# CONSERVATION ASSESSMENT AND MANAGEMENT PLAN WORKSHOP FOR AMPHIBIANS AND REPTILES OF SRI LANKA

# REPORT

The South Asian region consists of seven countries (Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan and Sri Lanka) and hosts a total of 632 reptiles (Das, 1994) and 300+ amphibian species. These constitute a tenth of the world's herpetofauna described until date. Sri Lanka and Maldives are two island nations in the region, the former of which is very rich in herpetofauna. The "tear drop" island is as big as an average state in India, but is richer in biodiversity than many states in India. Sri Lanka was included in the revised Hot Spots of the world along with the Western Ghats of India by Mittermeier *et al.* (1998). Recent field studies in Sri Lanka indicate that the country is a true Hot Spot for herpetofauna. Recent discoveries potentially increase the amphibian fauna from 52 species to more than 200 species when officially described (Pethiyagoda & Manamendra-Arachchi, 1998). The current published descriptions of herpetofauna indicates that Sri Lanka has a total of 54 taxa of amphibians and 176 taxa of reptiles as formally described.

A Conservation Assessment and Management Plan workshop was planned in the early part of 1998 with the objective of assessing the conservation status of every described reptile and amphibian of Sri Lanka. The Amphibian and Reptile Research Organisation of Sri Lanka (ARROS), Conservation Breeding Specialist Group, Sri Lanka and the University of Peradeniya organised and hosted the five-day workshop at the University of Peradeniya campus from 26 to 30 November 1998. The workshop was attended by more than 35 herpetologists from Sri Lanka, at the end of which 173 species and subspecies (taxa) of herpetofauna were assessed according to the IUCN Red List Criteria of 1994. Conservation research and management recommendations were also made species-wise after the assessments were completed. The workshop was facilitated and coordinated by the Conservation Breeding Specialist Group, India (CBSG India) and supported financially by the Philadelphia Zoo and the Columbus Zoo Conservation Fund (CZCF). The South Asian Reptile and Amphibian Specialist Group (SARASG), SSC, IUCN, Declining Amphibian Populations Task Force (DAPTF), Wildlife Heritage Trust of Sri Lanka and the Friends of Rare Amphibians of the Western Ghats (FRAWG) were collaborators of the workshop.

# The Conservation Assessment and Management Plan Process

(see details of the CAMP process in Ellis & Seal, 1997)

The CAMP process workshop is intensive and interactive and facilitates objective and systematic prioritization of research and management actions needed for species conservation, both *in situ* and *ex situ*. Workshop participants assess the risks to a group of taxa and formulate recommendations for action using a Taxon Data Sheet. The Taxon Data Sheet serves as a compendium of the data on the status of population and its habitat in the wild as well as recommendations for intensive conservation action. They also provide documentation of reasoning behind recommendations, as well as details of other species-pertinent information.

The CAMP process is one of prioritization, assembling 10 to 40 experts (e.g., wildlife managers, biologists, representatives of the academic community or private sector, researchers, government officials and captive managers) to evaluate threat status of all taxa in a broad taxonomic group (e.g., Reptiles), geographical region or country (e.g., Sri Lanka).

Information gathering is focused on the most recent available data, estimates, informed guesses and identification of needed knowledge that allow:

- 1. assignment to IUCN Category of Threat;
- 2. broad-based management recommendations;
- 3. specific conservation-oriented research recommendations useful to generate the knowledge needed to develop more comprehensive management and recovery programs *in situ* and/or *ex situ*.

The results of the initial CAMP workshops are reviewed:

- 1. by distribution of a preliminary draft to workshop participants who volunteer to serve as preliminary editors;
- 2. by distribution to all workshop participants.

CAMP workshops are part of a continuing and evolving process of developing conservation and recovery plans for the taxa involved. The CAMP review process allows extraction of information from experts worldwide. In many cases, follow-up workshops are required to consider particular issues in greater depth or on a regional basis. Moreover, some

form of follow-up will always be necessary to monitor the implementation and effectiveness of the recommendations resulting from the workshop.

The CAMP process is unique in its ability to prioritize intensive management action for species conservation in the wild and in captivity, if required. CAMP documents can be used as guidelines by national and regional wildlife agencies as well as regional captive breeding programs as they develop their own action plans. It is the intent that the CAMP process will ultimately contribute to the wise worldwide use of limited resources for species conservation.

# The IUCN Red List Criteria

The CAMP workshop process employs the IUCN Red List Criteria as a tool in assessing species status in a group. The IUCN Red List Criteria were revised in 1994 and ratified by the IUCN for use in threat categorisation at the global level (IUCN, 1996). The structure of the categories includes extinct, threatened, non-threatened, data deficient and not evaluated divisions; the first three divisions are further split into subcategories (Figure 1). Since 1991, the old Red Data Book categories have undergone successive changes to accommodate general guidelines for across taxonomic groups. To make application of the Criteria more universal, numerical values were attached to the different criteria for threat categories. The final version (1994) also includes a purely quantitative criterion, which involves computation of the probability of extinction (such as in a population viability analysis) over a time frame for a taxon. The 1994 version of the Red List threatened categories are derived through a set of 5 criteria based on which the threatened category is assigned. The term "threatened" according to the 1994 IUCN categories means Critically Endangered, Endangered or Vulnerable. The 5 criteria for threat categories (IUCN, 1994) are

- (A) Population reduction
- (B) Restricted distribution
- (C) Population restriction and fluctuation
- (D) Restricted population
- (E) Probability of extinction

For a taxon to be categorised as threatened, it needs to qualify for any one of the above 5 criteria only. Not qualifying for any of the above criteria could mean that a taxon is either not threatened or is data deficient.

The IUCN categories are best applicable only at the Global level. In this workshop, the categories were applied at the national level since Sri Lanka is an island and its herpetofauna are isolated from those of the Indian mainland. However, for the sake of clarity, those that are not endemic to Sri Lanka are to be considered as assessed at the National level and the indication for this is "/N" after the IUCN Category.

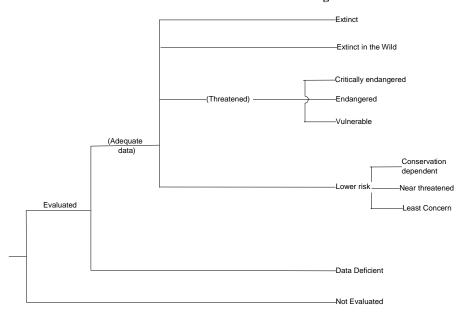


Figure 1. The structure of the IUCN Categories

# **Results and Discussion**

The Red List of Threatened Animals by IUCN (1996) lists no amphibian and only one reptile as being threatened in Sri Lanka. If that were true then concern about Sri Lanka's herpetofauna would not be necessary. However, the CAMP results indicate that quite a few herpetofauna are threatened according to the IUCN Red List Criteria. Of the 173 amphibians and reptiles assessed at this workshop, 98 taxa were found threatened, i.e. Vulnerable, Endangered or Critically Endangered, which means 39 per cent of all amphibians and 72 per cent of endemic reptiles of Sri Lanka described until now are threatened with extinction. While all the 54 amphibians were assessed, only 119 of the 176 reptiles were assessed at the CAMP. These dramatic figures were not reflected in the 1996 or subsequent Red Lists compiled by the IUCN because they had not been evaluated; the present assessment is the first attempt to evaluate every taxon according to the 1994 IUCN Criteria. IUCN Sri Lanka has assessed the country's herpetofauna using a different set of criteria, which was developed incountry. Sri Lanka is the second country to conduct such a detailed assessment all of its amphibians and reptiles, the first being India. The South Asian Reptile and Amphibian Specialist Group of the Species Survival Commission, IUCN, will use the results from both the countries in drawing up an Action Plan for South Asian herpetofauna.

#### **Amphibians**

Sri Lanka has a rich diversity of amphibians, a large percentage of which are endemic to the Island. Thirty-seven per cent (20 taxa) have con-specifics in India, while 63% (34 taxa) are endemic to the Island. This figure does not reflect an accurate number of taxa for the country however. A field survey project on amphibian identification and taxonomy is in the process of describing more than ca. 200 new species, which are confined to a small area in Horton Plains and other montane forests and lowland rain forests (Pethiyagoda & Manamendra-Arachchi, 1998). In future Sri Lanka may be recognised as the richest in amphibian diversity anywhere in the world! The current list of amphibians described from Sri Lanka include 16 taxa belonging to Family Ranidae, 18 to Family Rhacophoridae, eight to Family Bufonidae, nine to Family Microhylidae, and three to Family Ichthyophiidae. The unidentified taxa are mostly of the Family Rhacophoridae (tree frogs) (Pethiyagoda & Manamendra-Arachchi, 1998). As on the day of the workshop, 54 species of amphibians had been officially described and they were assessed by the group (Table 1). Two species of amphibians were de-listed from the original list of 56 Sri Lankan amphibians, the groups having agreed that they are no longer valid. The geographical location of these species was wrongly attributed as occurring in Sri Lanka, which was revealed as a mistake by recent studies. A look at their status indicates that 21 taxa (19 endemics and 2 non-endemics) of amphibians in Sri Lanka are threatened, i.e. Vulnerable (VU), Endangered (EN) or Critically Endangered (CR). The figure also indicates the proportion of threatened taxa that are endemic or non-endemic.

Name	Family	Category	Criteria
Adenomus dasi Manamendra-Arachchi & Pethiyagoda 1998	Bufonidae	VU	D2
Adenomus kandianus (Günther, 1872)	Bufonidae	DD	
Adenomus kelaartii (Günther, 1858 (publ. 1859))	Bufonidae	VU	A1c
Bufo atukoralei Bogert and Senanayake, 1966	Bufonidae	LR-nt	
Bufo fergusonii Boulenger, 1892	Bufonidae	LR-nt	
Bufo kotagamai Fernando, Dayawansa & Siriwardhane 1994	Bufonidae	EN	B1+2c
Bufo melanostictus Schneider, 1799	Bufonidae	LR-lc	
Bufo noellerti Manamendra-Arachchi & Pethiyagoda, 1998	Bufonidae	LR-nt	
Kaloula taprobanica Parker, 1934	Microhylidae	LR-lc	
Microhyla karunaratnei Fernando & Siriwarhane, 1996	Microhylidae	EN	B1+2bc
Microhyla ornata (Duméril & Bibron, 1841)	Microhylidae	LR-lc	
Microhyla rubra Jerdon, 1854	Microhylidae	LR-lc	
Microhyla zeylanica Parker & Hill, 1949	Microhylidae	EN	B1+2bc
Ramanella obscura (Günther, 1864)	Microhylidae	LR-lc	
Ramanella palmata Parker, 1934	Microhylidae	VU	A1c+2c
Ramanella variegata (Stoliczka, 1872)	Microhylidae	LR-lc	
Uperodon systoma (Schneider, 1799)	Microhylidae	LR-lc	
Euphlyctis cyanophlyctis Schneider, 1799	Ranidae	LR-lc	
Euphlyctis hexadactylus (Lesson, 1834)	Ranidae	LR-nt	
Hoplobatrachus crassus (Jerdon, 1853)	Ranidae	LR-lc	
Hoplobatrachus tigerinus Daudin, 1802	Ranidae	DD	
Limnonectes corrugatus Peters, 1863	Ranidae	VU	A1c+2c
Limnonectes greenii Boulenger, 1904	Ranidae	EN	B1+2c
Limnonectes kirtisinghei Manamendra-Arachchi & Gabadage, 1996	Ranidae	LR-nt	
Limnonectes limnocharis Gravenhorst, 1829	Ranidae	LR-nt	
Nannophrys ceylonensis Günther, 1868	Ranidae	VU	A1c+2c; B1+2bc

# Table 1. Checklist of Sri Lankan amphibians assessed at the workshop

Name	Family	Category	Criteria
Nannophrys guentheri Boulenger, 1882	Ranidae	DD	
Nannophrys marmorata Kirtisinghe, 1946	Ranidae	EN	B1+2bc
Rana aurantiaca Boulenger, 1904	Ranidae	LR-nt	
Rana gracilis Gravenhorst, 1829	Ranidae	LR-lc	
Rana temporalis (Günther, 1864)	Ranidae	LR-lc	
Tomopterna breviceps (Schneider, 1799)	Ranidae	LR-nt	
Tomopterna rolandae (Dubois, 1983)	Ranidae	LR-lc	
Philautus eximius Shreve, 1940	Rhacophoridae	EN	B1+2bc
Philautus femoralis (Günther, 1864)	Rhacophoridae	VU	B1+2bc
Philautus hypomelas (Günther, 1876)	Rhacophoridae	EN	B1+2c
Philautus leucorhinus (Lichtenstein & Martens, 1856)	Rhacophoridae	LR-nt	
Philautus nasutus Günther, 1868	Rhacophoridae	EN	B1+2c
Philautus stictomerus Günther, 1875	Rhacophoridae	DD	
Philautus variabilis (Günther, 1858)	Rhacophoridae	LR-nt	
Polypedates cruciger Blyth, 1852	Rhacophoridae	LR-lc	
Polypedates eques Günther, 1858	Rhacophoridae	LR-nt	
Polypedates longinasus Ahl, 1931	Rhacophoridae	VU	B1+2c
Polypedates maculatus (Peters, 1871)	Rhacophoridae	LR-lc	
Pseudophilautus temporalis (Günther, 1864)	Rhacophoridae	EN	B1+2c
Rhacophorus cavirostris (Günther, 1868)	Rhacophoridae	EN	B1+2bc
Rhacophorus fergusonianus Ahl.1927	Rhacophoridae	VU	B1+2bc
Rhacophorus macropus Günther, 1868	Rhacophoridae	VU	B1+2c
Rhacophorus microtympanum (Günther, 1858)	Rhacophoridae	VU	B1+2c
Rhacophorus reticulatus Günther, 1864	Rhacophoridae	EN	B1+2c
Theloderma schmarda (Kelaart, 1854)	Rhacophoridae	VU	A1c+2c; B1+2c
Ichthyophis glutinosus (Linnaeus, 1758)	Ichthyophiidae	LR-lc	
Ichthyophis orthoplicatus (Taylor, 1965)	Ichthyophiidae	DD	
Ichthyophis pseudangularis (Taylor, 1965)	Ichthyophiidae	LR-lc	

The threats to Sri Lankan amphibians are the same as found in rest of South Asia – habitat loss, fragmentation, human interference, pollution, pesticides, etc (Table 2, Figure 3). Table 2 indicates the major threats contributing to the decline of amphibian taxa in Sri Lanka -- total of 19 taxa (56%) are threatened endemics and 2 taxa (10%) are threatened non-endemics. One of the main reasons for amphibian declines is the very obvious loss of habitat and human interference, but in recent years threats from other man-related activities are impacting amphibian populations. Pesticides, pollution, man-made fires, agricultural mechanisation are some of those threats. Changing global climate patterns is also listed as a threat to amphibian populations in Sri Lanka. The fact that Sri Lanka is such a small country accounts for its considerably restricted amphibian population. Threats to habitat have resulted in shrinking of small distributional ranges, thereby resulting in many amphibians being threatened according to the IUCN Criteria.

	Table 2.	
Threats to	amphibian fauna	of Sri Lanka.

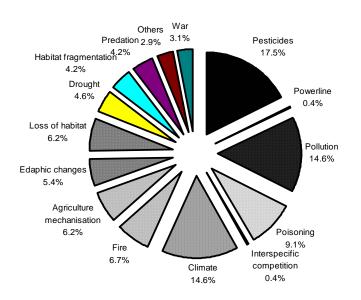
Name	Threat	Category
Adenomus dasi	Unknown	VU
Adenomus kandianus	Unknown	DD
Adenomus kelaartii	Loss of habitat, Habitat fragmentation, Pesticides	VU
Bufo atukoralei	Pesticides, Pollution, Interspecific competition, Fire, Road kills	LR-nt
Bufo fergusonii	Loss of habitat, Poisoning, Pollution, War, Trampling by military vehicle, Fire, Road kills	LR-nt
Bufo kotagamai	Loss of habitat, Habitat fragmentation, Pesticides, Human interference	EN
Bufo melanostictus	Pesticides, Road kills, Predation by reptiles, laboratory use	LR-lc
Bufo noellerti	Deforestation	LR-nt
Euphlyctis cyanophlyctis	Pesticides, Poisoning, Agricultural mechanisation, Drought, Water pollution	LR-lc
Euphlyctis hexadactylus	Pesticides, Poisoning, Water Pollution, War, Agricultural mechanisation	LR-nt
Hoplobatrachus crassus	Pesticides, Poisoning, Pollution, Agricultural mechanisation	LR-lc
Hoplobatrachus tigerinus	Pesticides, Poisoning, Pollution; War	DD
Ichthyophis glutinosus	Pesticides, Pollution, Edaphic changes, Predation, Road kills, Agriculture mechanisation	LR-lc
Ichthyophis orthoplicatus	Pesticides, Pollution, Edaphic changes, Predation, Fire, Agriculture	DD
Ichthyophis pseudangularis	Pesticides, Pollution, Edaphic changes, Fire, Agriculture mechansation	LR-lc
Kaloula taprobanica	Pesticides, Poisoning, Pollution, Edaphic changes, Mechanisations in paddy plowing, urbanization	LR-lc
Limnonectes corrugatus	Pesticides, Poisoning, Pollution, Climate, Drought, Agricultural mechanisation	VU
Limnonectes greenii	Pesticides, Pollution, Climate, Drought, Predation by exotics	EN
Limnonectes kirtisinghei	Habitat fragmentation, Pesticides, Pollution, Drought, Fire, Agricultural	LR-nt
Limnonectes limnocharis	Pesticides, Poisoning, Agricultural mechanisation	LR-nt

Name	Threat	Category
Microhyla karunaratnei	Loss of habitat; Habitat fragmentation; Climate, Edaphic changes; Human interference	EN
Microhyla ornata	Loss of habitat; pesticides, poisoning, pollution, edaphic changes, predation by exotics, agricultural practices such as mechanisation.	LR-lc
Microhyla rubra	Pesticides, Poisoning, Pollution, Edaphic changes, Agricultural mechanisations, Human interference	LR-lc
Microhyla zeylanica	Loss of habitat; Habitat fragmentation; Pesticides, Poisoning, Pollution, Climate,	EN
Nannophrys ceylonensis	Loss of habitat, Habitat fragmentation, Climate, Drought	VU
Nannophrys guentheri	Unknown	DD
Nannophrys marmorata	Loss of habitat, Climate, Drought, Fire, Human interference	EN
Philautus eximius	Pesticides, Climate, Habitat loss (Tea plantations)	EN
Philautus femoralis	Pesticides, Agricultural practices, Acid rain	VU
Philautus hypomelas	Pesticides, Pollution, Climate, Drought, Fire, Acid rain	EN
Philautus leucorhinus	Pesticides, Pollution, Climate, Fire, Forest die-back	LR-nt
Philautus nasutus	Loss of habitat, Habitat fragmentation, Pesticides, Power lines, Fire, Practice in home gardens	EN
Philautus stictomerus	Climate	DD
Philautus temporalis	Pollution, Acid rain, Climate	EN
Philautus variabilis	Pesticides, Pollution, Fire, Acid rain	LR-nt
Polypedates cruciger	Pesticides, Pollution, Predation by exotics, Eggs killed by people, Egg parasitism	LR-lc
Polypedates eques	Poisoning, Pesticides	LR-nt
Polypedates longinasus	Pesticidies, Poisoning, Pollution, Climate	VU
Polypedates maculatus	Pesticides, Poisoning, Pollution, Predation by exotics	LR-lc
Ramanella obscura	Pesticides; Poisoning; Pollution; Edaphic changes; Predation; Predation by exotics;	LR-lc
Ramanella palmata	Loss of habitat, Pesticides, Poisoning, Pollution, Climate, Edaphic changes, Fire, Acid rain	VU
Ramanella variegata	Pesticides, Poisoning, Pollution, War, Edaphic changes, Fire, Road kills, Human interference	LR-lc
Rana aurantiaca	Pesticides, Poisoning, Pollution, filling up of marshlands, Climate changes	LR-nt
Rana gracilis	Pesticidies, Poisoning, Pollution, Predation, attacks by other animals	LR-lc
Rana temporalis	Pesticides, Poisoning, Pollution, Fire	LR-lc
Rhacophorus cavirostris	Loss of habitat, Habitat fragmentation, Pesticides, Pollution, Climate, Drought, Acid rain, Forest die-back	EN
Rhacophorus fergusonianus	Pesticides, Poisoning, Pollution, Climate, Die-back	VU
Rhacophorus macropus	Pollution, Forest die-back, Acid rain	VU
Rhacophorus	Habitat fragmentation, Pesticides, Poisoning, Pollution, Trampling, Fire, Drought, Acid	VU
microtympanum	rain, Forest die-back	
Rhacophorus reticulatus	Pollution, Trampling, Climate, Die-back, Acid rain	EN
Theloderma schmarda	Habitat fragmentation, Pesticides, Pollution, Drought, Acid rain, Die-back	VU
Tomopterna breviceps	Pesticides, War, Edaphic changes, Fire	LR-nt
Tomopterna rolandae	Pesticides, Edaphic changes, Drought, Fire	LR-lc
Uperodon systoma	Pesticides, Climate, Edaphic changes, Habitat disturbance due to sand removal	LR-lc

The amphibian populations have not been studied extensively and there are only a few monitoring efforts to determine population fluctuations or reductions. Most of the threatened taxa are determined more by their restricted distribution (Criterion B) since they either have a restricted Extent of Occurrence of less than 20,000 sq.km. or restricted Area of Occupancy of less than 2,000 sq.km. Information is also available on the number of locations or sub-populations to which these taxa are restricted, along with known threats acting on the habitat and population, which together determined their threat status. Of the 21 amphibians threatened, 18 qualify for Criterion B (Figure 2).

# Figure 2. Criteria used for assessing amphibian taxa of Sri Lanka.





#### Figure 3. Threats affecting amphibian taxa.

The guidelines for applying IUCN Red List Criteria suggest the importance of data quality and uncertainty regarding information during assessment. The quality of data determines the quality of assessment. More research conducted on a species and its habitat, ecology, behaviour, population structure and dynamics, demography, threats, etc., the better the assessment. However, such studies have not been conducted consistently for any taxa. But the Criteria are so made as to allow for inferences from some information of the species in the wild. The guidelines for applying the IUCN Criteria also supports the validity of inference based on habitat, distribution, threats and indirect evidence but warns against making assessments for species which lack any information at all. The assessments for all amphibians were made keeping in mind the level of confidence in the available information.

# **Reptiles**

Although Sri Lanka has 175 species and subspecies of reptiles, only 119 taxa were assessed at the workshop (Table 3) due to lack of time as well as lack of expertise for some families of reptiles. Initially, it was agreed that all Sri Lankan endemics only would be assessed, but when this task was completed well ahead of time, some non-endemic species were also assessed. The bias in assessment of the non-endemic taxa in this workshop is based on the level of expertise available. A look at endemic reptiles (97 taxa) assessed indicates that 72 per cent of the island specialists are threatened to some degree. Of the 22 non-endemic reptiles assessed at the workshop, 13 are threatened; the assessments are indicated in table 3. Figure 7 show status of endemic reptiles assessed in Sri Lanka; the trends for the assessed non-endemics should not be taken as that representing the status of all non-endemic reptiles. Fifty-six non-endemic reptiles were not evaluated.

Table 3.
Checklist of Sri Lankan reptiles assessed at the workshop.

Scientific name	Family	Category	Criteria
Calotes calotes (Linnaeus, 1758)	Agamidae	LR-nt	
Calotes ceylonensis Muller, 1887	Agamidae	LR-nt	
Calotes liocephalus Günther, 1872	Agamidae	EN	B1+2bc
Calotes liolepis Boulenger, 1885.	Agamidae	VU	A1c; B1+2bc
Calotes nigrilabris Peters, 1860	Agamidae	VU	B1+2abc
Calotes versicolor versicolor (Daudin, 1802)	Agamidae	LR-nt	
Ceratophora aspera Günther, 1864	Agamidae	EN	B1+ 2abcd
Ceratophora erdeleni Pethiyagoda & Manamendra-Arachchi, 1998.	Agamidae	CR	B1+2bc
Ceratophora karu Pethiyagoda & Manamendra-Arachchi, 1998	Agamidae	CR	B1+2bc

Scientific name	Family	Category	Criteria
Ceratophora stoddartii Gray, 1834	Agamidae	VU	B1+2abcd
Ceratophora tennentii Günther, 1861	Agamidae	EN	B1+ 2abcd
Cophotis ceylanica Peters, 1861	Agamidae	EN	A1c+2c
Lyriocephalus scutatus (Linnaeus, 1758)	Agamidae	VU	A1c+2c
Otocryptis wiegmanni Wagler, 1830.	Agamidae	LR-nt	
Sitana ponticeriana Cuvier, 1844 Melanchelys trijuga parkeri (Deraniyagala, 1939)	Agamidae Bataguridae	VU VU	A1c+2c A1c
Eryx conica brevis (Deraniyagala, 1959)	Boidae	LR-nt	
Chamaeleo zeylanicus Laurenti, 1768	Chameleonidae	EN	B1+2bc
Caretta caretta (Linnaeus, 1758)	Chelonidae	EN	A1cd
Chelonia mydas (Linnaeus, 1758)	Cheloniidae	EN	A1cd
Eretmochelys imbricata (Linneaus 1766)	Cheloniidae	EN	A1cd
Lepidochelys olivacea (Eschschottz, 1829)	Cheloniidae	EN	A1cd
Aspidura brachyorrhos (Boie, 1758).	Colubridae	VU	A2c; B1+2bc
Aspidura copei Günther, 1864	Colubridae Colubridae	EN CR	B1+2bc B1+2bc
Aspidura deraniyagalae Gans & Fetcho, 1982 Aspidura drummondhayi Boulenger, 1904.	Colubridae	EN	B1+2bc B1+2bc
Aspidura guentheri Ferguson, 1876	Colubridae	VU	B1+2bc
Aspidura trachyprocta Cope 1860	Colubridae	VU	A2c
Belanophis ceylonensis (Günther, 1858)	Colubridae	LR-nt	
Boiga barnesii (Günther, 1869)	Colubridae	EN	B1+2bc
Calliophis melanurus sinhaleyus Deraniyagala, 1951	Colubridae	VU	A2c
Cercaspis carinata (Kuhl, 1820)	Colubridae	VU	B1+2bc
Chrysopelea ornata sinhaleya Deraniyagala, 1945	Colubridae	VU	A1c; B1+2bc
Chrysopelea taprobanica Smith, 1943	Colubridae	VU	A2c
Dendrelaphis oliveri (Taylor, 1950)	Colubridae	CR	B1+2bc
Haplocercus ceylonensis Günther, 1858 Lycodon osmanhilli Taylor 1950	Colubridae Colubridae	VU LR-lc	A2c; B1+2bc
Lycodon striatus sinhaleyus Deraniyagala, 1955	Colubridae	VU	A2c; B1+2bc
Macropisthodon plumbicolor palabariya Deraniyagala, 1955	Colubridae	VU	A2c; B1+2bc
Oligodon calamarius (Linnaeus, 1758)	Colubridae	VU	A2c; B1+2bc
Oligodon sublineatus Duméril, Bibron and Duméril, 1854	Colubridae	LR-nt	
Oligodon taeniolatus ceylonicus Wall 1921	Colubridae	VU	A2c; B1+2bc
Ptyas mucosus maximus (Deraniyagala, 1955)	Colubridae	LR-nt	
Xenochrophis asperrinus (Boulenger, 1891)	Colubridae	LR-nt	
Crocodylus palustris (Lesson, 1838)	Crocodylidae	VU	A1acd; B1+2c
Crocodylus porosus Schneider, 1801 Dermochelys coriacea (Vandelli, 1761)	Crocodylidae Dermochelyidae	VU EN	A1acd; B1+2c A1cd
Bungarus ceylonicus ceylonicus Günther, 1864	Elaphidae	VU	A1c+2c
Bungarus ceylonicus karawala (Deraniyagala, 1955)	Elaphidae	VU	A1c+2c, B1+2bc
Calodactylodes illingworthi Deraniyagala. 1953	Gekkonidae	EN	B1+2abc
Cnemaspis jerdonii sculpensis (Ferguson, 1879)	Gekkonidae	VU	B1+2bc
Cnemaspis kandianus (Kelaart, 1852)	Gekkonidae	VU	A1c
Cnemaspis podihuna Deraniyagala. 1944	Gekkonidae	CR	B1+2bc
Cnemaspis tropidogaster (Boulenger, 1885)	Gekkonidae	VU	B1+2bc
Cyrotodactylus frenatus (Günther, 1864) Geckoella triedrus (Günther, 1864)	Gekkonidae	VU VU	A2c; B1+2bc
	Gekkonidae	1.5	A1c; B1+2bc
Geckoella yakhuna (Deraniyagala. 1945) Hemidactylus brookii parvimaculatus Deraniyagala, 1953	Gekkonidae Gekkonidae	LR-nt LR-lc	
Hemidactylus depressus Gray, 1842	Gekkonidae	LR-nt	
Hemidactylus maculatus hunae Deraniyagala, 1937	Gekkonidae	EN	B1+2bc
Hemidactylus triedrus lankae Deraniyagala, 1953	Gekkonidae	LR-nt	
Leioselasma cyanocinctus (Daudin, 1803)	Hydrophiidae	LR-nt	
Microcephalophis gracilis (Shaw 1802)	Hydrophiidae	LR-nt	
Pleamis platurus (Linnaeus 1766)	Hydrophiidae	LR-nt	
Praescutata viperinus (Schmidt 1852) Ophisops leschenaultii lankae (Deraniyagala, 1953).	Hydrophiidae Lacertidae	LR-nt LR-nt	
Ophisops minor minor (Deraniyagala, 1953).	Lacertidae	VU	B1+2c
Chalcidoseps thwaitesii (Günther, 1872).	Scincidae	EN	B1+2bc
Dasia halianus (Haly & Nevil, 1887)	Scincidae	LR-NT	
Lankascincus deignani (Taylor, 1950)	Scincidae	EN	B1+2bc
Lankascincus deraniyagalae Greer, 1991.	Scincidae	EN	B1+2bc
Lankascincus fallax (Peters, 1860).	Scincidae	LR-nt	
Lankascincus gansi Greer, 1991.	Scincidae	VU	A1c
Lankascincus taprobanensis (Kelaart, 1854).	Scincidae	EN	B1+2bc
Lankascincus taylori Greer, 1991.	Scincidae	VU	B1+2bc
Mabuya bibronii (Gray, 1833) Mabuya carinata lankae Deraniyagala, 1953.	Scincidae Scincidae	DD LR-nt	
Mabuya carinata farikae Defaniyagala, 1955. Mabuya floweri Taylor, 1950.	Scincidae	DD	

Scientific name	Family	Category	Criteria
Nessia bipes Smith, 1935.	Scincidae	EN	B1, 2bc
Nessia burtonii Gray, 1839.	Scincidae	LR-nt	
Nessia deraniyagalai Taylor, 1950	Scincidae	CR	B1+2bc
Nessia didactylus (Deraniyagala, 1934).	Scincidae	CR	B1+2c
Nessia hickanala Deraniyagala, 1940.	Scincidae	EN	B1+2bc
Nessia layardi (Kelaart, 1853).	Scincidae	CR	B1+2c
Nessia monodactylus (Gray, 1839)	Scincidae	VU	B1+2bc
Nessia sarasinorum (Muller, 1889).	Scincidae	LR-nt	
Riopa singha (Taylor, 1950).	Scincidae	DD	
Sphenomophus dorsicatenatus Deraniyagala, 1953.	Scincidae	VU	A2c
Sphenomophus dussumieri Duméril and Bibron, 1939	Scincidae	DD	
Sphenomorphus megalops (Annandale, 1906).	Scincidae	DD	
Sphenomorphus rufogulus Taylor, 1950.	Scincidae	VU	D2
Sphenomorphus striatopunctatus (Ahl, 1925)	Scincidae	EN	B1+2bc
Geochelone elegans (Schoepff, 1795)	Testudinidae	VU	A1cd
Lissemys punctata punctata (Bonnaterre, 1789)	Trionychidae	VU	A1c
Typhlops ceylonicus Smith 1943	Typhlopidae	CR	B1+2bc
Typhlops lankaensis Taylor 1947	Typhlopidae	CR	B1+2bc
Typhlops mirus Jan, 1860	Typhlopidae	EN	B1+2bc
Typhlops tenebrarum Taylor 1947	Typhlopidae	CR	B1+2c
Typhlops veddae Taylor 1947	Typhlopidae	CR	B1+2c
Typhlops violaceus Taylor, 1947	Typhlopidae	CR	B1+2c
Cylindrophis maculata (Linnaeus, 1758)	Uropeltidae	LR-nt	
Pseudotyphlops philippinus Schlegel, 1839	Uropeltidae	EN	B1+2c
Rhinophis trevelyanus (Kelaart, 1853)	Uropeltidae	VU	B1+2bc
Rhinophis blythii Kelaart, 1853	Uropeltidae	EN	B1+2abc
Rhinophis dorsimaculatus Deraniyagala, 1941	Uropeltidae	CR	B1+2abc
Rhinophis drummondhayi Wall, 1921	Uropeltidae	EN	B1+2bc
Rhinophis oxyrhynchus (Schneider, 1801)	Uropeltidae	VU	A2c
Rhinophis philippinus (Cuvier, 1829)	Uropeltidae	VU	A2c; B1+2bc
Rhinophis porrectus Wall, 1921	Uropeltidae	EN	B1+2c
Rhinophis punctatus Muller, 1832	Uropeltidae	EN	B1+2c
Uropeltis melanogaster (Gray 1858)	Uropeltidae	VU	B1+2bc
Uropeltis phillipsi (Nicholls 1929)	Uropeltidae	CR	B1+2bc
Uropeltis ruhunae Deraniyagala, 1954	Uropeltidae	CR	B1+2c
Varanus bengalensis (Daudin, 1802)	Varanidae	LR-nt	
Varanus salvator kabaragoya (Daraniyagala, 1947)	Varanidae	VU	A2bd
Hypnale nepa (Laurenti, 1768)	Viperidae	VU	B1+2c
Hypnale walli (Gloyd, 1977)	Viperidae	VU	B1+2bc
Trimeresurus trigonocephalus (Sonnini & Latriele, 1801)	Viperidae	VU	A1c

Threats to reptiles in Sri Lanka are similar to those affecting amphibians. Loss of habitat, fragmentation, change in quality of habitat and human interference are the major threats (Table 4). Figure 4 indicates the major threats affecting the status of reptile taxa in Sri Lanka. A total of 74 threatened taxa (76%) are endemic to Sri Lanka and 13 threatened taxa of those assessed are non-endemics (Figure 7). Like the amphibian populations, the reptile populations have not been studied extensively and there are only a few monitoring efforts to determine population fluctuations or reductions. As in the case of all Sri Lankan fauna and flora, the land mass available is restricted and given the various zones in Sri Lanka with differing vegetation, distribution of habitat-specific taxa is constricted further. Hence the criteria on which their threat assessment is derived is most commonly restricted distribution (Criterion B). Of the 87 reptiles threatened, 63 qualify for Criterion B, while 36 threatened taxa qualify for Criterion A (Population reduction) (Figure 5).

Table 4. Threats to reptile fauna of Sri Lanka.

Scientific name	Threats	Category
Aspidura brachyorrhos	Loss of habitat, Habitat fragmentation, Pesticides, Pollution, Poisoning, Predation, Ploughing	VU
Aspidura copei	Loss of habitat, Habitat fragmentation, Pesticides, Pollution, Poisoning, Climate, Drought, Forest burning and clearing, Ploughing	EN
Aspidura deraniyagalae	Loss of habitat, Habitat fragmentation, Pesticides, Pollution, Poisoning, Climate, Drought, Fire, Ploughing	CR
Aspidura drummondhayi	Loss of habitat, Habitat fragmentation, Pesticides, Pollution, Poisoning	EN
Aspidura guentheri	Loss of habitat, Habitat fragmentation, Pesticides, Poisoning, Climate, Drought, Forest burning, Ploughing	VU
Aspidura trachyprocta	Loss of habitat, Habitat fragmentation, Pesticides, Poisoning, Climate, Drought, Road kills, Agriculture, Forest fire	VU

Scientific name	Threats	Category
Belanophis ceylonensis	Loss of habitat, Habitat fragmentation, Pesticides, Poisoning, Pollution, Climate, Drought, Man made fire	LR-nt
Boiga barnesii	Loss of habitat, Pesticides, Poisoning, Pollution, Climate, Drought, Man made fire, Hunting	EN
Bungarus ceylonicus ceylonicus	Hunting, Human interference, Habitat loss	VU
Bungarus ceylonicus karawala	Loss of habitat, Habitat fragmentation, Extensive Hunting, Human interference	VU
Calliophis melanurus sinhaleyus	Loss of habitat, Habitat fragmentation, Hunting, Fire, Predation	VU
Calodactylodes illingworthi	Loss of habitat, Habitat fragmentation, Pollution, War, Fire, Predation by exotic animals, Quarrying	EN
Calotes calotes	Loss of Habitat, Habitat fragmentation, Predation by common coucal, crow and other birds of prey, domestic cats, Road kills, Pesticides, Forest burnign	LR-nt
Calotes ceylonensis	Loss of habitat, Habitat fragmentation, Pollution, Man made fire, Predation	LR-nt
Calotes liocephalus	Loss of habitat, Habitat fragmentation	EN
Calotes liolepis	Loss of habitat, Habitat fragmentation, Climate, Predation by feral animals	VU
Calotes nigrilabris	Loss of habitat, Habitat fragmentation, Poisoning, Pollution, Climate, Predation by crows, Road kills	VU
Calotes versicolor versicolor	In home gardens it is attacked by cats and poultry (Predation)	LR-nt
Caretta caretta	Hunting, Hunting for food, Loss of nesting habitat, Habitat fragmentation, Overexploitation, Pollution, Drought, El Nino	EN
Ceratophora aspera	Loss of habitat, Habitat fragmentation, Climate, Drought	EN
Ceratophora erdeleni	Loss of habitat, Habitat fragmentation	CR
Ceratophora karu	Loss of habitat, Habitat fragmentation, Climate,:	CR
Ceratophora stoddartii	Loss of habitat, Habitat loss due to exotic animals, Habitat loss due to exotic plants, Pesticides, Poisoning, Trade for market, Trampling, Climate, Drought, Man made fire, Predation by birds	VU
Ceratophora tennentii	Loss of habitat, Habitat fragmentation, Pesticides, Pollution, Climate, Drought, Predation by birds	EN
Cercaspis carinata	Loss of habitat, Pesticides, Poisoning, Pollution, Climate, Drought, Man made fire, Hunting	VU
Chalcidoseps thwaitesii	Loss of habitat, Habitat fragmentation	EN
Chamaeleo zeylanicus	Loss of habitat, Climate, Drought	EN
Chelonia mydas	Hunting for food, Loss of habitat, Habitat fragmentation, Overexploitation, Pollution, Drought, El Nino, Disease, Egg collection	EN
Chrysopelea ornata sinhaleya	Loss of habitat, Habitat fragmentation, Trade	VU
Chrysopelea taprobanica	Loss of habitat, Habitat fragmentation, Climate, Drought	VU
Cnemaspis jerdonii sculpensis	Loss of habitat, Habitat fragmentation, Climate, Predation	VU
Cnemaspis kandianus	Loss of habitat, Habitat fragmentation, Pesticides, Climate, Predation by exotics	VU
Cnemaspis podihuna	Deforestation, Loss of habitat	CR
Cnemaspis tropidogaster	Loss of habitat, Habitat fragmentation, Predation by domestic fowls, Man made fire, Effect of threat on population	VU
Cophotis ceylanica	Loss of habitat, Habitat fragmentation, Pesticides, Pollution, Climate, Trampling, Predation by coucal and crow, Drought	EN
Crocodylus palustris	Hunting, Hunting for food, Loss of habitat, Habitat fragmentation, Pesticides, Poisoning, Pollution, Drought	VU
Crocodylus porosus	Hunting, Hunting for food, Loss of habitat due to land reclamation, Habitat fragme ntation, Pesticides, Poisoning, Pollution, Trade for parts, Drought	VU
Cylindrophis maculata	Loss of habitat, Pesticides, Climate changes, Drought, Fire, Hunting	LR-nt
Cyrotodactylus frenatus	Loss of habitat, Habitat fragmentation, Pesticides, Predation, Man made fire, Smuggling	VU
Dasia halianus	Loss of habitat, Habitat fragmentation, Pesticides	LR-NT
Dendrelaphis oliveri	Loss of habitat, Political unrest, War, Man made fire	CR
Dermochelys coriacea	Hunting, Hunting for food, Loss of habitat, Habitat fragmentation, Overexploitation, Pollution, Trade for Parts, Drought, El Nino, Egg collection	EN
Eretmochelys imbricata	Huntling, Huntling for food, Loss of nesting habitat, Overexploitation, Pollution, Drought, El Nino, Trade for parts, Egg collection	EN
Eryx conica brevis	Loss of habitat, Habitat fragmentation, Pollution, War, Fire	LR-nt
Geckoella triedrus	Loss of habitat, Predation by exotics, Fire, Fragmentation	VU
Geckoella yakhuna	Loss of habitat, Habitat fragmentation, War, Predation by exotics, Fire	LR-nt
Geochelone elegans	Hunting for food, Loss of habitat, Vehicles kills, Predation by dogs, fox, pet trade, road side water filled drains in Hambantota	VU
Haplocercus ceylonensis	Loss of habitat, Habitat fragmentation, Pesticides, Climate, Drought, Human interference	VU
Hemidactylus brookii parvimaculatus	Predation by cats and fowls	LR-lc
Hemidactylus depressus	Human interference, Pesticides, Predation	LR-nt
Hemidactylus maculatus hunae	Loss of habitat, Habitat fragmentation, Pesticides, Pollution	EN
Hemidactylus triedrus lankae	Loss of habitat, Habitat fragmentation, Climate, Predation by cats, Human interference	LR-nt
Hypnale nepa	Loss of habitat, Hunting	VU
,		
Hypnale walli	Loss of habitat, Poisoning, Pollution, Climate, Drought, Killing.	VU

