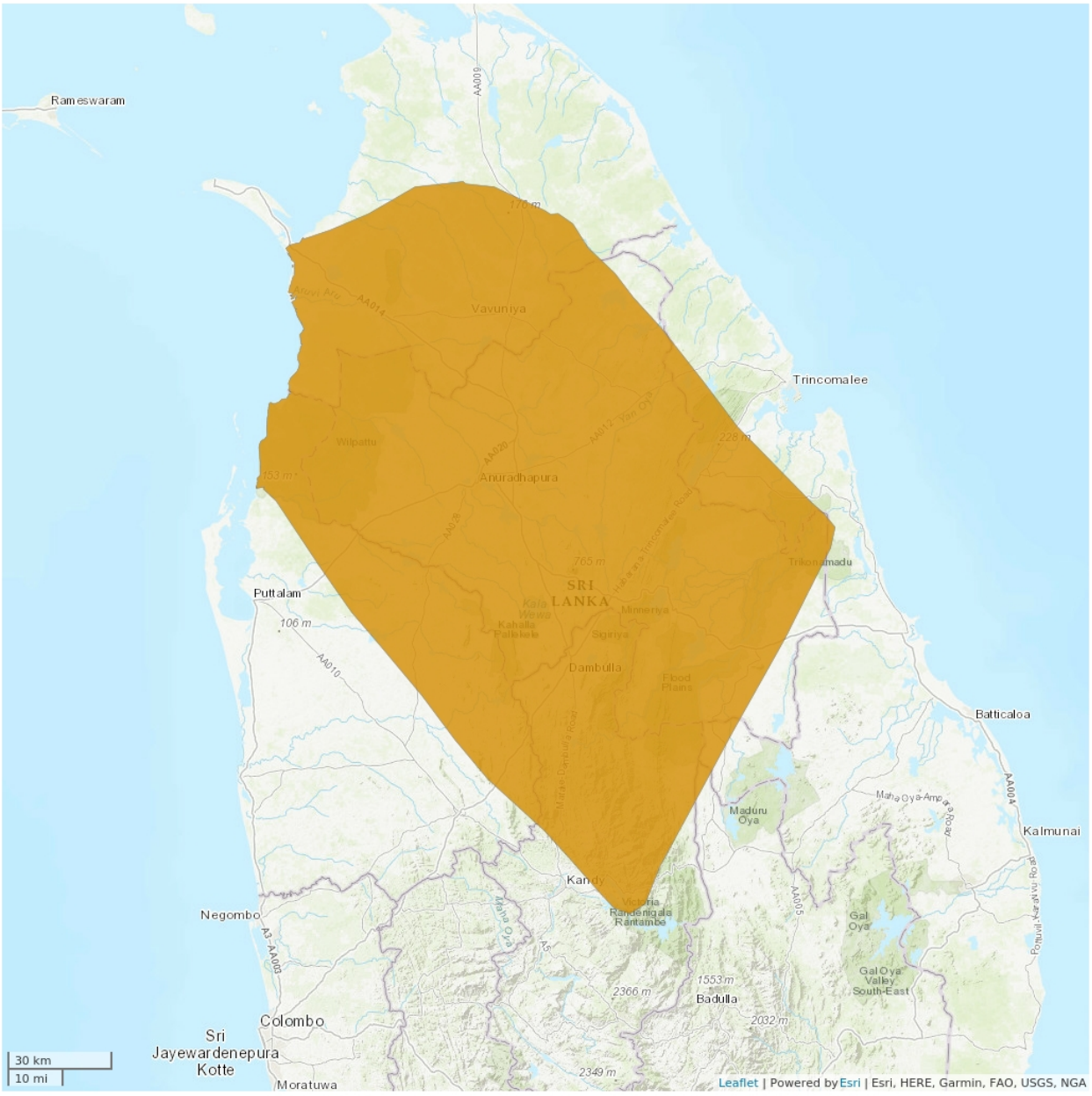
# Distribution Map




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.

**Current Population Trend:** Decreasing

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

*Semnopithecus vetulus philbricki* occupies dry evergreen and semi-deciduous forest, of the dry zone (Rudran 1970, 1973a,b; Vandercone *et al.* 2012). Depending on the locality this subspecies exploits 53% to 62% leaves, 25% to 26% fruits and 11% to 17% blossoms (Rudran 1970, 2012; Vandercone *et al*. 2012). Mating often occurs from October to February and results in a birth peak between May to August (Rudran 1970, 1973a, 2012) and an inter-birth interval of 24 months. Group size averages 8.4 individuals/group (range 3-14). Home range: 0.9-8.6ha. This subspecies is sympatric with *Semnopithecus priam thersites.*

**Systems:** Terrestrial

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

The subspecies does not appear in trade.