Scientific name Lankascincus deraniyagalae	Threats Loss of habitat, Habitat fragmentation, Pesticides, Predation by exotics	Category EN
Lankascincus deraniyagalae Lankascincus fallax	Loss of habitat, Habitat fragmentation, Pesticides, Predation by exolics	LR-nt
	cats, Human interference	
Lankascincus gansi	Loss of habitat, Habitat loss due to exotic animals, Predation by exotics	VU
Lankascincus taprobanensis	Trampling, Climate, Predation by exotics, Drought, Loss of habitat, Fragmentation	EN
Lankascincus taylori	Loss of habitat, Habitat fragmentation, Pesticides, Pollution, Trampling, Climate, Fire	VU
Leioselasma cyanocinctus	Fishing, Pollution, Trade	LR-nt
Lepidochelys olivacea	Hunting, Hunting for food, Loss of nesting habitat, Overexploitation, Pollution, Drought, El Nino, Egg collection, War, Turtle by catch, Trade for parts	EN
Lissemys punctata punctata	Hunting for food, Loss of habitat, Hunting, Habitat fragmentation	VU
Lycodon osmanhilli	Hunting, Predation	LR-lc
Lycodon striatus sinhaleyus	Loss of habitat, Pesticides, Man made fire, Predation (by Poultry and cats)	VU
Lyriocephalus scutatus	Loss of habitat, Habitat fragmentation, Climate, Predation	VU
Mabuya bibronii	Unknown	DD
Mabuya carinata lankae	Loss of habitat, Habitat fragmentation, Habitat loss due to exotic animals, Pesticides, Pollution, Climate, Predation by exotics, Drought	LR-nt
Mabuya floweri	Loss of habitat, Habitat fragmentation	DD
Mabuya madaraszi	Predation by exotics (Cat & Poultry), Human interference, Loss of habitat	VU
Macropisthodon plumbicolor palabariya	Loss of habitat, Habitat fragmentation, Climate, Manmade fire, Hunting	VU
Melanchelys trijuga parkeri	Loss of habitat, Hunting, Hunting for food, Habitat fragmentation	VU
Microcephalophis gracili	Pollution, Fishing	LR-nt
Nessia bipes	Loss of habitat, Habitat fragmentation	EN
Nessia burtonii	Loss of habitat, Pesticides, Poisoning, Pollution, Fire	LR-nt
Nessia deraniyagalai	Loss of habitat, War	CR
Nessia didactylus	Loss of habitat, Pollution, Predation by exotics, Fragmentation	CR
Nessia hickanala	Loss of habitat, War, Edaphic changes	EN
Nessia layardi	Loss of habitat, Predation by exotics	CR
Nessia monodactylus	Loss of habitat, Habitat fragmentation, Pesticides, Climate, Predation by exotics,	VU
	Commercial plantation, Human interference	
Nessia sarasinorum	Loss of habitat, Habitat fragmentation, Fire, Human interference	LR-nt
Oligodon calamarius	Loss of habitat, Habitat fragmentation, Pesticides, Poisoning, Pollution, Climate,	VU
Oligodon sublineatus	Drought Hunting, Loss of Habtiat, Habitat Fragmentation, Over exploitation, Pesticides,	LR-nt
Oligodon taeniolatus ceylonicus	Poisoning, Pollution, Climate, Drought, Predation, Hunting           Loss of habitat, Habitat fragmentation, Poisoning, Pollution, Climate, War, Human	VU
	interference	
Ophisops leschenaultii lankae	Fire, Habitat loss	LR-nt
Ophisops minor minor	Fire	VU
Otocryptis wiegmanni	Loss of habitat, Habitat fragmentation, Pesticides, Man made fire, Predation by birds and cats	LR-nt
Pleamis platurus	Pollution, Fishing	LR-nt
Praescutata viperinus	Pollution, Fishing	LR-nt
Pseudotypholops philippinus	Loss of habitat, Pesticides, Pollution, Climate, Drought, Fire. Road kills, Ploughing	EN
Ptyas mucosus maximus	Pesticides, Poisoning, Forest fire	LR-nt
Rhinophis trevelyanus	Human interference, Loss of habitat, Pesticides, Pollution, Poisoning, Climate, Drought, Ploughing	VU
Rhinophis blythii	Loss of habitat, Habitat fragmentation, Pesticides, Trampling, Ploughing, Human interference	EN
Rhinophis dorsimaculatus	Loss of habitat, Habitat fragmentation, Pesticides, Poisoning, War, Climate, Drought,	CR
	Human interference	-
Uninophia drummondhovi	Loss of habitat, Pesticides, Pollution, Fire, Ploughing, Human interference	EN
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Rhinophis oxyrhynchus	Loss of habitat, Pesticides, War, Climate, Drought, ploughing	VU
Rhinophis oxyrhynchus Rhinophis philippinus	Loss of habitat, Pesticides, War, Climate, Drought, ploughing Human Interference, Loss of habitat, Pesticides, Plouging	VU
Rhinophis drummondhayi Rhinophis oxyrhynchus Rhinophis philippinus Rhinophis porrectus Rhinophis punctatus	Loss of habitat, Pesticides, War, Climate, Drought, ploughing         Human Interference, Loss of habitat, Pesticides, Plouging         Human Interference, Loss of habitat, Habitat fragmentation, Climate, Drought         Pesticides, Poisoning, Pollution, Climate, Drought, Human Interference, Loss of	
Rhinophis oxyrhynchus Rhinophis philippinus Rhinophis porrectus Rhinophis punctatus	Loss of habitat, Pesticides, War, Climate, Drought, ploughing Human Interference, Loss of habitat, Pesticides, Plouging Human Interference, Loss of habitat, Habitat fragmentation, Climate, Drought Pesticides, Poisoning, Pollution, Climate, Drought, Human Interference, Loss of habitat, Ploughing	VU EN EN
Rhinophis oxyrhynchus Rhinophis philippinus Rhinophis porrectus Rhinophis punctatus Riopa singha	Loss of habitat, Pesticides, War, Climate, Drought, ploughing         Human Interference, Loss of habitat, Pesticides, Plouging         Human Interference, Loss of habitat, Habitat fragmentation, Climate, Drought         Pesticides, Poisoning, Pollution, Climate, Drought, Human Interference, Loss of habitat, Ploughing         Unknown	VU EN EN DD
Rhinophis oxyrhynchus Rhinophis philippinus Rhinophis porrectus Rhinophis punctatus Riopa singha Sitana ponticeriana	Loss of habitat, Pesticides, War, Climate, Drought, ploughing         Human Interference, Loss of habitat, Pesticides, Plouging         Human Interference, Loss of habitat, Habitat fragmentation, Climate, Drought         Pesticides, Poisoning, Pollution, Climate, Drought, Human Interference, Loss of habitat, Ploughing         Unknown         Loss of habitat, Habitat fragmentation, Predation by birds and cats	VU EN EN DD VU
Rhinophis oxyrhynchus Rhinophis philippinus Rhinophis porrectus Rhinophis punctatus Riopa singha Sitana ponticeriana Sphenomophus dorsicatenatu	Loss of habitat, Pesticides, War, Climate, Drought, ploughing         Human Interference, Loss of habitat, Pesticides, Plouging         Human Interference, Loss of habitat, Habitat fragmentation, Climate, Drought         Pesticides, Poisoning, Pollution, Climate, Drought, Human Interference, Loss of habitat, Ploughing         Unknown         Loss of habitat, Habitat fragmentation, Predation by birds and cats         Loss of habitat, Habitat fragmentation, Predation by exotics, Human interference	VU EN EN DD VU VU
Rhinophis oxyrhynchus Rhinophis philippinus Rhinophis porrectus Rhinophis punctatus Riopa singha Sitana ponticeriana Sphenomophus dorsicatenatu Sphenomophus dussumieri	Loss of habitat, Pesticides, War, Climate, Drought, ploughing         Human Interference, Loss of habitat, Pesticides, Plouging         Human Interference, Loss of habitat, Habitat fragmentation, Climate, Drought         Pesticides, Poisoning, Pollution, Climate, Drought, Human Interference, Loss of habitat, Ploughing         Unknown         Loss of habitat, Habitat fragmentation, Predation by birds and cats         Loss of habitat, Habitat fragmentation, Predation by exotics, Human interference	VU EN DD VU VU DD
Rhinophis oxyrhynchus Rhinophis philippinus Rhinophis porrectus Rhinophis punctatus Riopa singha Sitana ponticeriana Sphenomophus dorsicatenatu Sphenomophus dussumieri Sphenomophus megalops	Loss of habitat, Pesticides, War, Climate, Drought, ploughing         Human Interference, Loss of habitat, Pesticides, Plouging         Human Interference, Loss of habitat, Habitat fragmentation, Climate, Drought         Pesticides, Poisoning, Pollution, Climate, Drought, Human Interference, Loss of habitat, Ploughing         Unknown         Loss of habitat, Habitat fragmentation, Predation by birds and cats         Loss of habitat, Habitat fragmentation, Predation by exotics, Human interference         Unknown         Unknown	VU EN EN DD VU VU DD DD
Rhinophis oxyrhynchus Rhinophis philippinus Rhinophis porrectus	Loss of habitat, Pesticides, War, Climate, Drought, ploughing         Human Interference, Loss of habitat, Pesticides, Plouging         Human Interference, Loss of habitat, Habitat fragmentation, Climate, Drought         Pesticides, Poisoning, Pollution, Climate, Drought, Human Interference, Loss of habitat, Ploughing         Unknown         Loss of habitat, Habitat fragmentation, Predation by birds and cats         Loss of habitat, Habitat fragmentation, Predation by exotics, Human interference	VU EN DD VU VU DD
Rhinophis oxyrhynchus Rhinophis philippinus Rhinophis porrectus Rhinophis punctatus Riopa singha Sitana ponticeriana Sphenomophus dorsicatenatu Sphenomophus dussumieri Sphenomorphus megalops Sphenomorphus rufogulus Sphenomorphus striatopunctatus	Loss of habitat, Pesticides, War, Climate, Drought, ploughing         Human Interference, Loss of habitat, Pesticides, Plouging         Human Interference, Loss of habitat, Habitat fragmentation, Climate, Drought         Pesticides, Poisoning, Pollution, Climate, Drought, Human Interference, Loss of habitat, Ploughing         Unknown         Loss of habitat, Habitat fragmentation, Predation by birds and cats         Loss of habitat, Habitat fragmentation, Predation by exotics, Human interference         Unknown         Unknown         Unknown         Unknown         Loss of habitat, Habitat fragmentation, Predation by exotics, Human interference         Unknown         Unknown         Loss of habitat, Habitat fragmentation, Pesticides, Poisoning, Pollution, Climate, Edaphic changes, Fire, Drought, Human interference	VU           EN           DD           VU           DD           DD           VU           EN
Rhinophis oxyrhynchus Rhinophis philippinus Rhinophis porrectus Rhinophis punctatus Riopa singha Sitana ponticeriana Sphenomophus dorsicatenatu Sphenomophus dussumieri Sphenomorphus megalops Sphenomorphus rufogulus Sphenomorphus striatopunctatus Trimeresurus trigonocephalus	Loss of habitat, Pesticides, War, Climate, Drought, ploughing         Human Interference, Loss of habitat, Pesticides, Plouging         Human Interference, Loss of habitat, Habitat fragmentation, Climate, Drought         Pesticides, Poisoning, Pollution, Climate, Drought, Human Interference, Loss of habitat, Ploughing         Unknown         Loss of habitat, Habitat fragmentation, Predation by birds and cats         Loss of habitat, Habitat fragmentation, Predation by exotics, Human interference         Unknown         Unknown         Unknown         Unknown         Loss of habitat, Habitat fragmentation, Predation by exotics, Human interference         Unknown         Unknown         Loss of habitat, Habitat fragmentation, Pesticides, Poisoning, Pollution, Climate, Edaphic changes, Fire, Drought, Human interference         Loss of habitat, Habitat fragmentation, Pesticides, Poisoning, Pollution, Climate, Edaphic changes, Fire, Drought, Human interference	VU           EN           EN           DD           VU           DD           VU           VU           DD           VU           DD           VU           DD           VU           DD           VU           DD           VU           EN           VU
Rhinophis oxyrhynchus Rhinophis philippinus Rhinophis porrectus Rhinophis punctatus Riopa singha Sitana ponticeriana Sphenomophus dorsicatenatu Sphenomophus dussumieri Sphenomorphus megalops Sphenomorphus rufogulus Sphenomorphus striatopunctatus Trimeresurus trigonocephalus Typhlops ceylonicus	Loss of habitat, Pesticides, War, Climate, Drought, ploughing         Human Interference, Loss of habitat, Pesticides, Plouging         Human Interference, Loss of habitat, Habitat fragmentation, Climate, Drought         Pesticides, Poisoning, Pollution, Climate, Drought, Human Interference, Loss of habitat, Ploughing         Unknown         Loss of habitat, Habitat fragmentation, Predation by birds and cats         Loss of habitat, Habitat fragmentation, Predation by exotics, Human interference         Unknown         Unknown         Unsknown         Loss of habitat, Habitat fragmentation, Pesticides, Poisoning, Pollution, Climate, Edaphic changes, Fire, Drought, Human interference         Loss of habitat, Habitat fragmentation, Pesticides, Poisoning, Pollution, Climate, Edaphic changes, Fire, Drought, Human interference         Loss of habitat, Over exploitation, Hunting, Human interferences         Habitat loss, War	VU           EN           EN           DD           VU           DD           VU           DD           VU           EN           VU           VU           CR
Rhinophis oxyrhynchus Rhinophis philippinus Rhinophis porrectus Rhinophis punctatus Riopa singha Sitana ponticeriana Sphenomophus dorsicatenatu Sphenomophus dussumieri Sphenomorphus megalops Sphenomorphus rufogulus Sphenomorphus striatopunctatus Trimeresurus trigonocephalus Typhlops ceylonicus Typhlops lankaensis	Loss of habitat, Pesticides, War, Climate, Drought, ploughing         Human Interference, Loss of habitat, Pesticides, Plouging         Human Interference, Loss of habitat, Habitat fragmentation, Climate, Drought         Pesticides, Poisoning, Pollution, Climate, Drought, Human Interference, Loss of habitat, Ploughing         Unknown         Loss of habitat, Habitat fragmentation, Predation by birds and cats         Loss of habitat, Habitat fragmentation, Predation by exotics, Human interference         Unknown         Unknown         Unknown         Unknown         Unknown         Loss of habitat, Habitat fragmentation, Predation by exotics, Human interference         Unknown         Unknown         Loss of habitat, Habitat fragmentation, Pesticides, Poisoning, Pollution, Climate, Edaphic changes, Fire, Drought, Human interference         Loss of habitat, Over exploitation, Hunting, Human interferences         Habitat loss, War         Human Interference, Pollution, War, Loss of habitat	VU           EN           EN           DD           VU           DD           VU           EN           DD           VU           CR           CR
Rhinophis oxyrhynchus Rhinophis philippinus Rhinophis porrectus Rhinophis punctatus Riopa singha Sitana ponticeriana Sphenomophus dorsicatenatu Sphenomophus dussumieri Sphenomorphus megalops Sphenomorphus rufogulus	Loss of habitat, Pesticides, War, Climate, Drought, ploughing         Human Interference, Loss of habitat, Pesticides, Plouging         Human Interference, Loss of habitat, Habitat fragmentation, Climate, Drought         Pesticides, Poisoning, Pollution, Climate, Drought, Human Interference, Loss of habitat, Ploughing         Unknown         Loss of habitat, Habitat fragmentation, Predation by birds and cats         Loss of habitat, Habitat fragmentation, Predation by exotics, Human interference         Unknown         Unknown         Unsknown         Loss of habitat, Habitat fragmentation, Pesticides, Poisoning, Pollution, Climate, Edaphic changes, Fire, Drought, Human interference         Loss of habitat, Habitat fragmentation, Pesticides, Poisoning, Pollution, Climate, Edaphic changes, Fire, Drought, Human interference         Loss of habitat, Over exploitation, Hunting, Human interferences         Habitat loss, War	VU           EN           EN           DD           VU           DD           VU           EN           DD           VU           VU           DD           VU           DC           VU           CR

Scientific name	Threats	Category
Typhlops violaceus	War, Loss of habitat	CR
Uropeltis melanogaster	Human Interference, Loss of habitat, Pesticides, Poisoning, Pollution, Climate, Ploughing, Drought	
Uropeltis phillipsi	Human Interference, Loss of habitat, Pesticides, Pollution, Drought, Fire, Ploughing	CR
Uropeltis ruhunae	Human interference, Loss of habitat, Habitat fragmentation, Poisoning, Pollution, Climate, Drought	CR
Varanus bengalensis	Hunting for food, Loss of habitat, Habitat fragmentation	LR-nt
Varanus salvator kabaragoya	Hunting for medicine, Pesticides	VU
Xenochrophis asperrinus	Loss of habitat, Habitat fragmentation, Pesticides, Poisoning, Pollution, Climate, Drought, Hunting	LR-nt

Figure 4. Threats affecting reptile taxa.

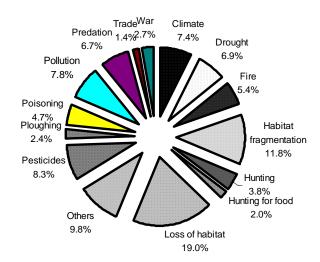
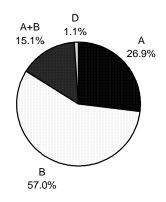


Figure 5. Criteria used for assessing reptile taxa of Sri Lanka.



# Recommendations

Status assessments of taxa make it possible to identify priority areas for research, management and conservation meaningfully. Management recommendations are made based on the status of the species and the degree of information about it. Recommendations for research, management, captive breeding and for a species-specific focused analysis such as applying the Population and Habitat Viability Assessment are discussed. Research recommendations include survey, limiting factor research, genetic studies, taxonomic studies, life history studies, population and habitat viability and others. Management, captive breeding and others. Since many taxa are relatively unknown, including biology and population dynamics, recommendations were made for research and management for both amphibians and reptiles (Tables 5 to 8). Tables 9 and 10 list the individual recommendations for research and management for amphibians and reptiles.

Table 5.
Research recommendations for amphibians.

Category	Survey	Genetics	Taxonomy	Life history studies	Limiting factor research	PHVA	Others
EN	11	2	7	10	6	1	-
VU	10	4	5	8	8	-	1
DD	5	-	3	3	2	1	1
LR-nt	9	2	4	4	5	-	1
LR-lc	10	1	6	7	7	-	3

 Table 6.

 Management recommendations for amphibians.

Category	Habitat management	Monitoring	Captive breeding	Limiting factor management	Others
EN	6	11	5	5	1
VU	3	11	1	4	-
DD	2	3	3	2	-
LR-nt	1	9	1	3	1
LR-lc	-	14	5	4	1

Table 7.
Research recommendations for reptiles.

Category	Survey	Genetics	Taxonomy	Life history studies	Limiting factor research	PHVA	Others
CR	16	4	8	14	3	2	-
EN	28	8	16	21	13	5	1
VU	43	8	15	36	12	2	4
DD	4	4	-	5	5	-	-
LR-nt	20	5	5	16	8	1	-
LR-lc	1	1	1	1	1	-	-

 Table 8.

 Management recommendations for reptiles.

Category	Habitat management	Wild population management	Monitoring	Captive breeding	Limiting factor management	Others
CR	13	9	15	15	-	2
EN	27	14	28	28	-	8
VU	37	8	40	35	3	2
DD	6	-	4	6	-	-
LR-nt	17	3	22	14	1	-
LR-lc	1	1	1	1	-	-

 Table 9.

 Recommendations listed for amphibians, taxa-wise.

Scientific Name	Research Recommendation	Management Recommendation
Adenomus dasi	Survey, Life history studies, PHVA	Monitoring, Captive breeding
Adenomus kandianus	Survey	None
Adenomus kelaartii	Limiting factor research	Monitoring, limiting factor management
Bufo atukoralei	Survey, Life history studies	Habitat management, Monitoring
Bufo fergusonii	Survey; Limiting factor research	Limiting factor management
<i>Bufo kotagamai</i> Fernando	Survey, Life history studies, Limiting factor research	Habitat management; Wild population management, Monitoring; Limiting factor management
Bufo melanostictus	None	None
Bufo noellerti	Field surveys	Monitoring
Euphlyctis cyanophlyctis	Survey, Taxonomic research	Monitoring
Euphlyctis hexadactylus	Survey; Life history studies, Limiting factor research; Diseases should be studied	Monitoring, Sustainable utilisation, Captive breeding
Hoplobatrachus crassus	Survey, Taxonomic research	Monitoring
Hoplobatrachus tigerinus	Survey, Limiting factor research, Taxonomic research, Effects due to prawn and fish breeding	Monitoring, Limiting factor management, Captive breeding
Ichthyophis glutinosus	Survey, Life history studies, Effects of agriculture	Monitoring, Captive breeding
Ichthyophis orthoplicatus	Survey, Life history studies, Limiting factor research	Habitat management, Monitoring, Limiting factor management, Captive breeding
Ichthyophis pseudangularis	Survey, Life history studies, Limiting factor research, Effects of diary/agriculture	Monitoring, Captive breeding
Kaloula taprobanica	Limiting factor research; Impact of agriculture	Monitoring, Limiting factor management
Limnonectes corrugatus	Survey, Life history studies, Limiting factor research, Taxonomic research	Habitat management; Monitoring
Limnonectes greenii	Survey, Limiting factor research	Monitoring, Limiting factor management, Captive breeding
Limnonectes kirtisinghei	Survey, Limiting factor research	Monitoring, Limiting factor management
Limnonectes limnocharis	Survey, Taxonomic research, Limiting factor research	Monitoring, Limiting factor management
Microhyla karunaratnei	Survey, Limiting factor research, Life history studies, PHVA	Habitat management, Monitoring, Limiting factor management
Microhyla ornata	Limiting factor research	Monitoring, Limiting factor management
Microhyla rubra	Limiting factor research, Life history studies	Limiting factor management, Captive breeding
Microhyla zeylanica	Survey, Taxonomic research, Life history studies	Habitat management; Monitoring, Captive breedin
Nannophrys ceylonensis	Survey, Life history studies, Limiting factor research	Monitoring, Limiting factor management
Nannophrys guentheri	Survey, Taxonomic research	None
Nannophrys marmorat	Survey, Taxonomic research, Life history studies, Limiting factor research	Habitat management, Monitoring, Llimiting factor management, Captive breeding
Philautus eximius	Survey, Taxonomic research, Life history studies	Monitoring
Philautus femoralis	Survey, Life history studies	Monitoring
Philautus hypomelas	Survey, Taxonomic research, Life history studies	Monitoring
Philautus leucorhinus	Survey, Genetic research, Taxonomic research, Life history studies, Limiting factor research	Monitoring
Philautus nasutus	Survey, Taxonomic research, Life history studies	Monitoring
Philautus stictomerus	Survey, Taxonomic research, Life history studies	Habitat management, Monitoring
Philautus variabilis	Genetic research, Taxonomic research	Monitoring
Polypedates cruciger	Survey, Life history stuidies	Monitoring, Captive breeding
Polypedates eques	Survey, Taxonomic research, Life history studies, Limiting factor research	Monitoring, Limiting factor management
Polypedates longinasus	Survey, Genetic research, Taxonomic research, Life history studies, Limiting factor research	Monitoring
Polypedates maculatus	Genetic research, Taxonomic research	Monitoring, Captive breeding
Pseudophilautus	Survey, Genetic research, Taxonomic research,	Monitoring, Captive breeding
temporalis	Life history 0studies	
Ramanella obscura	None Survey, Limiting factor research, Life history	Limiting factor management, Monitoring
Ramanella palmata	studies	Monitoring, Limiting factor management, Captive breeding
Ramanella variegata	Survey, Life history studies	Monitoring
Rana aurantiaca	Survey	Monitoring
Rana gracilis	Survey: Limiting factor research	Monitoring
Rana temporalis	Survey	Monitoring
Rhacophorus cavirostris	Survey, Genetic research, Taxonomic research, Life history studies, Limiting factor research	Habitat management, Monitoring, Limiting factor management, Captive breeding
Rhacophorus fergusonianus	Survey, Genetic research, Taxonomic research, Life history studies	Monitoring
Rhacophorus macropus	Survey, Life history studies, Limiting factor	Monitoring
	research, Ecological Studies	

Scientific Name	Research Recommendation	Management Recommendation
Rhacophorus	Survey, Genetic research, Taxonomic research,	Habitat management, Monitoring, Limiting factor
microtympanum	Life history studies, Limiting factor research	management
Rhacophorus reticulatus	Survey, Life history studies, Limiting factor	Habitat management, Monitoring
	research	
Theloderma schmarda	Survey, Genetic research, Taxonomic research,	Habitat management, Monitoring
	Life history studies, Limiting factor research	
Tomopterna breviceps	Survey, Taxonomic research	Monitoring
Tomopterna rolandae	Survey, Taxonomic research, Life history studies	Monitoring
Uperodon systoma	Limiting factor research, Life history studies,	Monitoring
	Taxonomic research	

# Table 10.Recommendations listed for reptiles, taxa-wise.

Scientific Name	Research Recommendation	Management Recommendation
Aspidura brachyorrhos	Survey, Taxonomic research, Life history studies	Habitat management, Wild population
		management, Monitoring, Captive breeding
Aspidura copei	Survey, Taxonomic research, Life history studies	Habitat management, Captive breeding
Aspidura deraniyagalae	Survey, Life history studies	Habitat management, Monitoring, Captive breeding
Aspidura drummondhayi	Survey, Life history studies	Habitat management, Monitoring, Captive breeding
Aspidura guentheri	Survey, Life history studies	Habitat management, Monitoring, Captive breeding
Aspidura trachyprocta	Survey, Life history studies	Habitat management, Monitoring, Captive breeding
Belanophis ceylonensis	Survey, Life history studies	Habitat management, Monitoring, Captive breeding
Boiga barnesii	Survey, Life history studies	Habitat management, Monitoring, Captive breeding
Bungarus ceylonicus ceylonicus	Survey	Monitoring, Habitat management
Bungarus ceylonicus karawala	Survey, Research on venom	Monitoring
Calliophis melanurus	Survey, Taxonomic research, Life history studies	Habitat management, Wild population
sinhaleyus		management, Monitoring, Captive breeding
Calodactylodes illingworthi	Survey, Taxonomic research, Life history studies	Habitat management, Wild population
		management, Monitoring, Genome resource
		banking, Captive breeding
Calotes calotes	Survey, Genetic research, Life history studies,	Habitat management, Wild population
		management, Monitoring, Captive breeding
Calotes ceylonensis	Survey, Limiting factor research, Life history studies	Habitat management, Monitoring, Captive breeding
Calotes liocephalus	Survey, Taxonomic research, Life history studies, Limiting factor research	Habitat management, Monitoring, Captive breeding
Calotes liolepis	Survey, Genetic research, Life history studies,	Habitat management, Monitoring, Limiting factor
	Limiting factor research	management, Captive breeding
Calotes nigrilabris	Survey, Life history studies, Limiting factor research	Habitat management, Monitoring, Captive breeding
Calotes versicolor	Survey, Genetic research, Life history studies	Habitat management, Wild population
versicolor		management, Monitoring, Limiting factor
		management, Captive breeding
Caretta caretta	Survey, Genetic research, Taxonomic research	Habitat management, Wild Population
		management, Monitoring, Captive breeding
Ceratophora aspera	Survey, Limiting factor research, PHVA	Habitat management, Monitoring, Captive breeding
Ceratophora erdeleni	Survey, Life history studies, Limiting factor research, PHVA	Monitoring, Captive breeding
Ceratophora karu	Survey, Life history studies, Limiting factor research, PHVA	Habitat management, Monitoring, Captive breeding
Ceratophora stoddardtii	Survey, Life history studies, Limiting factor research, PHVA	Habitat management, Monitoring, Captive breeding
Ceratophora tennentii	Survey, Life history studies, Limiting factor research, Research on environmental impacts, PHVA	Habitat management, Monitoring, Captive breeding
Cercaspis carinata	Survey, Life history studies	Habitat management, Monitoring, Captive breeding
Chalcidoseps thwaitesii	Survey, Genetic research, Taxonomic research,	Monitoring, Captive breeding
	Life history studies, Limiting factor research, PHVA	
Chamaeleo zeylanicus	Survey, Life history studies	Habitat management, Monitoring, Wild population management, Captive breeding
Chelonia mydas	Survey, Taxonomic research, Life history studies	Habitat management, Wild Population management, Monitoring, Sustainable utilisation, Captive breeding
Chrysopelea ornata sinhaleya	Survey, Taxonomic research, Life history studies	Habitat management, Wild population management, Monitoring, Captive breeding
Chrysopelea taprobanica	Survey, Life history studies	Habitat management, Monitoring, Captive breeding
		<b>A A A</b>

Scientific Name	Research Recommendation	Management Recommendation
Cnemaspis jerdonii	Survey, Taxonomic research, Life history studies	Habitat management, Wild population
sculpensis		management, Genome resource banking
Cnemaspis kandianus	Survey, Genetic Research, Life history studies	Unknown
Cnemaspis podihuna	Survey, Taxonomic research, Life history studies	Habitat management, Wild population management, Monitoring, Captive breeding
Cnemaspis tropidogaster	Survey, Taxonomic research, Life history studies	Habitat management, Monitoring
Cophotis ceylanica	Survey, Genetic research, Taxonomic research,	Habitat management, Wild population
oophous ceylanica	Life history studies, Limiting factor research	management, Monitoring, Translocation, Captive breeding, Reintroduction
Crocodylus palustris	Survey, Life history studies	Habitat management, Wild Population
Crocodylus porosus	Survey, Life history studies, PHVA	management, Monitoring, Captive breeding Habitat management, Wild Population
		management, Monitoring, Captive breeding
Cylindrophis maculata	Survey, Taxonomic research, Life history studies	Habitat management, Monitoring, Captive breeding
Cyrotodactylus frenatus	Life history studies	Habitat management, Monitoring, Captive breeding
Dasia halianu	Survey, Life history studies, Limiting factor research	Habitat management, Monitoring, Captive breeding
Dendrelaphis oliveri	Survey, Genetic research, Taxonomic research, Life history studies	Habitat management, Wild population management, Monitoring, Genome resource banking, Captive breeding
Dermochelys coriacea	Survey, Genetic research	Habitat management, Monitoring, Wild population management, Captive breeding
Eretmochelys imbricata	Survey, Taxonomic research, Limiting factor research, PHVA	Habitat management, Wild Population management, Monitoring, Sustainable utilisation, Captive breeding
Eryx conica brevis	Survey, Life history studies	Habitat management, Monitoring, Captive breeding
Geckoella triedrus	Survey, Genetic research, Life history studies	Habitat management, Monitoring, Captive breeding
Geckoella yakhuna	Survey, Taxonomic research, Life history studies	Habitat management, Monitoring, Captive breeding
Geochelone elegans	Survey, Life history studies	Habitat management, Monitoring, Limiting factor management, Captive breeding
Haplocercus ceylonensis	Survey	Habitat management, Monitoring, Captive breeding
Hemidactylus brookii parvimaculatus	Taxonomic research	No
Hemidactylus depressus	Life history studies	Monitoring
Hemidactylus maculatus	Survey, Taxonomic research, Limiting factor	Habitat management, Monitoring, Captive breeding
hunae	research	
Hemidactylus triedrus lankae	Genetic research, Taxonomic research, Life history studies	Habitat management, Monitoring, Captive breeding
Hypnale nepa	Survey	Sustainable utilisation, Captive breeding
Hypnale walli	Survey, Life history studies	Habitat management, Monitoring, Captive breeding
Lankascincus deignani	Survey, Life history studies, Limiting factor research	Habitat management, Monitoring, Captive breeding
Lankascincus deraniyagalae	Survey, Taxonomic research, Life history studies, Limiting factor research	Habitat management, Wild population management, Monitoring, Captive breeding
Lankascincus fallax	Survey, Life history studies, Limiting factor	Habitat management, Monitoring, Captive breeding
	research	
Lankascincus gansi	Survey, Life history studies, Limiting factor research	Habitat management, Monitoring, Captive breeding
Lankascincus taprobanensis	Survey, Genetic research, Limiting factor research	Habitat management, Wild population management, Captive breeding, Monitoring
Lankascincus taylori	Survey, Genetic research, Life history studies, Limiting factor research, Monitoring	Unknown
Leioselasma cyanocinctus	Survey	Monitoring
Lepidochelys olivacea	Survey, Taxonomic research, Life history studies, PHVA	Habitat management, Wild population management, Monitoring, Sustainable utilisation, Captive breeding
Lissemys punctata punctata	Survey, Life history studies, Taxonomic research, Limiting factor research	Habitat management, Monitoring, Captive breeding
Lycodon osmanhilli	Survey	Monitoring
Lycodon striatus	Survey, Taxonomic research, Life history studies	Habitat management, Monitoring, Captive breeding
sinhaleyus		
Lyriocephalus scutatus Mabuya bibronii	Survey, Taxonomic research, Life history studies Unknown	Habitat management, Monitoring, Captive breeding Habitat management, Captive breeding
Mabuya carinata lankae	Survey, Life history studies, Limiting factor research	Habitat management, Monitoring, Captive breeding
Mabuya floweri	Survey, Life history studies, Limiting factor research	Habitat management, Monitoring, Captive breeding
Mabuya madaraszi	Survey, Genetic research, Life history studies, Limiting factor research	Habitat management, Monitoring, Captive breeding
Macropisthodon	Survey, Taxonomic research, Life history studies,	Habitat management, Monitoring, Captive breeding
plumbicolor palabariya	Venom studies	

Scientific Name	Research Recommendation	Management Recommendation
Melanchelys trijuga parkeri	Survey, Life history studies, Taxonomic research, Limiting factor research	Habitat management, Monitoring, Captive breeding
Microcephalophis gracilis	Survey	Monitoring
Nessia bipes	Survey, Genetic research, Life history studies, Limiting factor research	Habitat management, Monitoring, Captive breeding
Nessia burtonii	Survey, Genetic research, Life history studies, Limiting factor research	Habitat management, Monitoring, Captive breeding
Nessia deraniyagalai Nessia didactylus	Survey, Genetic research, Limiting factor research Survey, Genetic research, Life history studies	Habitat management, Monitoring, Captive breeding Habitat management, Captive breeding
Nessia hickanala	Survey, Genetic research, Life history studies	Habitat management, Monitoring, Sustainable utilization, Captive breeding
Nessia layardi	Survey, Genetic research, Life history studies	Monitoring, Captive breeding
Nessia monodactylus	Survey, Genetic research, Life history studies, Limiting factor research	Habitat management, Monitoring, Captive breeding
Nessia sarasinorum	Survey, Genetic research, Life history studies, Limiting factor research	Habitat management, Monitoring, Captive breeding
Oligodon calamarius	Survey, Life history studies	Habitat management, Monitoring
Oligodon sublineatus Oligodon taeniolatus ceylonicus	Survey, Life history Studies Survey, Taxonomic research, Life history studies	Habitat management, Monitoring, Captive breeding           Habitat management, Monitoring, Captive breeding
Ophisops leschenaultii Iankae	Survey, Genetic research, Taxonomic research, Limiting factor research, PHVA	Monitoring
Ophisops minor minor	Survey, Genetic research, Taxonomic research, Limiting factor research	Monitoring
Otocryptis wiegmanni	Survey, Taxonomic research, Life history studies, Limiting factor research	Habitat management, Monitoring, Captive breeding
Pleamis platurus	Survey	Monitoring
Praescutata viperinus	Survey	Monitoring
Pseudotypholops philippinus	Survey, Taxonomic research, Life history studies, Limiting factor research	Habitat management, Monitoring, Captive breeding
Ptyas mucosus maximus	Limiting factor research	Habitat management, Wild population management
Rhinophis trevelyanu	Survey, Life history studies	Habitat management, Monitoring, Wild population
		management, Captive breeding,
Rhinophis blythii	Survey, Taxonomic research, Life history studies	Habitat management, Wild population management, Monitoring, Captive breeding
Rhinophis dorsimaculatus	Survey, Taxonomic research, Life history studies	Habitat management, Wild population management, Monitoring, Translocation, Captive breeding
Rhinophis drummondhayi	Taxonomic research, Survey, Life history studies	Habitat management, Wild population management, Monitoring, Captive breeding
Rhinophis oxyrhynchus	Survey, Life history studies	Habitat management, Monitoring, Captive breeding
Rhinophis philippinus	Survey, Taxonomic research, Life history studies	Habitat management, Wild population management, Monitoring, Captive breeding
Rhinophis porrectus	Survey	Habitat management, Wild population management, Monitoring, Captive breeding
Rhinophis punctatus	Survey, Taxonomic research, Life history studies	Habitat management, Monitoring, Captive breeding
Riopa singha	Survey, Genetic research, Life history studies, Limiting factor research	Habitat management, Monitoring, Captive breeding
Sitana ponticeriana	Survey, Life history studies, Limiting factor research	Habitat management, Monitoring, Limiting factor management, Captive breeding
Sphenomophus dorsicatenatus	Survey, Genetic research, Taxonomic research, Life history studies, Limiting factor research	Habitat management, Monitoring, Captive breeding
Sphenomophus dussumieri	Survey, Genetic research, Life history studies, Limiting factor research	Habitat management, Monitoring, Captive breeding
Sphenomorphus megalops	Survey, Genetic research, Life history studies, Limiting factor research	Habitat management, Monitoring, Captive breeding
Sphenomorphus rufogulus	Survey, Genetic research, Life history studies, Limiting factor research	Habitat management, Monitoring, Captive breeding
Sphenomorphus	Survey, Genetic research, Life history studies,	Habitat management, Monitoring, Captive breeding
striatopunctatus	Limiting factor research	
Trimeresurus trigonocephalus	Survey	Monitoring, Public awareness, Captive breeding
Typhlops ceylonicus	Survey, Taxonomic research, Life history studies	Habitat management, Wild population management, Monitoring, Captive breeding
Typhlops lankaensis	Survey, Taxonomic research, Life history studies	Habitat management, Wild population management, Monitoring,Captive breeding
Typhlops mirus	Survey, Taxonomic research, Life history studies	Habitat management, Wild population management, Monitoring, Captive breeding
Typhlops tenebrarum	Survey, Taxonomic research, Life history studies	Habitat management, Wild population management, Monitoring, Captive breeding
Typhlops veddae	Survey, Taxonomic research, Life history studies	Habitat management, Wild population management, Monitoring, Captive breeding

Scientific Name	Research Recommendation	Management Recommendation
Typhlops violaceus	Survey, Taxonomic research, Life history studies	Habitat management, Wild population
		management, Monitoring, Captive breeding
Uropeltis melanogaster	Survey	Habitat management, Monitoring, Captive breeding
Uropeltis phillipsi	Survey, Life history studies	Habitat management, Wild population
		management, Monitoring, Captive breeding
Uropeltis ruhunae	Survey	Monitoring
Varanus bengalensis	Survey, Life history studies	Habitat management, Monitoring, Captive breeding
Varanus salvator	Survey, Taxonomic research, Life history studies,	Habitat management, Monitoring, Captive breeding
kabaragoya	Epidemiology	
Xenochrophis asperrinus	Survey	Habitat management, Monitoring

Captive breeding is one of the most important components of conservation, especially applicable to smaller organisms and those facing a high risk of extinction in the wild. Captive breeding as a conservation tool is particularly apt for amphibians and reptiles as the problems, which hinder programmes involving large mammals, do not affect lower vertebrates. Captive breeding was recommended for 15 amphibians and 99 reptiles in the CAMP workshop. A common criteria was the degree of threat affecting the taxa and the objective for captive breeding such as for conservation, education, research or awareness building. As seen in tables 11 and 12, captive breeding was recommended for many of the taxa for very specific reasons and the level of importance for initiating this programme is also cited. In general, the participants at the workshop agreed that captive breeding would be encouraged for taxa that were under threat since there is no concerted effort towards captive breeding for species recovery in Sri Lanka. Apart from some taxa, which are being bred in captivity, for most of the others that were threatened, captive breeding was recommended for initiation soon. In some cases where the taxa were common and not threatened, they were thought fit to be bred in captivity purely for the purposes of public education and awareness.

Captive breeding has been carried out successfully in countries like Australia and in Europe, especially for amphibians and smaller reptiles which face a high degree of risk in the wild. Some programmes are so successful that reintroduction of some taxa into the wild have yielded positive results. Amphibians and reptiles in the South Asian region are poorly known. Zoos do not exhibit them (except the larger crocodiles, turtles and tortoises) and individuals do not maintain them in captivity. Hence knowledge about keeping and breeding them in captivity is poor as indicated by propagation techniques in tables 11 and 12.

Name	Captive breeding for	Propagation techniques	Level of Captive breeding
Adenomus dasi	Conservation	Not known at all	Initiate program within 3 years
Adenomus kandianus		Not known at all	Pending
Adenomus kelaartii		Known	Pending
Bufo atukoralei		Not known at all	Not recommended
Bufo fergusonii		Not known at all	Not required
Bufo kotagamai		Not known at all	Initiate program within 3 years
Bufo melanostictus		Known	Not required
Bufo noellerti		Not known at all	Not required
Euphlyctis cyanophlycti		Known	Not recommended
Euphlyctis hexadactylus	Conservation	Known	Ongoing program intensified
Hoplobatrachus crassus		Some techniques known	Not recommended
Hoplobatrachus tigerinus	Release	Known	Initiate program after 3 years.
Ichthyophis glutinosus	Awareness	Some techniques known	Not recommended
Ichthyophis orthoplicatus	Awareness	Some techniques known	Initiate program after 3 years
Ichthyophis pseudangularis	Awareness	Some techniques known	Initiate program after 3 years
Kaloula taprobanica		Not known at all	Not recommended
Limnonectes corrugatus		Not known at all	Initiate program after 3 years
Limnonectes greenii	Conservation	Not known at all	Initiate program after 3 years
Limnonectes kirtisinghei		Not known at all	Not recommended
Limnonectes limnocharis		Known	Unknown
Microhyla karunaratnei		Not known at all	Pending
Microhyla ornata		Not known at all	Not recommended
Microhyla rubra	Education	Not known at all	Pending
Microhyla zeylanica	Conservation, Research, Education	Not known at all	Initiate program within 3 years
Nannophrys ceylonensis		Not known at all	Not recommended
Nannophrys guentheri		Not known at all	Initiate program when individuals are found

# Table 11. Captive breeding recommendation for amphibians.

Name	Captive breeding for	Propagation techniques	Level of Captive breeding
Nannophrys marmorata	Restocking	Not known at all	Initiate program within 3 years
Philautus eximius		Not known at all	Initiate program after 3 years
Philautus femoralis		Not known at all	Not recommended
Philautus hypomelas		Not known at all	Initiate program after 3 years
Philautus leucorhinus		Not known at all	Not recommended
Philautus nasutus		Not known at all	Initiate program after 3 years
Philautus stictomerus		Not known at all	Not recommended
Philautus variabilis		Not known at all	Not recommended
Polypedates cruciger	Awareness	Some techniques known	Not recommended
Polypedates eques		Some techniques known	Not recommended
Polypedates longinasus		Not known at all	Not recommended
Polypedates maculatus	Education	Some techniques known	Initiate program after 3 years
Pseudophilautus temporalis	Restocking	Not known at all	Initiate program within 3 years
Ramanella obscura		Known	Not recommended
Ramanella palmata	Restocking	Not known at all	Initiate program within 3 years
Ramanella variegata		Not known at all	Not recommended
Rana aurantiaca		Not known at all	Not recommended
Rana gracilis		Not known at all	Not recommended
Rana temporalis		Known for similar taxa	Not recommended
Rhacophorus cavirostris	Conservation	Not known at all	Initiate program after 3 years
Rhacophorus fergusonianus		Not known at all	Not recommended
Rhacophorus macropus		Not known at all	Not recommended
Rhacophorus microtympanum		Not known at all	Not recommended
Rhacophorus reticulatus		Not known at all	Initiate program after 3 years
Theloderma schmarda		Not known at all	Not recommended
Tomopterna breviceps		Some techniques known	Not recommended
Tomopterna rolandae		Some technique known	Not recommended
Uperodon systoma		Known	Not recommended

 Table 12.

 Captive breeding recommendations for reptiles.

Scientific name	Captive breeding for	Propagation techniques	Level of captive breeding
Aspidura brachyorrhos	Education, Research	Not known at all	Initiate program after 3 years
Aspidura copei	Education, Research, Awareness	Information not available	Initiate program after 3 years
Aspidura deraniyagalae	Education, Research	Information not available	Initiate program after 3 years
Aspidura drummondhayi	Education, research, Awareness	Information not available	Initiate program after 3 years
Aspidura guentheri	Education, Research, Awareness	Information not available	Initiate program after 3 years
Aspidura trachyprocta	Education, Research	Information not available	Initiate program after 3 years
Belanophis ceylonensis	Education, Research, Awareness	Not known at all	Not recommended
Boiga barnesii	Education, Research, Awareness	Known	Initiate program within 3 years
Bungarus ceylonicus ceylonicus		Information not available	Not recommended
Bungarus ceylonicus karawala		Information not available	Not recommended
Calliophis melanurus sinhaleyus	Conservation	Information not available	Initiate program within 3 years
Calodactylodes illingworthi	Conservation	Not known at all	Initiate program within 3 years
Calotes calotes	Education, Research	Not known at all	
Calotes ceylonensis	Education, Research, Awareness	Some techniques known	Initiate program after 3 years
Calotes liocephalus	Education, Research, Awareness	Some techniques known	Initiate program after 3 years
Calotes liolepis	Education, Research, Awareness	Not known at all	Initiate program after 3 years
Calotes nigrilabris	Education, Research, Awareness	Not known at all	Initiate program after 3 years
Calotes versicolor versicolor	Education, Research, Awareness	Some techniques known	Initiate program after 3 years
Caretta caretta	Research, Education, Tourism, Awareness	Some techniques known	Initiate program within 3 years
Ceratophora aspera	Education, Research, Awareness	Some techniques known	Initiate program after 3 years
Ceratophora erdeleni	Education, Research	Not known at all	Initiate program within 3 years.
Ceratophora karu	Education, Research	Not known at all	Initiate program within 3 years
Ceratophora stoddartii	Education, Research, Awareness	Some techniques known	Initiate program after 3 years
Ceratophora tennentii	Education, Research, Awareness	Some techniques known	Initiate program after 3 years
Cercaspis carinata	Education, Research, Awareness	Not known at all	Initiate program after 3 years
Chalcidoseps thwaitesii	Education, Research	Information not available	Initiate program within 3 years
Chamaeleo zeylanicus	Education, Research, Awareness	Known	Initiate program after 3 years
Chelonia mydas	Research, Education, Tourism, Awareness	Some techniques known	Initiate program after 3 years
Chrysopelea ornata sinhaley	Awareness	Not known at all	Initiate program after 3 years
Chrysopelea taprobanica	Education, Research, Awareness	Not known at all	Initiate program after 3 years
Cnemaspis jerdonii sculpensis	, , , , , , , , , , , , , , , , , , , ,	Information not available	Pending
Cnemaspis kandianus		Not known at all	Pending
Cnemaspis podihuna	Conservation	Not known at all	Initiate program within 3 years

Scientific name	Captive breeding for	Propagation techniques	Level of captive breeding
Cnemaspis tropidogaster		Not known at all	Pending
Cophotis ceylanica	Education, Research, Awareness	Some techniques known	Ongoing program intensified
Crocodylus palustris	Education, Research, Awareness	Some techniques known	Initiate program after 3 years
Crocodylus porosus	Education, Research, Awareness	Some techniques known	Initiate program after 3 years
Cylindrophis maculat	Education, Research, Awareness	Not known at all	Initiate program after 3 years
Cyrotodactylus frenatus	Research	Some techniques known	Pending
Dasia halianus	Education, Research, Awareness	Information not available	Pending
Dendrelaphis oliveri	Recovery, Education, Research	Not known at all	Initiate program within 3 years
Dermochelys coriacea	Research, Recovery, Education, Awareness	Some techniques known	Initiate program after 3 years
Eretmochelys imbricata	Research, Education, Tourism, Awareness	Information not available	Initiate program within 3 years
Eryx conica brevis	Education, Research, Awareness	Not known at all	Initiate program after 3 years
Geckoella triedrus	Species recovery, Education	Information not available	
Geckoella yakhuna	Species recovery, Education, Awareness	Not known at all	Initiate program after 3 years
Geochelone elegans	Education, Research, Awareness	Information not available	Initiate program after 3 years
Haplocercus ceylonensis	Education, Research, Awareness	Not known at all	Initiate programme after 3 years
Hemidactylus brookii parvimaculatus		Not known at all	Not required
Hemidactylus depressus		Not known at all	Pending
Hemidactylus maculatus hunae	Conservation	Not known at all	Initiate programe within 3 years
Hemidactylus triedrus lankae	Education, Research	Information not available	Initiate program within 3 years
Hypnale nepa	Conservation, research	Some techniques known	Initiate program after 3 years
Hypnale walli	Awareness	Some techniques known	Initiate program after 3 years
Lankascincus deignani	Education, Research, Recovery, Awareness	Information not available	Initiate program within 3 years
Lankascincus deraniyagalae	Education, Research, Awareness	Information not available	Initiate program within 3 years
Lankascincus fallax		Information not available	Pending
Lankascincus gansi	Education, Research, Awareness	Not known at all	Initiate program within 3 years
Lankascincus taprobanensis	Education, Research	Not known at all	Initiate program within 3 years
Lankascincus taylori	Unknown	Information not available	Unknown
Leioselasma cyanocinctus	Onkilown	Information not available	Not recommended
Lepidochelys olivacea	Research, Education, Tourism, Awareness	Some techniques known	Initiate program after 3 years
Lissemys punctata punctata	Education, Research, Awareness	Some techniques known Not known at all	Initiate program after 3 years Not recommended
Lycodon striatus sinhaleyus	Education, Research	Not known at all	Initiate program within 3 years
Lyriocephalus scutatus	Education, Research, Awareness	Known	Initiate program after 3 years
Mabuya bibronii	Education, Research	Information not available	Pending
Mabuya carinata lankae.	Awareness	Information not available	Not required
Mabuya cannata lankae. Mabuya floweri	Education, Research, Awareness	Not known at all	Initiate program within 3 years
Mabuya mowen Mabuya madaraszi	Education, Research, Awareness	Information not available	Initiate program after 3 years
Macropisthodon plumbicolor		Some techniques known	
palabariya	Recovery, Education, Research		Initiate program after 3 years
Melanchelys trijuga parkeri	Education, Research, Awareness	Some techniques known	Initiate program after 3 years
Microcephalophis gracilis Nessia bipes	Education, Research, Genome,	Not known at all Not known at all	Not recommended           Initiate program within 3 years
Nessia bundansii	Awareness		Not an environ el
Nessia burtonii	Education, Research, Awareness	Information not available	Not required
Nessia Deraniyagalai	Education, Research, Awareness	Information not available	Initiate program within 3 years
Nessia didactylus	Education, Research, Awareness	Information not available	Initiate program within 3 years
Nessia hickanal	Education, Research, Awareness	Information not available	Initiate program within 3 years
Nessia layardi	Education, Research, Awareness	Not known at all	Initiate program within 3 years
Nessia monodactylus	Education, Research, Awareness	Information not available	Initiate program after 3 years
Nessia sarasinorum	Education, Research, Awareness	Information not available	Pending
Oligodon calamarius	None	Information not available	Unknown
Oligodon sublineatus	Awareness	Information not available	Not recommended
Oligodon taeniolatus ceylonicus Ophisops leschenaultii lankae	Education, Research, Awareness	Information not available Information not available	Initiate program after 3 years Pending
Ophisops minor minor		Information not available	Pending
Otocryptis wiegmanni	Awareness	Some techniques known	
Pleamis platurus	Monitoring	Not known at all	Not recommended
Praescutata viperinus		Not known at all	Not recommended
Pseudotypholops philippinus	Education, Research, Awareness	Some techniques known	Initiate program after 3 years
	No	Known	Initiate program after 3 years
Ptyas mucosus maximus		Not known at all	Initiate program within 3 years
	Conservation. Awareness		
Rhinophis blythii	Conservation, Awareness Conservation		
Rhinophis blythii Rhinophis dorsimaculatus	Conservation	Not known at all	Initiate program within 3 years
Ptyas mucosus maximus Rhinophis blythii Rhinophis dorsimaculatus Rhinophis drummond-hayi Rhinophis oxyrhynchus			

Scientific name	Captive breeding for	Propagation techniques	Level of captive breeding
Rhinophis porrectus	Education, Research	Not known at all	Initiate program within 3 years
Rhinophis punctatus	Education, Research	Information not available	Initiate program within 3 years
Rhinophis trevelyanus	Education, Research	Information not available	Initiate program after 3 years
Riopa singha	Education, Research, Awareness	Not known at all	Initiate program within 3 years
Sitana ponticeriana	Education, Research, Awareness	Some techniques known	Initiate program after 3 years
Sphenomophus dorsicatenatus	Education, Research, Awareness	Information not available	Initiate program after 3 years
Sphenomophus dussumieri	Education, Research, Awareness	Information not available	Initiate program within 3 years
Sphenomorphus megalops	Education, Research, Awareness	Information not available	Initiate program within 3 years
Sphenomorphus rufogulus	Education, Research, Awareness	Information not available	Initiate program within 3 years
Sphenomorphus	Education, Research, Awareness	Information not available	Initiate program within 3 years
striatopunctatus			
Trimeresurus trigonocephalus	Education, Research, Venom,	Known	Initiate program after 3 years
- ·	Awareness		
Typhlops ceylonicus	Recovery, Awareness	Not known at all	Initiate program within 3 years
Typhlops lankaensis	Recovery, Research, Awareness	Not known at all	Initiate program within 3 years
Typhlops mirus	Recovery, Research, Awareness	Not known at all	Initiate program within 3 years
Typhlops tenebrarum	Recovery, Research, Awareness	Not known at all	Initiate program within 3 years
Typhlops veddae	Recovery, Research, Awareness	Not known at all	Initiate program within 3 years
Typhlops violaceus	Recovery, Research, Awareness	Not known at all	Initiate program within 3 years
Uropeltis melanogaster	Education, Research, Awareness	Not known at all	Initiate program after 3 years
Uropeltis phillipsi	Education, Research, Awareness	Not known at all	Initiate program within 3 years
Uropeltis ruhunae	Education, Research	Information not available	Initiate program within 3 years
Varanus bengalensis	Education, Research	Some techniques known	Initiate program after 3 years
Varanus salvator kabaragoya	Education, Research, Awareness	Some techniques known	Initiate program after 3 years
Xenochrophis asperrinus		Information not available	Not recommended

# **Data quality**

Data quality is an important criterion while making any conservation assessment. Quality of data is determined by the type of information available while making any assessment, for example, an assessment based on census over years can give an accurate measure of the status of a taxon with respect to its population trends. Direct observations and general field studies make possible a reasonable assessment of the habitat of a taxon based on which its assessment can be made. Indirect evidences such as from trade and field inferences of a taxon can provide valuable information with respect to its population status in the wild. Literature and museum records can provide valuable evidence of a taxon's past distribution and therefore a comparative assessment of its present status. And, hearsay can provide an insight into what may be popular beliefs as to the status of a given taxon. The order of these different valuators in data quality indicates the degree of confidence in the data while making assessments. The most reliable data quality, namely, census and direct observation over the years is available for very few taxa across different taxonomic groups, mainly in larger mammals and a few large reptiles, but not for the numerous amphibians and smaller reptiles. In this workshop, only five amphibians and nine reptiles were assessed based on such data. Many taxa were evaluated using information from general field studies, which indicates fairly high confidence in the assessments. Many taxa known only from their type locations or single studies were assessed based either on indirect information or on literature/museum records. The flexibility allowed in applying the IUCN Criteria using inference based on other factors such as comparative habitat status permits such assessments to be considered. Table 13 indicates the kind of data quality taken into consideration while assessing the herpetofauna of Sri Lanka. Many taxa were evaluated with more than one type of information, for example, with general field studies and literature. No assessment was based only on hearsay/popular belief, rather in addition to some other reliable data.

Data Quality	Amphibians	Reptiles
Census or monitoring	5	9
General field studies	41	55
Informal field sightings	45	78
Indirect information	9	30
Literature/museum/records	50	107
Hearsay/popular belief	43	14

# Table 13. Data quality used in assessing amphibians and reptiles.

Based on data quality, assessments indicate a distinct bias towards restricted distribution with respect to the threatened taxa qualifying for a particular criterion more than any other. Of the five criteria for threat [viz., (A) Population reduction; (B) Restricted distribution; (C) Restricted population and fluctuation; (D) Population restriction; (E)

Probability of extinction], criterion B was the basis for many taxa to be classified as threatened. This was because very little information on population status of the taxa was available, and as table 13 indicates, only five amphibians and nine reptiles have been monitored over years for a reliable assessment of their population declines. However an attempt has been made to assess population declines in reptiles and 35 taxa were assessed as threatened based on population reduction resulting from indirect information such as the status of the habitat. Table 14 shows the assessments of threatened amphibians and reptiles based on the different criteria.

Criteria	Amphibians	Reptiles
(A) Population reduction	3	25
(B) Restricted distribution	16	53
(C) Population restriction and fluctuation	0	0
(D) Restricted population	1	1
(E) Probablity of extinction	0	0
(A)+(B)	2	11

 Table 14.

 Threatened herpetofauna qualifying for threat criteria

# Conclusion

The amphibians and reptiles of Sri Lanka were assessed according to the 1994 IUCN Red List Criteria. They were assessed at the global level regardless of whether or not the taxon was endemic to the country, for non-endemic taxa (those that have distribution in India), regional assessments could not be made. Sri Lanka is cut off from mainland India and there is no genetic and demographic exchange through population exchange between the two con-specific populations. The factors that contribute to population recovery such as from immigration and recolonization do not apply in such a situation (Gärdenfors, 1996) and so global guidelines for assessment have been retained.

This exercise is only an initial step to understanding the current status of amphibians and reptiles in Sri Lanka with available information. This is not a final assessment, or verdict but a guideline leading tomanagement options and review. The assessments are based on the best information available at this point of time and reassessments are encouraged as and when further data becomes available. What is to be understood, however, is that the dangers to the taxa are in plenty, and appropriate actions to mitigate the extinction process are required at the right time. A look at the following figures indicates the urgency with which pro-active conservation actions are required.

# Figure 6. Status of amphibians in Sri Lanka

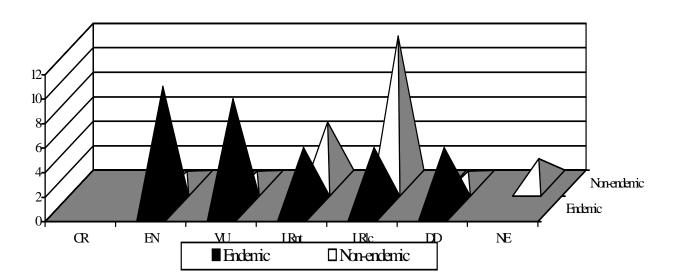
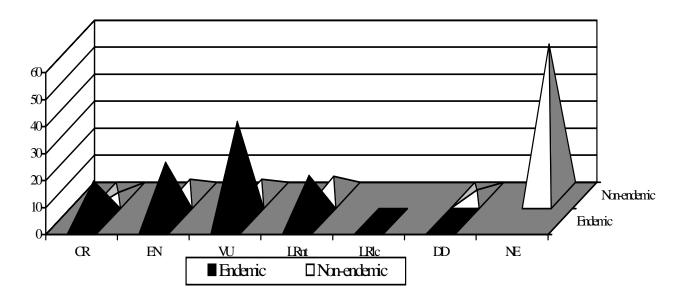


Figure 7. Status of reptiles in Sri Lanka



# **References:**

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**IUCN. 1994.** *IUCN Red List Categories, as approved by the 40<sup>th</sup> meeting of the IUCN Council, IUCN, Gland, Switzerland.* 

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Mittermeier, R.A., N. Myers, J.B. Thomsen, G.A.B. da Fonesca and S. Olivieri. 1998. Biodiversity hotspots and major tropical wilderness areas: Approaches to setting conservation priorities. *Conservation Biology* 12:3 (516-520).

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# **AMPHIBIA**

# **TAXON DATA SHEETS**

# CONSERVATION ASSESSMENT AND MANAGEMENT PLAN WORKSHOP FOR AMPHIBIANS AND REPTILES OF SRI LANKA

REPORT 2000

Scientific name (author; date) Adenomus dasi Manamendra-Arachchi & Pethiyagoda, 1998 Family Bufonidae Species Taxonomic level of assessment Distribution Habitat of the taxon Sub montane to montane wet zone Habitat specificity Stream banks, heavily shaded forests, leaf litter, mossy boulders near streams, damp leaf litter. 1370 m Current distribution (by country) ENDEMIC to Sri Lanka Current Sri Lankan distribution Peak Wilderness Extent of occurrence (Sq. km.) <100 Area of occupancy (Sq. km.) <10 Number of locations/sub pop. 1 Habitat status No change Threats Threats to taxon Unknown Effect of threat on population Unknown Trade No **Population numbers Global** population Unknown Regional Pop (# sub-pop.) Unknown Number of mature individuals Unknown Generation time Unknown Population trends Unknown **Data Quality** General field studies, Survey **Recent field studies** Manamendra-Arachchi and Pethiyagoda, in Peak Wilderness from 1998, Phytogeny, Wildlife Heritage Trust of Sri Lanka Status **IUCN** VULNERABLE IUCN Criteria based on D2 National WL legislation CITES Not listed FFPA 1996 Red List (IUCN) National Red Data Book Critically Endangered (1998) Not listed Yes - Peak wilderness Presence in Protected Area Recommendations Research Survey, Life history studies, PHVA Management Monitoring, captive breeding Captive breeding for Conservation Captive stocks None Level of captive breeding recs. Initiate programme within 3 years **Propagation Techniques** Not known at all Other comments Manamendra-Arachchi had observed only four specimens over 2 years. Rare. Sources 7.21 Compilers C. Bambaradeniva, P. Balasooriva, S. Dutta, S. Karunarathne, N.P. Kumara, U. Livanage, M. Meegaskumbura, K. Ukuwela, N. Weerasinghe, R. Weerawardhena, D. de Silva, J. Wilkinson, P. Yahapath M.M. Bahir, C. Bambaradeniya, Anslem de Silva, A. Jayawickrama, S. Karunarathne, K.N. Reviewers Manamendra-Arachchi, M. Meegaskumbura, R. Somaweera, D. Srinath, N.D. Rathnayake, K.D.B. Ukuwela

# Adenomus kandianus (Günther, 1872)

Bufonidae Kandyan Dwarf Toad (English) Species

#### Distribution Habitat of the taxon Unknown Habitat specificity Unknown Current distribution (by country) **ENDEMIC** to Sri Lanka Current Sri Lankan distribution Probably Kandy or Peradeniya (Type locality) Extent of occurrence (Sq. km.) Unknown Area of occupancy (Sq. km.) Unknown Number of locations/sub pop. Unknown Habitat Status Unknown Threats Threats to taxon Unknown Trade No **Population numbers** Global population Unknown Regional Pop (# sub-pop.) Unknown Number of mature individuals Unknown Generation time Unknown Population trends Unknown **Data Quality** Unknown Recent field studies Manamendra-Arachchi K. & R. Pethiyagoda, from 1998, Phylogeny. Status **IUCN** DATA DEFICIENT IUCN Criteria based on ---CITES Not listed National WL legislation FFPA National Red Data Book Data Deficient 1996 Red List (IUCN) Not listed Presence in Protected Area Unknown Recommendations Research Survey Management Unknown Captive stocks None Level of captive breeding rec. Pending Propagation Techniques Techniques not known at all Type locality not recorded, other information not available. Collected only by Other comments Thwaites, probably in 1860s, Not recorded since then. This species can therefore be considered extinct. Sources 21 Compilers C. Bambaradeniya, P. Balasooriya, S. Dutta, S. Karunarathne, N.P. Kumara, U. Liyanage, M. Meegaskumbura, K. Ukuwela, N. Weerasinghe, R. Weerawardhena, D. de Silva, J. Wilkinson, P. Yahapath Reviewers M.M. Bahir, C. Bambaradeniya, Anslem de Silva, A. Jayawickrama, S. Karunarathne, K.N. Manamendra-Arachchi, M. Meegaskumbura, R. Somaweera, D. Srinath, N.D. Rathnayake, K.D.B. Ukuwela

#### Distribution

Habitat of the taxon Habitat specificity

Current distribution (by country) Current Sri Lankan distribution

Ext.of occurrence (Sq. km.) Area of occupancy (Sq. km.) Number of locations/sub pop. Habitat status

# Threats

Threats to taxon Effect of threat on population Trade

# **Population numbers**

Global population Regional Pop (# sub-pop.) Number of mature individuals Generation time Population trends

Data Quality Recent field studies

# Status

IUCN CITES National Red Data Book Presence in Protected Area

# Recommendations

Research Management Captive stocks Level of captive breeding recs. Propagation Techniques

Other comments

# Sources

Compilers

Reviewers

#### Adenomus kelaartii (Günther, 1858 (publ. 1859)

Bufo kelaartii Günther, 1858, Bufo kandianus Günther, 1872 Bufonidae Kelaarfs Dwarf Toad (English); Kelatge Kum-Gemba (Sinhala) Species

Wet zone and intermediate zone Terrestrial, semi arboreal; Under leaf litter, logs, rocks, closer to aquatic habitats. Up to 700 m. **ENDEMIC** to Sri Lanka, A relict species Mid-hills in western, southern, and central Sri Lanka, Sabaragamuwa Province, Randenigala < 20,000 > 2,000 Many; Contiguous > 20% in the last 10 years; Predicted decline < 20% in the next 10 years

Loss of habitat; Habitat fragmentation; Pesiticides Population decline prediced No

Unknown Unknown Unknown Decline, 20% in Last 10 years; Predicted decline < 20% in the next 10 years

Indirect information; museum/records, literature; hearsay/popular belief Wildlife Heritage Trust, Colombo - known locations from 1993 to date on Distribution; Hass ef a/. (1997) on tadpoles,

VULNERABLE	IUCN Criteria based on	A1c
Not listed	National WL legislation	FFPA
1998, Vulnerable	1996 Red List (IUCN)	Not listed
Sinharaja, Peak Wilderness, k	Kanneliya.	

Limiting factor research Monitoring, limiting factor management (Germany (Haas ef a/1997) Pending Techniques known

7,13,15,18,21

Future studies necessary to find out whether the species is found in tea estates and home gardens

C. Bambnradoniyn, P. BnInsooriyn, S Dutta, S, Karunarathne, N.P. Kumara, U. Liyanage, M. Meegaskumbura, K. Ukuwela, N. Weerasinghe, R. Weerawardhena, D. de Silva, J. Wilkinson, P. Yahapath

M.M. Bahir, C. Bambaradeniya, Anslem de Silva, A. Jayawickrama, S. Karunarathne, K.N. Manamendra-Arachchi, M. Meegaskumbura, R. Somaweera, D. Srinath, N.D. Rathnayake, K.D.B. Ukuwela

Scientific name (author; date) Bufo atukoralei Bogert and Senanayake, 1966 Family Bufonidae Common name Atukorale's Dwarf Toad (English); Atukoralage Kuru-gemba (Sinhala) Taxonomic level of assessment Species Distribution Habitat of the taxon Southern wet zone, coastal belt, dry zone, arid zone Habitat specificity Under litter, stones, logs and in marshy areas. Up to 200m Current distribution (by country) **ENDEMIC** to Sri Lanka Chilaw, Yala, Galle, Hikkaduwa, Inginiyagala, Weligatta, Navinna, Rumassala, Current Sri Lankan distribution Wirawila, Hapugala, Palatupana, Dambulla, Muthurajawala, Akuressa Extent of occurrence (Sq. km.) < 20,000 Area of occupancy (Sq. km.) > 2.000 Number of locations/sub pop. Many; Fragmented Habitat status Stable in area Threats Threats to taxon Pesticides, Pollution, Interspecific competition, Fire, Road kills Effect of threat on population Unknown Trade No **Population numbers** Global population Unknown Regional Pop (# sub-pop.) Unknown Number of mature individuals Unknown Generation time Unknown Population trends Unknown **Data Quality** General field study, Informal field sighting, Literature, Museum, records Recent field studies Wildlife Heritage Trust - Colombo in known locations from 1993 to date, distribution Manamendra-Arachchi and Porase collected it recently from Muthurajavela Status **IUCN** LOWER RISK-NEAR THREATENED IUCN Criteria based on CITES Not listed National WL legislation **FFPA** Not listed National Red Data Book Vulnerable (1998) 1996 Red List (IUCN) Presence in Protected Area Yala, Gal-oya, Giritale, Muthrajavela Recommendations Survey, Life history studies Research Habitat management, Monitoring, Management Captive stocks None Level of captive breeding recs. Not recommended Propagation Techniques Techniques not known at all Other comments Unknown Sources 4,7,13,29 C. Bambaradeniya, P. Balasooriya, S. Dutta, S. Karunarathne, N.P. Kumara, U. Compilers Liyanage, M. Meegaskumbura, K. Ukuwela, N. Weerasinghe, R. Weerawardhena, D. de Silva, J. Wilkinson, P. Yahapath **Reviewers** M.M. Bahir, C. Bambaradeniya, Anslem de Silva, A. Jayawickrama, S. Karunarathne, K.N. Manamendra-Arachchi, M. Meegaskumbura, R. Somaweera, D. Srinath, N.D. Rathnayake, K.D.B. Ukuwela

#### Distribution

Habitat of the taxon Habitat specificity Current distribution (by country) Current Sri Lankan distribution

Extent of occurrence (Sq. km.) Area of occupancy (Sq. km.) Number of locations/sub pop. Habitat status

#### Threats

Threats to taxon Effect of threat on population

#### **Population numbers**

Global population Regional Pop (# sub-pop.) Number of mature individuals Generation time Population trends

# Data Quality Recent field studies

# Status

IUCN CITES National Red Data Book Presence in Protected Area

# Recommendations

Research Management Captive stocks Level of captive breeding recs. Propagation Techniques

#### Other comments

#### Sources

Compilers

Reviewers

# Bufo fergusonii Boulenger, 1892

Bufonidae Ferguson's Dwarf Toad (English); *Fergasonge kuru-gemba* (Sinhala) Species

Dry zone; arid zone; wet zone Up to 300 m. Under leaf litter, logs and rocks Southern and eastern India, Sri Lanka North Central province, Trincomalee, Kiriyankali, Mullaittivu, Tunukkai, Elapata, Polonnaruwa > 20,000 > 2000 7; Fragmented Stable in area; Decrease in quality of habitat

Loss of habitat, Poisoning, Pollution, War, Road kills (military and other vehicles), Fire Yes

Unknown Unknown Unknown Declining (rate unknown) General field survey; Informal field sighting; Museum/records; Literature; Hearsay

Wildlife Heritage Trust, Colombo in known locations from 1993 to date, Distribution; Weerasinghe, 1998 in Polonnaruwa

LOWER RISK-NEAR THREATENED IUCN Criteria based on Not listed National WL legislation Not listed 1996 Red List (IUCN) Wilpattu, Wasgomuwa, Giritale

FFPA Not listed

Survey; Limiting factor research Limiting factor management None Not required Not known at all

7, 13, 30

Deliberate poisoning of water bodies by Sri Lankan forces and LTTE is a threat to most species found in northern and northeastern provinces; also road kills by military vehicles is a growing threat.

C. Bambaradeniya, P. Balasooriya, S. Dutta, S. Karunarathne, N.P. Kumara, U. Liyanage, M. Meegaskumbura, K. Ukuwela, N. Weerasinghe, R. Weerawardhena, D. de Silva, J. Wilkinson, P. Yahapath

M.M. Bahir, C. Bambaradeniya, Anslem de Silva, A. Jayawickrama, S. Karunarathne, K.N. Manamendra-Arachchi, M. Meegaskumbura, R. Somaweera, D. Srinath, N.D. Rathnayake, K.D.B. Ukuwela

#### Distribution

Habitat of the taxon Habitat specificity Current distribution (by country) Current Sri Lankan distribution Extent of occurrence (Sq. km.) Area of occupancy (Sq. km.) Number of locations/sub pop. Habitat status

### Threats

Threats to taxon Effect of threat on population Trade

#### **Population numbers**

Global population Regional Pop (# sub-pop.) Number of mature individuals Generation time Population trends

# **Data Quality**

**Recent field studies** 

#### Status

**IUCN** CITES National Red Data Book Presence in Protected Area

#### Recommendations Research Management

Captive breeding for Captive stocks Level of captive breeding recs. Propagation Techniques

Bufo kotagamai Fernando, Oayawansa and Siriwardhane 1994 Bufonidae Kotagama's Toad (English); Kotagamage gemba (Sinhala) Species

Natural forests - rain forests (Southern wet zone) Close proximity to streams. Leaf litter. Up to 1070 m **ENDEMIC** to Sri Lanka Kanneiiya, Sinharaja, Kitulgala, Massena, Ambagamuwa, Watawala. < 5000 < 2000 6; Fragmented Decrease in area. > 20% in last 10 years and predicted decline, < 20% in next 10 years; Deforestation; Decrease in quality; Population Pressure.

Loss of habitat, Habitat fragmentation, Pesticides, Human interference Yes No

Unknown Unknown Unknown Unknown Declining, > 20% in last 10 Years; predicted decline <20% in next 10 years

Informal field sighting; Literature; Indirect information such as from trade etc.; Hearsay/popular belief Wildlife Heritage Trust, Colombo in known locations from 1993 to date; Ajantha in Ambogamuwa in 1996; Pradeep Nayana (1998) collected in Watawala

IUCN Criteria based on

B1+2c

**FFPA** 

Not listed National WL legislation 1998 1996 Red List (IUCN) Not listed Endangered, Sinharaia. Peak wilderness Survey, Life history studies, Limiting factor research

Habitat management; Wild population management; Monitoring; Limiting factor management; Captive breeding Species recovery None Initiate program within 3 years

Information not available with this group of Compilers

ENDANGERED

Other comments None 7.13.14 Sources Compilers C. Bambaradeniya, P. Balasooriya, S. Dutta, S. Karunarathne, N.P. Kumara, U. Liyanage, M. Meegaskumbura, K. Ukuwela, N. Weerasinghe, R. Weerawardhena, D. de Silva, J. Wilkinson, P. Yahapath M.M. Bahir, C. Bambaradeniya, Anslem de Silva, A. Jayawickrama, S. Karunarathne, K.N. **Reviewers** Manamendra-Arachchi, M. Meegaskumbura, R. Somaweera, D. Srinath, N.D. Rathnayake, K.D.B. Ukuwela

#### Distribution

Habitat of the taxon Habitat specificity Current distribution (by country) Current Sri Lankan distribution Extent of occurrence (Sq. km.) Area of occupancy (Sq. km.) Number of locations/sub pop. Habitat status

#### Threats

Threats to taxon Effect of threat on population Trade

# **Population numbers**

Global population Regional Pop (# sub-pop.) Number of mature individuals Generation time Population trends

# **Data Quality Recent field studies**

#### Status **IUCN**

#### LOWER RISK -LEAST CONCERN IUCN Criteria based on CITES Not listed National WL legislation National Red Data Book Not listed 1996 Red List (IUCN) Except Horton Plains found in all P.A's Presence in Protected Area

# Recommendations

Research Management Captive stocks Level of captive breeding recs. Propagation Techniques

Other comments

Sources

Compilers

Reviewers

M.M. Bahir, C. Bambaradeniya, Anslem de Silva, A. Jayawickrama, S. Karunarathne, K.N. Manamendra-Arachchi, M. Meegaskumbura, R. Somaweera, D. Srinath, N.D, Rathnayake, K.D.B. Ukuwela

C. Bambaradeniya, P. Balasooriya, S. Dutta, S. Karunarathne, N.P. Kumara, U. Liyanage,

M. Meegaskumbura, K. Ukuwela, N. Weerasinghe, R. Weerawardhena, D. de Silva, J.

Bufonidae Common House toad (English); Geyi gemba (Sinhala) Species

Human habitats Terrestrial, Under logs, rubble; Up to 1700m South. Southeast and East Asia Throughout Sri Lanka > 20,000 >2000 Many; Contiguous Stable in area, Stable in quality

Pesticides, Road kills, Predation by reptiles, Laboratory use No No

Unknown Unknown Unknown 5-6 years Unknown

Informal field sighting: Literature: Hearsay/popular belief Wildlife Heritage Trust in most places in Sri Lanka from 1993 to date, distribution Bambaradeniya in the intermediate zone, paddy fields

**FFPA** Not listed

None Individual collections Not required Techniques known

Wilkinson, P. Yahapath

3,7,13, 18,21

Widespread and well known species. This species has been confused for Bufo microtympanum, which is no longer considered a valid species in Sri Lanka.

Scientific name (author; date) Family Common name	<b>Bufo noellerti Manamendra-Ar</b> Bufonidae Nollert's Toad (English); <i>Nollertg</i>		8
Taxonomic level of assessment	Species	e Gernba (Girmala)	
Distribution			
Habitat of the taxon Habitat specificity Current distribution (by country)	Forests, plantations, tea estate, I Up to 460 m. ENDEMIC to Sri Lanka	numan habitation, wet zone	
Current Sri Lankan distribution Extent of occurrence (Sq. km.) Area of occupancy (Sq. km.)	Southwestern wet zone (Udugan < 5,000 <500	na, Kanneliya, Sinharaja, Pa	napola)
Number of locations/sub pop. Habitat status	Few; Fragmented Deforestation, Human interference	ce	
Threats Threats to taxon	None		
Effect of threat on population Trade	Unknown No		
Population numbers Global population	Unknown		
Regional Pop (# sub-pop.)	Unknown		
Number of mature individuals Generation time	Unknown Unknown		
Population trends	Unknown		
Data Quality Recent field studies	Field research by Wildlife Heritag Manamendra-Arachchi K. & R. P		from 1998, Phylogeny.
Status			
IUCN CITES	LOWER RISK-NEAR THREATENED Not listed	IUCN Criteria based on National WL legislation	 FFPA
National Red Data Book Presence in Protected Area	Endangered (98 draft) Sinharaja	1996 Red List (IUCN)	Not listed
Recommendations			
Research Management	Field surveys Monitoring		
Captive stocks Level of captive breeding recs.	None Not required		
Propagation Techniques	Not known at all		
Other comments	The species, though restricted in found in tea plantations, home ga its population is minimum.		
Sources	7,21		
Compilers	C. Bambaradeniya, P. Balasooriy Liyanage, M. Meegaskumbura, K D. de Silva, J. Wilkinson, P. Yaha	. Ukuwela, N. Weerasinghe	
Reviewers	MM Dahia O Daashaasadaasiya	Anslem de Silva A Javawic	krama, S. Karunarathne, K.N.
	M.M. Banir, C. Bambaradeniya, J Manamendra-Arachchi, M. Meeg Rathnayake, K.D.B. Ukuwela		

#### Distribution

Habitat of the taxon Habitat specificity Current distribution (by country) Current Sri Lankan distribution Extent of occurrence (Sq. km.) Area of occupancy (Sq. km.) Number of locations/sub pop. Habitat status

#### Threats

Threats to taxon Effect of threat on population Trade

#### **Population numbers**

Global population Regional Pop (# sub-pop.) Number of mature individuals Generation time Population trends

# **Data Quality**

**Recent field studies** 

<b>Status</b> IUCN CITES National Red Data Book Presence in Protected Area	LOWER RISK-LEAST CONCERN Not listed 1998, Endangered Many	IUCN Criteria based on National WL legislation 1996 Red List (IUCN)	 FFPA Not listed
Recommendations Research Management Captive breeding for Captive stocks Level of captive breeding recs. Propagation Techniques	Survey, Life history studies, Effects Monitoring, Captive breeding Public awareness None Not recommended Techniques known for similar ta:		elds
Other comments	Anslem de Silva has observed sev vehicles during the past 15 years. It also get killed due to agricultur	Some people kill this species a	2
Sources	5,7, 13, 18,24		
Compilers	C. Bambaradeniya, P. Balasooriya Liyanage, M. Meegaskumbura, K. de Silva, J. Wilkinson, P. Yahap	Ukuwela, N. Weerasinghe, R.	
Reviewers	M.M. Bahir, C. Bambaradeniya, A Manamendra-Arachchi, M. Meega		

# Ichthyophis glutinosus (Linnaeus, 1758)

Serpens caecilia Seba, 1735; Caecilia glutinosa Linnaeus, 1754 Ichthyophiidae Common Yellow-band Caecillian (English), Kaha hiri-danda (Sinhala) Species

Through out wet intermediate forests and human habitats Wet, rotting vegetation. Burrowing. Up to 1350 m. ENDEMIC to Sri Lanka Central and southern Sri Lanka (Wet and intermediate zones) > 20,000 > 2,000 20+; Contiguous Stable in area; Decrease in quality due to Human habitation, Agricultural mechanisation

Pesticides, Pollution, Edaphic changes, Predation, Road kills, Ploughing. None No

Unknown Unknown Unknown Unknown Unknown

General field study, Informal field sighting, Literature, Indirect information such as from trade, farmers, etc., Wildlife Heritage Trust from 1993 to date, Distribution. Jayawickrama, A. (ARROS) in Gampola on going, Field survey; C. Gans in 1980's, Distribution and Taxonomy.

K.D.B. Ukuwela

#### Distribution

Habitat of the taxon Habitat specificity Current distribution (by country) Current Sri Lankan distribution

Extent of occurrence (Sq. km.) Area of occupancy (Sq. km.) Number of locations/sub pop. Habitat status

#### Threats

Threats to taxon Effect of threat on population Trade

# **Population numbers**

Global population Regional Pop (# sub-pop.) Number of mature individuals Generation time Population trends

Data Quality Recent field studies

#### Status

IUCN CITES National Red Data Book Presence, in Protected Area

#### Recommendations

Research Management Captive breeding for Captive stocks Level of captive breeding recs. Propagation Techniques

Other comments

Sources

Compilers

Reviewers

# Ichthyophis orthoplicatus (Taylor, 1965)

Ichthyophis taprobanicus Taylor, 1965 Ichthybphiidae Brown Caecillian (English), *Dumburu hiri-danda* (Sinhala) Species

Forests and human habitation 500-1890 m ENDEMIC to Sri Lanka Central and Knuckles, Puwakpitiya, Badalla, Demodara, Nuwara Eliya, Namunukula (Submontane and montane zones) < 20,000 < 5,000 Unknown Urbanization

Pesticides, Pollution, Edaphic changes, Predation, Fire, Agriculture Unknown No

Unknown Unknown Unknown Unknown Unknown

General field study, Informal field sighting, Literature, Hearsay/ popular belief Wildlife Heritage Trust from 1993 to date, Distribution. C. Gans in 1980's, Distribution and taxonomy.

# DATA DEFICIENT

5, 7, 13, 24

Unknown 1998, Endangered Unknown IUCN Criteria based on National WL legislation 1996 Red List (IUCN)

--FFPA Not listed

Survey, Life history studies, Limiting factor research Habitat management, Monitoring, Limiting factor management, Captive breeding Public awareness None Initiate programme after 3 years Some techniques known for similar taxa

To determine the quality of habitat it is important to study if the species has benefited by dairy farming and to study the effects of agriculture.

C. Bambaradeniya, P. Balasooriya, S. Dutta, S. Karunarathne, N.P. Kumara, U. Liyanage, M. Meegaskumbura, K. Ukuwela, N. Weerasinghe, R. Weerawardhena, D. de Silva, J. Wilkinson, P. Yahapath

M.M. Bahir, C. Bambaradeniya, Anslem de Silva, A. Jayawickrama, S. Karunarathne, K.N. Manamendra-Arachchi, M. Meegaskumbura, R. Somaweera, D. Srinath, N.D. Rathnayake, K.D.B. Ukuwela

#### Distribution

Habitat of the taxon Habitat specificity Current distribution (by country) Current Sri Lankan distribution Extent of occurrence (Sq. km.) Area of occupancy (Sq. km.) Number of locations/sub pop. Habitat status

#### Threats

Threats to taxon Effect of threat on population Trade

# **Population numbers**

Global population Regional Pop (# sub-pop.) Number of mature individuals Generation time Population trends

# Data Quality Recent field studies

# Status

IUCN CITES National Red Data Book Presence in Protected Area

# Recommendations

Research

Management Captive breeding for Captive stocks Level of captive breeding recs. Propagation Techniques

# Other comments

Sources

Compilers

Reviewers

Ichthyophis pseudangularis (Taylor, 1965)

Ichthyophiidae Lesser Yellow-band Caecillian (English), Kuda kaha hiri-danda (Sinhala) Species

Wet Zone, Forests and human habitation Burrowing. Up to 1525 m ENDEMIC to Sri Lanka Central and southern Sri Lanka (Wet zone) > 20,000 > 2,000 Many; Contiguous Stable in area; Decrease in quality due to Human habitation, Agriculture

Pesticides, Pollution, Edaphic changes, Fire, Ploughing None No

Unknown Unknown Unknown Unknown Unknown

5,7,13,24

Informal field sighting, Literature, Indirect information. Wildlife Heritage Trust in known locations from 1993 to date, Distribution.

LOWER RISK-LEAST CONCERN	IUCI
Not listed	Natio
1998, Endangered	1996
Many	

CN Criteria based on tional WL legislation 96 Red List (IUCN)

FFPA Not listed

Survey, Life history studies, Limiting factor research, Effects of diary farming and paddy fields Monitoring, Captive breeding Public awareness None Initiate programme after 3 years Some techniques known for similar taxa

People kill this species assuming it to be a serpent. Another species *Caudacaecilia asplenia* needs further investigation (Anslem de Silva, 1996).

C. Bambaradoniya, P, Balasooriya, S. Dutta, S. Knrunarathno, N.P. Kumarn, U. Liyanage, M. Meegaskumbura, K. Ukuwela, N. Weerasinghe, R. Weerawardhena, D. de Silva, J. Wilkinson, P. Yahapath

M.M. Bahir, C. Bambaradeniya, Anslem de Silva, A. Jayawickrama, S. Karunarathne, K.N. Manamendra-Arachchi, M. Meegaskumbura, R. Somaweera, D. Srinath, N.D. Rathnayake, K.D.B. Ukuwela

#### Distribution

Habitat of the taxon Habitat specificity Current distribution (by country) Current Sri Lankan distribution Extent of occurrence (Sq. km.) Area of occupancy (Sq. km.) Number of locations/sub pop. Habitat status

Threats

Threats to taxon

Effect of threat on population Trade

# **Population numbers**

Global population Regional Pop (# sub-pop.) Number of mature individuals Generation time Population trends

# **Data Quality**

**Recent field studies** 

	Somaweela in Meriduena, Dambula, neu studies.			
Status IUCN CITES National Red Data Book Presence in Protected Area Natl./Reg. Protection plan	<b>LOWER RISK</b> - LEAST <b>CONCERN</b> Not listed No Giritale No	IUCN Criteria based on National WL legislation 1996 Red List (IUCN)	 FFPA Not listed	
<b>Recommendations</b> Research Management Captive stocks Level of captive breeding recs. Propagation Techniques	Limiting factor research; Impact of agricultural practices Monitoring, Limiting factor management None Not recommended Not known at all			
Other comments	The species was also recorded in the third peneplain (type specimen); also recorded to be widely distributed in areas not mentioned in this report. No prediction of decline.			
Sources	7,12,13,18			
Compilers	C. Bambaradeniya, P. Balasooriya, S. Dutta, S. Karunarathne, N.P. Kumara, U. Liyanage, M. Meegaskumbura, K. Ukuwela, N. Weerasinghe, R. Weerawardhena, D. de Silva, J. Wilkinson, P. Yahapath			
Reviewers		a, Anslem de Silva, A. Jayawickrama, S. Karunarathne, K.N. egaskumbura, R. Somaweera, D. Srinath, N.D. Rathnayake,		

# Kaloula taprobanica Parker, 1934

Kaloula pulchra taprobanica Parker, 1934; Kaloula pulchra Grey 1831 Microhylidae Bullfrog (English); *Visituru Ratu Madiya* (Sinhala) Species

Wet, intermediate and dry zones; paddy fields and other human habitations Burrowing, sandy soil, tree crevices, upto 500 m India and Sri Lanka Many locations in wet, dry and intermediate zones > 20,000 > 2,000 Many; Contiguous Decrease in quality

Pesticides, Poisoning, Pollution, Edaphic changes, Mechanisations in paddy ploughing, Urbanization No No

Unknown Unknown Unknown Unknown Unknown

Census or monitoring; general field study; informal field sighting, literature, hearsay/popular belief Wildlife heritage Trust Colombo in known locations, from 1993 to date, on Distribution; Anslem de Silva and P. de Silva, from 1995, ecology and distribution; Ukuwela and Somaweera in Menkdena, Dambulla, field studies.

#### Distribution

Habitat of the taxon Habitat specificity Current distribution (by country) Current Sri Lankan distribution Extent of occurrence (Sq. km.) Area of occupancy (Sq. km.) Number of locations/sub pop. Habitat status

Threats

Threats to taxon

Effect of threat on population Trade

# **Population numbers**

Global population Regional Pop (# sub-pop.) Number of mature individuals Generation time Population trends

# Data Quality Recent field studies

### Status

IUCN CITES National Red Data Book Presence in Protected Area

# Recommendations

Research Management Captive stocks Level of captive breeding recs. Propagation Techniques

#### Other comments

Sources

Compilers

Reviewers

Forests in wet zone Moist leaf litter; Up to 1100 m ENDEMIC to Sri Lanka Morningside (Rakwana), Balangoda, Knuckles < 5,000 <500 2, Fragmented Decrease in area, 20% in the last 10 years; Predicted decline 20% in next 10 years,

Karunatatne's Narrow-mouth Frog (English); Karunaratnage muwapatu madiya (Sinhala)

Loss of habitat; Habitat fragmentation; Climate, Edaphic changes; Human interference Yes No

Deforestation, Decrease in quality, Population pressure

Microhyla karunaratnei Fernando and Siriwarhane, 1996

Microhylidae

Species

Unknown Unknown Unknown Unknown Decline, 20% in the last 10 years; predicted decline about 20% in the next 10 years

Informal field sighting, literature, hearsay/popular belief Wildlife Heritage Trust, Colombo, in known locations from 1993 to date, distribution.