## Threats (see Appendix for additional information)

*Semnopithecus vetulus nestor* habitat is undergoing extensive deforestation to satisfy the needs of a rapidly increasing human population around the country's Capital, Colombo is the most serious threat to the survival of this subspecies. In these fragmented human dominated landscapes, death due to electrocution, collision with speeding vehicles and attacks by village dogs also pose serious threats to survival (Rudran 2007). Additionally, habitat fragmentation has resulted in local extinction within the range of this taxon (Rudran 2007, Parker *et al*. 2008).

## 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 (Rajapakse 2010, Yatwara 2011). The decree also stipulated the use of native species to increase forest cover. Hence, an excellent opportunity arose to study the food habits of *Semnopithecus vetulus nestor*, so that its food plants could be used to reforest degraded habitats (Rudran *et al*. 2013).

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


*https://dx.doi.org/10.2305/IUCN.UK.2020-2.RLTS.T39845A17988332.en*

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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## Disclaimer

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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 |

## 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<br>1. Ecosystem stresses -> 1.2. Ecosystem degradation<br>2. Species Stresses -> 2.2. Species disturbance | | |
| 2. Agriculture & aquaculture -> 2.1. Annual & perennial non-timber crops -> 2.1.2. Small-holder farming | Ongoing | Majority (50-90%) | Slow, significant declines | Medium impact: 6 |
| | Stresses: | 1. Ecosystem stresses -> 1.1. Ecosystem conversion<br>1. Ecosystem stresses -> 1.2. Ecosystem degradation<br>2. Species Stresses -> 2.2. Species disturbance | | |
| 2. Agriculture & aquaculture -> 2.1. Annual & perennial non-timber crops -> 2.1.3. Agro-industry farming | Ongoing | Majority (50-90%) | Slow, significant declines | Medium impact: 6 |
| | Stresses: | 1. Ecosystem stresses -> 1.1. Ecosystem conversion<br>1. Ecosystem stresses -> 1.2. Ecosystem degradation<br>2. Species Stresses -> 2.1. Species mortality<br>2. Species Stresses -> 2.2. Species disturbance | | |
| 2. Agriculture & aquaculture -> 2.2. Wood & pulp plantations -> 2.2.1. Small-holder plantations | Ongoing | Majority (50-90%) | Slow, significant declines | Medium impact: 6 |
| | Stresses: | 1. Ecosystem stresses -> 1.1. Ecosystem conversion<br>1. Ecosystem stresses -> 1.2. Ecosystem degradation<br>2. Species Stresses -> 2.1. Species mortality<br>2. Species Stresses -> 2.2. Species disturbance | | |
| 2. Agriculture & aquaculture -> 2.2. Wood & pulp plantations -> 2.2.2. Agro-industry plantations | Ongoing | Minority (50%) | Slow, significant declines | Low impact: 5 |
| | Stresses: | 1. Ecosystem stresses -> 1.1. Ecosystem conversion<br>1. Ecosystem stresses -> 1.2. Ecosystem degradation<br>2. Species Stresses -> 2.1. Species mortality<br>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<br>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 | Majority (50-90%) | Slow, significant declines | Medium impact: 6 |
| | Stresses: | 1. Ecosystem stresses -> 1.2. Ecosystem degradation<br>2. Species Stresses -> 2.2. Species disturbance | | |
| 5. Biological resource use -> 5.3. Logging & wood harvesting -> 5.3.2. Intentional use: (large scale) [harvest] | Ongoing | Minority (50%) | Slow, significant declines | Low impact: 5 |
| | Stresses: | 1. Ecosystem stresses -> 1.1. Ecosystem conversion<br>1. Ecosystem stresses -> 1.2. Ecosystem degradation<br>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 |
| 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 |

| Conservation Action Needed |
|---|
| 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 -> 1.5. 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 |
|---|
| Estimated area of occupancy (AOO) ($km^2$): 3300 |
| Continuing decline in area of occupancy (AOO): Yes |
| Extreme fluctuations in area of occupancy (AOO): Unknown |
| Estimated extent of occurrence (EOO) ($km^2$): 20324 |
| Continuing decline in extent of occurrence (EOO): Unknown |
| Extreme fluctuations in extent of occurrence (EOO): Unknown |
| Number of Locations: 20-40 |
| Continuing decline in number of locations: Yes |
| Extreme fluctuations in the number of locations: Unknown |
| Lower elevation limit (m): 50 |
| Upper elevation limit (m): 800 |

| |
|---|
| **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 |

# The IUCN Red List Partnership


The IUCN Red List of Threatened Species™ is produced and managed by the IUCN Global Species Programme, the IUCN Species Survival Commission (SSC) and The IUCN Red List Partnership.

The IUCN Red List Partners are: Arizona State University; BirdLife International; Botanic Gardens Conservation International; Conservation International; NatureServe; Royal Botanic Gardens, Kew; Sapienza University of Rome; Texas A&M University; and Zoological Society of London.