ENDANGEREDIUCN Criteria based on<br/>National WL legislationB1+2bc<br/>FFPACritically Endangered (1998 draft)1996 Red List (IUCN)Not listedSinharaja1996 Red List (IUCN)Not listed

Survey, Limiting factor research, Life history studies, PHVA recommended Habitat management, Monitoring, Limiting factor management None Pending Techniques not known at all

Dying of natural forest is a threat to the species.

7,13,20

C. Bambaradeniya, P. Balasooriya, S. Dutta, S. Karunarathne, N.P. Kumara, U. Liyanage, M. Meegaskumbura, K. Ukuwela, N. Weorasinghe, R. Weerawardhena, D. de Silva, J. Wilkinson, P. Yahapath

M.M. Bahir, C. Bambaradeniya, Anslem de Silva, A. Jayawickrama, S. Karunarathne, K.N. Manamendra-Arachchi, M. Meegaskumbura, R. Somaweera, D. Srinath, N.D. Rathnayake, K.D.B. Ukuwela Scientific name (author; date) Microhyla ornata (Dumeril and Bibron, 1841) Engystoma omata Dumeril and Bibron, 1841 Synonyms Family Microhvlidae Common name Ornate Narrow-mouth Frog (English), Visituru Muwapatu Madiya (Sinhala) Taxonomic level of assessment Species Distribution Habitat of the taxon Forests and man made habitats (Low and midcountry dry and wet zone) Habitat specificity Burrowing, Leaflitter, under logs, in crevices, up to 500 m Current distribution (by country) Pakistan, India, Nepal, Bangladesh, Burma, Thailand, China, Japan, Southeast Asia, and Sri Lanka Throughout Sri Lanka except above 500 m Current Sri Lankan distribution Extent of occurrence (Sq. km.) > 20,000 Area of occupancy (Sq. km.) > 2,000 Number of locations/sub pop. Many; Contiguous Habitat status Stable in area, Decrease in quality, Anthropogenic factors Threats Loss of habitat; pesticides, poisoning, pollution, edaphic changes, predation by exotics, Threats to taxon agricultural practices such as mechanisation Effect of threat on population No Trade No **Population numbers** Global population Unknown Regional Pop (# sub-pop.) Unknown Number of mature individuals Unknown Generation time Unknown Population trends Unknown **Data Quality** General field study, Informal field sighting, Literature **Recent field studies** Wildlife Heritage Trust, Colombo in known locations, from 1993 to date, distribution; Anslem de Silva, on going studies. Status **IUCN** LOWER RISK-LEAST CONCERN IUCN Criteria based on FFPA CITES National WL legislation Not listed National Red Data Book Not listed 1996 Red List (IUCN) Not listed Presence in Protected Area Yala, Wilpattu Recommendations Research Limiting factor research Monitoring, Limiting factor management Management Captive stocks None Level of captive breeding recs. Not recommended **Propagation Techniques** Not known at all Other comments Tree trunks for nesting are declining; big trees are felled. 7,13,18,28 Sources Compilers C. Bambaradeniya, P. Balasooriya, S. Dutta, S. Karunarathne, N.P. Kumara, U. Liyanage, M. Meegaskumbura, K. Ukuwela, N. Weerasinghe, R. Weerawardhena, D. de Silva, J. Wilkinson, P. Yahapath M.M. Bahir, C. Bambaradeniya, Anslem de Silva, A. Jayawickrama, S. Karunarathne, K.N. Reviewers Manamendra-Arachchi, M. Meegaskumbura, R. Somaweera, D. Srinath, N.D. Rathnayake, K.D.B. Ukuwela

### Distribution

Habitat of the taxon Habitat specificity Current distribution (by country) Current Sri Lankan distribution Extent of occurrence (Sq. km.) Area of occupancy (Sq. km.) Number of locations/sub pop. Habitat status

### Threats

Threats to taxon

Effect of threat on population Trade

# **Population numbers**

Global population Regional Pop (# sub-pop.) Number of mature individuals Generation time Population trends

# Data Quality Recent field studies

Status IUCN CITES

National Red Data Book Presence in Protected Area

# Recommendations

Research Management Captive breeding for Captive stocks Level of captive breeding recs. Propagation Techniques

# Other comments

Sources

Compilers

Reviewers

Microhyla rubra Jerdon, 1854

*Engystoma rubrum* Jerdon, 1854 Microhylidae Narrow-mouth Red Frog (English); *Ratu muvapatu madiya* (Sinhala) Species

Dry and intermediate zone Terrestrial, Burrowing, Under rocks and crevices, Up to 500 m India, Sri Lanka, Bangladesh Mainly in the dry zone; also recorded from wet zone > 20,000 > 2,000 Many; Contiguous Stable

Pesticides, Poisoning, Pollution, Edaphic changes, Agricultural mechanisations, Human interference No No

Unknown Unknown Unknown Unknown Unknown

Census or monitoring; Informal field sighting; Literature, Hearsay/popular belief Wildlife Heritage Trust, Colombo in known locations from 1993 to date, distribution C. Bambaradeniya in Bathalagoda, 1997, feeding; Anslem de Silva, 1990, Distribution.

LOWER RISK-LEAST CONCERN Not listed Not listed Yes

IUCN Criteria based on National WL legislation 1996 Red List (IUCN) --FFPA Not listed

Limiting factor research, Life history studies Limiting factor management, captive breeding Education None Pending Not known at all

nts Ecology of microhylidae is poorly known.

1,7,13, 18

C. Bambaradeniya, P. Balasooriya, S. Dutta, S. Karunarathne, N.P. Kumara, U. Liyanage, M. Meegaskumbura, K. Ukuwela, N. Weerasinghe, R. Weerawardhena, D. de Silva, J. Wilkinson, P. Yahapath

M.M. Bahir, C. Bambaradeniya, Anslem de Silva, A. Jayawickrama, S. Karunarathne, K.N. Manamendra-Arachchi, M. Meegaskumbura, R. Somaweera, D. Srinath, N.D. Rathnayake, K.D.B. Ukuwela

Scientific name (author; date)	<i>Microhyla zeylanica</i> Parker and Hill, 1949
Family	Microhylidae
Common name	Sri Lanka Narrow-mouth Frog (English); <i>Lanka Muvapatu Madiya</i> (Sinhala)
Taxonomic level of assessment	Species

Distribution Habitat of the taxon Habitat specificity Current distribution (by country) Current Sri Lankan distribution Extent of occurrence (Sq. km.) Area of occupancy (Sq. km.)

Number of locations/sub pop. Habitat status

# Threats

Threats to taxon

Effect of threat on population Trade

### **Population numbers**

Global population Regional Pop (# sub-pop.) Number of mature individuals Generation time Population trends

## Data Quality Recent field studies

### Status

IUCN CITES National Red Data Book Presence in Protected Area

# Recommendations

Research Management Captive breeding for Captive stocks Level of captive breeding recs. Propagation Techniques

Other comments

### Sources

Compilers

Reviewers

Near Lentic habitats in upper montane grasslands Wet patana grassland near riparian habitats, 1000 m. ENDEMIC to Sri Lanka Restricted to montane zone. Horton Plains, Hakgala, Pattipola, Nuwara Eliya. < 5,000 < 2,000 < 5; fragmented. Decreasing in area, 20% in the last 10 years and predicted decline 20% in the next 10 years due to agriculture and plantations, Decrease in quality, Urbanization.

Loss of habitat; Habitat fragmentation; Pesticides, Poisoning, Pollution, Climate, Edaphic changes, Predation, Fire, Acid rain. Yes No

Unknown Unknown > 2,500 (Unknown) Unknown Declining, > 20% in the last 10 years; Predicted decline > 20% in the next 10 years.

General field study; Informal field sighting; Literature; Hearsay/popular belief Wildlife Heritage Trust, in known areas from 1993 to date. Weerawardena in Horton Plains, 1998, morphometric and development stage; Anslem de Silva in Horton Plains, 1997-98, ZSSL (Zoological Survey of Sri Lanka)

> IUCN Criteria based on National WL legislation 1996 Red List (IUCN)

B1+2bc FFPA Not listed

Survey, Taxonomic research, Life history studies Habitat management; Monitoring, Captive breeding Conservation, Research, Education None Initiate programme within 3 years Techniques not known at all

ENDANGERED

1998-Vulnerable

Horton Plains, Hakoala

Not listed

7.13.18.31

**hts** Need to clarify if this species found in Rakwana is the same. Anslem de Silva observed during the ZSSL survey 1997/98 that it was common in lentic habitats in grasslands and fair number of its tadpoles are predated by aquatic hermiptrans.

C. Bambaradeniya, P. Balasooriya, S. Dutta, S. Karunarathne, N.P. Kumara, U. Liyanage, M. Meegaskumbura, K. Ukuwela, N. Weerasinghe, R. Weerawardhena, D. de Silva, J. Wilkinson, P. Yahapath

M.M. Bahir, C. Bambaradeniya, Anslem de Silva, A. Jayawickrama, S. Karunarathne, K.N. Manamendra-Arachchi, M. Meegaskumbura, R. Somaweera, D. Srinath, N.D. Rathnayake, K.D.B. Ukuwela

### Distribution

Habitat of the taxon Habitat specificity Current distribution (by country) Current Sri Lankan distribution Extent of occurrence (Sq. km.) Area of occupancy (Sq. km.) Number of locations/sub pop. Habitat status

Threats

Threats to taxon

Effect of threat on population Trade

### **Population numbers**

Global population Regional Pop (# sub-pop.) Number of mature individuals Generation time Population trends

## Data Quality Recent field studies

### Status **IUCN** IUCN Criteria based on LOWER RISK - LEAST CONCERN CITES Not listed National WL legislation FFPA National Red Data Book 1998-Vulnerable 1996 Red List (IUCN) Not listed Presence in Protected Area Uluwatte Kele Recommendations Research None Limiting factor management, Monitoring Management Captive stocks Anslem de Silva (private collection) > 25 and Madava Magaskumbura (private collection) 12.3. Total 35 (20 male, 15 female) Level of captive breeding recs. Not recommended for conservation breeding Propagation Techniques Techniques known Other comments Local population has increased in some locations. Highly adaptable species. Sources 7, 13, 18, 23 C. Bambaradeniya, P. Balasooriya, S. Dutta, S. Karunarathne, N.P. Kumara, U. Compilers Liyanage, M. Meegaskumbura, K. Ukuwela, N. Weerasinghe, R. Weerawardhena, D. de Silva, J. Wilkinson, P. Yahapath

Reviewers M.M. Bahir, C. Bambaradeniya, Anslem de Silva, A. Jayawickrama, S. Karunarathne, K.N. Manamendra-Arachchi, M. Meegaskumbura, R. Somaweera, D. Srinath, N.D. Rathnayake,

Ramanella obscura (Günther, 1864)

*Callula obscura* Günther, 1964 Microhylidae Grey-brown Pug-snout Frog (English); *Alu-dumburu motahombu madiya* (Sinhala) Species

Wet zone sub montane forests Leaf litter, under logs, stones. Burrowing arboreal. Up to 1200 m ENDEMIC to Sri Lanka Low country, wet zone; forests and human habitations > 20,000 >2000 Many; Contiguous Stable in area

Pesticides; Poisoning; Pollution; Edaphic changes; Predation; Predation by exotics; Fire; Drying of breeding pools. No

Unknown Unknown Unknown Unknown Stable

K.D.B. Ukuwela

General field study; Informal field sighting; Literature; Hearsay/popular belief Wildlife Heritage Trust in known locations, 1993 to date, distribution. Anslem de Silva and P. de Silva in Gampola, on going, observation on threats and. breeding. Meegaskumbura in Peradeniya 1998, breeding and development stages. N. Ratnayake and N. Weerasinghe in Knuckles.

### Distribution

Habitat of the taxon Habitat specificity Current distribution (by country) Current Sri Lankan distribution Extent of occurrence (Sq. km.) Area of occupancy (Sq. km.) Number of locations/sub pop. Habitat Status

### Threats

Threats to taxon Effect of threat on population Trade

# **Population numbers**

Global population Regional Pop (# sub-pop.) Number of mature individuals Generation time Population trends

# Data Quality Recent field studies

### Status

IUCN CITES National Red Data Book Presence in Protected Area

### Recommendations

Research Management Captive breeding for Captive stocks Level of captive breeding recs. Propagation Techniques

### Other comments

Sources

Compilers

Reviewers

Ramanella palmata Parker, 1934

Microhylidae Half-webbed Pug-snout Frog (English); *Patala-pa motahombu madiya* (Sinhala) Species

Upper montane forests of Sri Lanka Sub fossorial. Leaf litter, under logs, stones. Above 1500m. **ENDEMIC** to Sri Lanka Horton Plains, Hakgala, Peak Wilderness, Bogawantalawa, Nuwara Eliya, < 20,000 < 2,000 Many; Contiguous Decreasing in area > 20% in the last 10 years; Predicted decline > 20% in next 10 years

Loss of habitat, Pesticides, Poisoning, Pollution, Climate, Edaphic changes, Fire, Acid rain Yes No

Unknown Unknown Unknown Declining, 20% in the last 10 years; predicted decline 20% in next 10 years.

General field study, Informal field sighting, Literature, Hearsay/popular belief Wildlife Heritage Trust, Colombo in known areas from 1993 to date, distribution. Anslem de Silva, Zoological Survey of Sri Lanka in known areas from 1997 to date.

VULNERABLEIUCNot listedNat1998 draft - Endangered199Horton Plains and Peak Wilderness

7,9,13, 18

IUCN Criteria based on National WL legislation 1996 Red List (IUCN) A1c+2c FFPA Not listed

Survey, Limiting factor research, Life history studies Monitoring, Limiting factor management, Captive breeding Restocking None Initiate programme within 3 years Techniques not known at all

Rare - Anslem de Silva in situ breeding programme under ZSSL at Horton Plains.

C. Bambaradeniya, P. Balasooriya, S. Dutta, S. Karunarathne, N.P. Kumara, U. Liyanage, M. Meegaskumbura, K. Ukuwela, N. Weerasinghe, R. Weerawardhena, D. de Silva, J. Wilkinson, P. Yahapath

M.M. Bahir, C. Bambaradeniya, Anslem de Silva, A. Jayawickrama, S. Karunarathne, K.N. Manamendra-Arachchi, M. Meegaskumbura, R. Somaweera, D. Srinath, N.D. Rathnayake, K.D.B. Ukuwela

### Distribution

Habitat of the taxon Habitat specificity Current distribution (by country) Current Sri Lankan distribution Extent of occurrence (Sq. km.) Area of occupancy (Sq. km.) Number of locations/sub pop. Habitat status

Threats

Threats to taxon

Effect of threat on population Trade

### **Population numbers**

Global population Regional Pop (# sub-pop.) Number of mature individuals Generation time Population trends

### Data Quality Recent field studies

### Status **IUCN** LOWER RISK-LEAST CONCERN IUCN Criteria based on **FFPA** CITES Not listed National WL legislation National Red Data Book 1996 Red List (IUCN) Not listed Not listed Presence in Protected Area Yes. Recommendations Research Survey, Life history studies Management Monitoring Captive stocks None Level of captive breeding recs. Not recommended **Propagation Techniques** Not known at all Other comments Common in anthropogenic habitats in low lands.

Sources

Compilers

Reviewers

7, 13, 16, 18

C. Bambaradeniya, P. Balasooriya, S. Dutta, S. Karunarathne, N.P. Kumara, U. Liyanage, M. Meegaskumbura, K. Ukuwela, N. Weerasinghe, R. Weerawardhena, D. de Silva, J. Wilkinson, P. Yahapath

M.M. Bahir, C. Bambaradeniya, Anslem de Silva, A. Jayawickrama, S. Karunarathne, K.N. Manamendra-Arachchi, M. Meegaskumbura, R. Somaweera, D. Srinath, N.D. Rathnayake, K.D.B. Ukuwela

# Ramanella variegata (Stoliczka, 1872)

*Callula variegata* Stoliczka, 1872; *Callula olavacea* Günther, 1975 Microhylidae White-bellied Pug-snout Frog (English); *Bada-sudu motahombu madiya* (Sinhala) Species

In the plains of the wet and dry climatic zones Subfossorial, semi-arboreal. Under rubbles, logs. Up to 500 m India and Sri Lanka Wide distribution in low country > 20,000 > 2,000 Many; contiguous Stable in area, Decrease in quality

Pesticides, Poisoning, Pollution, War, Edaphic changes, Fire, Road kills, Human interference No

Unknown Unknown Unknown Unknown Stable

General field study; Informal field sightings; Literature; Hearsay/popular belief Wildlife Heritage Trust in known locations from 1993 to date on Distribution Global Environment Facility Project in Lunugamwehera, Polonnaruwa, Randenigala, Rantambe, Udawalawe and Floodplains from 1996-97 on Resource Inventories for Protected Areas, GEF Project. Scientific name (author; date) Uperodon systoma (Schneider, 1799) Synonyms Rana systoma Schneider, 1799 Family Microhvlidae Common name Baloon Frog (English); Balun madiya (Sinhala) Taxonomic level of assessment Species Distribution Habitat of the taxon Low country; intermediate and dry zones Burrowing, Terrestrial, Up to 300 m Habitat specificity Current distribution (by country) Sri Lanka, southern and eastern India Current Sri Lankan distribution Dry zone and intermediate zone throughout Sri Lanka Extent of occurrence (Sq. km.) > 20,000 Area of occupancy (Sq. km.) > 2,000 Number of locations/sub pop. 8+; wide distribution; contiguous Habitat status Stable in areas. Threats Threats to taxon Pesticides, Climate, Edaphic changes, Habitat disturbance due to sand removal Effect of threat on population Unknown Trade No Population numbers Global population Unknown Regional Pop (# sub-pop.) Unknown Number of mature individuals Unknown Generation time Unknown Population trends Stable Data Quality General field study. Informal field sighting. Hearsay/popular belief **Recent field studies** Wildlife Heritage Trust, Colombo in known locations from 1993 to date, distribution. Anslem de Silva, 1994 in Trincomalee area. Status **IUCN** LOWER RISK - LEAST CONCERN IUCN Criteria based on CITES Not listed National WL legislation 1996 Red List (IUCN) National Red Data Book Not listed Not listed Presence in Protected Area Yes Recommendations Research Limiting factor research, Life history studies, Taxonomic research Monitoring, Management Captive stocks None Level of captive breeding recs. Not recommended Propagation Techniques Unknown Other comments Some localized U. systoma species in the dry zone need to be further investigated with more specimens to establish whether it is a different population (Anslem de Silva, on going field work). Low dispersal potential. This species is localised and if the particular habitat is disturbed may be a possibility of decline of species found near human habitat. Species lives on sand heaps used in construction ... Sources 7,13,18 C. Bambaradeniya, P. Balasooriya, S. Dutta, S. Karunarathne, N.P. Kumara, U. Compilers Liyanage, M. Meegaskumbura, K. Ukuwela, N. Weerasinghe, R. Weerawardhena, D. de Silva, J. Wilkinson, P. Yahapath M.M. Bahir, C. Bambaradeniya, Anslem de Silva, A. Jayawickrama, S. Karunarathne, K.N. Reviewers Manamendra-Arachchi, M. Meedaskumbura, R. Somaweera, D. Srinath, N.D. Rathnavake, K.D.B. Ukuwela

Scientific name (author; date) Euphlyctis cyanophlyctis Schneider, 1799 Rana cyanophlyctis Schneider, 1799 Synonyms Family Ranidae Common name Skipper Frog (English); Utpatana madiya (Sinhala) Taxonomic level of assessment Species Distribution Habitat of the taxon Adaptable species, cosmopolitan distribution. Habitat specificity Aquatic. Up to 1800 m. Current distribution (by country) Afganistan, Baluchistan, India, Indo-china, Sri Lanka Widely distributed Current Sri Lankan distribution Extent of occurrence (Sq. km.) > 20,000 Area of occupancy (Sq. km.) > 2,000 Number of locations/sub pop. Many; Contiguous Habitat status Stable in area Threats Threats to taxon Pesticides, Poisoning, Agricultural mechanisation, Drought, Water pollution Effect of threat on population None Trade No **Population numbers** Global population Unknown Regional Pop (# sub-pop.) Unknown Number of mature individuals Unknown Generation time Unknown Population trends Unknown Data Quality General field studies. Informal field sightings. Literature. Hearsay/popular belief. Recent field studies Wildlife Heritage Trust, Colombo, from 1993 to date, distribution. Bambaradeniya in Bathelegoda, from 1995-1998, in paddy fields. N.D. Ratnayake, 1992 in Dimbulagala. Status LOWER RISK-LEAST CONCERN **IUCN** IUCN Criteria based on National WL legislation **FFPA** CITES Not listed National Red Data Book : 1996 Red List (IUCN) Not listed No Presence in Protected Area Yes Recommendations Research Survey, Taxonomic research Monitoring Management Captive breeding for Unknown Captive stocks None Level of captive breeding recs. Not recommended Propagation Techniques Techniques known A common species often encountered in aquatic habitat. According to farmers working in Other comments paddy fields, most of the aquatic species are declining in number. Poisoned as a pest in the prawn industry, this polymorphic species requires thorough taxonomic studies. Sources 7,13,18,27 C. Bambaradeniya, P. Balasooriya, S. Dutta, S. Karunarathne, N.P. Kumara, U. Compilers Liyanage, M. Meegaskumbura, K. Ukuwela, N. Weerasinghe, R. Weerawardhena, D. de Silva, J. Wilkinson, P. Yahapath Reviewers M.M. Bahir, C. Bambaradeniya, Anslem de Silva, A. Jayawickrama, S. Karunarathne, K.N. Manamendra-Arachchi, M. Meegaskumbura, R. Somaweera, D. Srinath, N.D. Rathnavake, K.D.B. Ukuwela

Scientific name (author; date) Synonyms Family Common name Taxonomic level of assessment	<i>Euphlyctis hexadactylus</i> (Less Rana hexadactyla, Lesson, 1834 Ranidae Six-toed Green Frog (English); Sa Species		ala)
Distribution Habitat of the taxon Habitat specificity Current distribution (by country) Current Sri Lankan distribution Extent of occurrence (Sq. km.) Area of occupancy (Sq. km.) Number of locations/sub pop. Habitat status	Lowland marshes and other aqua Aquatic and semi-aquatic. Up to 7 India, Nepal, Sri Lanka, Banglade Lowland and midland areas; > 20,000 > 2,000 Many; Contiguous Decrease in quality, Agricultural r	760 m. esh.	
<b>Threats</b> Threats to taxon Effect of threat on population Trade Effect of trade on population	Pesticides, Poisoning, Water Poll Yes Local, commercial. Legs, whole a Unknown	-	chanisation
<b>Population numbers</b> Global population Regional Pop (# sub-pop.) Number of mature individuals Generation time Population trends	Unknown Unknown Unknown Unknown Declining. Predicted decline < 20	% in the next 10 years	
Data Quality Recent field studies	General field study; Informal field popular belief Wildlife Heritage Trust in known lo Bambaradeniya in Bathelegoda fi Somaweera from 1998 onwards i	ocations from 1993 to date, rom 1995 to 1998, paddy fie	distribution. C.
<b>Status</b> IUCN CITES National Red Data Book Presence in Protected Area		IUCN Criteria based on National WL legislation 1996 Red List (IUCN)	  Not listed
Recommendations Research Management Captive breeding for Captive stocks Level of captive breeding recs. Propagation Techniques	Survey; Life history studies, Limit Monitoring, Sustainable utilisation Commercial sustainability Mr. Weerawardena, Department of female) Ongoing program intensified or in Some techniques known for taxof	n, Čaptive breeding of Zoology, University of Ke ocreased	
Other comments	Trading is a severe problem; spe Mr. Weerawarden a is carrying ou in prawn industry. Suspected dise	cies used for laboratory pra ut studies in the field and in	captivity. Poisoned as pest
Sources	7,13,18		
Compilers	C. Bambaradeniya, P. Balasooriy Liyanage, M. Meegaskumbura, K D. de Silva, J. Wilkinson, P. Yaha	. Ukuwela, N. Weerasinghe	
Reviewers	M.M. Bahir, C. Bambaradeniya, A K.N. Manamendra-Arachchi, M. M Rathnayake, K.D.B. Ukuwela		

Scientific name (author; date) Synonyms Family Common name Taxonomic level of assessment <b>Distribution</b> Habitat of the taxon Habitat specificity Current distribution (by country) Current Sri Lankan distribution Extent of occurrence (Sq. km.) Area of occupancy (Sq. km.) Number of locations/sub pop. Habitat status	<ul> <li>Hoplobatrachus crassus (Jerdon, 1853)</li> <li>Rana crassa Jerdon, 1853; Hoplobactrachus ceylonicus, Peter 1863</li> <li>Ranidae</li> <li>Jerdon's Bullfrog (English); Jerdonge hela madiya (Sinhala)</li> <li>Species</li> <li>Cosmopolitan distribution</li> <li>Semi aquatic. Up to 465 m</li> <li>India and Sri Lanka</li> <li>Widely distributed in low and mid elevations</li> <li>&gt; 20,000</li> <li>&gt;2000</li> <li>Many, Contiguous</li> <li>Stable in area, Decrease in quality, Agriculture</li> </ul>
<b>Threats</b> Threats to taxon Effect of threat on population Trade	Pesticides, Poisoning, Pollution, Agricultural mechanisation None No
<b>Population numbers</b> Global population Regional Pop (# sub-pop.) Number of mature individuals Generation time Population trends	Unknown Unknown Unknown Unknown Predicted decline <20 % in the next 10 years
Data Quality Recent field studies	General field study; Informal field sighting; Literature; Hearsay/popular belief Wildlife Heritage Trust in known locations from 1993 to date, distribution C. Bambaradeniya in Bathelegoda from 1995, Observations in rice fields. Somaweera and Ukuwela, 1998 in Menikdena; N. Ratnayake, 1997, Popham Arboretum in Dambulla
<b>Status</b> IUCN CITES National Red Data Book Presence in Protected Area	LOWER RISK - LEAST CONCERNIUCN Criteria based on National WL legislationNot listed1996 Red List (IUCN)FFPAYesYesYes
<b>Recommendations</b> Research Management Captive stocks Level of captive breeding recs. Propagation Techniques	Survey, Taxonomic research Monitoring None Not recommended Some techniques known
Other comments	Considered a problem in the prawn industry - Hence poisoned. Sushil Dutta doubts the validity of this species in Sri Lanka. Taxonomic research required. Largest frog in Sri Lanka.
Sources	7,13,18
Compilers	C. Bambaradeniya, P. Balasooriya, S. Dutta, S. Karunarathne, N.P. Kumara, U. Liyanage, M. Meegaskumbura, K. Ukuwela, N. Weerasinghe, R. Weerawardhena, D. de Silva, J. Wilkinson, P. Yahapath
Reviewers	M.M. Bahir, C. Bambaradeniya, Anslem de Silva, A. Jayawickrama, S. Karunarathne, K.N. Manamendra-Arachchi, M. Meegaskumbura, R. Somaweera, D. Srinath, N.D. Rathnayake, K.D.B. Ukuwela

Scientific name (author; date) Hoplobatrachus tigerinus Daudin, 1802 Synonyms Rana tigrina Daudin 1802 Family Ranidae Common name Indian Bullfrog (English); Indiya hala-madiya (Sinhala) Taxonomic level of assessment Species Distribution Habitat of the taxon Coastal belt in dry zone Habitat specificity Semi-aquatic. Up to 200 m Current distribution (by country) South Asia Current Sri Lankan distribution Coastal belt in eastern and western province Extent of occurrence (Sq. km.) Unknown Area of occupancy (Sq. km.) Unknown Number of locations/sub pop. Unknown Habitat status Decrease in quality, War, Pollution Threats Pesticides, Poisoning, Pollution, War Threats to taxon Effect of threat on population Yes Trade No **Population numbers** Global population Unknown Regional Pop (# sub-pop.) Unknown Number of mature individuals Unknown Generation time Unknown Population trends Unknown **Data Quality** General field study. Informal field sighting. Literature. Indirect. Hearsay Recent field studies Wildlife Heritage Trust, Colombo in known locations, from 1993 to date, distribution Status **IUCN** DATA DEFICIENT IUCN Criteria based on ---CITES National WL legislation ---Not listed Not listed National Red Data Book 1996 Red List (IUCN) Not listed Presence in Protected Area No Recommendations Research Survey, Limiting factor research, Taxonomic research, Effects due to prawn and fish breeding activities Management Monitoring, Limiting factor management, Captive breeding Captive breeding for Release Captive stocks None Level of captive breeding recs. Initiate programme after 3 years. Propagation Techniques Techniques known This is one of the species that causes problems in the prawn industry; the habitat of this Other comments species is deliberately poisoned. Specimens not found in Wildlife Heritage Trust. Needs further studies. Locations given by Dutta and Manamendra-Arachchi are through museum studies. Sources 7,13 C. Bambaradeniya, P. Balasooriya, S. Dutta, S. Karunarathne, N.P. Kumara, U. Compilers Liyanage, M. Meegaskumbura, K. Ukuwela, N. Weerasinghe, R. Weerawardhena, D. de Silva, J. Wilkinson, P. Yahapath M.M. Bahir, C. Bambaradeniya, Anslem de Silva, A. Jayawickrama, S. Karunarathne, K.N. Reviewers Manamendra-Arachchi, M. Meegaskumbura, R. Somaweera, D. Srinath, N.D. Rathnavake, K.D.B. Ukuwela

### Distribution

Habitat of the taxon Habitat specificity Current distribution (by country) Current Sri Lankan distribution Extent of occurrence (Sq. km.) Area of occupancy (Sq. km.) Number of locations/sub pop. Habitat status

### Threats

Threats to taxon Effect of threat on population Trade

### **Population numbers**

Global population Regional Pop (# sub-pop.) Number of mature individuals Generation time Population trends

# **Data Quality**

**Recent field studies** 

# Status

**IUCN** CITES National Red Data Book Presence in Protected Area

### Recommendations

Research Survey, Life history studies, Limiting factor research, Taxonomic research Habitat management; Monitoring Management Captive stocks None Level of captive breeding recs. Initiate programme after 3 years **Propagation Techniques** Techniquest not known

**VULNERABLE** 

1998. Vulnerable

Not listed

Yes

Other comments

Sources

Farmers often mistake the call of this species to that of crabs. Placing in a different genus is considered due to many valid reasons. 7,13,18

Ukuwela has observed species of Channa attacking juveniles and tadpoles of this species.

C. Bambaradeniya, P. Balasooriya, S. Dutta, S. Karunarathne, N.P. Kumara, U. Compilers Livanage, M. Meegaskumbura, K. Ukuwela, N. Weerasinghe, R. Weerawardhena, D. de Silva, J. Wilkinson, P. Yahapath

Reviewers M.M. Bahir, C. Bambaradeniva, Anslem de Silva, A. Javawickrama, S. Karunarathne, K.N. Manamendra-Arachchi, M. Meegaskumbura, R. Somaweera, D. Srinath, N.D. Rathnayake, K.D.B. Ukuwela

# Limnonectes corrugatus Peters, 1863

Rana cormgata Peters, 1863 Ranidae Corrugated Water Frog (English); Vakaralimadiya (Sinhala) Species

Wet habitats Aquatic, semi-aquatic and riparian zones. Up to 1600 m ENDEMIC to Sri Lanka Wet zone of Sri Lanka in all three peneplanes > 20,000 > 2,000 Many; Contiguous Decrease in quality, Agricultural mechanisation and urbanization

Pesticides, Poisoning, Pollution, Climate, Drought, Agricultural mechanisation Yes No

Unknown Unknown Unknown Unknown Declining > 20 % in the last 10 years; Predicted decline > 20% in next 10 years

General field study; Informal field sighting; Literature; Indirect information; Hearsay/ popular belief Wildlife Heritage Trust in known locations from 1993 to date on distribution. Anslem

de Silva on going study on colour variations

IUCN Criteria based on National WL legislation 1996 Red List (IUCN)

A1c+2c FFPA Not listed

Conservation Assessment and Management Plan for Amphibians and Reptiles of Sri Lanka - Report

### Distribution

Habitat of the taxon Habitat specificity Current distribution (by country) Current Sri Lankan distribution Extent of occurrence (Sq. km.) Area of occupancy (Sq. km.) Number of locations/sub pop. Habitat status

### Threats

Threats to taxon Effect of threat on population Trade

### **Population numbers**

Global population Regional Pop (# sub-pop.) Number of mature individuals Generation time Population trends

# Data Quality Recent field studies

Status

IUCN CITES National Red Data Book Presence in Protected Area

# Recommendations

Research Management Captive breeding for Captive stocks Level of captive breeding recs. Propagation Techniques

Other comments

Sources

Compilers

Reviewers

7, 13, 32

None

**ENDANGERED** 

1998, Endangered

Horton plains, Hakgala

Survey, Limiting factor research

Initiate programme after 3 years

Monitoring, Limiting factor management

Report of R. greeni in India need for further studies

Not listed

Conservation

Not known

C. Bambaradeniya, P. Balasooriya, S. Dutta, S. Karunarathne, N.P. Kumara, U. Liyanage, M. Meegaskumbura, K. Ukuwela, N. Weerasinghe, R. Weerawardhena, D. de Silva, J. Wilkinson, P. Yahapath

M.M. Bahir, C. Bambaradeniya, Anslem de Silva, A. Jayawickrama, S. Karunarathne, K.N. Manamendra-Arachchi, M. Meegaskumbura, R. Somaweera, D. Srinath, N.D. Rathnayake, K.D.B. Ukuwela

Montane species Semi aquatic Margins of shallow, slow flowing streams and small water holes. 1700 - 2135 m ENDEMIC to Sri Lanka Montane - 3rd Peneplain < 5,000 > 2,000 5; Contiguous Stable in area, Decrease in quality, Agriculture

Pesticides, Pollution, Climate, Drought, Predation by exotics Yes No

Sri Lankan Reed Frog (English), Lanka vel-madiya (Sinhala)

Limnonectes greenii Boulenger, 1904

Rana greenii Boulenger, 1904

Ranidae

Species

Unknown Unknown Unknown Unknown Declining < 20% in the last 10 years; Predicted decline < 20% in next 10 years.

General field study, Informal field sighting, Literature, Hearsay/popular belief Wildlife Heritage Trust in known location from 1993 to date, distribution. Zoological survey (University of Kelaniyia) in Horton ongoing, distribution. Global Environment Facility project in Horton plains and Hakgala, 1995, inventorization. Anslem de Silva from 1997 to 1998, Zoological Survey of Sri Lanka survey at Horton Plains.

# IUCN Criteria based on National WL legislation 1996 Red List (IUCN)

B1+2c FFPA Not listed

### Distribution

Habitat of the taxon Habitat specificity Current distribution (by country) Current Sri Lankan distribution Extent of occurrence (Sq. km.) Area of occupancy (Sq. km.) Number of locations/sub pop. Habitat status

Threats

Threats to taxon

Effect of threat on population Trade

### **Population numbers**

Global population Regional Pop (# sub-pop.) Number of mature individuals Generation time Population trends

# Data Quality Recent field studies

# Status

IUCN CITES National Red Data Book Presence in Protected Area

### Recommendations

Research Management Captive stocks Level of captive breeding recs. Propagation Techniques

### Other comments

# Sources7,13,22CompilersC. Bambaradeniya, P. Balasooriya, S. Dutta, S. Karunarathne, N.P. Kumara, U.<br/>Liyanage, M. Meegaskumbura, K. Ukuwela, N. Weerasinghe, R. Weerawardhena, D.<br/>de Silva, J. Wilkinson, P. YahapathReviewersM.M. Bahir, C. Bambaradeniya, Anslem de Silva, A. Jayawickrama, S. Karunarathne, K.N.<br/>Manamendra-Arachchi, M. Meegaskumbura, R. Somaweera, D. Srinath, N.D. Rathnayake,<br/>K.D.B. Ukuwela

Ranidae Mountain Paddy Field Frog (English), *Kandukara vel-madiya* (Sinhala) Species Marshy and wet areas; Montane, low country wet zone

Limnonectes kirtisinghei Manamendra-Arachchi and Gabadage, 1996

1580 m. Aquatic and semi aquatic **ENDEMIC** to Sri Lanka Western, Southern, Central and Eastern including knuckles > 20,000 > 2,000 Many; Contiguous Decrease in quality, Deforestation, Plantation

Habitat fragmentation, Pesticides, Pollution, Drought, Fire, Agricultural mechanization. Yes No

Unknown Unknown Unknown Predicted decline <20% in the next 10 years

Survey, Limiting factor research

None

Not known

Not recommended

Monitoring, Limiting factor management

General field study, Informal field sighting, Literature, Hearsay/popular belief Wildlife Heritage Trust in known location from 1993 to date, distribution.

LOWER RISK-NEAR THREATENED IUCN Criteria based on Not listed National WL legislation 1998, Vulnerable 1996 Red List (IUCN) Yes

FFPA Not listed

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Scientific name (author; date)	Limnonectes limnocharis Gra	venhorst, 1829	
Synonyms	Rana limnocharis Boie, 1835		
Family	Ranidae		
Common name	Common Paddy Field Frog (Eng	glish); <i>Vel Madiya</i> (Sinhala)	
Taxonomic level of assessment	Subgeneric species		
Distribution			
Habitat of the taxon	Near water bodies.		
Habitat specificity	Up to 1700 m. Semi aquatic		
Current distribution (by country)	Philippines, Borneo, China, Indi	a,	
Current Sri Lankan distribution Extent of occurrence (Sq. km.)	Throughout Sri Lanka > 20,000		
Area of occupancy (Sq. km.)	> 2,000		
Number of locations/sub pop.	Many; Contiguous		
Habitat Status	Increase in area, Decrease in q	uality, Pesticides, Increased	mechanisation
Threats			
Threats to taxon	Pesticides, Poisoning, Agricultu	ral mechanisation	
Effect of threat on population Trade	None No		
Hade	NO		
Population numbers			
Global population	Unknown		
Regional Pop (# sub-pop.)	Unknown		
Number of mature individuals Generation time	Unknown Unknown		
Population trends	Unknown		
Data Quality	General field study, Informal fiel		
Recent field studies	Wildlife Heritage Trust in known		
	Anslem de Silva in Gampola on Somaweera, 1998 in Menikdena		anu
	,,,,	.,	
Status			
IUCN	LOWER <b>RISK</b> -NEAR THREATENED		
CITES National Red Data Book	Not listed Not listed	National WL legislation 1996 Red List (IUCN)	FFPA Not listed
Presence in Protected Area	Yes		Not listed
Recommendations			
Research	Survey, Taxonomic research, Li		
Management	Monitoring, Limiting factor mana Unknown	agement	
Captive breeding for Captive stocks	Unknown		
Level of captive breeding recs.	Unknown		
Propagation Techniques	Unknown		
		· The second second state	
Other comments	Absent in undisturbed rain fores around Gampola area. (Anslem	de Silva on going studies)	Further studies on the
	population structure is needed.	de oliva on going studies).	
	• •		
Sources	7, 13,18,27		
Compilers		iva S Dutta S Karunarathi	ne, N.P. Kumara, U
Complicito	C Bambaradeniva P Balasoor		
	C. Bambaradeniya, P. Balasoor Liyanage, M. Meegaskumbura,	K. Ukuwela, N. Weerasingh	e, R.
		K. Ukuwela, N. Weerasingh	e, R.
Boviowara	Liyanage, M. Meegaskumbura, Weerawardhena, D. de Silva, J.	K. Ukuwela, N. Weerasingh Wilkinson, P. Yahapath	
Reviewers	Liyanage, M. Meegaskumbura, Weerawardhena, D. de Silva, J. M.M. Bahir, C. Bambaradeniya,	K. Ukuwela, N. Weerasingh Wilkinson, P. Yahapath Anslem de Silva, A. Jayawi	ckrama, S. Karunarathne,
Reviewers	Liyanage, M. Meegaskumbura, Weerawardhena, D. de Silva, J.	K. Ukuwela, N. Weerasingh Wilkinson, P. Yahapath Anslem de Silva, A. Jayawi	ckrama, S. Karunarathne,

### Distribution

Habitat of the taxon Habitat specificity Current distribution (by country) Current Sri Lankan distribution Extent of occurrence (Sq. km.) Area of occupancy (Sq. km.) Number of locations/sub pop. Habitat status

### Threats

Threats to taxon Effect of threat on population Trade

### **Population numbers**

Global population Regional Pop (# sub-pop.) Number of mature individuals Generation time Population trends

Data Quality Recent field studies

# Status

IUCN CITES National Red Data Book Presence in Protected Area

Recommendations

Research Management Captive stocks Level of captive breeding recs. Propagation Techniques

Other comments

6,7,13,18

Sources

Compilers

Reviewers

Nannophrys ceylonensis Günther, 1868

Ranidae Sri Lankan Rock Frog (English), *Lanka Galpara Madiya* (Sinhala) Species

Lowland rain forest and sub-montane forest Rocks and wet boulders (Rocky streams), 60-1070 m. **ENDEMIC** to Sri Lanka Hills of western, southern and central Sri Lanka < 20,000 > 2,000 Many; Fragmented Decrease in area >20% in the last 10 years; Predicted deline > 20% in next 10 years. Urbanisation, Decrease in quality, Deforestation

Loss of habitat, Habitat fragmentation, Climate, Drought Yes No

Unknown Unknown Unknown Declining, >20% in the last 10 years; predicted decline >20% in the next 10 years.

Informal field sighting, Literature, Hearsay/ popular belief. Wildlife Heritage Trust in known locations from 1993 to date, distribution. Anslem de Silva in 1994, Survey in Dolosbage Hills.

VULNERABLE Not listed 1998, Vulnerable Yes IUCN Criteria based on National WL legislation 1996 Red List (IUCN) A1c+2c; B1+2bc FFPA Not listed

Survey, Life history studies, Limiting factor research Monitoring, Limiting factor management No Not recommended Techniques not known

Relict species. Genus endemic to Sri Lanka, therefore higher priority of conservation. In localities where it is found it is common with good healthy populations (Anslem de Silva - ongoing studies).

C. Bambaradeniya, P. Balasooriya, S. Dutta, S. Karunarathne, N.P. Kumara, U, Llyanago, M. Moogaskumbura, K. Ukuwoln, N. Wooroninghe, R. Weerawardhena, D. de Silva, J. Wilkinson, P. Yahapath

wers M.M. Bahir, C. Bambaradeniya, Anslem de Silva, A. Jayawickrama, S. Karunarathne, K.N. Manamendra-Arachchi, M. Meegaskumbura, R. Somaweera, D. Srinath, N.D. Rathnayake, K.D.B. Ukuwela

Scientific name (author; date) Family Common name Taxonomic level of assessment	<i>Nannophrys guentheri</i> Boulen Ranidae Günther's Rock Frog (English), <i>Gü</i> Species	-	ala)
Distribution Habitat of the taxon Habitat specificity Current distribution (by country) Current Sri Lankan distribution Extent of occurrence (Sq. km.) Area of occupancy (Sq. km.) Number of locations/sub pop. Habitat Status	Unknown Unknown <b>ENDEMIC</b> to Sri Lanka Labugama, Western province (K Unknown Unknown Unknown Unknown	irtisinghe)	
<b>Threats</b> Threats to taxon Effect of threat on population Trade	Unknown Unknown No		
<b>Population numbers</b> Global population Regional Pop (# sub-pop.) Number of mature individuals Generation time Population trends	Unknown Unknown Unknown Unknown Unknown		
Data Quality Recent field studies	Indirect information, Literature Unknown		
<b>Status</b> IUCN CITES National Red Data Book Presence in Protected Area	<b>DATA DEFICIENT</b> Not listed 1998, Vulnerable. Unknown	IUCN Criteria based on National WL legislation 1996 Red List (IUCN)	 FFPA Not listed
<b>Recommendations</b> Research Management Captive stocks	Survey, Taxonomic research Unknown None		
Level of captive breeding recs. Propagation Techniques	Initiate programme when individu Not known	uals are found	
Level of captive breeding recs.	Initiate programme when individu	nes. Possibly extinct. Specime	ns deposited in NHM
Level of captive breeding recs. Propagation Techniques	Initiate programme when individu Not known Not found in Sri Lanka in recent tin	nes. Possibly extinct. Specime	ns deposited in NHM
Level of captive breeding recs. Propagation Techniques Other comments	Initiate programme when individe Not known Not found in Sri Lanka in recent tin London. Only known from type s	nes. Possibly extinct. Specime pecimen. , S. Dutta, S. Karunarathne, N. Ukuwela, N. Weerasinghe, R.	P. Kumara, U.

### Distribution

Habitat of the taxon Habitat specificity Current distribution (by country) Current Sri Lankan distribution

Extent of occurrence (Sq. km.) Area of occupancy (Sq. km.) Number of locations/sub pop. Habitat status

### Threats

Threats to taxon Effect of threat on population Trade

# **Population numbers**

Global population Regional Pop (# sub-pop.) Number of mature individuals Generation time Population trends

### Data Quality Recent field studies

### Status

IUCN CITES National Red Data Book Presence in Protected Area

### Recommendations

Research Management Captive breeding for Captive stocks Level of captive breeding recs. Propagation Techniques

### Other comments

Sources

Compilers

Reviewers

# *Nannophrys marmorata* Kirtisinghe, 1946 Ranidae Kirtisinge's Rock Frog (English), *Kirtisinghege Galpara Madiya* (Sinhala) Species

Montane Rocky streams, under wet boulders. 200 -1220 m. ENDEMIC to Sri Lanka Restricted to Knuckles range (Gonewala, Pitaewalapathana grasslands, Lakgala, Gammaduwa) < 5,000 <100 4; Contiguous Decreasing <20% in the last 10 years, Decrease in quality, Cardamom cultivations, deforestation

Loss of habitat, Climate, Drought, Fire, Human interference Yes No

Unknown Unknown Unknown Unknown Declining >20% in the last 10 years; Predicted decline < 20% in next 10 years

Informal field sighting, Literature, Hearsay/ popular belief Knuckles IUCN survey in SW Kotagama from (1990-1993). Wildlife Heritage Trust in Knuckles from 1993 to date, distribution.

# ENDANGERED

Not listed 1998, Endangered Knuckles Reserve IUCN Criteria based on National WL legislation 1996 Red List (IUCN) B1+2bc FFPA Not listed

Survey, Taxonomic research, Life history studies, Limiting factor research Habitat management, Monitoring, Limiting factor management, Captive breeding Restocking None Initiate programme within 3 years Not known at all

Type locality - Knuckles region. Relict genus in Sri Lanka.

# 6,7, 13, 18 C. Bambaradeniva, P. Balasooriva, S. Dutt

C. Bambaradeniya, P. Balasooriya, S. Dutta, S. Karunarathne, N.P. Kumara, U. Liyanage, M. Meegaskumbura, K. Ukuwela, N. Weerasinghe, R. Weerawardhena, D. de Silva, J. Wilkinson, P. Yahapath

M.M. Bahir, C. Bambaradeniya, Anslem de Silva, A. Jayawickrama, S. Karunarathne, K.N. Manamendra-Arachchi, M. Meegaskumbura, R. Somaweera, D. Srinath, N.D. Rathnayake, K.D.B. Ukuwela

Conservation Assessment and Management Plan for Amphibians and Reptiles of Sri Lanka - Report

**Distribution** Habitat of the taxon

Habitat specificity Current distribution (by country) Current Sri Lankan distribution Extent of occurrence (Sq. km.) Area of occupancy (Sq. km.) Number of locations/sub pop. Habitat status

Threats Threats to taxon Effect of threat on population Trade

# **Population numbers**

Global population Regional Pop (# sub-pop.) Number of mature individuals Generation time Population trends

Data Quality Recent field studies

# Status

IUCN CITES National Red Data Book Presence in Protected Area

# Recommendations

Research Management Captive stocks Level of captive breeding recs. Propagation Techniques

### Other comments

Sources

Compilers

Reviewers

# Rana aurantiaca Boulenger, 1904

Ranidae Small Wood Frog (English), Kuda badi madiya (Sinhala) Species

Lowland wet zone, submontane zone, semi-arboreal, semi-aquatic, under wet boulders Upto 660 m. Southern India and Sri Lanka Wet zone (mid hills in western and southern Sri Lanka) < 20,000 > 2,000 Many; Contiguous Decreasing in area 20% last 10 years, Urbanization, Decrease in quality.

Pesticides, Poisoning, Pollution, filling up of marshlands, Climate changes Yes No

Unknown Unknown Unknown Unknown Declining

General field study, Informal field sighting, Literature, Hearsay/ popular belief Wildlife Heritage Trust in Sri Lanka from 1993 onwards, Distribution

LOWER RISK-NEAR THREATENED IUCN Criteria based on Not listed National WL legislation 1998, Vulnerable 1996 Red List (IUCN) Kanneliya, Sinharaja, Atbidiya

--FFPA Not listed

Survey Monitoring None Not recommended Techniques not known

7, 13,18

C. Bambaradeniya, P. Baiasooriya, S. Dutta, S. Karunarathne, N.P. Kumara, U. Liyanage, M. Meegaskumbura, K. Ukuwela, N. Weerasinghe, R. Weerawardhena, D. de Silva, J. Wilkinson, P. Yahapath

M.M. Bahir, C. Bambaradeniya, Anslem de Silva, A. Jayawickrama, S. Karunarathne, K.N. Manamendra-Arachchi, M. Meegaskumbura, R. Somaweera, D Srinath, N.D. Rathnayake, K.D.B.

### Distribution

Habitat of the taxon Habitat specificity Current distribution (by country) Current Sri Lankan distribution Extent of occurrence (Sq. km.) Area of occupancy (Sq. km.) Number of locations/sub pop. Habitat status

### Threats

Threats to taxon Effect of threat on population Trade

# **Population numbers**

Global population Regional Pop (# sub-pop.) Number of mature individuals Generation time Population trends

# Data Quality Recent field studies

# Status

IUCN CITES National Red Data Book Presence in Protected Area

### Recommendations

Research Management Captive stocks Level of captive breeding recs. Propagation Techniques

# Other comments

Sources

Compilers

Reviewers

### Rana gracilis Gravenhorst, 1829

Ranidae, Sri Lanka Wood Frog (English), *Lanka badi madiya* (Sinhala) Species

Lowland, wet and dry zones, Mid hills Marshes and paddy fields, in grassy areas with small bushes. Up to 500 m. **ENDEMIC** to Sri Lanka Wet and dry zones (Forests and human habitations) > 20,000 > 2,000 Many; Contiguous Decrease in quality, Anthropogenic factors (Urbanization, Agricultural practice etc)

Pesticidies, Poisoning, Pollution, Predation. None No

Unknown Unknown Unknown Unknown Unknown

General field study, Informal field sighting, Literature, Hearsay/popular belief Wildlife Heritage Trust from 1993 onwards, distribution.

LOWER RISK-LEAST CONCERNIUCN Criteria based on---Not listedNational WL legislationF1998, Vulnerable1996 Red List (IUCN)NWasgomuwa National Park, Udawalane National ParkF

FFPA Not listed

Survey; Limiting factor research Monitoring None Not recommended Techniques not known

# 7, 13,18

C. Bambaradeniya, P. Balasooriya, S. Dutta, S. Karunarathne, N.P. Kumara, U. Liyanage.'M. Meegaskumbura, K. Ukuwela, N. Weerasinghe, R. Weerawardhena, D. de Silva, J. Wilkinson, P. Yahapath

M.M. Bahir, C. Bambaradeniya, Ansjem de Silva, A. Jayawickrama, S. Karunarathne, K.N. Manamendra-Arachchi, M. Meegaskumbura, R. Somaweera, D. Srinath, N.D. Rathnayake, K.D.B. Ukuwela

Scientific name (author; date) Rana temporalis (Günther, 1864) Family Ranidae Common name Common Wood Frog (English), Sulaba badi madiya (Sinhala) Taxonomic level of assessment Species Distribution Habitat of the taxon Rain forest stream/ Riverine forests and Human habitations; Wet zone and intermediate zone Habitat specificity Terrestrial, Sometimes arboreal. Up to about 1830 m. Current distribution (by country) Southern India, Sri Lanka Forests in wet zone and intermediate zone Current Sri Lankan distribution Extent of occurrence (Sq. km.) > 20.000 Area of occupancy (Sq. km.) > 2,000 Number of locations/sub pop. Many; Contiguous Stable in area, Decrease in quality, Anthropogenic factors Habitat status Threats Threats to taxon Pesticides, Poisoning, Pollution, Fire Effect of threat on population Unknown Trade No **Population numbers** Global population Unknown Regional Pop (# sub-pop.) Unknown Number of mature individuals Unknown Generation time Unknown Population trends Unknown General field study, Informal field sighting, Literature, Hearsay/ popular belief Wildlife Heritate Trust, distribution; VRR Sanctuary - Resource inventory from 1997, Local distribution (Dept of Zoology/ Wildlife Department - Sri Lanka). **Data Quality Recent field studies** Status **IUCN** LOWER RISK - LEAST CONCERN IUCN Criteria based on National WL legislation CITES Not listed **FFPA** National Red Data Book Not listed 1996 Red List (IUCN) Not listed Presence in Protected Area VRR Sanctuary, Sinharaja, Kanneliya, Labugama Recommendations Research Survey Management Monitoring Captive stocks None Level of captive breeding recs. Not recommended Propagation Techniques Techniques known for similar taxa Other comments --Sources 7,13,18 C. Bambaradeniya, P. Balasooriya, S. Dutta, S. Karunarathne, N.P. Kumara, U. Compilers Liyanage, M. Meegaskumbura, K. Ukuwela, N. Weerasinghe, R. Weerawardhena, D. de Silva, J. Wilkinson, P. Yahapath M.M. Bahir, C. Bambaradeniya, Anslem de Silva, A. Jayawickrama, S. Karunarathne, K.N. Reviewers Manamendra-Arachchi, M. Meegaskumbura, R. Somaweera, D. Srinath, N.D. Rathnayake, K.D.B. Ukuwela

### Distribution

Habitat of the taxon Habitat specificity Current distribution (by country) Current Sri Lankan distribution Extent of occurrence (Sq. km.) Area of occupancy (Sq. km.) Number of locations/sub pop. Habitat status

Threats

Threats to taxon Effect of threat on population Trade

# **Population numbers**

Global population Regional Pop (# sub-pop.) Number of mature individuals Generation time Population trends

## **Data Quality**

**Recent field studies** 

### Status

**Reviewers** 

**IUCN** LOWER RISK-NEAR THREATENED IUCN Criteria based on CITES Not listed National WL legislation **FFPA** National Red Data Book 1998, Not threatened 1996 Red List (IUCN) Not listed Yala NP, Bundala, Wasgomuwa Presence in Protected Area Recommendations Survey, Taxonomic research Research Management Monitorina Captive stocks None Level of captive breeding recs. Not recommended Propagation Techniques Some techniques known This species appears to be uncommon due to its burrowing and nocturnal habits. Other comments Tomopterna species complex in Sri lanka needs taxonomic study/revision (sug gested by Dutta) Sources 7, 13, 18 C. Bambaradeniya, P. Balasooriya, S. Dutta, S. Karunarathne, N.P. Kumara, U. Liyanage, Compilers M. Meegaskumbura, K. Ukuwela, N. Weerasinghe, R. Weerawardhena, D. de Silva, J. Wilkinson, P. Yahapath

> M.M. Bahir, C. Bambaradeniya, Anslem de Silva, A. Jayawickrama, S. Karunarathne, K.N. Manamendra-Arachchi, M. Meegaskumbura, R. Somaweera, D. Srinath, N.D. Rathnayake, K.D.B. Ukuwela

### Tomopterna breviceps (Schneider, 1799)

Ranidae Banded Sand Frog (English), *Tunhiri vali madiya* (Sinhala) Species

Arid zones, Dry zones Sandy leaf litter, burrowing. < 300 m. India, Sri Lanka Dry and Arid zones > 20,000 > 2,000 Many; Contiguous Decrease in area >20% in the last 10 years. Predicted decrease <20% in next 10 years, War and Anthropogenic factors, Decrease in quality

Pesticides, War, Edaphic changes, Fire Yes No

Unknown Unknown Unknown Predicted decline <20% in the next 10-15 years

Census or monitoring, General field study, Informal field sighting, Literature, Hearsay/ popular belief Wildlife Heritage Trust from 1993 onwards, distribution. Anslem de Silva on distribution.

### Tomopterna rolandae (Dubois, 1983) Ranidae

India and Sri Lanka

Many; Contiguous

> 20,000

> 2,000

Stable

None

Unknown

Unknown

Unknown

Unknown

Unknown

No

Wet,dry intermediate zones

Dry zone and Intermediate zone and wet zone.

Sandy soil, Terrestrial-burrowing. Up to 200 m.

Pesticides, Edaphic changes, Drought, Fire

Marbled Sand Frog (English), Lapavan veli madiya (Sinhala) Species

Distribution Habitat of the taxon Habitat specificity Current distribution (by country) Current Sri Lankan distribution Extent of occurrence (Sq. km.) Area of occupancy (Sq. km.) Number of locations/sub pop. Habitat status

### Threats

Threats to taxon Effect of threat on population Trade

# **Population numbers**

**Global** population Regional Pop (# sub-pop.) Number of mature individuals Generation time Population trends

# **Data Quality Recent field studies**

### Status **IUCN** CITES

LOWER RISK - LEAST CONCERN IUCN Criteria based on Not listed National WL legislation **FFPA** 1996 Red List (IUCN) National Red Data Book 1998. Not threatened Not listed Presence in Protected Area **Ritigala SNR** 

Wildlife Heritage Trust in Sri Lanka from 1993 onwards, distribution. Anslem de Silva, 1992, distribution.

# Recommendations

Research Management Captive stocks Level of captive breeding recs. **Propagation Techniques** 

### Other comments

Sources

Compilers

**Reviewers** 

Survey, Taxonomic research, Life history studies Monitorina None Not recommended Some technique known for similar taxa

Taxonomic revision recommended by Dutta.

7,13

C. Bambaradeniya, P. Balasooriya, S. Dutta, S. Karunarathne, N.P. Kumara, U. Liyanage, M. Meegaskumbura, K. Ukuwela, N. Weerasinghe, R. Weerawardhena, D. de Silva, J. Wilkinson, P. Yahapath

General field study, Informal field sighting, Literature, Hearsay/ popular belief

M.M. Bahir, C. Bambaradeniya, Anslem de Silva, A. Jayawickrama, S. Karunarathne, K.N. Manamendra-Arachchi, M. Meegaskumbura, R. Somaweera, D. Srinath, N.D. Rathnayake, K.D.B. Ukuwela

### Distribution

Habitat of the taxon Habitat specificity Current distribution (by country) Current Sri Lankan distribution Extent of occurrence (Sq. km.) Area of occupancy (Sq. km.) Number of locations/sub pop. Habitat status

### Threats

Threats to taxon Effect of threat on population Trade

# **Population numbers**

Global population Regional Pop (# sub-pop.) Number of mature individuals Generation time Population trends

# Data Quality Recent field studies

# Status

IUCN CITES National Red Data Book Presence in Protected Area

# Recommendations

Research Management Captive stocks Level of captive breeding recs. Propagation Techniques

### Other comments

Sources

Compilers

**Reviewers** 

### Philautus eximius Shreve, 1940

Rhacophoridae Pygmy Tree Frog (English), *Atikitta* (Sinhala) Species

Wet zone forests Ground leaf litter. Up to 1850 m. **ENDEMIC** to Sri Lanka Wet zone forests < 5,000 < 2,000 4; Fragmented (Dimballa, Ramboda, Koskulana, Adam's Peak) Area 20% decline over years, Decrease in quality, Tea estates - biocides

Pesticides, Climate, Habitat loss (Tea plantations) Unknown No

Unknown Unknown Unknown Unknown Unknown

ENDANGERED

1998, Endangered

Peak Wilderness

Not listed

Informal field sighting, Literature, Hearsay/popular belief. Wildlife Heritage Trust in Sri Lanka from 1993 onwards, distribution

IUCN Criteria based on	B1+2bc
National WL legislation	No
1996 Red List (IUCN)	Not listed

Survey, Taxonomic research, Life history studies Monitoring None Initiate program after 3 years Techniques not known

Genus subject to revision - suggested by Pethiyagoda and Manamendra-Arachchi (1998).

# 7, 13,25

C. Bambaradeniya, P. Balasooriya, S. Dutta, S. Karunarathne, N.P. Kumara, U. Liyanage, M. Meegaskumbura, K. Ukuwela, N. Weerasinghe, R. Weerawardhena, D. de Silva, J. Wilkinson, P. Yahapath

M.M. Bahir, C. Bambaradeniya, Anslem de Silva, A. Jayawickrama, S. Karunarathne, K.N. Manamendra-Arachchi, M. Meegaskumbura, R. Somaweera, D. Srinath, N.D. Rathnayake, K.D.B. Ukuwela

Scientific name (author; date) Synonyms

Family Common name Taxonomic level of assessment

### Distribution

Habitat of the taxon Habitat specificity Current distribution (by country) Current Sri Lankan distribution Extent of occurrence (Sq. km.) Area of occupancy (Sq. km.) Number of locations/sub pop. Habitat status

### Threats

Threats to taxon Effect of threat on population Trade

Population numbers Global population Regional Pop (# sub-pop.) Number of mature individuals Generation time Population trends

Data Quality Recent field studies

### Status

IUCN CITES National Red Data Book Presence in Protected Area

### Recommendations

Research Management Captive stocks Level of captive breeding recs. Propagation Techniques

Other comments

Sources

Compilers

**Reviewers** 

Philautus femoralis (Günther, 1864)

Ixalus femoralis Günther, 1872; Ixalus pulchellus Günther, 1872; Ixalus fergusonii Günther, 1876. Rhacophoridae Round-snout Pygmy Tree Frog (English), Vatahombu atikitta (Sinhala) Species

Montane zone. Leaf litter. Up to 2135 m. Southern India and Sri Lanka. Central mountains, Peak Wilderness, Horton Plains. < 20,000 < 2,000 5; Fragmented Decline in area <20% in the next 10 years, Agricultural activities, Decrease in quality, Tea estates, vegetative cultivations.

Pesticides, Agricultural practices, Acid rain Yes No

Unknown Unknown Unknown Declining <20% in the last 10 years; Predicted decline < 20% in next 10 years.

General field study, Informal field sighting, Literature, Hearsay/ popular belief Wildlife Heritage Trust from 1993 onwards, Distribution C. Bambaradeniya found it from Horton Plains (Field study)

VULNERABLE Not listed 1998, Endangered Knuckles Reserve

7,13,18

IUCN Criteria based on National WL legislation 1996 Red List (IUCN)

B1+2bc FFPA Not listed

Survey, Life history studies Monitoring None Not recommended Techniques not known

Under Wildlife Heritage Trust studies. Revision under consideration.

C. Bambaradeniya, P. Balasooriya, S. Dutta, S. Karunarathne, N.P. Kumara, U. Liyanage, M. Meegaskumbura, K. Ukuwela, N. Weerasinghe, R. Weerawardhena, D. de Silva, J. Wilkinson, P. Yahapath

M.M. Bahir, C. Bambaradeniya, Anslem de Silva, A. Jayawickrama, S. Karunarathne, K.N. Manamendra-Arachchi, M. Meegaskumbura, R. Somaweera, D. Srinath, N.D. Rathnayake, K.D.B. Ukuwela

### Distribution

Habitat of the taxon Habitat specificity Current distribution (by country) Current Sri Lankan distribution Extent of occurrence (Sq. km.) Area of occupancy (Sq. km.) Number of locations/sub pop. Habitat status

Threats

Threats to taxon Effect of threat on population Trade

# **Population numbers**

Global population Regional Pop (# sub-pop.) Number of mature individuals Generation time Population trends

Data Quality Recent field studies

# Status

IUCN CITES National Red Data Book Presence in Protected Area

### Recommendations

Research Management Captive stocks Level of captive breeding recs. Propagation Techniques

Other comments

Sources

Compilers

Reviewers

## Philautus hypomelas (Günther, 1876)

Ixalus hypomelas Günther, 1876 Rhacophoridae Webless Pygmy Tree Frog (English), *Patala - Rahita atikitta* (Sinhala) Species

Central - southern wet zone Moist leaft-litter, low vegetation. Up to 1830 m. ENDEMIC to Sri Lanka Gampola (500 m.), Horton Plains, Hakgala, Peak Wilderness, Colombo, Gampaha < 5,000 < 2,000 6; Fragmented Decrease in quality, Acid rain, agricultural impacts

Pesticides, Pollution, Climate, Drought, Fire, Acid rain Yes No

Unknown Unknown Unknown Unknown Predicted decline >20% in the next 10 years

General field study, Informal field sightings, Literature, Hearsay/ popular belief Wildlife Heritage Trust from 1993 to date, distribution; Bambaradeniya and Ranawana from 1995, distribution (Montane zone); Pumie Balasooriya 1998, distribution (Colombo and Gampaha)

ENDANGERED	IUCN Criteria based on	B1+2c
Not listed	National WL legislation	FFPA
1998, Endangered	1996 Red List (IUCN)	Not listed
Horton Plains, Hakgala, Peak W	/ilderness	

Survey, Taxonomic research, Life history studies Monitoring None Initiate programme after 3 years Techniques not known at all

2,7,13,18

Studies (genetic) needed of the populations from Gampaha (below 100 m) and Horton Plains (above 2000 m.).

C. Bambaradeniya, P. Balasooriya, S. Dutta, S. Karunarathne, N.P. Kumara, U. Liyanage, M. Meegaskumbura, K. Ukuwela, N. Weerasinghe, R. Weerawardhena, D. de Silva, J. Wilkinson, P. Yahapath

M.M. Bahir, C. Bambaradeniya, Anslem de Silva, A. Jayawickrama, S. Karunarathne, K.N. Manamendra-Arachchi, M. Meegaskumbura, R. Somaweera, D. Srinath, N.D. Rathnayake, K.D.B. Ukuwela

### Distribution

Habitat of the taxon Habitat specificity Current distribution (by country) Current Sri Lankan distribution Extent of occurrence (Sq. km.) Area of occupancy (Sq. km.) Number of locations/sub pop. Habitat status

### Threats

Threats to taxon Effect of threat on population Trade

# **Population numbers**

Global population Regional Pop (# sub-pop.) Number of mature individuals Generation time Population trends

# Data Quality Recent field studies

### Status **IUCN** LOWER RISK-NEAR THREATENED IUCN Criteria based on National WL legislation CITES Not listed **FFPA** National Red Data Book 1996 Red List (IUCN) Not listed Not listed Presence in Protected Area HPNP, HSNR, PWS.VRRS Recommendations Research Survey, Genetic research, Taxonomic research, Life history studies, Limiting factor research Management Monitoring Captive stocks None Level of captive breeding recs. Not recommended **Propagation Techniques** Techniques not known at all Other comments Taxonomic investigation necessary. Found supposedly in both India and Sri Lanka. Recommended for genetic research and taxonomic studies. Availability of this species in Sri Lanka is questionable. Sources 2,7,13,18 Compilers C. Bambaradeniya, P. Balasooriya, S. Dutta, S. Karunarathne, N.P. Kumara, U. Liyanage, M. Meegaskumbura, K. Ukuwela, N. Weerasinghe, R. Weerawardhena, D. de Silva, J. Wilkinson, P. Yahapath M.M. Bahir, C. Bambaradeniya, Anslem de Silva, A. Jayawickrama, S. Karunarathne, **Reviewers** K.N. Manamendra-Arachchi, M. Meegaskumbura, R. Somaweera, D. Srinath, N.D. Rathnayake, K.D.B. Ukuwela

### Philautus leucorhinus (Lichtenstein & Martens, 1856)

*Ixalus leucorhinus* Luchtenstein and Martens, 1856 Rhacophoridae Striped Pygmy Tree Frog (English), *Iri atikitta* (Sinhala) Species

Wet zone and Dry zone forests, Shrubs and Home gardens Bush and wet ground. Low vegetation, moist leaf litter. Up to 1710 m. Southern parts of India and Sri Lanka. Mainly wet zone and some in dry and intermediate zone. > 20,000 > 2,000 10+; Contiguous Predicted decline in area <20% in the next 10 years, Anthropogenic factors, Decrease in quality

Pesticides, Pollution, Climate, Fire, Forest die-back Yes No

Unknown Unknown Unknown Predicted decline < 20% in the next 10 years.

General field study, Informal field sighting, Literature, Hearsay/ popular belief Wildlife Heritage Trust from 1993 to date, distribution. Bambaradeniya and Ranawana from 1993 to date, distribution (Montane zone). Balasooriya and Liyanage from 1998 Colombo and Gampaha distributions. VRR-Resource inventory '97 (University of Peradeniya), distribution.

Conservation Assessment and Management Plan for Amphibians and Reptiles of Sri Lanka – Report

### Distribution

Habitat of the taxon Habitat specificity Current distribution (by country) Current Sri Lankan distribution Extent of occurrence (Sq. km.) Area of occupancy (Sq. km.) Number of locations/sub pop. Habitat status

Threats

Threats to taxon

Effect of threat on population Trade

# **Population numbers**

Global population Regional Pop (# sub-pop.) Number of mature individuals Generation time Population trends

# **Data Quality**

**Recent field studies** 

# Status

**IUCN** CITES National Red Data Book Presence in Protected Area

# Recommendations

Research Management Captive stocks Level of captive breeding recs. **Propagation Techniques** 

Other comments

Sources

Compilers

Reviewers

### Philautus nasutus Günther, 1868

Ixalus nasutus Günther, 1868 Rhacophoridae Sharp-snout Pygmy Tree Frog (English), Ulhombu atikitta (Sinhala) Species

Wet zone rain and other forests Moist leaf litter. Up to 1375 m. ENDEMIC to Sri Lanka Wet zone (Lowland and Montane zone) < 5,000 < 2,000 5; Fragmented Decrease in area <20% in last 10 years. Deforestation, Decrease in quality

Loss of habitat, Habitat fragmentation, Pesticides, Powerlines, Fire practice in home gardens. . Yes No

Unknown Unknown Unknown Unknown Declining < 20% in the last 10 years; Predicted decline < 20% in next 10 years

Census or monitoring, General field study, Informal field sighting, Literature, Hearsay/ popular belief Wildlife Heritage Trust, 1993, Distribution. Shantha Karunaratne from 1996, distribution/ecology

ENDANGERED	IUCN Criteria based on	B1+2bc
Not listed	National WL legislation	FFPA
1998, Vulnerable	1996 Red List (IUCN)	Not listed
Peak Wildnersess Sanctuary	, Gannoruwa forest	

Survey, Taxonomic research, Life history studies Monitorina None Initiate programme after 3 years Techniques not known at all

Taxonomic investigation recommended due to many morphological variations.

### 2,7,13,17,18

C. Bambaradeniya, P. Balasooriya, S. Dutta, S. Karunarathne, N.P. Kumara, U. Liyanage, M. Meegaskumbura, K. Ukuwela, N. Weerasinghe, R. Weerawardhena, D. de Silva, J. Wilkinson, P. Yahapath

M.M. Bahir, C. Bambaradeniya, Anslem de Silva, A. Jayawickrama, S. Karunarathne, K.N. Manamendra-Arachchi, M. Meegaskumbura, R. Somaweera, D. Srinath, N.D. Rathnavake, K.D.B. Ukuwela

Scientific name (author; date) Synonyms Family Common name Taxonomic level of assessment	<i>Philautus stictomerus</i> Günthe <i>Ixalus stictomerus</i> Günther, 187 Rhacophoridae Spotted Pygmy Tree Frog (Eng Species	75	ala)
Distribution Habitat of the taxon Habitat specificity Current distribution (by country) Current Sri Lankan distribution Extent of occurrence (Sq. km.) Area of occupancy (Sq. km.) Number of locations/sub pop. Habitat status	Wet zone, rain and other forests Up to 350 m ENDEMIC to Sri Lanka Kanneliya Forest Unknown Unknown Unknown Unknown	5	
<b>Threats</b> Threats to taxon Effect of threat on population Trade	Climate Unknown No		
<b>Population numbers</b> Global population Regional Pop (# sub-pop.) Number of mature individuals Generation time Population trends	Unknown Unknown Unknown Unknown Unknown		
Data Quality Recent field studies	Literature Wildlife Heritage Trust from 199	3 to date, distribution	
<b>Status</b> IUCN CITES National Red Data Book Presence in Protected Area	<b>DATA DEFICIENT</b> Not listed 1998, Endangered Kanneliya Forest	IUCN Criteria based on National WL legislation 1996 Red List (IUCN)	 FFPA Not listed
<b>Recommendations</b> Research Management Captive stocks Level of captive breeding recs. Propagation Techniques	Survey, Taxonomic research, L Habitat management, Monitorin None Not recommended Techniques not known		
Other comments	Detail field surveys should be	conducted of species which	fall under Data Deficient
Sources	7,13		
Compilers	C. Bambaradeniya, P. Balasoor U. Liyanage, M. Meegaskumbur Weerawardhena, D. de Silva, J.	a, K. Ukuwela, N. Weerasing	
Reviewers	M.M. Bahir, C. Bambaradeniya, K.N. Manamendra-Arachchi, M. Rathnayake, K.D.B. Ukuwela		

### Distribution

Habitat of the taxon Habitat specificity Current distribution (by country) Current Sri Lankan distribution Extent of occurrence (Sq. km.) Area of occupancy (Sq. km.) Number of locations/sub pop. Habitat status

Threats

Threats to taxon Effect of threat on population Trade

# **Population numbers**

Global population Regional Pop (# sub-pop.) Number of mature individuals Generation time Population trends

# Data Quality Recent field studies

	-
<b>Status</b> IUCN CITES National Red Data Book Presence in Protected Area	LOWER RISK-NEAR THREATENEDIUCN Criteria based onNot listedNational WL legislationFFPANot listed1996 Red List (IUCN)Not listedHorton Plains, Peak Wilderness, Hakgala, Victoria Randenigala Rantambe (VRR)
Recommendations	
Research	Genetic research, Taxonomic research
Management	Monitoring
Captive stocks	None
Level of captive breeding recs.	Not recommended
Propagation Techniques	Techniques not known at all
Other comments	Taxonomic investigation recommended. The <i>variabilis</i> sp. complex needs taxonomic verification.
Sources	2,7,13,18
Compilers	C. Bambaradeniya, P. Balasooriya, S. Dutta, S. Karunarathne, N.P. Kumara, U. Liyanage, M. Meegaskumbura, K. Ukuwela, N. Weerasinghe, R. Weerawardhena, D. de Silva, J. Wilkinson, P. Yahapath
Reviewers	M.M. Bahir, C. Bambaradeniya, Anslem de Silva, A. Jayawickrama, S. Karunarathne, K.N. Manamendra-Arachchi, M. Meegaskumbura, R. Somaweera, D. Srinath, N.D. Rathnayake, K.D.B. Ukuwela

# Philautus variabilis (Günther, 1858)

*Ixalus variabilis* Günther, 1858 Rhacophoridae Variable Pygmy Tree Frog (English), *Vichalya atikitta* (Sinhala) Species

Wet zone and wet pockets of dry zone Moist grasslands/Litter/Bushes. Up to 2135 m. India and Sri Lanka Wet zone -widespread, intermediate as well. > 20,000 > 2,000 Many; Fragmented Decrease in quality, Pollution, Acid rain

Pesticides, Pollution, Fire, Acid rain Yes No

Unknown Unknown Unknown Decreasing, <20% in the last 10 years

. General field study, Informal field sighting, Literature, Hearsay/ popular belief Wildlife Heritage Trust from 1993, distribution. VRR-Resource survey from 1996-97, Species occurrence Montane zone-Resource survey from 1995, Species occurrence. N. Ratnayake in Riverstern, Knuckles.

### Distribution

Habitat of the taxon Habitat specificity Current distribution (by country) Current Sri Lankan distribution Extent of occurrence (Sq. km.) Area of occupancy (Sq. km.) Number of locations/sub pop. Habitat status

### Threats

Threats to taxon Trade Effect of trade on population

### **Population numbers**

Global population Regional Pop (# sub-pop.) Number of mature individuals Generation time Population trends

### Data Quality Recent field studies

### Status IUCN CITES National Red Data Book

# Presence in Protected Area

Recommendations Research Management Captive stocks Level of captive breeding recs. Propagation Techniques

Other comments

Sources

Compilers

Reviewers

# Polypedates cruciger Blyth, 1852

Polypedates leucomystax Kelaart, 1852 Rhacophoridae Common Hour-glass Tree Frog (English), Pahimbu sulaba gas-mandiya (Sinhala) Species

Wet and dry zones. Human habitats and Forests Arboreal. Up to 1525 m. ENDEMIC to Sri Lanka Wet and dry zone > 20,000 > 2,000 Many; Contiguous Stable

Pesticides, Pollution, Predation by exotics, Eggs killed by people, Egg parasitism Evidence of smuggling Unknown

Unknown Unknown Unknown Unknown Stable

7,13,18

General field study, Informal field sighting, Literature, Hearsay/ popular belief Wildlife Heritage Trust from 1993 to date, distribution. Anslem de Silva, on going conservation breeding programme and re-introduction programme and assessment of threats.GEF-Montane zone report, 1995, distribution. Global Environmental Facility project GEF-VRR report, 1997, distribution.

LOWER RISK - LEAST CONCERNIUCN Criteria based on<br/>National WL legislation--Not listedNational WL legislationNone1998, Vulnerable1996 Red List (IUCN)Not listedHakgala, Peak Wilderness, . VRR (Victorial Randeniigala Rantambe)--

Survey, Life history stuidies Monitoring, Public awareness Over 2500 tadpoles - on going re-introduction and conservation breeding program, 1999. Not recommended Some techniques known

de Silva and de Silva (1994) obserrved egg parasitism of this species by flies, which needs further investigation to identify the insects. There is a popular belief among the general public that this spp. is very poisonous, hence, it warrants public awareness programme

C. Bambaradeniya, P. Balasooriya, S. Dutta, S. Karunarathne, N.P. Kumara, U. Liyanage, M. Meegaskumbura, K. Ukuwela, S. Veediyatandar, N. Weerasinghe, R. Weerawardhena, D. de Silva, J. Wilkinson, P. Yahapath

M.M. Bahir, C. Bambaradeniya, Anslem de Silva, A. Jayawickrama, S. Karunarathne, K.N. Manamendra-Arachchi, M. Meegaskumbura, R. Somaweera, D. Srinath, N.D. Rathnayake, K.D.B. Ukuwela

### Distribution

Habitat of the taxon Habitat specificity Current distribution (by country) Current Sri Lankan distribution Extent of occurrence (Sq. km.) Area of occupancy (Sq. km.) Number of locations/sub pop. Habitat status

### Threats

Threats to taxon Effect of threat on population Trade

# **Population numbers**

**Global** population Regional Pop (# sub-pop.) Number of mature individuals Generation time Population trends

# **Data Quality Recent field studies**

# Status

**IUCN** CITES National Red Data Book Presence in Protected Area

### Recommendations

Research Management Captive stocks Level of captive breeding recs. Propagation Techniques

### Other comments

Survey of Sri Lanka, 1997/98). Sources 2,7,8, 13, 18 Compilers C. Bambaradeniya, P. Balasooriya, S. Dutta, S. Karunarathne, N.P. Kumara, U. Livanage, M. Meegaskumbura, K. Ukuwela, N. Weerasinghe, R. Weerawardhena, D. de Silva, J. Wilkinson, P. Yahapath Reviewers M.M. Bahir, C. Bambaradeniya, Anslem de Silva, A. Jayawickrama, S. Karunarathne, K.N. Manamendra-Arachchi, M. Meegaskumbura, R. Somaweera, D. Srinath, N.D. Rathnayake, K.D.B. Ukuwela

Polypedates eques Günther, 1858

Rhacophoridae Montane Hour-glass Tree Frog (English), Porakatu gas-madiya (Sinhala) Species

Montane Terrestrial and Arboreal. Above 1300 m. **ENDEMIC** to Sri Lanka Central and southern hills (3<sup>rd</sup> peneplain) < 20,000 500 - 2,000 m. Many; Contiguous Decrease in quality, Acid rain, Tea estate, Pollution (Biocides)

Poisoning, Pesticides Yes No

Unknown Unknown Unknown Unknown Predicted decline < 20% in the next 10 years

General field study, Infromal field sighting, Literature, Hearsay/ popular beilef Wildlife Heritage Trust from 1993 to date, distribution; GEF-Montane report from 1995, distribution; R. Weerawardhan in Keianiya, 1998, development stages. Anslem de Silva, ZSSL survey at Horton Plains 1997/98.

LOWER RISK-NEAR THREATENED IUCN Criteria based on Not listed National WL legislation **FFPA** 1998, Vulnerable 1996 Red List (IUCN) Not listed Peak Wilderness, Horton Plains, Hakgala

Survey, Taxonomic research, Life history studies. Limiting factor research Monitoring, Limiting factor management None Not recommended Some techniques known for similar taxa.

First report of cestodes from Sri Lanka frog - Anslem de Silva, 1999. FROGLOG, 1999. On Adams Peak, during the pilgrim season of Row of light, the lights attract insects, which intum attract amphibians leading to mass deaths of amphibians due to trampling by pilgrims. Lentic habitats studied at Horton Plains showed entire tadpole populations in small pools being wiped out by aquatic hemipterans (Anslem de Silva, Zoological

### Distribution

Habitat of the taxon Habitat specificity Current distribution (by country) Current Sri Lankan distribution Extent of occurrence (Sq. km.) Area of occupancy (Sq. km.) Number of locations/sub pop. Habitat status

Threats Threats to taxon Effect of threat on population Trade

# **Population numbers**

Global population Regional Pop (# sub-pop.) Number of mature individuals Generation time Population trends

# **Data Quality Recent field studies**

# Status

**IUCN** CITES National Red Data Book Presence in Protected Area

### Recommendations Research

Management Captive stocks Level of captive breeding recs. **Propagation Techniques** 

2, 7, 13

Other comments

Sources

Compilers

Reviewers

Polypedates longinasus Ahl, 1931

Rhacophoridae Sharpsnout Tree Frog (English), Ulhombu Gas-madiya (Sinhala) Species

Forests in the mid hills upper montane region Arboreal, 150-1800 m. **ENDEMIC** to Sri Lanka Montane forest, central areas, southern areas (Thangamalai, Sinharaja). < 20,000 > 2,000 9; Fragmented Decrease in quality, Acid rain, forest die-back.

Pesticidies, Poisoning, Pollution, Climate. Yes No

Unknown Unknown Unknown Unknown Continuing decline < 20% in the last 10 years; Predicted decline < 20% in next 10 years

General field study. Informal field sighting. Literature. Hearsay/popular belief Wildlife Heritage Trust from 1993. distribution. GEF-montane study from 1995. distribution

VULNERABLE	IUCN Criteria based on	B1+2c
Not listed	National WL legislation	FFPA
1998, Endangered	1996 Red List (IUCN)	Not liste
Peak Wilderness, Hakgala, S	Sinharaja	

Survey, Genetic research, Taxonomic research, Life history studies, Limiting factor research Monitoring None Not recommended Techniques not known

listed

Population fragmented. Species warrants taxonomic study/genetic research

C. Bambaradeniya, P. Balasooriya, S. Dutta, S. Karunarathne, N.P. Kumara, U. Liyanage, M. Meegaskumbura, K. Ukuwela, N. Weerasinghe, R. Weerawardhena, D. de Silva, J. Wilkinson, P. Yahapath

M.M. Bahir, C. Bambaradeniya, Anslem de Silva, A. Jayawickrama, S. Karunarathne, K.N. Manamendra-Arachchi, M. Meegaskumbura, R. Somaweera, D. Srinath, N.D. Rathnayake, K.D.B. Ukuwela

### Distribution

Habitat of the taxon Habitat specificity Current distribution (by country) Current Sri Lankan distribution Extent of occurrence (Sq. km.) Area of occupancy (Sq. km.) Number of locations/sub pop. Habitat status

### Threats

Threats to taxon Effect of threat on population Trade

### **Population numbers**

Global population Regional Pop (# sub-pop.) Number of mature individuals Generation time Population trends

# **Data Quality Recent field studies**

### Status

**IUCN** CITES National Red Data Book Presence in Protected Area

# Recommendations

Research Managemet Captive breeding for Captive stocks Level of captive breeding recs. Propagation Techniques

### Other comments

Reviewers

Taxonomic status of sub species (Endemic) unclear, which warrants genetic study to confirm sub species validity. P. maculatus is common inside houses, specially toilets. Its been long accepted as an animal that "lives" with humans (Anslem de Silva), on going study on knowledge, attitude and practices on amphibians. Sources 7,13,18 C. Bambaradeniya, P. Balasooriya, S. Dutta, S. Karunarathne, N.P. Kumara, U. Liyanage, M. Meegaskumbura, K. Ukuwela, N. Weerasinghe, R. Weerawardhena, D. Compilers de Silva, J. Wilkinson, P. Yahapath

> M.M. Bahir, C. Bambaradeniya, Anslem de Silva, A. Jayawickrama, S. Karunarathne, K.N. Manamendra-Arachchi, M. Meegaskumbura, R. Somaweera, D. Srinath, N.D. Rathnayake, K.D.B. Ukuwela

# Polypedates maculatus (Peters. 1871)

Hyla maculata Gray 1834 Rhacophoridae Chunam Tree Frog (English), Hunu-gomara gas-madiya (Sinhala) Species

Widely distributed - cosmopolitan Arboreal. Up to 500 m. India and Sri Lanka Wide distribution below 500 m. > 20,000 > 2,000 Many; Contiguous Stable

Pesticides, Poisoning, Pollution, Predation by exotics None No

Unknown Unknown Unknown Unknown Stable

General field study. Informal field stighting. Literature. Hearsay/ popular belief Wildlife Heritage Trust from 1993, distribution. VRR-Faunal report (GEF) from 1997, distribution

LOWER RISK - LEAST CONCERN	IUCN Criteria based on	
Not listed	National WL legislation	FFPA
Not listed	1996 Red List (IUCN)	Not listed
Many		

Genetic research, Taxonomic research Monitoring, Captive breeding Public awareness, Education None Initiate programme after 3 years Some techniques known

Conservation Assessment and Management Plan for Amphibians and Reptiles of Sri Lanka - Report

### Distribution

Habitat of the taxon Habitat specificity Current distribution (by country) Current Sri Lankan distribution Extent of occurrence (Sq. km.) Area of occupancy (Sq. km.) Number of locations/sub pop. Habitat status

Threats

Threats to taxon Effect of threat on population Trade

### **Population numbers**

Global population Regional Pop (# sub-pop.) Number of mature individuals Generation time Population trends

# Data Quality Recent field studies

# Status

IUCN CITES National Red Data Book Presence in Protected Area

# Recommendations

Research Management Captive breeding for Captive stocks Level of captive breeding recs. Propagation Techniques

Other comments

# Sources

Compilers

Reviewers

Pseudophilautus temporalis (Günther, 1864)

Ixalus temporalis Günther, 1864; Pseudophilautus temporalis Rhacophoridae Spurless Pygmy Tree Frog (English), Niyakatu rahita atikitta (Sinhala) Species

Wet zone, shaded forests Leaf litter, 1000-2000 m ENDEMIC to Sri Lanka Wet zone < 5,000 < 2,000 ± 5; Fragmented (Upper montane) Decrease in quality, Pollution

Pollution, Acid rain, Climate Yes No

Unknown Unknown Unknown Predicted decline >20% in the next 10 years

General field study, Literature Wildlife Heritage Trust from 1993 to date, distribution. VRR Resource inventory,

ENDANGERED Not listed 1998, Critically Endangered Unknown IUCN Criteria based **on** National WL legislation 1996 Red List (IUCN)

B1+2c FFPA Not listed

Survey, Genetic research, Taxonomic research, Life history studies Monitoring, Captive breeding Restocking None Initiate programme within 3 years Techniques not known at all

Taxonomic investigation recommended.

7,13

C. Bambaradeniya, P. Balasooriya, S. Dutta, S. Karunarathne, N.P. Kumara, U. Liyanage, M. Meegaskumbura, K. Ukuwela, N. Weerasinghe, R. Weerawardhena, D. de Silva, J. Wilkinson, P. Yahapath

M.M. Bahir, C. Bambaradeniya, Anslem de Silva, A. Jayawickrama, S. Karunarathne, K.N. Manamendra-Arachchi, M. Meegaskumbura, R. Somaweera, D. Srinath, N.D. Rathnayake, K.D.B. Ukuwela

Rhacophorus cavirostris (Günther, 1868) Scientific name (author; date) Polypedates cavirostris Günther 1868 Synonyms Family Rhacophoridae Common name Tubercle Tree Frog (English), Hirigadu gas-madiya (Sinhala) Taxonomic level of assessment Species Distribution Habitat of the taxon Montane forests Canopy (Arboreal). 500 -1710 m Habitat specificity Current distribution (by country) ENDEMIC to Sri Lanka Current Sri Lankan distribution Central hills and southern hills of Sri Lanka Extent of occurrence (Sq. km.) < 5,000 Area of occupancy (Sq. km.) < 2,000 Number of locations/sub pop. 5; Fragmented Habitat status Predicted decline in area >20% in the next 10 years, Urbanization, Decrease in quality, Pollution due to tea plantation. Threats Loss of habitat, Habitat fragmentation, Pesticides, Pollution, Climate, Drought, Threats to taxon Acid rain, Forest die-back Yes Effect of threat on population Trade No **Population numbers** Global population Unknown Regional Pop (# sub-pop.) Unknown Number of mature individuals Unknown Generation time Unknown Population trends Continuing decline >20% in the last 10 years; Predicted decline > 20% in next 10 vears **Data Quality** General field study, Informal field sighting, Literature, Hearsay/ popular belief **Recent field studies** Wildlife Heritage Trust from 1993, distribution. Dharmasiri Kandamby in Galle District, 1998/99 Status ENDANGERED **IUCN** IUCN Criteria based on B1+2bc CITES Not listed National WL legislation **FFPA** National Red Data Book 1998, Endangered 1996 Red List (IUCN) Not listed Presence in Protected Area Knuckles Recommendations Survey, Genetic research, Taxonomic research, Life history studies, Limiting factor Research research Habitat management, Monitoring, Limiting factor management Management Captive breeding for Conservation Captive stocks None Level of captive breeding recs. Initiate programme after 3 years **Propagation Techniques** Techniques not known Current locations indicate that population/ habitat are fragmented, therefore requires Other comments taxonomic investigation. The record of R. cavirostris from China is doubtful as the type locality of this is Sri Lanka. Hence it need further study to establish its validity. Several specimens with similar tuberculated fringes on the posterior margin of hind limbs was observed in Gampola (Anslem de Silva). Sources 7,13,19 Compilers C. Bambaradeniya, P. Balasooriya, S. Dutta, S. Karunarathne, N.P. Kumara, U. Liyanage, M. Meegaskumbura, K. Ukuwela, N. Weerasinghe, R. Weerawardhena, D. de Silva, J. Wilkinson, P. Yahapath M.M. Bahir, C. Bambaradeniya, Anslem de Silva, A. Jayawickrama, S. Karunarathne, Reviewers K.N. Manamendra-Arachchi, M. Meegaskumbura, R. Somaweera, D. Srinath, N.D. Rathnayake, K.D.B. Ukuwela

#### Distribution

Habitat of the taxon Habitat specificity-Current distribution (by country) Current Sri Lankan distribution Extent of occurrence (Sq. km.) Area of occupancy (Sq. km.) Number of locations/sub pop. Habitat status

#### Threats

Threats to taxon Effect of threat on population Trade

#### **Population numbers**

Global population Regional Pop (# sub-pop.) Number of mature individuals Generation time Population trends

Data Quality Recent field studies

## Status

IUCN CITES National Red Data Book Presence in Protected Area

#### Recommendations

Research Management Captive stocks Level of captive breeding recs. Propagation Techniques

#### Other comments

Sources

Compilers

**Reviewers** 

## Rhacophorus fergusonianus Ahl, 1927

Rhacophoridae Ferguson's Tree Frog (English), *Fergasonge gas-madiya* (Sinhala) Species

Rocky streams/ Riverine forests Arboreal. 450 - 2000 m. **ENDEMIC** to Sri Lanka Wet zone (Central) and Intermediate zone < 20,000 > 2,000 7; Fragmented Predicted decline in area < 20% in the next 10 years, Decrease in quality, Climate change, Human impacts

Pesticides, Poisoning, Pollution, Climate, Forest die-back. Yes No

Unknown Unknown Unknown Predicted decline < 20% in the next 10 years

General field study, Informal field sighting, Literature, Hearsay/ popular belief WHT, 1993, distribution; VRR-GEF Project from 1997, distribution.

VULNERABLEIUCN Criteria based on<br/>National WL legislationB1+2bc<br/>FFPA1998, Vulnerable1996 Red List (IUCN)Not listedVRR Sanctuary, Peak Wilderness SanctuarySanctuary

Survey, Genetic research, Taxonomic research, Life history studies Monitoring None Not recommended Techniques not known

Population/ habitat-fragmented, Taxonomic investigation necessary.

#### 2, 7, 13

C. Bambaradeniya, P. Balasooriya, S. Dutta, S. Karunarathne, N.P. Kumara, U. Liyanage, M. Meegaskumbura, K. Ukuwela, N. Weerasinghe, R. Weerawardhena, D. de Silva, J. Wilkinson, P. Yahapath

M.M. Bahir, C. Bambaradeniya, Anslem de Silva, A. Jayawickrama, S. Karunarathne, K.N. Manamendra-Arachchi, M. Meegaskumbura, R. Somaweera, D. Srinath, N.D. Rathnayake, K.D.B. Ukuwela

#### Distribution

Habitat of the taxon Habitat specificity Current distribution (by country) Current Sri Lankan distribution Extent of occurrence (Sq. km.) Area of occupancy (Sq. km.) Number of locations/sub pop. Habitat status

Threats

Threats to taxon Effect of threat on population Trade

## **Population numbers**

Global population Regional Pop (# sub-pop.) Number of mature individuals Generation time Population trends

Data Quality Recent field studies

## Status

IUCN CITES National Red Data Book Presence in Protected Area

#### Recommendations

Research Management Captive stocks Level of captive breeding recs. Propagation Techniques

#### Other comments

Sources7,13CompilersC. Bambaradeniya, P. Balasooriya, S. Dutta, S. Karunarathne, N.P. Kumara, U.<br/>Liyanage, M. Meegaskumbura, K. Ukuwela, N. Weerasinghe, R. Weerawardhena, D.<br/>de Silva, J. Wilkinson, P. YahapathReviewersM.M. Bahir, C. Bambaradeniya, Anslem de Silva, A. Jayawickrama, S. Karunarathne, K.N:<br/>Manamendra-Arachchi, M. Meegaskumbura, R. Somaweera, D. Srinath, N.D. Rathnayake,<br/>K.D.B. Ukuwela

## Rhacophorus macropus Günther, 1868

Ixalus macropus Günther Rhacophoridae Webtoe tree frog (English), Patala-pa Gas-madiya (Sinhala) Species

Central hill (Forest habitats) Leaf litter, wet boulders, 300 -1710 m ENDEMIC to Sri Lanka Central hills < 20,000 > 2,000 6; Fragmented Decrease in quality, Acid rain, Forest die-back.

Pollution, Forest die-back, Acid rain Yes No

Unknown Unknown Unknown Continuing decline < 20% in the last 10 years

General field study, Infromal field study, Literature, Hearsay/ popular belief Wildlife Heritage Trust from 1993 to date, distribution. N. Ratnayake in Pitawalapathana grassland. D.M.N. Pradeep at Galaboda area, 1999.

VULNERABLE Not listed 1998, Vulnerable Knuckles IUCN Criteria based on National WL legislation 1996 Red List (IUCN) B1+2c FFPA Not listed

Survey, Life history studies, Limiting factor research, Ecological Studies Monitoring None Not recommended Not known at all

Family Common name Taxonomic level of assessment

## Distribution

Habitat of the taxon Habitat specificity Current distribution (by country) Current Sri Lankan distribution Extent of occurrence (Sq. km.) Area of occupancy (Sq. km.) Number of locations/sub pop. Habitat status

Threats

Threats to taxon

Effect of threat on population Trade

## **Population numbers**

Global population Regional Pop (# sub-pop.) Number of mature individuals Generation time Population trends

## Data Quality Recent field studies

Status VULNERABLE **IUCN** IUCN Criteria based on B1+2c CITES Not listed National WL legislation **FFPA** National Red Data Book 1998, Endangered 1996 Red List (IUCN) Not listed HPNP, PWS, HSNR, VRR, Knuckles Presence in Protected Area Recommendations Survey, Genetic research, Taxonomic research, Life history studies, Limiting factor Research research Management Habitat management, Monitoring, Limiting factor management Captive stocks None Level of captive breeding recs. Not recommended Propagation Techniques Techniques not known Other comments Dominent species of Horton Plains ecosystem with a density of 62000 individuals per Sq. km. (Anslem de Silva, Zoological Survey of Sri Lanka, 1999) Sources 2, 7, 8, 9, 12, 13, 18 C. Bambaradeniya, P. Balasooriya, S. Dutta, S.Karunarathne, N.P. Kumara, U. Compilers Liyanage, M. Meegaskumbura, K. Ukuwela, N. Weerasinghe, R. Weerawardhena, D. de Silva, J. Wilkinson, P. Yahapath M.M. Bahir, C. Bambaradeniya, Anslem de Silva, A. Jayawickrama, S. Karunarathne, **Reviewers** K.N. Manamendra-Arachchi, M. Meegaskumbura, R. Somaweera, D. Srinath, N.D. Rathnavake, K.D.B. Ukuwela

Polypedates microtympanum Günther, 1858 Rhacophorus dimbullae Shreve, 1940; *R. zimmeri* Ahl, 1927
Rhacophoridae
Small-eared Tree Frog (English), *Kudukan gas-madiya* (Sinhala)
Species
Wet zone and intermediate zone. Moist leaf litter, under logs, stones, crevices. 300 - 2135 m. Terrestrial and arboreal
ENDEMIC to Sri Lanka
Wet zone and intermediate zone
< 20,000</li>
> 2,000
Fragmented

Rhacophorus microtympanum (Günther, 1858)

Predicted decline in area < 20% in the next 10 years, Human habitations, Decrease in quality, Acid ran, Forest die-back, human impact.

Habitat fragmentation, Pesticides, Poisoning, Pollution, Trampling, Fire (at Horton's), Drought, Acid rain, Forest die-back. Yes No

Unknown Unknown Unknown Unknown Declining < 20% in the last 10 years; Predicted decline < 20% in next 10 years

General field study, Informal field sighting, Literature, Hearsay/ popular belief Wildlife Heritage Trust, 1993, distribution. VRR-GEF Report, 1997, Distribution; Montane zone GEF report 1995, distribution. Horton Plain survey (Costa and R. Weerawardhena), 1998, distribution/ecology; Population and ecological studies by Anslem de Silva, Zoological Survey at Hortain Plains, 1998/99/2000.

Conservation Assessment and Management Plan for Amphibians and Reptiles of Sri Lanka – Report	

#### Distribution

Habitat of the taxon Habitat specificity Current distribution (by country) Current Sri Lankan distribution Extent of occurrence (Sq. km.) Area of occupancy (Sq. km.) Number of locations/sub pop. Habitat status

Threats

Threats to taxon Effect of threat on population Trade

## **Population numbers**

Global population Regional Pop (# sub-pop.) Number of mature individuals Generation time Population trends

## **Data Quality Recent field studies**

## Status

**IUCN** CITES National Red Data Book Presence in Protected Area Recommendations Research Management Captive stocks Level of captive breeding recs. Propagation Techniques

#### Other comments

Sources

Compilers

**Reviewers** 

## Rhacophorus reticulatus Günther, 1864

Rhacophoridae Reticulated Tree Frog (English), Jalabha gas-madiya (Sinhala) Species

Montane forests Wet leaf litter. 900 -1370m. **ENDEMIC** to Sri Lanka Upper montane forests < 5.000 < 2,000 5; Fragmented Decrease in quality, Acid rain, Forest die-back.

Pollution, Trampling, Climate, Forest die-back, Acid rain. Yes No

Unknown Unknown Unknown Unknown Predicted decline > 20% in the next 10 years

General field study. Informal field sighting. Literature. Hearsay/ popular belief Wildlife Heritage Trust, 1993, distribution, GEF-Montane report, 1995, distribution,

**ENDANGERED** IUCN Criteria based on B1,2c National WL legislation FFPA Not listed 1998, Endangered 1996 Red List (IUCN) Not listed Peak Wilderness, Knuckles Survey, Life history studies, Limiting factor research Habitat management, Monitoring None Initiate programme after 3 years Techniques not known at all ---7.13 C. Bambaradeniya, P. Balasooriya, S. Dutta, S. Karunarathne, N.P. Kumara, U. Liyanage, M. Meegaskumbura, K. Ukuwela, N. Weerasinghe, R. Weerawardhena, D. de Silva, J. Wilkinson, P. Yahapath M.M. Bahir, C. Bambaradeniya, Anslern de Silva, A. Jayawickrama, S. Karunarathne, K.N. Manamendru-Arachchl, M. Meegaskumbura, R. Somaweora, D. Srinath, N.D. Rathnayake,

Conservation Assessment and Management Plan for Amphibians and Reptiles of Sri Lanka - Report

K.D.B. Ukuwela

#### Distribution

Habitat of the taxon Habitat specificity Current distribution (by country) Current Sri Lankan distribution Extent of occurrence (Sq. km.) Area of occupancy (Sq. km.) Number of locations/sub pop. Habitat status

#### Threats

Threats to taxon Effect of threat on population Trade

## **Population numbers**

**Global** population Regional Pop (# sub-pop.) Number of mature individuals Generation time Population trends

## **Data Quality**

Status **IUCN** 

CITES

**Recent field studies** 

#### Wildlife Heritage Trust from 1993, distribution. GEF-Montane zone report from 1995, distribution. Knuckles survey from 1997, distribution. Anslem de Silva, Zoological Survey of Sri Lanka survey at Horton Plains, 1997-98 VULNERABLE IUCN Criteria based on A1c+2c; B1+2c Not listed National WL legislation **FFPA** National Red Data Book Not listed 1996 Red List (IUCN) 1998, Vulnerable Presence in Protected Area Gannoruwa, Horton Plains, Peak Wilderness, Hakgala

Recommendations	
Research	Survey, Genetic research, Taxonomic research, Life history studies, Limiting factor research
Management	Habitat management, Monitoring
Captive stocks	None
Level of captive breeding recs.	Not recommended
Propagation Techniques	Techniques not known at all
Other comments	At Horton Plains this is the second dominant amphibian species, Zoological Survey of Sri Lanka Survey, 1997-98 by Anslem de Silva.
Sources	7,8,13,18
Compilers	C. Bambaradeniya, P. Balasooriya, S. Dutta, S. Karunarathne, N.P. Kumara, U. Liyanage, M. Meegaskumbura, K. Ukuwela, N. Weerasinghe, R.

Weerawardhena, D. de Silva, J. Wilkinson, P. Yahapath

Reviewers

M.M. Bahir, C. Bambaradeniya, Anslem de Silva, A. Jayawickrama, S. Karunarathne, K.N. Manamendra-Arachchi, M. Meegaskumbura, R. Somaweera, D. Srinath, N.D. Rathnayake, K.D.B. Ukuwela.

Species Upper montane forests

Conical-wart Pygmy Tree Frog (English), Gorahadi atikitta (Sinhala)

Thelodorma schmarda (Kelaart, 1854)

Rhacophoridae

Unknown

Unknown

Unknown

Unknown

Hearsay/ popular belief

Leaf litter, rock and tree crevices. Arboreal. Above 500 m ENDEMIC to Sri Lanka Central regions of Sri Lanka < 20,000 > 2,000 In upper montane hills (Horton Plains, Hakgala, Peak Wilderness it is contiguous) Decrease in quality, Acid rain, Forest die-back, rise in temperature, drop in rainfall

Polypedates(?) schmardanus Kelaart, 1854; Ixalus sghmardanus Günther, 1864.

Habitat fragmentation, Pesticides, Pollution, Drought, Acid rain, Forest die-back. Yes No

Declining > 20% in the last 10 years; Predicted decline > 20% in next 10 years.

Census or monitoring. General field study. Informal field sighting. Literature.

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# REPTILIA

# **TAXON DATA SHEETS**

## CONSERVATION ASSESSMENT AND MANAGEMENT PLAN WORKSHOP FOR AMPHIBIANS AND REPTILES OF SRI LANKA

**REPORT 2000** 

#### Distribution

Habitat of the taxon Habitat specificity

Current distribution (by country) Current Sri Lankan distribution

Extent of occurrence (Sq. km.) Area of occupancy (Sq. km) Number of locations/sub pop. Habitat status

## Threats

Threats to taxon Effect of threat on population Trade Effect of trade on population

#### **Population numbers**

Global population Regional Pop (# sub-pop.) Number of mature individuals Generation time Population trends

Data Quality Recent field studies

Status IUCN CITES National Red Data Book Presence in Protected Area

## Recommendations

Research Management Captive breeding for Captive stocks Level of captive breeding recs. Propagation Techniques

Other comments

-

Compilers

Dry zone ponds, tanks and marshes Semi-aquatic, terrestrial. In crevices, among boulders, roots of trees, near ponds and tanks; 300 m. **ENDEMIC** to Sri Lanka Low country wet zone and dry zone (Polonnaruwa, Nikeveratiya, Manampitiya, Anamaduwa) > 20,000 > 2,000 Many; Fragmented Decrease in area < 20% in last 10 years; Habitat loss, Degradation; Decrease in

Loss of habitat, Hunting, Hunting for food, Habitat fragmentation Yes Domestic; Meat and whole animal trade Declining

Unknown Unknown (Unknown) > 2,500 10 years Declining > 20% in the last 20 years (2 generations)

Melanochelys trijuga parked (Deraniyagala, 1939)

Hard-shell Terapin (English); Gal Ibba (Sinhala)

Bataguridae

Sub species

quality

General field study, Informal field sightings, Literature Anslem de Silva and I. Das, ongoing.

VULENERABLE	Criteria	.A1cd
Not listed	National WL legislation	FFPA
1998, Not threatened	1996 Red List (IUCN)	.Not listed
Yala, Bundala (Rekawa, Kandy, Anuradhapura)		

Survey, Life history studies, Taxonomic research, Limiting factor research Habitat management, Monitoring, Captive breeding Public awareness, Education, Research In Colombo Zoological Gardens Initiate Programme after 3 years Some techniques known for taxon or similar taxa

One of the major threats to *Melanochelys trijuga parkeri* is hunting for flesh specially in the dry zone. Two sub species are recorded from Sri Lanka. They are *Melanochelys trijuga parkeri* and *Melanochelys trijuga thermalis. Melanochelys trijuga thermalis* is not endemic to Sri Lanka,

**Sources** 22, 24, 45, 50, 60, 63

Anslem de Silva, L. Ekenayake, S.S.S. Jasinghe, T. Kapurusinghe, S. Karunarathna, B.Z. Nizam, A. Palihawadane, R. Peris, K. Parameshwaran, N.D. Rathnayake, H.D. Rathnavake, P. Vinobaba

Reviewers

Anslem de Silva

Scientific name (author; date) Caretta caretta (Linnaeus, 1758) Thalassochelys caretta Boulenger 1890 Synonym Family Cheloniidae Loggerhead Sea Turtle (English); Olugedi Kasbaeva, Kannadi Kasbaeva Common name (Sinhala); Perunthalai amai, Kadal amai (Tamil)

Taxonomic level of assessment

## Distribution

Habitat of the taxon Habitat specificity Current distribution (by country) Current Sri Lankan distribution

Extent of occurrence (Sg. km.) Area of occupancy (Sq. km) Number of locations/sub pop. Habitat status

Threats

Threats to taxon

Effect of threat on population Trade Effect of trade on population

#### **Population numbers**

Global population Regional Pop (# sub-pop.) Number of mature individuals Generation time Population trends **Data Quality** 

**Recent field studies** 

#### Status

IUCN CITES National Red Data Book Presence in Protected Area

#### Recommendations

Other comments

Research Management Captive breeding for Captive stocks Level of captive breeding recs. **Propagation Techniques** 

> This species is nests only in Sri Lanka and in northern Indian Ocean. In Kosgoda, Ussangoda, eggs are collected for hatcheries and for consumption. Very rare species in Sri Lanka and should be given high attention to remaining population. Presently the IUCN Sri Lanka, Department of Wild Life and NGO's are working on a joint Action Plan.

Habitat management, Wild Population management, Monitoring, Captive breeding

Sources 22, 45, 47, 50, 60, 63

Compilers

Anslem de Silva, L. Ekenayake, S.S.S. Jasinghe, T. Kapurusinghe, S. Karunarathna, B.Z. Nizam, A. Palihawadane, R. Peris, K. Parameshwaran, N.D. Rathnayake, H.D. Rathnayake, P. Vinobaba

**Reviewers** 

Anslem de Silva

Local; Domestic; Meat, eggs. Yes Unknown Unknown Unknown

Hunting, Hunting for food, Loss of nesting habitat, Habitat fragmentation,

80-120 years Declining > 50% in the last 3 generations Census or monitoring, General field study, Informal field sighting, Literature, Indirect information such as from trade etc., Museum/records Peter Richard, Hewavisanthi and Amarasuriya

South and Southwest beaches and coastal waters; Northern and northwestern

Decrease in area (of coral and sea grass beds) > 20% in the last 5 years; Habitat

#### ENDANGERED Listed (Appendix ?)

No

None

Yes

Species

coastal waters

> 20,000

Contiguous

> 2,000

Yes

Marine and sandy beaches

India, Sri Lanka, Maldives

Marine, near sea grass beds, coral reefs; Sea level

loss, Beach development; Decrease in quality

Overexploitation, Pollution, Drought, El Nino

Survey, Genetic research, Taxonomic research

Public awareness, Research, Education, Tourism

Some techniques known for taxon or similar taxa

Initiate Programme within 3 years

Criteria ..... A1cd National WL legislation ..... FFPA 1996 Red List (IUCN) ...... Endangered

Scientific name (author; date) Chelonia mydas (Linnaeus, 1758) Testudo mydas Linn., 1758; Mydas viridis Gray 1870 Synonym Family Cheloniidae Green Turtle (English); Gal Kasbaeva, Mas Kasbaeva, Vali Kasbaeva (Sinhala); Common name Pachchai Amai (Tamil) Taxonomic level of assessment Species

Tropical, Indian, Atlantic and Pacific oceans

Marine waters (Coral reefs and sea grass beds); Sea level

Marine and sandy beaches

northwestern coastal waters

Coral mining, Decrease in quality

Disease, Egg collection, Trade

Local, Domestic; Meat, eggs

> 20,000

Decrease

Unknown

Unknown

80-120 years

(Unknown) > 2,500

Many; Contiguous

> 2,000

#### Distribution

Habitat of the taxon Habitat specificity Current distribution (by country) Current Sri Lankan distribution

Extent of occurrence (Sq. km.) Area of occupancy (Sq. km) Number of locations/sub pop. Habitat status

## Threats

Threats to taxon

Effect of threat on population Trade Effect of trade on population

## **Population numbers**

**Global** population Regional Pop (# sub-pop.) Number of mature individuals Generation time Population trends

#### **Data Quality**

**Recent field studies** 

Declining > 50% in the last 2 generations
Census or monitoring, General field study, Informal field sighting, Literature, Indirect information such as from trade, Museum/records Hewavisanthi from 1994, the mortality of green turtle. Amarasuriya from 1996, some observation in marine turtle hatcheries. TCP surveys (Peter Richardon & T. Kapurusinghe on going)

South and Southwest coast of Sri Lanka (Beaches and coastal waters); Northern and

Habitat loss (destruction of coral reefs) > 5% in the last 20 years; Beach

Egg collection, killing for meat has resulted in population declines

development, Loss of nesting habitats, Developmental activities, Sea erosion,

Hunting for food, Loss of habitat, Overexploitation, Pollution, Drought, El Nino,

<b>Status</b> IUCN CITES National Red Data Book Presence in Protected Area	<b>ENDANGERED</b> Not listed Not evaluated Yala, Bundala	Criteria <b>A1cd</b> National WL legislation FFPA 1996 Red List (IUCN) Endangered	
Recommendations			
Research	Survey, Taxonomic research, Life history studies		
Management	Habitat management, Wild Population management, Monitoring, Sustainable utilisation, Captive breeding		
Captive breeding for	Public awareness, Research, Education, Tourism		
Captive stocks	Yes		
Level of captive breeding recs,	Initialo Programme after 3 years		
Propagation Techniques	Some techniques known for taxon or similar taxa		
Other comments	hatchery management practices wide spread threat. Most comm	e hatcheries operating illegally in Sri Lanka and s are very poor in Sri Lanka. Egg collection is the most onest among the nesting turtles. Presently the IUCN	

Sri Lanka Department of Wild Life and NGO's are working on a joint Action Plan. Sources 1,45,47,50,60,63,85 Compilers Anslem de Silva, L. Ekenayake, S.S.S. Jasinghe, T. Kapurusinghe, S. Karunarathna, B.Z. Nizam, A. Palihawadane, R. Peris, K. Parameshwaran, N.D. Rathnayake, H.D. Rathnayake, P. Vinobaba Reviewers Anslem de Silva

Scientific name (author; date) Synonym Family Common name

Taxonornic level of assessment

#### Distribution

Habitat of the taxon Habitat specificity Current distribution (by country) Current Sri Lankan distribution Extent of occurrence (Sq. km.) Area of occupancy (Sq. km) Number of locations/sub pop. Habitat status

## Threats

Threats to taxon

Effect of threat on population Trade Effect of trade on population

**Population numbers** 

Global population Regional Pop (# sub-pop.) Number of mature individuals Generation time Population trends

## **Data Quality**

**Recent field studies** 

#### Status

IUCN CITES National Red Data Book Presence in Protected Area

## Recommendations

Research Management

Captive breeding for Captive stocks Level of captive breeding recs. Propagation Techniques

Other comments

Sources

Compilers

#### Eretmochelys imbricata (Linneaus, 1766)

Testudo imbricata Linn., 1766 Cheloniidae Hawksbill Sea Turtle (English); *Pothu Kasbaeva, Leli Kasbaeva* (Sinhala); *Kadal Amai* (Tamil) Species

Marine and sandy beaches Close to muddy lagoons, coral reef, sea grass beds; Sea level Tropical coastal waters around coral reefs Southwestern and southern coast; Northern and northwestern coastal waters > 20,000 > 2,000 Contiguous Decrease in area > 50% in the last 20 years; Development, Beach erosion, Loss of nesting sites; Decrease in quality

Hunting, Hunting for food, Loss of nesting habitat, Overexploitation, Pollution, Drought, El Nino, Trade for parts, Egg collection Yes Yes, Local; Domestic; International; Meat, eggs, shell Killing for shell, meat and egg collection has resulted in population declines

Unknown Unknown Unknown 80-100 years Declining; > 50% in the last 20 years (< 1 generation)

Census or monitoring, General field study, Informal field sighting, Literature, Indirect information such as from trade etc., Museum/records P. Richardson and D. Amarasuriya from 1993,1994 & 1995

ENDANGERED	Criteria	A1cd
Listed	National WL legislation	FFPA
Not listed	1996 Red List (IUCN) .	CR
Yala, Bundala (Rekawa, I	Kosqoda)	

Survey, Taxonornic research, Limiting factor research, PHVA Habitat management, Wild Population management, Monitoring, Sustainable utilisation, Captive breeding Public awareness, Research, Education, Tourism Yes Unknown

Initiate Programme within 3 years

Although this species is living in open ocean, nesting beaches are rapidly decreasing. Therefore the survival of the species will be dependent on immediate terrestrial conservation actions. In Sri Lanka and Maldives tortoise shell trade is still occuring. According to our experience this species is rapidly decreasing in Sri Lanka and is listed as Cricitically Endangered in IUCN Red List. Presently IUCN Sri Lanka, Department of Wild Life and NGO's are working on a joint Action Plan. Several human deaths have occurred in India and Sri Lanka due to consumption of flesh of this turtle. This could be highlighted so that people will not eat/consume turtle flesh.

24, 45, 47, 50, 60, 63

Anslem de Silva, L. Ekenayake, S.S.S. Jasinghe, T. Kapurusinghe, S. Karunarathna, B.Z. Nizam, A. Palihawadane, R. Peris, K. Parameshwaran, N.D. Rathnayake, H.D. Rathnayake, P. Vinobaba

Reviewers

Anslem de Silva

Scientific name (author; date)Lepidochelys olivacea (Eschscholtz, 1829)SynonymChelonia olivacea Eschscholtz, 1829; Chelonia dubia Bleeker, 1860FamilyCheloniidaeCommon nameOlive Ridley Sea Turtle (English); Batu Kasbaeva, Mada Kasbaeva (Sinhalaj; Pul<br/>Amai, Kadal Amai (Tamil)Taxonomic level of assessmentSpeciesDistribution

Sea grass beds, coral reefs; Sea level

Marine and sandy beaches

> 20,000

Contiguous

> 2.000

Habitat of the taxon Habitat specificity Current distribution (by country) Current Sri Lankan distribution Extent of occurrence (Sq. km.) Area of occupancy (Sq. km) Number of locations/sub pop. Habitat status

## Threats

Threats to taxon

Effect of threat on population Trade Effect of trade on population

## **Population numbers**

Global population Regional Pop (# sub-pop.) Number of mature individuals Generation time Population trends

#### **Data Quality**

## **Recent field studies**

Status **IUCN** ENDANGERED Criteria ..... A1cd CITES National WL legislation ...... FFPA Listed (Appendix ?) National Red Data Book Not listed 1996 Red List (IUCN) ...... Endangered Presence in Protected Area Bundala Recommendations Research Survey, Taxonomic research, Life history studies, PHVA Management Habitat management, Wild population management, Monitoring, Sustainable utilisation, Captive breeding Captive breeding for Public awareness, Research, Education, Tourism Captive stocks Yes Level of captive breeding recs. Initiate Programme after 3 years Some techniques known for taxon or similar taxa Propagation Techniques In northern area there is a war and off shore fishing is restricted. Therefore people Other comments catch nesting turtles for meat. There are over 10 marine turtle hatcheries in south western coast of Sri Lanka. All these hatcheries are illegal. Presently the IUCN Sri Lanka, Department of Wild Life and NGO's are working on a joint Action Plan. Sources 45,50, 60, 63 Compilers Anslem de Silva, L. Ekenayake, S.S.S. Jasinghe, T. Kapurusinghe, S. Karunarathna, B.Z. Nizam, A. Palihawadane, R. Peris, K. Parameshwaran, N.D.

Reviewers

Fishing, Drought, El Nino, Egg collection, War, Trade for parts Yes Local, Domestic; Meat, egg Egg collection Is resulting in population decline Unknown

Tropical parts of Pacific, Indian and southern Atlantic Ocean

Beach development, Sea erosion; Decrease in quality

Northern, northwestern, southwestern and southern coast of Sri Lanka

Decrease in nesting area of beaches > 20% in the last 10 years; Habitat loss,

Hunting, Hunting for food, Loss of nesting habitat, Overexploitation, Pollution,

Unknown Unknown 80-100 years Declining > 50% in the last 2 generations

Census or monitoring, General field study, Informal field sighting, Literature, Indirect information such as from trade etc., Museum/records P. Richardson, D. Amarasuriya, Suhasini Hewavisanthi and T. Kapurusinghe ongoing

Conservation Assessment and Management Plan for Amphibians and Reptiles of Sri Lanka – Report

Rathnayake, H.D. Rathnayake, P. Vinobaba

Anslem de Silva

93

Scientific name (author; date) Synonyms Family Common name

Taxonomic level of assessment

#### Distribution

Habitat of the taxon Habitat specificity Current distribution (by country) Current Sri Lankan distribution

Extent of occurrence (Sq. km.) Area of occupancy (Sq. km) Number of locations/sub pop. Habitat status

#### Threats

Threats to taxon

Effect of threat on population Trade Effect of trade on population

## **Population numbers**

Global population Regional Pop (# sub-pop.) Number of mature individuals Generation time Population trends

## **Data Quality**

**Recent field studies** 

### Status

**IUCN** CITES National Red Data Book Presence in Protected Area

## Recommendations

Research Management Captive breeding for Captive stocks Level of captive breeding recs. Propagation Techniques

Other comments

Sources

Compilers

## Dermochelys coriacea (Vandelli, 1761)

Testudo coriacea Linn., 1766; Sphargis mercurialis Merrem, 1820 Dermochelvidae Leatherback Sea Turtle (English), Dara Kasbaeya, Tun Dara Kasbaeva (Sinhala); Dhoni amai (Tamil) Species

Terrestrial and marine habitats Ocean Arctic circle, Northern Indian ocean, Africa Northern and Northwestern coastal waters; Nestings occur in Kosgoda, Rekawa, Ussangoda, Bundala, Yala > 20,000 > 2,000 Many; Contiguous Decrease in area: > 20% in the last 10 years: Loss of nesting habitats. Beach development, Sea erosion. Decrease in quality

Hunting, Hunting for food, Decrease in feeding and nesting habitats, Over exploitation, Pollution, Trade for Parts, Drought, El Nino, Egg collection (Trade) Yes Yes, Local; Domestic; Meat, eggs Eggs collection has resulted in population declines

Unknown Unknown Unknown 80 - 120 vears Declining; > 50% in the last (2 generations)

General field study, Informal field sighting, Literature, Census or monitoring, Indirect information such as trade, Museum/records TCP Research team in Sri Lanka (Rekawa) since 1993 to 98; D. Amarasooriya (NARA) in Sri Lanka; Heritage Foundation in Sri Lanka (Bundala)

ENDANGERED Endangered (Appendix ?) Not listed Yala, Bundala

CriteriaA1	cd
National WL legislation FFI	PA
1996 Red List (IUCN) Not	t listed

Survey, Genetic research Habitat management, Monitoring, Wild population management, Captive breeding Public awareness, Research, conservation, education None Initiate Programme after 3 years Some techniques known for taxon or similar taxa

This taxon nests only in the Andaman and Nicobar Islands and Sri Lanka in the northern Indian ocean. In many places eggs are collected by the coastal fisher men. Occassionally they kill the animal for meat. Therefore this species should be considered should be given high conservation priority. Presently the IUCN Sri Lanka Department of Wild Life and NGO's are working on a joint Action Plan.

24, 45, 50, 60, 63

Anslem de Silva, L. Ekenayake, S.S.S. Jasinghe, T. Kapurusinghe, S. Karunarathna, B.Z. Nizam, A. Palihawadane, R. Peris, K. Parameshwaran, N.D. Rathnayake, H.D. Rathnayake, P. Vinobaba

**Reviewers** 

Anslem de Silva

#### Distribution

Habitat of the taxon Habitat specificity

Current distribution (by country) Current Sri Lankan distribution Extent of occurrence (Sq. km.) Area of occupancy (Sq. km) Number of locations/sub pop. Habitat status

## Threats

Threats to taxon

Effect of threat on population Trade Effect of trade on population

**Population numbers Global** population Regional Pop (# sub-pop.)

Number of mature individuals Generation time Population trends

## **Data Quality** Recent field studies

#### Status

**IUCN** CITES National Red Data Book Presence in Protected Area

## Recommendations

Research Management Captive breeding for Captive stocks

Level of captive breeding recs. **Propagation Techniques** 

Other comments

Geochelone elegans (Schoepff, 1795)

Testudo stellata Schweigger, 1814 Testudinidae Indian Star Tortoise (English); Mevara Ibba, Taraka Ibba (Sinhala), Katupetti Amai (Tamil) Species

Dry zone plains, in scrub jungle areas Terrestrial, scrub jungle and grass land including agricultural land; First peneplain of Sri Lanka (Below 300m). Sri Lanka, India, Pakistan. Low country dry zone and Intermediate zone (Upto Rantabe) Sigiria, Dambulla. > 20,000 > 2,000 Many: Fragmented Decrease in area > 20% in the last 10 years; Deforestation, Man made fire and human settlement: Decrease in quality.

Hunting for pet trade and food, Loss of habitat, Road kills, Predation by dogs, fox, Pet trade, Drowning in road side water-filled drains in Hambantota Unknown International: Whole animal, pet trade Yes

Unknown Unknown. In a study at Andigama there were approximately 200 individuals in an area of 1375 acres Unknown Unknown Declining > 20% in the last 10 years

General field study, Informal field sighting, Literature Anslem de Silva 1994 at Andigama ongoing

VULNERALBLE Listed (Appendix ?)

Criteria ......A1cd National WL legislation ......FFPA 1999 Threatened 1996 Red List (IUCN) ..... Not listed Yala, Bundala, Dimbulagala, Giritale, Wilpattu

Survey, Life history studies Habitat management, Monitoring, Limiting factor management, Captive breeding Public awareness, Education, Research Many private persons keep it as a pet, Zoological Gardens - Dehiwala; Ahungalla Zoo (Presently closed down) Initiate Programme after 3 years Unknown

Species is declining due to habitat loss. It is identified that the road kills are increasing in Anamaduwa area in Puttalam district. The flesh of star tortoise, the only terrestrial tortoise found mainly in the dry zone lowlands, is not eaten as the flesh is believed to be poisonous. The only land tortoise recorded in Sri Lanka.

22, 44, 45

Compilers

Reviewers

Sources

Anslem de Silva, L. Ekenayake, S.S.S. Jasinghe, T. Kapurusinghe, S. Karunarathna, B.Z. Nizam, A. Palihawadane, R. Peris, K. Parameshwaran, M. Priyadarshana, N.D. Rathnayake, H.D. Rathnayake, P. Vinobaba

Anslem de Silva

#### Distribution

Habitat of the taxon Habitat specificity

Current distribution (by country) Current Sri Lankan distribution Extent of occurrence (Sq. km.) Area of occupancy (Sq. km) Number of locations/sub pop. Habitat status

Threats

Threats to taxon

Effect of threat on population Trade

## **Population numbers**

**Global** population Regional Pop (# sub-pop.) Number of mature individuals Generation time Population trends

**Data Quality Recent field studies** 

#### Status

**IUCN** CITES National Red Data Book Presence in Protected Area

#### Recommendations

Research Management Captive breeding for Captive stocks Level of captive breeding recs. **Propagation Techniques** 

Other comments

medicines. Decrease in habitat quality - influx of nutrients pesticides in the form of and paddy fields. 44, 45, 50, 60, 63 Anslem de Silva, L. Ekenayake, S.S.S. Jasinghe, T. Kapurusinghe, S. Karunarathna, B.Z. Nizam, A. Palihawadane, R. Peris, K. Parameshwaran, M.

Priyadarshana, N.D. Rathnayake, H.D. Rathnayake, P. Vinobaba

**Reviewers** 

Compilers

Sources

Anslem de Silva

#### Lissemys punctata punctata (Bonnaterre, 1789)

Testudo punctata Bonaterre, 1789; Emyda ceylonensis Gray, 1855 Trionvchidae Flapshell Turtle (English), Kiri Ibba (Sinhala), Pal Amai (Tamil) Sub species

Plains from coast Banks, among rocks in ponds, swamps, lakes, streams and occasionly in esturies; Aquatic; Upto 1200m Sri Lanka, India, Pakistan Low country and mid country upto 1200m > 20,000 > 2.000 Many; Fragmented Decrease in habitat > 20% in the last 20 years; Predicted decline over years > 20% in the next 20 years; Deforestation, Habitat loss; Decrease in quality

Hunting for food, Loss of habitat (due to reclamation of land by filling marshes and swamps), Hunting, Habitat fragmentation Yes Unknown

Unknown Unknown Unknown Unknown Declining > 20% in the last 10 years

General field study, Informal field sighting, Literature Anslem de Silva on going

VULNERABLE	Criteria	A1c
Not listed	National WL legislation	FFPA
1998, Not threatened	1996 Red List (IUCN) .	Not listed
Many places in low country (Yal	a, Wilpattu, Giritale)	

Survey, Life history studies, Taxonomic research, Limiting factor research Habitat management, Monitoring, Captive breeding Public awareness, Education, Research Dehiwela Zoo Initiate Programme after 3 years Some techniques known for taxon or similar taxa.

People hunt this species for food and because of reclamation, habitat loss occurs. No research data on population. Flesh is also used for preparation of some indigenous agrochemicals leads to eutrophication a common problem in ponds near urban areas

Scientific name (author; date) Crocodylus palustris (Lesson, 1838) Crocodylus trigonops Gray, 1844 Synonyms Family Crocodvlidae Mugger or Marsh Crocodile (English), Ali Kimbula, Hala Kimbula (Sinhala); Common name Kulathu Muthalai (Tamil) Taxonomic level of assessment Species Distribution Habitat of the taxon Inland water bodies of low land plains (mainly in the dry zone) Semi aquatic (Swamps, lagoon, spend much time in burrows on banks); Up Habitat specificity to 150m. Current distribution (by country) India, Nepal, Pakistan, Sri Lanka, Pakistan Anuradhapura, Polonnarwa, Dehiattakandiya, Yala, Randenigala, Current Sri Lankan distribution Mahiyangana, Handapanagala, Northeastern province < 20,000 Extent of occurrence (Sq. km.) Area of occupancy (Sq. km) > 2,000 Number of locations/sub pop. Many: Fragmented Habitat status Decrease in area > 20% in the last 10 years; Drying up of water bodies; Felling trees around water bodies, Decrease in quality. Threats Threats to taxon Hunting, Hunting for food, Loss of habitat, Habitat fragmentation, Pesticides, Poisoning, Pollution, Drought, Trade, Destroying of eggs and other animals feeding in eggs Effect of threat on population Yes Domestic: Flesh Trade Effect of trade on population Yes **Population numbers** Global population Unknown Regional Pop (# sub-pop.) Unknown Number of mature individuals Unknown Generation time Unknown Population trends Predicted decline. > 20% in the next 10 years **Data Quality** General field study, Informal field sighting, Literature Porej, 1997; Wijeyamohan et al., 1993-94; Anslem de Silva on going; Whitaker **Recent field studies** & Whitaker 1978. Status **IUCN** VULNERABLE Criteria ..... A1acd; B1+2c Listed (Appendix ?) National WL legislation ..... FFPA CITES 1998, Not threatened 1996 Red List (IUCN) ...... 1996, Vulnerable National Red Data Book Presence in Protected Area Yala Recommendations Survey. Life history studies Research Management Habitat management, Wild Population management, Monitoring, Captive breeding Public awareness, Education, Research Captive breeding for National and Zoological Garden and University of Peradeniva; Approxi-Captive stocks mately 15 Level of captive breeding recs. Initiate Programme after 3 years **Propagation Techniques** Techniques known for taxon Research on captive breeding is recommended only to meet future requirement if Other comments needed. Due to the killing of species for dry flesh and for skin the population is under threat. Presently the IUCN Sri Lanka, Department of Wild Life and NGO's are working on a joint Action Plan. Approximately 25 - 50 are killed annually for flesh Sources 13,17,62,63,73,127 Anslem de Silva, L. Ekenayake, S.S.S. Jasinghe, T. Kapurusinghe, S. Compilers Karunarathna, B.Z. Nizam, A. Palihawadane, R. Peris, K. Parameshwaran, N.D. Rathnayake, H.D. Rathnayake, P. Vinobaba Reviewers Anslem de Silva

Family Common name

Taxonomic level of assessment

## Distribution

Habitat of the taxon Habitat specificity Current distribution (by country) Current Sri Lankan distribution Extent of occurrence (Sq. km.) Area of occupancy (Sq. km) Number of locations/sub pop. Habitat status

#### Threats

Threats to taxon

Effect of threat on population Trade Effect of trade on population

#### **Population numbers**

Global population Regional Pop (# sub-pop.) Number of mature individuals Generation time Population trends

#### **Data Quality** Recent field studies

#### Status

**IUCN** CITES National Red Data Book Presence in Protected Area

## Recommendations

Research Management Captive breeding for Captive stocks Level of captive breeding recs. **Propagation Techniques** 

Other comments

Sources

Reviewers

#### Crocodylus porosus Schneider, 1801

Crocodilus oopholis Schneider, 1801; Crocodilus. biporcatus Cuvier, 1807; Oopholis pondicerianus Gray, 1862; Oopholis porosus Deraniyagala, 1939 Crocodvlidae Saltwater or Estuarine Crocodile (English), Gata Kimbula (Sinhala), Semmukku Muthalai (Tamil) Species

Lagoons, estuaries and rivers in the lowland Among aquatic vegetation, tunnels in river banks and roots in banks; Up to 50 m. India, Nepal, Pakistan, Phillipines Bolgoda, Kumana, Bentota, Negambo, Yala, Matara, Trincomalee < 20,000 > 2,000 Many; Fragmented Decrease in area > 20% in the last 10 years; Pollution, Destroying the mangrove plantations; Decrease in quality

Hunting, Hunting for food, Loss of habitat due to land reclamation, Habitat fragmentation, Pesticides, Poisoning, Pollution, Trade for parts, Drought. Yes Local, Commercial Yes

Unknown Unknown Unknown Unknown Declining > 20% in the last 10 years

General field study, Informal field sighting Smithsonian project, Whitaker & Whitaker 1978: Porei 1997 & Anslem de Silva, on going,

## VULNERABLE

Listed (Appendix ?) 1998, Not threatened Yala, Wilpatu, Muthrajawela Criteria .....A1acd; B1+2c National WL legislation ......FFPA 1996 Red List (IUCN) .....Not listed

Survey, Life history studies, PHVA Habitat management, Wild Population management, Monitoring, Captive breeding Public awareness, Education, Research None Initiate Programme after 3 years Some techniques known for taxon or similar taxa

Research on captive breeding is recommended to meet future requirements if needed. Due to the construction work in logoons (mangrove area) and for flesh trade the population of the Crocodvlus porosus and their habitat is in threatened.

4,17,19,62,82,94,127 Compilers

Anslem de Silva, L. Ekenayake, S.S.S. Jasinghe, T. Kapurusinghe, S. Karunarathna, B.Z. Nizam, A. Palihawadane, R. Peris, K. Parameshwaran, H.D. Rathnayake, N.D. Rathnayake, P. Vinobaba

Anslem de Silva

Family Common name Taxonomic level of assessment

## Distribution

Habitat of the taxon

Current distribution (by country) Current Sri Lankan distribution Extent of occurrence (Sq. km.) Area of occupancy (Sq. km) Number of locations/sub pop. Habitat status

#### Threats

Threats to taxon

Effect of threat on population Trade

## **Population numbers**

Global population Regional Pop (# sub-pop.) Number of mature individuals Generation time Population trends

#### **Data Quality Recent field studies**

**IUCN** 

Status LOWER RISK - NEAR THREATENED Criteria .....--National WL legislation ...... FFPA CITES Not listed National Red Data Book 1995, Not threatened 1996 Red List (IUCN) .....No Presence in Protected Area Yes all protected areas including montane Recommendations Research Survey, Genetic research, Life history studies, Management Habitat management, Wild population management, Monitoring, Captive breeding Education, Research

Captive breeding for Captive stocks Level of captive breeding recs. **Propagation Techniques** 

## Other comments

Sources	26, 49, 63, 69, 70, 71, 72, 89, 90, 99, 110
Compilers	Anslem de Silva, L. Ekenayake, S.S.S. Jasinghe, T. Kapurusinghe, S. Karunarathna, B.Z. Nizam, A. Palihawadane, R. Peris, K. Parameshwaran, H.D. Rathnayake, N.D. Rathnayake, P. Vinobaba
Reviewers	Anslem de Silva, A. Jayawickrama, M. Meegaskumbura, R. Somaweera, D. Srinath, N.D. Rathnayaka, K.D.B. Ukuwela

## Calotes calotes (Linnaeus, 1758)

Agama ophiomachus (Merrem, 1820), Agama lineata (Kuhl, 1820), Lacerta calotes (Linnaeus, 1758) Agamidae Green Garden Lizard (English), Pala katussa (Sinhala), Pachai Ona (Tamil) Species

Low vegetation close to aquatic habitats, human habitation, arboreal, terrestrial. Up to 1600 m Sri Lanka, India, Pakistan Except upper montane, Island wide > 20,000 > 2,000 Many Decrease in area, decrease in quality, habitat loss, human settlements (Urbanization)

Predation by the common Coucal, Crow and other birds of prey, Domestic cats, Road kills, Pesticides, Forest burning Unknown

Unknown Unknown Unknown Unknown Unknown

None

No

Pendina

Not known at all

General field study, Informal field sightings, Literature Walter Erdelen in Island wide study from 1980, distribution of Agamids; Nimal Ratnayaka in Hantana from 1990, Snakes and Agamids; Kelum Manamendra-Arachehi in Island wide study from 1991, distribution of Agamids; Ukuwela & Somaweera in Menikdena, 1998 onwards.

Family Common name Taxonomic level of assessment

## Distribution

Habitat of the taxon Habitat specificity Current distribution (by country) Current Sri Lankan distribution Extent of occurrence (Sq. km.) Area of occupancy (Sq. km) Number of locations/sub pop. Habitat status

#### Threats

Threats to taxon Effect of threat on population Trade

## **Population numbers**

Global population Regional Pop (# sub-pop.) Number of mature individuals Generation time Population trends

Data Quality Recent field studies

#### Status

IUCN CITES National Red Data Book Presence in Protected Area

#### Recommendations

Research Management Captive breeding for Captive stocks Level of captive breeding recs. Propagation Techniques

Other comments

## Sources

Compilers

Reviewers

## Calotes ceylonensis Muller, 1887

Calotes mystaceus (Muller, 1931), Calotes kellaartii (Nevil, 1887), Calotes asleoides (Werner, 1896) Agamidae Painted-lip lizard (English); Thola -Visituru Katussa (Sinhala) Species

Dry zone forest and some parts of Intermediate zone Trees with canopy and riverine forests. Terrestrial, arboreal. Up to 300m **ENDEMIC** to Sri Lanka Low country, dry and intermediate zones > 20,000 > 2,000 Many; Fragmented Decrease in area > 20% in the last 20 years, decrease in quality, habitat loss, deforestation, human settlements, encroachment

Loss of habitat, Habitat fragmentation, Pollution, Man made fire, Predation Yes No

Unknown Unknown Unknown Unknown Unknown

General field study, Informal field sightings, Literature Kelum Manamendra-Arachchi, 1994; Walter Erdelen 1978,1979,1984, 1986

LOWER RISK - NEAR THREATENED Criteria Not listed National WL legislation .......FFPA 1998, Vulnerable 1996 Red List (IUCN) .......Not listed In low country dry and intermediate zones

Survey, Limiting factor research, Life history studies Habitat management, Monitoring, Captive breeding Public awareness, Education, Research Unknown Initiate Programme after 3 years Some techniques known for the taxon or similar taxa

Deraniyagala had recorded this species from Peradeniya in 1953. In some areas it is found in human habitation.

21, 26, 49, 63, 70, 71, 72, 84, 97, 99

Anslem de Silva, L. Ekenayake, S.S.S. Jasinghe, T. Kapurusinghe, S. Karunarathna, B.Z. Nizam, A. Palihawadane, R. Peris, K. Parameshwaran, H.D. Rathnayake, N.D. Rathnayake, P. Vinobaba

#### Distribution

Habitat of the taxon Habitat specificity Current distribution (by country) Current Sri Lankan distribution Extent of occurrence (Sq. km.) Area of occupancy (Sq. km) Number of locations/sub pop. Habitat status

#### Threats

Threats to taxon Effect of threat on population Trade

#### **Population numbers**

Global population Regional Pop (# sub-pop.) Number of mature individuals Generation time Population trends

Data Quality Recent field studies

## Status

IUCN CITES National Red Data Book Presence in Protected Area

Recommendations

Research Management Captive breeding for Captive stocks Level of captive breeding recs. Propagation Techniques

Other comments

their local habitats. In situ and ex situ breeding programmes are recommendedSources49,70,71,72,99CompilersAnslem de Silva, L. Ekenayake, S.S.S. Jasinghe, T. Kapurusinghe, S. Karunarathna,<br/>B.Z. Nizam, A. Palihawadane, R. Peris, K. Parameshwaran, H.D. Rathnayake, N.D.<br/>Rathnayake, P. VinobabaReviewersAnslem de Silva, A. Jayawickrama, M. Meegaskumbura, R. Somaweera, D. Srinath, N.D.<br/>Rathnayaka, K.D.B. Ukuwela

Calotes liocephalus Günther, 1872

Agamidae Crestless Lizard (English); *Kondu Datirahita, Katussa* (Sinhala) Species

Knuckles, Peak Wilderness (Moray Estate) Low branches. Arboreal. Up to 1850 m. ENDEMIC to Sri Lanka Knuckles, Sinharaja (Kudawa) < 5,000 <500 Few; Fragmented Decrease in area > 20% in the last 10 years, Decrease in quality, Cardamom cultivation, Deforestation

Loss of habitat, Habitat fragmentation Yes No

Unknown Unknown Unknown Unknown Declining; Rate of decline unknown

General field study, Informal field sighting Manamendra-Arachchi & Saman Liyange, 1995, Conservation and distribution of the agamid lizards; Nimal Ratnayake, Kalupahana, 1997.

ENDANGERED Not listed 1998, Endangered Peak Wilderness, Knuckles Criteria ......B1+2bc National WL legislation ...... FFPA 1996 Red List (IUCN) .....Endangered

Survey, Taxonomic research, Life history studies, Limiting factor research Habitat management, Monitoring, Captive breeding Public awareness, Education, Research and restocking Unknown Initiate programme after 3 years Some techniques known for taxon or similar taxa

We feel that this species is one of the rarest agamid lizards found in Sri Lanka. This species is found only from 2 locations (Knuckles and Sinharaja) and there are very few in their local habitats. *In situ* and ex *situ* breeding programmes are recommended

Conservation Assessment and Management Plan for Amphibians and Reptiles of Sri Lanka - Report

Scientific name (author; date) Family Common name

Taxonomic level of assessment

Distribution

Habitat of the taxon Habitat specificity

Current distribution (by country) Current Sri Lankan distribution

Extent of occurrence (Sq. km.) Area of occupancy (Sq. km) Number of locations/sub pop. Habitat status

#### Threats

Threats to taxon Effect of threat on population Trade

## **Population numbers**

Global population Regional Pop (# sub-pop.) Number of mature individuals Generation time Population trends

Data Quality Recent field studies

#### Status

IUCN CITES National Red Data Book Presence in Protected Area

#### Recommendations Research

Management

Captive breeding for Captive stocks Level of captive breeding recs. Propagation Techniques

Other comments

Sources

Compilers

Reviewers

## Calotes liolepis Boulenger, 1885.

Agamidae Whistling lizard, Forest lizard (English); *Sivuruhandalana Katussa, Mukalan Katussa* (Sinhala) Species

Forests and home gardens Usually on tree trunks above 5-10 m. and trees above 40 dbh. Arboreal, Terrestrial. Up to 1000 m. ENDEMIC to Sri Lanka Knuckles, Kothmale, Sinharaja, Talawakale, Hanguranketha, Kan Eliya, Menikdena, Pitawala, Pathana, Galle, Kandy, Peradeniya, Gampola < 20,000 < 2,000 Many; Fragmented Decrease in area > 20% in the last 10 years, Decrease in quality, Habitat loss

Loss of habitat, Habitat fragmentation, Climate, Predation by feral animals Yes No

Unknown Unknown (> 2,500) Unknown Declining > 20% in the last 10 years

General field study, Informal field sighting, Literature Ukuwela and Somaweera in Menikdena, 1998

VULNERABLECriteriaA1c; B1+2bcNot listedNational WL legislationFFPA1998, Endangered1996 Red List (IUCN)Not listedSinharaja, Knuckles, Ritigala, Kaneliya, Udawatte kaleSinharaja

Survey, Genetic research, Life history studies, Limiting factor research Habitat management, Monitoring, Public awareness, Limiting factor management, Captive breeding Education, Research No Initiate Programme after 3 years Not known at all

This species has adopted to live in homegardens but mainly confined to large and tall trees. This agamid produces distress cries.

26,35,49,57,63,70,71,72

Anslem de Silva, L. Ekenayake, S.S.S. Jasinghe, T. Kapurusinghe, S. Karunarathna, B.Z. Nizam, A. Palihawadane, R. Peris, K. Parameshwaran, H.D. Rathnayake, N.D. Rathnayake, P. Vinobaba

## Distribution

Habitat of the taxon Habitat specificity Current distribution (by country) Current Sri Lankan distribution Extent of occurrence (Sq. km.) Area of occupancy (Sq. km) Number of locations/sub pop. Habitat status

Threats

Threats to taxon

Effect of threat on population Trade

## **Population numbers**

Global population Regional Pop (# sub-pop.) Number of mature individuals Generation time Population trends

## **Data Quality Recent field studies**

## Status

**IUCN** CITES National Red Data Book Presence in Protected Area

## Recommendations

Research Management Captive breeding for Captive stocks Level of captive breeding recs. Propagation Techniques

## Other comments

Sources Compilers

Reviewers

## Calotes nigrilabris Peters, 1860

Agamidae Black-lipped lizard (English); Katakalu katussa (Sinhala) Species

Peripheries of Montane forest, low vegetation and grassland. Tree trunks, branches and grass, Arboreal, Terrestrial. Above 1000m. ENDEMIC to Sri Lanka. Montane forests above 1500m. < 20,000 < 2,000 Many; fragmented Decrease in area > 20% in the last 20 years, Decrease in quality, Potato cultivation, Habitat loss, Man made fire

Loss of habitat, Habitat fragmentation, Poisoning, Pollution, Climate, Predation by crows, Road kills Yes No

Unknown Unknown Unknown Unknown Declining (Rate of decline unknown)

General field study, Informal field sighting, Literature, Museum/records K. Manamendra-Arachchi in Island-wide study on Agamid lizards from early 1990s. Walter Erdelen conducted Island-wide study commencing in mid 1970s on genus Calotes. C.N.B Bambaradeniya & Ranawana in Horton plains, Hakgala, Knuckles, 1995. Anslem de Siiva during Zoological survey at Horton plains 1997/98

VULNERABLE	Criteria	B1+2abc
Not listed	National WL legislation	.FFPA
1998, Endangered	1996 Red List (IUCN)	.Not listed
Horton plains, Hakgala, Peak wilderness		

Survey, Life history studies, Limiting factor research Habitat management, Monitoring, Captive breeding Public awareness, Education, Research No Initiate Programme after 3 years Not known at all

#### 3, 49, 55, 65, 70, 71, 72, 99, 107, 108

Anslem de Silva, L. Ekenayake, S.S.S. Jasinghe, T. Kapurusinghe, S. Karunarathna, B.Z. Nizam, A. Palihawadane, R. Peris, K. Parameshwaran, H.D. Rathnayake, N.D. Rathnayake, P. Vinobaba

## Agamidae

Common Garden Lizard (English), Gara katussa (Sinhala), Wona (Tamil) Sub species

Distribution Habitat of the taxon Habitat specificity Current distribution (by country) Current Sri Lankan distribution Extent of occurrence (Sq. km.) Area of occupancy (Sq. km) Number of locations/sub pop. Habitat status

#### Threats

Threats to taxon Effect of threat on population Trade

## **Population numbers**

Global population Regional Pop (# sub-pop.) Number of mature individuals Generation time Population trends

## Data Quality Recent field studies

<b>Status</b> IUCN CITES National Red Data Book Presence in Protected Area	LOWER RISK - NEAR THREATENE Not listed Not listed All protected areas except monta	National WL legislationFFPA 1996 Red List (IUCN)Not listed	
Recommendations			
Research	Survey, Genetic research, Life h	istory studies	
Management	Habitat management, Wild population management, Monitoring, Limiting factor management, Captive breeding		
Captive breeding for	Public awareness, Education, Research		
Captive stocks	None		
Level of captive breeding recs.	Initiate Programme after 3 years		
Propagation Techniques	Some techniques known for taxon or similar taxa		
Other comments	It can tolerate varying temperature (24 - 40 C)		
Sources	26,49,57,63,70,71,72,99		
Compilers	Anslem de Silva, L. Ekenayake, S.S.S. Jasinghe, T. Kapurusinghe, S. Karunarathna, B.Z. Nizam, A. Palihawadane, R. Peris, K. Parameshwaran, H.D. Rathnayake, N.D. Rathnayake, P. Vinobaba		
Reviewers	Anslem de Silva, A. Jayawickrar N.D. Rathnayaka, K.D.B. Ukuwe	na, M. Meegaskumbura, R. Somaweera, D. Srinath, Ia	

Secondary forests, Home Gardens etc., Terrestrial, Arboreal. Up to 1500 m. Sri Lanka, India, Pakistan Island wide except upper montane > 20,000 > 2,000 Many; Contiguous Decrease in area, Decrease in quality

Calotes versicolor versicolor (Daudin, 1802)

In home gardens it is attacked by cats and poultry (Predation) No No

Unknown Unknown Unknown Unknown Declining < 20% in the last 10 years

General field study, Informal field sighting, Literature Nimal Rathnayake & Nadera Weerasingha in Hantana from 1996, Agamids and Snakes of Hantana; Walter Erdelen & Manamendra-Arachchi from 1995, conserva tion and distribution of Agamid Lizards of Sri Lanka; Somaweera and Ukuwela in Menikdena, 1998

#### Distribution

Habitat of the taxon Habitat specificity Current distribution (by country) Current Sri Lankan distribution Extent of occurrence (Sq. km.) Area of occupancy (Sq. km) Number of locations/sub pop. Habitat status

Threats

Threats to taxon Effect of threat on population Trade

## **Population numbers**

Global population Regional Pop (# sub-pop.) Number of mature individuals Generation time Population trends

## Data Quality Recent field studies

## Status

IUCN. CITES National Red Data Book Presence in Protected Area

Recommendations Research Management Captive breeding for

Captive breeding for Captive stocks Level of captive breeding recs. Propagation Techniques

Other comments

Sources

Compilers

42,49,57,63,99,106,111,112 Anslem de Silva, L. Ekenayake, S.S.S. Jasinghe, I. Kapurusinghe, S. Karunarathna, B.Z. Nizam, A. Palihawadane, R. Peris, K. Parameshwaran, H.D. Rathnayake, N.D. Rathnayake, P. Vinobaba

Reviewers Anslem de Silva, A. Jayawickrama, M. Meegaskumbura, R. Somaweera, D. Srinath, N.D. Rathnayaka, K.D.B. Ukuwela

## Ceratophora aspera Günther, 1864

Agamidae Rough Horn lizard (English); *Raluang Katussa, Kuru Angkatussa* (Sinhala) Species

Lowland wet zone, rainforest Terrestrial among leaf litter, boulders and roots. Up to 800 m. The Genus and species **ENDEMIC** to Sri Lanka Low land rainforest in Sri Lanka < 5,000 <500 Many; Fragmented Decrease in area > 50 % in the last 20 years, Decrease in quality, Deforestation

Loss of habitat, Habitat fragmentation, Climate, Drought Yes No

Unknown Unknown Unknown Unknown Declining > 20% in the last 10 years

General field study, Informal field sighting, Literature Walter Erdelen in Island - wide study in late 1980s, Agamids of Sri Lanka. Senanayake in late 1970s

<b>ENDANGERED</b> Not listed 1998, Vulnerable Sinharaja, Peak Wilderness	Criteria National WL legislation 1996 Red List (IUCN)	FFPA
Sinharaja, Peak Wilderness		

Life history and ecological requirement to be studied. Due to deforestation

Survey, Limiting factor research, PHVA Habitat management, Monitoring, Captive breeding Public awareness, Education, Research None Initiate Programme after 3 years Some techniques known for other agamids.

locations are reducing

#### Distribution

Habitat of the taxon Habitat specificity Current distribution (by country) Current Sri Lankan distribution Extent of occurrence (Sq. km.) Area of occupancy (Sq. km) Number of locations/sub pop. Habitat status

#### Threats

Threats to taxon Effect of threat on population Trade

## **Population numbers**

Global population Regional Pop (# sub-pop.) Number of mature individuals Generation time Population trends

## Data Quality Recent field studies

## Status

IUCN CITES National Red Data Book Presence in Protected Area

## Recommendations

Research Management Captive breeding for Captive stocks Level of captive breeding recs. Propagation Techniques

#### Other comments

Sources

Compilers

Reviewers

Wet zone rain forest Terrestrial, semi arboreal. 300 -1060 m ENDEMIC to Sri Lanka Morning side, Tangamale, Silverkande, Deniyaya <500 <10 Few; fragmented Decrease in area > 20% in last 25 years, Cardamom plantations

Ceratophora erdeleni Pethiyagoda & Manamendra-Arachchi, 1998.

Endelen's horn lizard (English), Erdelenge Angkatusa (Sinhala)

Loss of habitat, Habitat fragmentation Yes No

Agamidae

Species

Unknown Unknown Unknown Predicted decline > 50% in next 10 years

Census or monitoring, General field study, Informal field sighting, Literature K.N. Manamendra - Arachchi in known location from early 1990s; Ajanta & Walter in known location from late 1980s; Ranil Senanayake in known location from 1970s P.B. Karunaratne 1993

CRITICALLY ENDANGEREDCriteriaB1+2bcNot listedNational WL legislationFFPA1998, Critically Endangered1996 Red List (IUCN)Not listedTangamale, Silverkanda, MorningsideSilverkanda, MorningsideSilverkanda, Morningside

Survey, Life history studies, Limiting factor research, PHVA Monitoring, Captive breeding Education, Research None Initiate programme within 3 years. Not known at all

As a newly identified species, more studies should be carried out on its ecology

103, 106

Anslem de Silva, L. Ekenayake, S.S.S. Jasinghe, T. Kapurusinghe, S. Karunarathna, B.Z. Nizam, A. Palihawadane, R. Peris, K. Parameshwaran, H.D. Rathnayake, N.D. Rathnayake, P. Vinobaba Anslem de Silva, A. Jayawickrama, M. Meegaskumbura, R. Somaweera, D. Srinath, N.D. Rathnayaka, K.D.B. Ukuwela

#### Distribution

Habitat of the taxon Habitat specificity Current distribution (by country) Current Sri Lankan distribution Extent of occurrence (Sq. km.) Area of occupancy (Sq. km) Number of locations/sub pop. Habitat status

#### Threats

Threats to taxon Effect of threat on population Trade

## **Population numbers**

Global population Regional Pop (# sub-pop.) Number of mature individuals Generation time Population trends

Data Quality Recent field studies

## Status

IUCN CITES National Red Data Book Presence in Protected Area

#### Recommendations

Research Management Captive breeding for Captive stocks Level of captive breeding recs. Propagation Techniques

Other comments

## Sources

Compilers

Reviewers

Anslem de Silva, L. Ekenayake, S.S.S. Jasinghe, T. Kapurusinghe, S. Karunarathna, B.Z. Nizam, A. Palihawadane, R. Peris, K. Parameshwaran, H.D. Rathnayake, N.D. Rathnayake, P. Vinobaba

Anslem de Silva, A. Jayawickrama, M. Meegaskumbura, R. Somaweera, D. Srinath, N.D. Rathnayaka, K.D.B. Ukuwela

Karunarathne's Horn lizard (English), *Karunarathnega Ang Katussa* (Sinhala) Species Rakwana Hills Leaf litter and moss covered tree trunks. Terrestrial, Above 1060m

Ceratophora karu Pethiyagoda & Manamendra-Arachchi, 1998

Leaf litter and moss covered tree trunks, Terrestrial. Above 1060m. **ENDEMIC** to Sri Lanka. Morning side - Sinharaja Forest, Thangamale plains, Gongala. <500 <10 Few; Fragmented Decrease in area > 20% in the last 25 years, Decrease in quality, Introduction of tea and cardamom plantation.

Loss of habitat, Habitat fragmentation, Climate, Yes No

Declining Unknown Unknown Unknown Declining (rate unknown)

106

Agamidae

Census or monitoring, General field study, Informal field sighting, Literature K.N. Manamendra-Arachchi & R. Pethiyagoda from 1998.

CRITICALLY ENDANGERED	Criteria	. B1+2bc
Not listed	National WL legislation	. FFPA
1998, Critical	1996 Red List (IUCN)	. Not listed
Gongala, Thangamale plains, Morningside, Sellawakanda		

Survey, Life history studies, Limiting factor research, PHVA Habitat management, Monitoring, Captive breeding Education, Research Unknown Initiate programme within 3 years Not known at all

Action should be taken immediately to develop the studies on *Ceratophora karu* since it is a new species. Least known species known from very few specimen.

## Conservation Assessment and Management Plan for Amphibians and Reptiles of Sri Lanka - Report

#### Distribution

Habitat of the taxon Habitat specificity Current distribution (by country) Current Sri Lankan distribution Extent of occurrence (Sq. km.) Area of occupancy (Sq. km) Number of locations/sub pop. Habitat status

Threats

Threats to taxon

Effect of threat on population Trade Effect of trade on population

## **Population numbers**

**Global** population Regional Pop (# sub-pop.) Number of mature individuals Generation time Population trends

## **Data Quality Recent field studies**

## Status

**IUCN** CITES National Red Data Book Presence in Protected Area

#### Recommendations

Research Management Captive breeding for Captive stocks Level of captive breeding recs. Propagation Techniques

Other comments

Sources

Compilers

Reviewers

## Ceratophora stoddartii Gray, 1834

Agamidae Rhino horn lizard (English) Kagamuva Angkatussa (Sinhala) Species

Upper montane forests Semi arboreal, Terrestrial. Above 1400m ENDEMIC to Sri Lanka Horton Plains, Peak Wilderness, Hakgala, Galaha, Nunwara Eliya (Loolcondera) <20,000 <2000 Many fragmented Decrease in area > 20% in the last 25 years, Commercial plantations, encroachment. Decrease in quality, Pesticides, Climate rise in temperature

Loss of habitat, Habitat loss due to exotic animals, Habitat loss due to exotic plants, Pesticides, Poisoning, Trade for market, Trampling, Climate, Drought, Man made fire, Predation by birds Yes Commercial, Laboratory, Pet trade Yes

Unknown Unknown > 2,500 (Unknown) Unknown Declining > 20% in the last 25 years

General field study, Informal field sighting, Literature, Indirect information. Anslem de Silva Zoological survey 1997/98 at Horton Plains.

## VULNERABLE

Criteria ......B1+2abcd Not listed National WL legislation ......FFPA 1998. Vulnerable 1996 Red List (IUCN) ..... No Horton Plains, Hakgala, Peak Wilderness

Survey, Life history studies, Limiting factor research, PHVA Habitat management, Monitoring, Captive breeding Public awareness, Education, Research No Initiate Programme after 3 years Some techniques known for taxon or similar taxa

Some captive breeding programmes have been conducted by Mr. Ajantha Palihawadana in 1992. At Horton Plains it is a dominant Agamid (Anslem de Silva, ZSSL, 1997, 1998)

10, 26, 42, 49, 97, 99, 106, 111, 112

Anslem de Silva, L. Ekenayake, S.S.S. Jasinghe, T. Kapurusinghe, S. Karunarathna, B.Z. Nizam, A. Palihawadane, R. Peris, K. Parameshwaran, H.D. Rathnayake, N.D. Rathnayake, P. Vinobaba

Scientific name (author; date) Family Common name

Taxonomic level of assessment

#### Distribution

Habitat of the taxon Habitat specificity Current distribution (by country) Current Sri Lankan distribution Extent of occurrence (Sq. km.) Area of occupancy (Sq. km) Number of locations/sub pop. Habitat status

#### Threats

Threats to taxon

Effect of threat on population Trade

#### **Population numbers** Global population

Regional Pop (# sub-pop.) Number of mature individuals Generation time Population trends

## Data Quality Recent field studies

## Status

IUCN CITES National Red Data Book Presence in Protected Area

#### Recommendations Research

Management Captive breeding for Captive stocks Level of captive breeding recs. Propagation Techniques

Other comments

Sources

Compilers

**Reviewers** 

## Ceratophora tennentii Günther, 1861

Agamidae Tenents Horn Lizard or Leaf-Nose Lizard (English), *Peti Angkatsussa, Tenentge Angkatsussa, Pethi Angkatsussa* (Sinhala) Species

Rain forest Leaf litter and moss covered tree trunks. Semi arboreal. Over 700m to 1280 m. ENDEMIC to Sri Lanka Knuckles < 5,000 <500 <500 <5; Contiguous Decrease in area > 20% in the last 20 years, Decrease in quality, Cardamom plantations, Chena cultivation (Slash & burn), Human encroachment, Habitat loss

Loss of habitat, Habitat fragmentation, Pesticides, Pollution, Climate, Drought, Predation by birds Yes No

Unknown Unknown Unknown Declining < 20% in the last 20 years.

Census or monitoring, General field study, Informal field sighting, Literature B.Z. Nizam in a ongoing research at Knuckles region.

ENDANGERED Not listed 1998, Critical Knuckles Criteria ......B1+2abcd National WL legislation ......FFPA 1996 Red List (IUCN) ......Endangered

Survey, Life history studies, Limiting factor research, Research on environmental impacts, PHVA Habitat management, Monitoring, Captive breeding Public awareness, Education, Research Unknown Initiate Programme after 3 years. Some techniques known for taxon or similar taxa.

Life history and ecological requirements to be studies. Because of deforestation number of mature individuals and populations will decline in future.

26,32,49,86,97,99, 111, 112

Anslem de Silva, L. Ekenayake, S.S.S. Jasinghe, T. Kapurusinghe, S. Karunarathna, B.Z. Nizam, A. Palihawadane, R. Peris, K. Parameshwaran, H.D. Rathnayake, N.D. Rathnayake, P. Vinobaba

#### Distribution

Habitat of the taxon Habitat specificity Current distribution (by country) Current Sri Lankan distribution Extent of occurrence (Sg. km.) Area of occupancy (Sq. km.) Number of locations/sub pop. Habitat status

Threats

Threats to taxon

Effect of threat on population Trade

#### **Population numbers**

Global population Regional Pop (# sub-pop.) Number of mature individuals Generation time Population trends

## **Data Quality Recent field studies**

#### Status **IUCN** CITES

National Red Data Book Presence in Protected Area

Captive breeding, Reintroduction into suitable areas

Public awareness, Education, Research

Ongoing programme intensified or increased

Some techniques known for taxon or similar taxa

(3 males, 4 females) in Nuwara Eliya

research

Recommendations Research

Management

Captive breeding for Captive stocks

Level of captive breeding recs. **Propagation Techniques** 

Other comments

Captive breeding studies have been carried by Ajantha Palihawadane in Nuwara Eliya since 1991. Although the species comes under the status of Endangered, it is highly recommended to carry out population surveys because the group feels that this species is Critically Endangered in most of the habitats and therefore both wild and captive populations must be managed. 32,49,63,97,99,104,106,108 Anslem de Silva, L. Ekenayake, S.S.S. Jasinghe, T. Kapurusinghe, S. Karunarathna, B.Z. Nizam, A. Palihawadane, R. Peris, K. Parameshwaran, M. Priyadarshana, N.D. Rathnayake, H.D. Rathnayake, P. Vinobaba

Reviewers

Sources

Compilers

Anslem de Silva, A. Jayawickrama, M. Meegaskumbura, R. Somaweera, D. Srinath, N.D. Rathnayaka, K.D.B. Ukuwela

## Cophotis ceylanica Peters, 1861

Agamidae Pygmy lizard (English), Kandukara kurukatussa (Sinhala) Species

Upper montane forest Arboreal / terrestrial. Above 1500 m . **ENDEMIC** to Sri Lanka Nuwara Eliya, Horton Plains, Knuckles, Hakgala, Peak Wilderness < 20,000 < 2,000 Many; Fragmented Decrease in area > 50% in the last 20 years, Deforestation, Climatic change, Drought, Man made fire, Decrease in quality. Loss of habitat, Habitat fragmentation, Pesticides, Pollution, Climate, Trampling, Predation by Coucal and Crow, Drought

Yes No Unknown

Unknown Unknown Unknown Declining > 50% in the last 10 years; Predicted decline >50% in next 10 years.

General field study, Informal field sighting, Literature Captive breeding, mangement and life history studies by A. Palihawadane in Nuwara Eliya, Hakgala from 1992-1998; Anslem de Silva, Zoological survey at Horton plains 1997/98

Survey, Genetic research, Taxonomic research, Life history studies, Limiting factor

Yes, Breeding colony has been established since 1991 by Ajantha Palihawadane, 7

Habitat management, Wild population management, Monitoring, Translocation,

ENDANGERED	CriteriaA1c+2c	
Not listed	National WL legislation FFPA	
1998, Endangered	1996 Red List (IUCN) Not listed	
Hukgala, Horton plains, Knuckles, Peak wilderness		

Scientific name (author; date) Family Common name

Taxonomic level of assessment

**Distribution** Habitat of the taxon

Habitat specificity Current distribution (by country) Current Sri Lankan distribution Extent of occurrence (Sq. km.) Area of occupancy (Sq. km) Number of locations/sub pop. Habitat status

#### Threats

Threats to taxon Effect of threat on population Trade Effect of trade on population

## **Population numbers**

Global population Regional Pop (# sub-pop.) Number of mature individuals Generation time Population-trends

Data Quality Recent field studies

## Status

IUCN CITES National Red Data Book Presence in Protected Area

#### Recommendations

Research Management Captive breeding for Captive stocks Level of captive breeding recs. Propagation Techniques

Other comments

#### Sources

Compilers

Reviewers

#### Lyriocephalus scutatus (Linnaeus, 1758)

Agamidae Hump Nose Lizard, Lyre Head Lizard (English), *Kandukara bodiliya, Karamal bodiliya, Sondura* (Sinhala) Species

Forest habitat of wet and intermediate zones and marginal species (Home gardens close to forest) Arboreal / terrestrial. Up to 1400m **ENDEMIC** to Sri Lanka Udawattakele, Gannoruwa, Hantana, Matugama, Wakarawatte, Sinharaja > 20,000 > 2,000 Many; Fragmented Decrease in area > 20%, Man made fire, Habitat loss, Encroachment, Decrease in quality

Loss of habitat, Habitat fragmentation, Climate, Predation Yes Domestic No

Unknown Unknown Unknown Declining > 20% in the last 10 years; Predicted decline >20% in next 10 years.

Informal field sighting, Literature, General field study Anslem de Silva distribution and ecology on going; Bambaradeniya *et a*/, 1997 on distribution.

> Criteria ......A1c+2c National WL legislation ......FFPA 1996 Red List (IUCN) ......No

Survey, Taxonomic research, Life history studies Habitat management, Monitoring, Captive breeding Public awareness, Education, Research None Initiate programme after 3 years Techniques known for this taxon or similar taxon

VULNERABLE

1998, Vulnerable

Not listed

Sinharaja

8, 49, 63, 99

Presently at many locations it is found in home gardens. In Gannoruwa area (Kandy) *Lyriocephalus scutatus* is recognized as Sondura (= wife). Hawk Eagles and Coucal are known to feed on *L. scutatus*.

Anslem de Silva, L. Ekenayake, S.S.S. Jasinghe, T. Kapurusinghe, S. Karunarathna, B.Z. Nizam, A. Palihawadane, R. Peris, K. Parameshwaran, H.D. Rathnayake, N.D. Rathnayake, P. Vinobaba

Distribution

Habitat of the taxon

Habitat specificity Current distribution (by country) Current Sri Lankan distribution Extent of occurrence (Sq. km.) Area of occupancy (Sq. km) Number of locations/sub pop. Habitat status

## Threats

Threats to taxon

Effect of threat on population Trade

## **Population numbers**

Global population Regional Pop (# sub-pop.) Number of mature individuals Generation time Population trends

#### Data Quality Recent field studies

## Status

IUCN CITES National Red Data Book Presence in Protected Area

## Recommendations

Research Management Captive breeding for Captive stocks Propagation Techniques

## Other comments

Sources

Compilers

Reviewers

## Otocryptis wiegmanni Wagler, 1830

Agamidae Sri Lankan kangaroo lizard (English), *Tali katussa, Pinum katussa* (Sinhala) Species

Lowland and montane forests, plantations and home gardens in the wet and intermediate climatic zones Terrestrial. 1200 m. ENDEMIC to Sri Lanka Unknown > 20,000 > 2,000 Many; Fragmented Decrease in area of natural habitat > 20% in the last 20 years, Habitat loss, Deforestation, Human settlement, Decrease in quality

Loss of habitat, Habitat fragmentation, Pesticides, Man made fire, Predation by birds and cats Yes

Unknown Unknown Unknown Unknown Declining (rate unknown)

No

General field study, Informal field sighting, Literature Pahatkumbuara in island-wide, study on ecology and distribution ongoing; K.N. Manamendra-Arachchi ongoing throughout Sri Lanka; W. Erdelen, 1980s; Somaweera and Ukuwela in Menikdena 1998 onwards.

LOWER RISK - NEAR THREATENE	D Criteria
Not listed	National WL legislationFFPA
1998, Vulnerable	1996 Red List (IUCN)Not listed
Yes	

Survey, Taxonomic research, Life history studies, Limiting factor research Habitat management, Monitoring, Captive breeding
Public awareness
None
Some techniques known for taxon or similar taxa.

Some authors have mentioned that the population is decreasing Gampola, Kandy.

25, 32, 49, 63, 73, 97

Anslem de Silva, L. Ekenayake, S.S.S. Jasinghe, T. Kapurusinghe, S. Karunarathna, B.Z. Nizam, A. Palihawadane, R. Peris, K. Parameshwaran, H.D. -Rathnayake, N.D. Rathnayake, P. Vinobaba

Scientific name (author; date) Family Common name

Taxonomic level of assessment

#### Distribution

Habitat of the taxon Habitat specificity Current distribution (by country) Current Sri Lankan distribution

Extent of occurrence (Sq. km.) Area of occupancy (Sq. km) Number of locations/sub pop. Habitat status

#### Threats

Threats to taxon Effect of threat on population Trade

## **Population numbers**

Global population Regional Pop (# sub-pop.) Number of mature individuals Generation time Population trends

#### **Data Quality**

**Recent field studies** 

## Status

IUCN CITES National Red Data Book Presence in Protected Area

#### Recommendations

Research Management Captive breeding for Captive stocks Level of captive breeding recs. Propagation Techniques

Other comments

Sources

Compilers

Reviewers

## Sitana ponticeriana Cuvier, 1844

Agamidae Fanthroat Lizard (English), *Pulina Talikatussa, Vali katussa, Pullibim katussa* (Sinhala), *Veeseri wona* (Tamil) Species

Lowland scrub jungles and home gardens in dry zone Terrestrial. Arboreal. Up to 300m. Sri Lanka, India Low land dry zone, Hambantota, Rakawa, Polonnaruwa, Nilgala, Palatupana, Mannar, Wallawaya, Dimbulagala. > 20,000 > 2,000 Many; Fragmented Decrease in area > 20% in the last 20 years, Deforestation, Man made fire, Decrease in quality

Loss of habitat, Habitat fragmentation, Predation by birds, cats and poultry. Yes Unknown

Unknown Unknown Unknown Unknown Declining > 20% in the last 10 years; Predicted decline >20% in next 10 years

Census/ Monitoring, General field study, Informal field sighting, Literature, Museum/records K. Manamendra-Arachchi & Saman Liyanage, 1994, Conservation and distribution of Agamid lizards of Sri Lanka; W. Erdelen, 1970s

VULNERABLE	Criteria	A1c+2c
Not listed	National WL legislation	FFPA
No	1996 Red List (IUCN)	Not listed
Yala, Bundala (Rekawa, Anuradapura)		

Survey, Life history studies, Limiting factor research Habitat management, Monitoring, Limiting factor management, Captive breeding Public awareness, Education, Research Unknown
Initiate programme after 3 years Some techniques known for taxon or similar taxa

This species is widely distributed in low country dry zone but due to Chenna cultivation the numbers have been reduced rapidly in recent past.

26, 49, 63, 73, 99

Anslem de Silva, L. Ekenayake, S.S.S. Jasinghe, T. Kapurusinghe, S. Karunarathna, B.Z. Nizam, A. Palihawadane, R. Peris, K. Parameshwaran, H.D. Rathnayake, N.D. Rathnayake, P. Vinobaba

#### Distribution

Habitat of the taxon Habitat specificity Current distribution (by country) Current Sri Lankan distribution

Extent of occurrence (Sq. km.) Area of occupancy (Sq. km) Number of locations/sub pop. Habitat status

## Threats

Threats to taxon Effect of threat on population Trade Effect of trade on population

## **Population numbers**

Global population Regional Pop (# sub-pop.) Number of mature individuals Generation time Population trends

Data Quality Recent field studies

## Status

IUCN CITES National Red Data Book Presence in Protected Area

## Recommendations

Research Management Captive breeding for Captive stocks Level of captive breeding recs. Propagation Techniques

Other comments

#### Sources

Compilers

Reviewers

## Chamaeleo zeylanicus Laurenti, 1768

Chameleonidae Sri Lankan Chameleon (English), *Bodiliya* (Sinhala), Pachai Wona (Tamil) Species

Dry zone scrub jungle areas Arboreal. Up to 100m Sri Lanka and India Jaffna, Mullaithivu, northern arid northwestern arid zone, Puttalam, Mankulam, Tabbowa, Wilpattu < 5,000 <500 Few; Fragmented Decrease in area > 50% in the last 20 years, Human settlement, Climatic change, Decrease in quality

Loss of habitat, Climate, Drought Yes International, Pet trade, Whole animal Unknown

Unknown Unknown Unknown Declining (rate unknown); Predicted decline < 20% in the next 20 years

General field study, Informal field sighting, Literature D. Gabadage, 1993.

#### **ENDANGERED**

Not listed 1998, Vulnerable Wilpattu National Park Criteria ......B1+2bc National WL legislation ......FFPA 1996 Red List (IUCN) ....... Not listed

Survey, Life history studies Habitat management, Monitoring, Wild population management, Captive breeding Public awareness, Education, Research None Initiate Programme after 3 years Technques known for this taxon or similar taxa

Due to myths and belief people used to send specimen to the zoological garden regularly about 10 years ago. Presently sitings gradually decreasing.

## 26,49,63,99, 105

Anslem de Silva, L. Ekenayake, S.S.S. Jasinghe, T. Kapurusinghe, S. Karunarathna, B.Z. Nizam, A. Palihawadane, R. Peris, K. Parameshwaran, H.D. Rathnayake, N.D. Rathnayake, P. Vinobaba

#### Distribution

Habitat of the taxon Habitat specificity Current distribution (by country) Current Sri Lankan distribution Extent of occurrence (Sq. km.) Area of occupancy (Sq. km) Number of locations/sub pop. Habitat status

Threats

Threats to taxon

Effect of threat on population Trade

#### **Population numbers**

Global population Regional Pop (# sub-pop.) Number of mature individuals Generation time Population trends

Data Quality Recent field studies

#### Status

IUCN CITES National Red Data Book Presence in Protected Area

Recommendations Research

Management

Captive breeding for Captive stocks Level of captive breeding recs. Propagation Techniques

Other comments

Sources

Compilers

Reviewers

Great Rock Gecko, Sri Lankan Golden Gecko (English), *Maha Gal Huna* (Sinhala), Species Dry zone forests Rock outcrop upto 400m. **ENDEMIC** to Sri Lanka Eastern province - Ampara district, Nilgala, Monaragala < 20,000 <500 Few; Fragmented Decrease in area > 20% in the last 10 years, Deforestation, Quarrying, Decrease in quality.

Loss of habitat, Habitat fragmentation, Pollution, War, Fire, Predation by exotic animals, Quarrying Yes No

Unknown Unknown Unknown Predicted decline > 20% in the next 10 years

Calodactylodes illingworthi Deraniyagala, 1953

Gekkonidae

informal field sighting, Literature, Museum/Records S. Karunarathne in Eggal-Oya, Wadinagala from 1997.

ENDANGERED Not listed 1993, Threatened Eggal-oya, Wadinagala, Nilgala Criteria ......B1+2abc National WL legislation ....... FFPA 1996 Red List (IUCN) .....Not listed

Survey, Taxonomic research, Life history studies Habitat management, Wild population management, Monitoring, Genome resource banking, Captive breeding Species recovery, Re-introduction, Preservation of live genome None Initiate Programme within 3 years Not known at all

Due to war in northern Sri Lanka habitats are under threat.

26, 49, 63. 93, 96, 98

Anslem de Silva, L. Ekenayake, S.S.S. Jasinghe, T. Kapurusinghe, S. Karunarathna, B.Z. Nizam, A. Palihawadane, R. Peris, K. Parameshwaran, H.D. Rathnayake, N.D. Rathnayake, P. Vinobaba Anslem de Silva, A. Jayawickrama, M. Meegaskumbura, R. Somaweera, D. Srinath, N.D. Rathnayaka, K.D.B. Ukuwela

#### Distribution

Habitat of the taxon Habitat specificity Current distribution (by country) Current Sri Lankan distribution Extent of occurrence (Sq. km.) Area of occupancy (Sq. km) Number of locations/sub pop. Habitat status

#### Threats

Threats to taxon Effect of threat on population Trade

### **Population numbers**

Global population Regional Pop (# sub-pop.) Number of mature individuals Generation time Population trends

### Data Quality Recent field studies

#### Status

IUCN CITES National Red Data Book Presence in Protected Area

### Recommendations

Research Management Captive breeding for Captive stocks Level of captive breeding recs. Propagation Techniques

### Other comments

Sources

Compilers

**Reviewers** 

#### Cnemaspis jerdonii scalpensis (Ferguson, 1879)

*Gymnodactylus jerdoni, Gymnodactylus scalpensis, Cnemaspis jerdoni* Gekkonidae Jerdon' s Day Gecko (English), *Jerdonge Divasarihuna* (Sinhala) Sub species

Dry and wet zone forests Rocky forests. Diurnal. Terrestrial. Up to 500m **ENDEMIC** to Sri Lanka Hill country of Sri Lanka. Gammaduwa, Palmadulla, Ritigala, Kandy > 20,000 < 2,000 4: Fragmented Decrease in area < 20% in the last 10 years, Deforestation, Loss of habitat, Decrease in quality.

Loss of habitat, Habitat fragmentation, Climate, Predation Yes No

Unknown Unknown Unknown Declining. < 20% in the last 10 years

General field study, Informal field sighting, Literature, Museum/records Jayawickrama, A. in Ritigala from 1995; S. Karunarathne in Pallegama, 1997-1998

VULNERABLECriteriaB1+2bcNot listedNational WL legislationB1+2bc1998, Vulnerable1996 Red List (IUCN)Not listedPallegama, Ritigala, GmmaduwaFFPAFrance

Survey, Taxonomic research, Life history studies Habitat management, Wild population management, Genome resource banking No None Pending Unknown

Ongoing studies should be carried out to get more knowledge. Comparative work with Indian sub species initiated

26, 38, 49, 58, 63, 96, 98

Anslem de Silva, L. Ekenayake, S.S.S. Jasinghe, T. Kapurusinghe, S. Karunarathna, B.Z. Nizam, A. Palihawadane, R. Peris, K. Parameshwaran, H.D. Rathnayake, N.D. Rathnayake, P. Vinobaba

Scientific name (author; date) Synonyms

Family Common name Taxonomic level of assessment

### Distribution

Habitat of the taxon Habitat specificity Current distribution (by country) Current Sri Lankan distribution Extent of occurrence (Sq. km.) Area of occupancy (Sq. km) Number of locations/sub pop. Habitat status

### Threats

Threats to taxon Effect of threat on population Trade

### **Population numbers**

Global population Regional Pop (# sub-pop.) Number of mature individuals Generation time Population trends

Data Quality Recent field studies

#### Status

IUCN CITES National Red Data Book Presence in Protected Area

#### Recommendations

Research Management Captive stocks Level of captive breeding recs. Propagation Techniques

#### Other comments

Sources

Compilers

Anslem de Silva, L. Ekenayake, S.S.S. Jasinghe, T. Kapurusinghe, S. Karunarathna, B.Z. Nizam, A. Palihawadane, R. Peris, K. Parameshwaran, H.D. Rathnayake, N.D. Rathnayake, P. Vinobaba

Reviewers

Anslem de Silva, A. Jayawickrama, M. Meegaskumbura, R. Somaweera, D. Srinath, N.D. Rathnayaka, K.D.B. Ukuwela

#### Cnemaspis kandianus (Kelaart, 1852)

Gymnodactylus kandianus, Gonotodes kandianus, Gymnodactylus gracilis, Gymnodactylus hunei Gekkonidae Kandyan Day Gecko (English); Kandukara divasarihuna (Sinhala) Species

Shady cool forests, man made habitats On tree trunks, on rocks. Arboreal, terrestrial. About 1300 m. Sri Lanka, South India, Andaman Islands Between 500 -1300 m. (wet and intermediate zone) > 20,000 > 2,000 Many; Fragmented Decrease in area, > 20% in the last 10 years, Deforestation, Climatic change, Decrease in quality

Loss of habitat, Habitat fragmentation, Pesticides, Climate, Predation by exotics Unknown No

Unknown Unknown Unknown Declining > 20% in the last 10 years

Survey, Genetic Research, Life history studies

Unknown

Not known at all

Diurnal in habitat

No Pending

87, 98

General field study, Informal field sighting, Literature, Museum/records K. Manamendra Arachchi ongoing studies; Anslem de Silva ongoing studies

VULNERABLECriteriaA1cNot listedNational WL legislationFFPA1998, Not evaluated1996 Red List (IUCN)Not listedKnuckles, Udawathakele, Dambulla, Randinigala

### Distribution

Habitat specificity Current distribution (by country) Current Sri Lankan distribution Extent of occurrence (Sq. km.) Area of occupancy (Sq. km) Number of locations/sub pop. Habitat status

#### Threats

Threats to taxon Effect of threat on population Trade

#### **Population numbers**

Global population Regional Pop (# sub-pop.) Number of mature individuals Generation time Population trends

**Data Quality** Recent field studies

### Status

**IUCN** CITES National Red Data Book Presence in Protected Area

### Recommendations

Research Management Captive breeding for Captive stocks Level of captive breeding recs. **Propagation Techniques** 

#### Other comments

Sources

Compilers

26,49,61,63

None

Reviewers

tory studies management, Monitoring, Captive breeding н Species recovery None, Initiate Programme within 3 years Not known at all

Cnemaspis podihuna Deraniyagala, 1944 Gekkonidae

Dwarf Day Gecko (English), Kuda Divasarihuna, Podigalhuna (Sinhala) Species

On trees. Below 200m ENDEMIC to Sri Lanka Lahugala - Maha Oya, Galoya <100 < 10 Few; Fragmented Decrease in area

Deforestation, Loss of habitat Yes No

Unknown Unknown Unknown Unknown Predicted decline > 20% in the next 10 years

Literature, Museum/records K. Manamendra-Arachchi, 1998

<b>CRITICALLY ENDANGERED</b> Not listed 1998, Vulnerable Lahugala Sanctuary	Criteria National WL legislation 1996 Red List (IUCN)	.FFPA
Survey, Taxonomic research, Lit Habitat management, Wild popu	,	ng, Captive

Anslem de Silva, L. Ekenayake, S.S.S. Jasinghe, T. Kapurusinghe, S. Karunarathna, B.Z. Nizam, A. Palihawadane, R. Peris, K. Parameshwaran, H.D. Rathnayake, N.D. Rathnayake, P. Vinobaba Anslem de Silva, A. Jayawickrama, M. Meegaskumbura, R. Somaweera, D. Srinath, N.D. Rathnayaka, K.D.B. Ukuwela

#### Distribution

Habitat of the taxon Habitat specificity Current distribution (by country) Current Sri Lankan distribution Extent of occurrence (Sq. km.) Area of occupancy (Sq. km) Number of locations/ sub pop. Habitat status

#### Threats

Threats to taxon Effect of threat on population Trade Effect of trade on population

#### **Population numbers**

Global population Regional Pop (# sub-pop.) Number of mature individuals Generation time Population trends

### **Data Quality**

Status IUCN

CITES

Research

Management

Captive stocks

**Recent field studies** 

National Red Data Book

Recommendations

Presence in Protected Area

Level of captive breeding recs.

**Propagation Techniques** 

### Cnemaspis tropidogaster (Boulenger, 1885)

Gekkonidae Roughbelly Day Gecko (English), *Jalodara Divasarihuna* (Sinhala) Species

Wet forests and near streams Boulders, barks, roots. Up to 1,300 m **ENDEMIC** to Sri Lanka Mountains in Sabaragamuva province and Central province, Knuckles < 20,000 < 2,000 Many; Fragmented Decrease in area < 20% in the last 10 years, Deforestation, Drying up of streams, Man made fire, Decrease in quality.

Loss of habitat, Habitat fragmentation, Predation by domestic fowls, Man made fire. Yes International, Pet trade Unknown

Unknown Unknown Unknown Declining < 20% in the last 10 years; Predicted decline < 20% in the next 10 years

General field study, Informal field sighting, Literature, Indirect information such as from trade etc., Museum/records, Hearsay/popular belief K. Manamendra-Arachchi in all known locations ongoing, Taxonomy and distribution; Anslem de Silva in all known location ongoing, ecology and distribution and as sessment of threats; C. Bambaradeniya in Dambulla from March 1998, Survey of vertebrate fauna of Kandalama

Survey, Taxonomic research, Life history studies Habitat management, Monitoring No Pending Not known at all

Predation by domestic fowl is a major threat and needs monitoring.

7, 49, 98

Sources

Compilers

Other comments

-

Reviewers

Anslem de Silva, L. Ekenayake, S.S.S. Jasinghe, T. Kapurusinghe, S. Karunarathna, B.Z. Nizam, A. Palihawadane, R. Peris, K. Parameshwaran, H.D. Rathnayake, N.D. Rathnayake, P. Vinobaba

#### Distribution

Habitat of the taxon Habitat specificity Current distribution (by country) Current Sri Lankan distribution

Extent of occurrence (Sq. km.) Area of occupancy (Sq. km) Number of locations/sub pop. Habitat status

Threats

Threats to taxon

Effect of threat on population Trade

### **Population numbers**

Global population Regional Pop (# sub-pop.) Number of mature individuals Generation time Population trends

Data Quality Recent field studies

#### Status

IUCN CITES National Red Data Book Presence in Protected Area

### Recommendations

Research Management Captive breeding for Captive stocks Level of captive breeding recs. Propagation Techniques

Other comments

# Cyrotodactylus frenatus (Günther, 1864)

Great Forest Gecko (English), *Mahakela huna, Mukalan huna* (Sinhala) Species

Rain forests, sub montane forests and man made habitat Arboreal, Terrestrial, Trees and fallen logs, rock and tree crevices. Up to 1500 m. **ENDEMIC** to Sri Lanka Ampitiya, Ginigathena, Mautakada estate, Gammaduwa, Medamahanuwara, Peradeniya, Rathnapura, Neerodumnaai (Eastern province), Knuckles range, Hakgala, Pallegama, Sigiriya, Balangoda, Gampola, Menikdena. > 20,000 < 2,000 Many; Fragmented Decrease in area > 20% in the last 10 years; Deforestation; Decrease in quality

Loss of habitat, Habitat fragmentation, Pesticides, Predation, Man made fire, Smuggling Yes No

Unknown Unknown 5 -7 years Predicted decline < 20% in the next 5 years, >20% in next 3 generations

Informal field sighting, Literature. Somaweera and Ukuwela in Menikdena, 1998 onwards.

VULNERABLECriteriaA2c; B1+2bcNot listedNational WL legislationFFPA1998, Vulnerable1996 Red List (IUCN)Not listedKunckles (northern region), Namunukula, Randenigala, Hakgala

Life history studies Habitat management, Monitoring, Captive breeding Husbandry Yes Pending Some techniques known for taxon and similar taxa

Nocturnal in habitat. During the study of biodiversity of Knuckles range about 30 eggs were found in a rock area (personal observation by Nimal Rathnayake and Nadeera Weerasingha, 1997). Samitha Harischandra has observed over 100 in one house at Knuckles. K. Ukuwela has observed one in his house in Ampitiya (Kandy).

Sources	12,26,39,40,49,95,96,98
Compilers	Anslem de Silva, L. Ekenayake, S.S.S. Jasinghe, T. Kapurusinghe, S. Karunarathna, B.Z. Nizam, A. Palihawadane, R. Peris, K. Parameshwaran, H.D. Rathnayake, N.D. Rathnayake, P. Vinobaba
Reviewers	Anslem de Silva, A. Jayawickrama, M. Meegaskumbura, R. Somaweera, D. Srinath, N.D. Rathnayaka, K.D.B. Ukuwela

#### Distribution

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#### Threats

Threats to taxon Effect of threat on population Trade

## **Population numbers**

Global population Regional Pop (# sub-pop.) Number of mature individuals Generation time Population trends

### **Data Quality Recent field studies**

#### Status

**IUCN** CITES National Red Data Book Presence in Protected Area

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Research Management Captive breeding for Captive stocks Level of captive breeding recs. Propagation Techniques

### Other comments

Sources

Compilers

Reviewers

### Geckoella triedrus (Günther, 1864)

Gymnodactylus triedrus Gekkonidae Spotted Bowfinger Gecko (English), Pulli Vakaniyahuna (Sinhala) Species

Montane forests Under stones - decaying logs, terrestrial. Arboreal. Below 700 m. ENDEMIC to Sri Lanka Peradeniya, Gammaduwa, Kitulgala, Knuckles range < 20,000 < 2,000 4; Fragmented Decrease in area > 20% in the last 10 years, Deforestation, Habitat loss; Decrease in quality.

Loss of habitat, Predation by exotics, Fire, Fragmentation. Yes No

Unknown Unknown Unknown Unknown Declining > 20% in the last 10 years

General field study, Informal field sighting, Literature, Museum/records. Anslem de Silva, ongoing studies on ecology; K. Manamendra-Arachchi on going on taxonomy.

VULNERABLE Not listed 1998, Vulnerable Knuckles

6,49,98,107

Criteria .....A1c, B1+2bc National WL legislation ...... FFPA 1996 Red List (IUCN) .....No

Survey; Genetic research, Life history studies Habitat management, Monitoring, Captive Breeding Species recovery, Education No Unknown Unknown

Nocturnal in habit. Record from Horton Plains by P.H.D.H. de Silva in 1957 need further investigation.

Anslem de Silva, L. Ekenayake, S.S.S. Jasinghe, T. Kapurusinghe, S. Karunarathna, B.Z. Nizam, A. Palihawadane, R. Peris, K. Parameshwaran, H.D. Rathnayake, N.D. Rathnavake, P. Vinobaba

#### Distribution

Habitat of the taxon Habitat specificity

Current distribution (by country) Current Sri Lankan distribution Extent of occurrence (Sq. km.) Area of occupancy (Sq. km) Number of locations/sub pop. Habitat status

#### Threats

Threats to taxon Effect of threat on population Trade

# Population numbers

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#### Data Quality Recent field studies

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IUCN CITES National Red Data Book Presence in Protected Area

### Recommendations

Research Management Captive breeding for Captive stocks Level of captive breeding recs. Propagation Techniques

### Other comments

Sources

Compilers

Reviewers

#### Geckoella yakhuna (Deraniyagala, 1945)

*Gymnodactylus yakhuna, Gymnodactylus collegalensis, Gymnodactylus nebulosus* Gekkonidae Devil Gecko, Blotch Bowfinger Gecko (English); *Lapavan vakniyahuna* (Sinhala) Species

Dry and intermediate zone Leaf litter and tree trunks and crevices; Under decaying logs, Terrestrial/arboreal; Below 300 m. ENDEMIC to Sri Lanka Manaar, Puliyankulam, Polonnaruwa, Giritalae, Menikdena > 20,000 > 2,000 Many; Contiguous Decrease in area < 20% in the last 10 years; Deforestation, War; Decrease in quality

Loss of habitat, Habitat fragmentation, War, Predation by exotics, Fire Yes No

Unknown Unknown Unknown Declining < 20% in the last 10 years

General field study, Informal field sighting, Literature, Museum/records Somaweera & Ukuwela in Menikdena, 1998.

LOWER RISK - NEAR THREATENED Criteria ....... Not listed National WL legislation ...... FFPA 1998, Vulnerable 1996 Red List (IUCN) ....... Not listed Giritale

Survey, Taxonomic research, Life history studies Habitat management, Monitoring, Captive breeding Public awareness, Species recovery, Education None Initiate programme after 3 years Not known at all

Needs taxonomic assessment

49, 63, 98

Anslem de Silva, L. Ekenayake, S.S.S. Jasinghe, T. Kapurusinghe, S. Karunarathna, B.Z. Nizam, A. Palihawadane, R. Peris, K. Parameshwaran, H.D. Rathnayake, N.D. Rathnayake, P. Vinobaba

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Threats

Threats to taxon Effect of threat on population Trade

### **Population numbers**

**Global** population Regional Pop (# sub-pop.) Number of mature individuals Generation time Population trends

### **Data Quality Recent field studies**

### Status

**IUCN** CITES National Red Data Book Presence in Protected Area

### Recommendations

Research	Taxonomic research
Management	No
Captive stocks	None
Level of captive breeding recs.	Not required
Propagation Techniques	Not known at all
1 0 1	

### Other comments

Sources 7, 49, 63, 98 Compilers Anslem de Silva, L. Ekenayake, S.S.S. Jasinghe, T. Kapurusinghe, S. Karunarathna, B.Z. Nizam, A. Palihawadane, R. Peris, K. Parameshwaran, H.D. Rathnayake, N.D. Rathnayake, P. Vinobaba Reviewers Anslem de Silva, A. Jayawickrama, M. Meegaskumbura, R. Somaweera, D. Srinath, N.D. Rathnayaka, K.D.B. Ukuwela

Hemidactylus brookii parvimaculatus Deraniyagala, 1953

Hemidactylus brookii Gekkonidae Spotted House Gecko (English), Pulligehuna (Sinhala) Sub species

Human dwellings; Forests Houses, trees: < 1000 m. ENDEMIC to Sri Lanka Throughout Sri Lanka (in houses) except above 1000 m. > 20,000 > 2,000 Many; Contiguous Stable in quality

Predation by cats and fowls No No

Unknown Unknown Unknown Unknown Stable

General field study. Informal field sighting. Literature. Hearsay/popular belief C.N.B. Bambaradeniya & M.R.B. Meegaskumbura in Kandalama from March 1998, Faunal Survey; Anslem de Silva in Gampola and Kandy; Somaweera & Ukuwela in Menikdena, 1998 onwards.

LOWER RISK - LEAST CONCERN Criteria Not listed National WL legislation FFPA Not listed 1996 Red List (IUCN) Not listed Yes

### Feed on mosquitos

Scientific name (author; date) Hemidactylus depressus Gray, 1842 Hemidactylus piersii Synonyms Family Gekkonidae Common name Kandyan Gecko (English), Hali Gehuna (Sinhala) Taxonomic level of assessment Species Distribution Habitat of the taxon Dry, intermediate and wet zone forests, home gardens and houses Habitat specificity Trees, mossy caves, human settlements. Up to 1000 m Current distribution (by country) ENDEMIC to Sri Lanka Sinharaja, Yala, Gampola, Kandy, Namunukula Current Sri Lankan distribution Extent of occurrence (Sq. km.) < 20,000 Area of occupancy (Sq. km) < 2,000 Number of locations/sub pop. Many; Fragmented Habitat Status Change in quality. Threats Threats to taxon Pesticides, Predation, Human interference Effect of threat on population Yes Trade No **Population numbers** Global population Unknown Regional Pop (# sub-pop.) Unknown Number of mature individuals Unknown Generation time Unknown Population trends Declining < 20% in the last 10 years; Predicted decline < 20% in the next 10 years Data Quality Informal field sighting, Literature Recent field studies K.N. Manamendra Arachchi, taxonomic and distribution, Island-wide, Ongoing; Somaweera & Ukuwela in Menikdena, 1998 onwards Status **IUCN** LOWER RISK - NEAR THREATENED Criteria.....--CITES Not listed National WL legislation ......FFPA 1996 Red List (IUCN) .....Not listed National Red Data Book 1998, Threatened Presence in Protected Area Sinharaja, Yala Recommendations Research Life history studies Monitorina Management Captive stocks None Pending Level of captive breeding recs. Propagation Techniques Not known at all This species also found in human habitation. Other comments Sources 49,98 Anslem de Silva, L. Ekenayake, S.S.S. Jasinghe, T. Kapurusinghe, S. Compilers Karunarathna, B.Z. Nizam, A. Palihawadane, R. Peris, K. Parameshwaran, H.D. Rathnayake, N.D. Rathnayake, P. Vinobaba Anslem de Silva, A. Jayawickrama, M. Meegaskumbura, R. Somaweera, D. Srinath, Reviewers N.D. Rathnavaka, K.D.B. Ukuwela

#### *Hemidactylus maculatus hunae* Daraniyagala, 1937 Gekkonidae Spotted Giant Gecko, Rock Gecko (English); *Palli Huna, Devanta tit huna* (Sinhala) Sub species

Distribution Habitat of the taxon Habitat specificity Current distribution (by country) Current Sri Lankan distribution Extent of occurrence (Sq. km.) Area of occupancy (Sq. km) Number of locations/sub pop. Habitat status

#### Threats

Threats to taxon Effect of threat on population Trade

#### **Population numbers**

Global population Regional Pop (#'sub-pop.) Number of mature individuals Generation time Population trends

Data Quality Recent field studies

#### Status

IUCN CITES National Red Data Book Presence in Protected Area

#### Recommendations

Research Management Captive breeding for Captive stocks Level of captive breeding recs. Propagation Techniques

#### Other comments

Sources

CompilersAnslem de Silva, L. Ekenayake, S.S.S. Jasinghe, T. Kapurusinghe, S.<br/>Karunarathna, B.Z. Nizam, A. Palihawadane, R. Peris, K. Parameshwaran, H.D.<br/>Rathnayako, N.D. Rathnayako, P. Vinobaba

Reviewers Anslem de Silva, A. Jayawickrama, M. Meegaskumbura, R. Somaweera, D. Srinath, N.D. Rathnayaka, K.D.B. Ukuwela

Rainforest and rubber plantations Rock caves. Arboreal, terrestrial. Boulders, Tree trunks. Up to 400 m. ENDEMIC to Sri Lanka Monaragala, Panama, Okanda, Panamure < 5,000 <500 5; Fragmented Decrease in area > 20% in the last 10 years; Predicted decline > 20% in the next 10 years; Deforestation for plantations; Decrease in quality

Loss of habitat, Habitat fragmentation, Pesticides, Pollution Yes No

Unknown Unknown
Unknown
Unknown
Declining > 20% in the last 10 years; Predicted decline < 20% in the next 10 years

Informal field sightings, Literature, Hearsay/popular belief. K.N. Manamendra-Arachchi in Monaragala ongoing, taxonomy and distribution.

### ENDANGERED Criteria B1+2bc

Species recovery, Reintroduction

Initiate Programme within 3 years

The largest Gecko in Sri Lanka

None

49,63,99

Not known at all

Not listed National WL legislation FFPA Not listed 1996 Red List (IUCN) Not listed Panama (Yala National Park)

Survey, Taxonomic research, Limiting factor research

Habitat management, Monitoring, Captive breeding

125

#### Distribution

Habitat of the taxon Habitat specificity Current distribution (by country) Current Sri Lankan distribution Extent of occurrence (Sq. km.) Area of occupancy (Sq. km) Number of locations/sub pop.

Habitat status

Threats Threats to taxon

Effect of threat on population Trade

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#### Data Quality Recent field studies

### Status

IUCN CITES National Red Data Book Presence in Protected Area

#### Recommendations

Research Management Captive breeding for Captive stocks Level of captive breeding recs. Propagation Techniques

Other comments

#### Sources

Compilers

Reviewers

Hemidactylus triedrus lankae Daraniyagala, 1953 Gecko triedrus, Hemidactylus triedrus Gekkonidae Termite Hill Gecko (English), Humbas huna (Sinhala) Sub species Dry zone and intermediate zone forests and home gardens Termite mound, rock, barks, houses. Below 300 m. ENDEMIC to Sri Lanka Kandalama, Dambulla, Giritale, Bakamuna, Menikdena 20.000 > 2,000 > Many: Fragmented Decrease in area < 20% in last 10 years; Mahawela constructions, deforestations; Decrease in quality Loss of habitat, Habitat fragmentation, Climate, Predation by cats, Human interference Yes No Unknown Unknown Unknown Unknown Declining < 20% in the last 10 years General field study, Literature, Informal field sightings, Museum/records C.N.B. Bambaradeniya & M.C.B. Meegaskumbura in Kandalama from 1998 March, Faunal survey; Ranawana & Bambaradeniya in V.R.R. Sanctuary from 1997, Faunal survey; Somaweera & Ukuwela in Menikdena, 1998 onwards LOWER RISK - NEAR THREATENED Criteria Not listed National WL legislation FFPA 1998, Not threatened 1996 Red List (IUCN) Not listed Girithale, Dambulla Genetic research, Taxonomic research, Life history studies Habitat management, Monitoring, Captive breeding Education, Research None Initiate Programme within 3 years Unknown The largest threat to the H. tridus lankae is the cleaning the area for Mahaweli settlements and agriculture 7,49,63,99,113 Anslem de Silva, L Ekenayake, S.S.S. Jasinghe, T. Kapurusinghe, S. Karunarathna, B.Z. Nizam, A. Palihawadane, R. Peris, K. Parameshwaran, H.D. Rathnayake, N.D. Rathnayake, P. Vinobaba

#### Ophisops leschenaultii lankae (Deraniyagala, 1953) Lacertidae

Terrestrial, dry grass lands; Up to 500m.

Udawalawe, Nilgala, Mulaitivu, Galoya, Jaffna

Grasslands

> 20,000

Unknown

Unknown

Unknown Unknown

Unknown

Unknown

Monitoring

None

Pending

Unknown

No

> 2,000

**ENDEMIC** to Sri Lanka

Many; Fragmented

Fire, Habitat loss

Leschenault's Snake-eye Lizard (English), Panduru Sarpakshi Katussa (Sinhala) Sub species

Decrease in quality; Delibrate fires, Preparation of land for agriculture

Survey, Genetic research, Taxonomic research, Limiting factor research, PHVA

Needs taxonomic investigation to confirm species validity, future studies recom

Distribution Habitat of the taxon Habitat specificity Current distribution (by country) Current Sri Lankan distribution Extent of occurrence (Sq. km.) Area of occupancy (Sq. km) Number of locations/sub pop. Habitat status

#### Threats

Threats to taxon Effect of threat on population Trade

### **Population numbers**

**Global** population Regional Pop (# sub-pop.) Number of mature individuals Generation time Population trends

### **Data Quality Recent field studies**

### Status

**IUCN** LOWER RISK-NEAR THREATENED Criteria .....---CITES National WL legislation ...... FFPA Not listed National Red Data Book 1998, Not threatened 1996 Red List (IUCN) ..... Not listed Presence in Protected Area Gabya, Udawalawe

P.B. Karunaratne, IUCN/NCR survey

Informal field sighting, Literature, Museum/records

### Recommendations

Research Management Captive stocks Level of captive breeding recs. **Propagation Techniques** 

#### Other comments

mended Sources 49.63 Compilers Anslem de Silva, L. Ekenayake, S.S.S. Jasinghe, T. Kapurusinghe, S. Karunarathna, B.Z. Nizam, A. Palihawadane, R. Peris, K. Parameshwaran, H.D. Rathnayake, N.D. Rathnayake, P. Vinobaba **Reviewers** Anslem de Silva, A. Jayawickrama, M. Meegaskumbura, R. Somaweera, D. Srinath, N.D. Rathnayaka, K.D.B. Ukuwela

## Distribution

Habitat of the taxon Habitat specificity Current distribution (by country) Current Sri Lankan distribution Extent of occurrence (Sq. km.) Area of occupancy (Sq. km) Number of locations/sub pop. Habitat status

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Data Quality Recent field studies

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IUCN CITES National Red Data Book Presence in Protected Area

### Recommendations

Research Management Captive stocks Level of captive breeding recs. Propagation Techniques

Other comments

Sources

Compilers

Reviewers

#### Ophisops minor minor (Deraniyagala, 1971)

Lacertidae Lesser Snakeeye Lizard (English), Kuda Sarpakshi Katusaa (Sinhala) Sub species

Grasslands Terrestrial. Up to 500 m. ENDEMIC to Sri Lanka Udawalawe, Nilgala < 20,000 < 2,000 Few; Fragmented Decrease in quality; Deliberate fires

Fire Unknown No

Unknown Unknown Unknown Unknown Unknown

**VULNERABLE** 

Literature P.B. Karunaratne, IUCN survey

ea	Not listed 1998 Vulnerable Udawalawe	National WL legislationFFPA 1996 Red List (IUCN)Not listed
recs.	Survey, Genetic research, Taxono Monitoring None Pending Unknown	mic research, Limiting factor research
	Need taxonomic investigation to correcommended	onfirm sub species/ species further study
	23, 42, 49, 63, 65	

Anslem de Silva, L. Ekenayake, S.S.S. Jasinghe, T. Kapurusinghe, S. Karunarathna, B.Z. Nizam, A. Palihawadane, R. Peris, K. Parameshwaran, H.D. Rathnayake, N.D. Rathnayake, P. Vinobaba

### Chalcidoseps thwaitesii (Günther, 1872)

Nessia thwaitesii Scincidae Four-toed Snake Skink (English), Caturanguli Sarpiyahikanala (Sinhala) Species

## Distribution Habitat of the taxon

Habitat specificity Current distribution (by country) Current Sri Lankan distribution Extent of occurrence (Sq. km.) Area of occupancy (Sq. km) Number of locations/sub pop. Habitat status

#### Threats

Threats to taxon Effect of threat on population Trade

#### **Population numbers**

Global population Regional Pop (# sub-pop.) Number of mature individuals Generation time Population trends

**Data Quality** Recent field studies

### Status

**IUCN** CITES National Red Data Book Presence in Protected Area

#### Recommendations Research

Management Captive breeding for Captive stocks Level of captive breeding recs. **Propagation Techniques** 

Other comments

49, 63, 77, 89, 119 Sources Compilers

None

Reviewers

Anslem de Silva, L. Ekenayake, S.S.S. Jasinghe, T. Kapurusinghe, S. Karunarathna, B.Z, Nizam, A. Palihawadane, R. Peris, K. Parameshwaran, H.D. Rathnayake, N.D. Rathnayake, P. Vinobaba

Anslem de Silva, A. Jayawickrama, M. Meegaskumbura, R. Somaweera, D. Srinath, N.D. Rathnayaka, K.D.B. Ukuwela

Montane forests Under logs, leaf litter, boulders: Between 700m - 1200m ENDEMIC to Sri Lanka Knuckles <500

<100 Few in the range; Fragmented. Decrease in area; Deforestation; Decrease in quality

Loss of habitat, Habitat fragmentation Unknown No

Unknown Unknown Unknown Unknown Unknown

Field observations Anslem de Silva (ecology)

**ENDANGERED** 

Not listed 1998, Endangered Knuckles

Criteria ..... B1+2bc National WL legislation ...... FFPA 1996 Red List (IUCN) .....Not listed

Survey, Genetic research, Taxonomic research, Life history studies, Limiting factor research, PHVA Monitoring, Captive breeding Education, Research None Initiate Programme within 3 years Unknown

#### Distribution

Habitat of the taxon Habitat specificity Current distribution (by country) Current Sri Lankan distribution

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**Data Quality Recent field studies** 

### Status

**IUCN** CITES National Red Data Book Presence in Protected Area

#### Recommendations

Research Management Captive breeding for Captive stocks Level of captive breeding recs. **Propagation Techniques** 

### Other comments

Sources	49,63,77,119
Compilers	Anslem de Silva, L. Ekenayake, S.S.S. Jasinghe, T. Kapurusinghe, S. Karunarathna, B.Z. Nizam, A. Palihawadane, R. Peris, K. Parameshwaran, H.D. Rathnayake, N.D. Rathnayake, P. Vinobaba
Reviewers	Anslem de Silva, A. Jayawickrama, M. Meegaskumbura, R. Somaweera, D. Srinath, N.D. Rathnayaka, K.D.B. Ukuwela

### Dasia halianus (Haly & Nevil, 1887)

Euprepes halianus, Theconyx halianus, Lygosoma halianus Scincidae Haly's Tree Skink (English), Helige rukhiraluva (Sinhala) Species

Low land dry zone forests Arboreal, large trees, Upto 300m ENDEMIC to Sri Lanka Gampha, Horana, Dambulla, Elahera, Anuradhapura, Polonnaruwa, Jaffna, Palatupana, Galoya, Menikdena > 20,000 > 2,000 Many; Fragmented Decrease in area; Deforestation, Encroachment

Loss of habitat, Habitat fragmentation, Pesticides Unknown No

Unknown Unknown Unknown Unknown Unknown

General field studies Somaweera and Ukuwela in Menikdena 1998 onwards.

Not listed 1998, Not threatened Galoya, Giritale

National WL legislation ...... FFPA 1996 Red List (IUCN) ..... Not listed

Survey, Life history studies, Limiting factor research Habitat management, Monitoring, Captive breeding Public awareness, Education, Research None Pendina Unknown

Distribution

Habitat of the taxon

Habitat specificity Current distribution (by country) Current Sri Lankan distribution Extent of occurrence (Sq. km.) Area of occupancy (Sq. km) Number of locations/sub pop. Habitat status

#### Threats

Threats to taxon Effect of threat on population Trade

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Data Quality Recent field studies

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IUCN CITES National Red Data Book Presence in Protected Area

### Recommendations

Research Management Captive breeding for Captive stocks Level of captive breeding recs. Propagation Techniques

#### Other comments

Sources

Compilers

Reviewers

### Lankascincus deignani (Taylor, 1950)

Sphenomorphus deignani Scincidae Deignan's Lanka Skink (English), *Deignange Lakhiraluva* (Sinhala) Species

Montane forests Leaf litter, under decaying logs and rubble. Terrestrial. Up to 1750 m.

#### ENDEMIC to Sri Lanka

Gannoruwa, Peradeniya, Labukele, Talawakele < 5,000 <500 Few; Fragmented Decrease in area > 20% in the last 10 years; Deforestation (Tea plantations); Decrease in guality

Loss of habitat, Habitat fragmentation, Pesticides, Predation. Yes No

Unknown Unknown Unknown Unknown Declining < 20% in the last 10 years; Predicted decline > 20% in next 10 years

General field study, Informal field sighting, Literature, Museum/records Carl Gans, distribution in 1980's; I. Das & Anslem de Silva, on going

#### ENDANGERED Not listed 1998, Endangered

Unknown

Criteria ......B1+2bc National WL legislation ...... FFPA 1996 Red List (IUCN) ........ Not listed

Survey, Life history studies, Limiting factor research Habitat management, Monitoring, Captive breeding Public awareness, Education, Research, Reintroduction None Initiate Programme within 3 years Unknown

Taxonomic studies, Biological studies

49, 77,81

Anslem de Silva, L. Ekenayake, S.S.S. Jasinghe, T. Kapurusinghe, S. Karunarathna, B.Z. Nizam, A. Palihawadane, R. Peris, K. Parameshwaran, H.D. Rathnayake, N.D. Rathnayake, P. Vinobaba

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#### Other comments

#### Sources

Compilers

**Reviewers** 

#### Lankascincus deraniyagalae Greer, 1991

Scincidae Deraniyagala's Lanka Skink (English); *Daraniyagalae Lakharaluva* (Sinhala) Species

Forests and montane forests (including home gardens) Leaf litter, under logs and rubble. Terrestrial. Upto 1000 m. **ENDEMIC** to Sri Lanka Central hills and Galle district < 5,000 <500 Few; Fragmented Decrease in area < 20% in the last 10 years; Deforestation; Decrease in quality

Loss of habitat, Habitat fragmentation, Pesticides, Predation by exotics Yes No

Unknown Unknown Unknown Declining < 20% in the last 10 years

General field study, Informal field sighting, Literature, Museum/records Carl Gans on distribution in 1980's; I. Das and Anslem de Silva on going

ENDANGERED		
Not listed		
1998, Vulnerable		
Yes		

Criteria ......B1+2bc National WL legislation ...... FFPA 1996 Red List (IUCN) ........ Not listed

Survey, Taxonomic research, Life history studies, Limiting factor research Habitat management, Wild population management, Monitoring, Captive breeding Public awareness, Education, Research None Initiate programme within 3 years Unknown

#### Taxonomic studies

### 49, 77,81

rs Anslem de Silva, L. Ekenayake, S.S.S. Jasinghe, T. Kapurusinghe, S. Karunarathna, B.Z. Nizam, A. Palihawadane, R. Peris, K. Parameshwaran, H.D. Rathnayake, N.D. Rathnayake, P. Vinobaba

#### Distribution

Habitat of the taxon Habitat specificity Current distribution (by country) Current Sri Lankan distribution Extent of occurrence (Sq. km.) Area of occupancy (Sq. km) Number of locations/sub pop. Habitat status

#### Threats

Threats to taxon

Effect of threat on population Trade

#### **Population numbers**

Global population Regional Pop (# sub-pop.) Number of mature individuals Generation time Population trends

#### Data Quality Recent field studies

#### Status **IUCN** LOWER RISK - NEAR THREATENED Criteria .....---National WL legislation ...... FFPA CITES Not listed National Red Data Book 1998, Not threatened 1996 Red List (IUCN) ..... Not listed Presence in Protected Area Yes Recommendations Survey, Life history studies, Limiting factor research Research Management Habitat management, Monitoring Captive stocks None Pendina Level of captive breeding recs. **Propagation Techniques** Unknown Other comments Need taxonomic evaluation of the red and blue colour neck males Sources 49,77,81 Compilers Anslem de Silva, L. Ekenayake, S.S.S. Jasinghe, T. Kapurusinghe, S. Karunarathna, B.Z. Nizam, A. Palihawadane, R. Peris, K. Parameshwaran, H.D. Rathnayake, N.D. Rathnayake, P. Vinobaba **Reviewers** Anslem de Silva, A. Jayawickrama, M. Meegaskumbura, R. Somaweera, D. Srinath,

N.D. Rathnayaka, K.D.B. Ukuwela

Lankascincus fallax (Peters, 1860)

Wet and dry zone forests, Home gardens Leaf litter, under logs, rubble: Up to 1050 m.

Common Lanka Skink (English), Sulaba Lakhiraluva (Sinhala)

Western, southwestern and northeastern low lands as well as central highlands

Decrease in area < 20% in the last 10 years; Deforestation; Decrease in quality

Loss of habitat, Habitat fragmentation, Trampling, Fire, Predation by poultry and

General field study, Informal field sighting, Literature, Hearsay/popular belief

Carl Gans on distribution in 1980's and I. Das & Anslem de Silva, on going.

Lygosoma fallax

ENDEMIC to Sri Lanka

cats. Human interference

Many; Contiguous

Scincidae

Species

> 20,000

Unknown

Unknown

Unknown

Unknown Unknown

Unknown

No

> 2,000

#### Distribution

Habitat of the taxon Habitat specificity Current distribution (by country) Current Sri Lankan distribution Extent of occurrence (Sq. km.) Area of occupancy (Sq. km) Number of locations/sub pop. Habitat status

Threats Threats to taxon

Effect of threat on population Trade

### **Population numbers**

Global population Regional Pop (# sub-pop.) Number of mature individuals Generation time Population trends

Data Quality Recent field studies

### Status

IUCN CITES National Red Data Book Presence in Protected Area

#### Recommendations

Research Management Captive breeding for Captive stocks Level of captive breeding recs. Propagation Techniques

#### Other comments

Sources

Compilers

Reviewers

#### Lankascincus gansi Greer, 1991

Scincidae Gan's Lanka Skink (English), *Gansge Lakhiraluva* (Sinhala) Species

Forests and human habitats Under logs, leaf litter; Sub fossorial; Up to 1000 m. ENDEMIC to Sri Lanka Gampola, Deniyaya, Akuressa, Ratnapura, Sinharaja, Kuruwita, Pallegama < 5,000 < 2,000 Few; Contiguous Decrease in area > 20% in the last 10 years; Deforestation, Decrease in quality of habitat

Loss of habitat, Habitat loss due to exotic animals, Predation by exotics Yes No

Unknown Unknown Unknown Declining > 20% in the last 10 years.

General field study, Informal field sighting, Literature, Museum/records Carl Gans on distribution in 1980s; I. Das & Anslem de Silva, on going.

### VULNERABLE

Not listed 1998, Vulnerable Sinharaja Criteria ...... A1c National WL legislation ...... FFPA 1996 Red List (IUCN) .........Not listed

Survey, Life history studies, Limiting factor research Habitat management, Monitoring, Captive breeding Public awareness, Education, Research None Initiate Programme within 3 years Not known at all

Studies on ecology required

### 49,77,81

Anslem de Silva, L. Ekenayake, S.S.S. Jasinghe, T. Kapurusinghe, S. Karunarathna, B.Z. Nizam, A. Palihawadane, R. Peris, K. Parameshwaran, H.D. Rathnayake, N.D. Rathnayake, P. Vinobaba

Scientific name (author; date) Synonyms

Family Common name Taxonomic level of assessment

#### Distribution

Habitat of the taxon Habitat specificity Current distribution (by country) Current Sri Lankan distribution

Extent of occurrence (Sq. km.) Area of occupancy (Sq. km) Number of locations/sub pop. Habitat status

#### Threats

Threats to taxon Effect of threat on population Trade

### **Population numbers**

Global population Regional Pop (# sub-pop.) Number of mature individuals Generation time Population trends

### Data Quality Recent field studies

#### Status

IUCN CITES National Red Data Book Presence in Protected Area

#### Recommendations

Research Management Captive breeding for Captive stocks Level of captive breeding recs. Propagation Techniques

Other comments

Sources

Compilers

Reviewers

### Lankascincus taprobanensis (Kelaart, 1864)

Eumeces taprobanense (Boulenger, 1907) Lygosoma punctatolineatum, Lygosoma striatopunctatum Boulenger, 1893 Scincidae Smooth Lanka Skink (English); Sumudu lakhiraluwa (Sinhala) Species

Upper montane forests Under logs and rubble and leaf litter. Terrestrial, sub-fossorial. 1500 m to 2300 m. ENDEMIC to Sri Lanka Apparently restricted to the central highlands. Horton Plains, Hakgala, Labukele, Nuwara Eliya, Namunukula < 5,000 <500 Few; Fragmented Decrease in area > 20% in the last 10 years; Deforestation, Vegetable and tea cultivation

Trampling, Climate, Predation by exotics, Drought, Loss of habitat, Fragmentation Yes No

Unknown Unknown Unknown Unknown Declining > 20% in the last 10 years

Informal field sighting, Literature, Museum/records, Hearsay/popular belief Carl Gans on distribution in 1980's.

### ENDANGERED

Not listed 1998, Vulnerable Horton plains, Hakgala Criteria ......B1+2bc National WL legislation .......FFPA 1996 Red List (IUCN) ......Not listed

Survey, Genetic research, Limiting factor research Habitat management, Wild population management, Captive breeding, Monitoring Education, Research None g recs. Initiate programme within 3 years Not known at all

Population decline can be observed due to forest fires (Horton Plains). A Skink with prehensile tail.

48, 49, 63, 77, 81

Anslem de Silva, L. Ekenayake, S.S.S. Jasinghe, T. Kapurusinghe, S. Karunarathna, B.Z. Nizam, A. Palihawadane, R. Peris, K. Parameshwaran, H.D. Rathnayake, N.D. Rathnayake, P. Vinobaba

#### Distribution

Habitat of the taxon Habitat specificity Current distribution (by country) Current Sri Lankan distribution

Extent of occurrence (Sq. km.) Area of occupancy (Sq. km) Number of locations/sub pop. Habitat status

Threats

Threats to taxon

Effect of threat on population Trade

#### **Population numbers**

Global population Regional Pop (# sub-pop.) Number of mature individuals Generation time Population trends

#### Data Quality Recent field studies

#### Status

IUCN CITES National Red Data Book Presence in Protected Area

#### Recommendations

Research Management Captive breeding for Captive stocks Level of captive breeding recs. Propagation Techniques

#### Other comments

Sources

### Compilers

Reviewers

#### Lankascincus taylori Greer, 1991

Scincidae Taylor's Lanka Skink (English), *Taylorge Lak Heeraluwa* (Sinhala) Species

Forests and human habitation Under leaf litter, logs, rubble; Sub-fossorial, terrestrial; Up to 1500 m **ENDEMIC** to Sri Lanka Restricted to the central highlands, Sinharaja, Knuckles, Riverston, Gampola, Hantana, Udemuwa, Udawattekale < 20,000 > 2,000 Many; Fragmented Decrease in area < 20% in the last 10 years; Deforestation, Tea plantation; Decrease in quality

Loss of habitat, Habitat fragmentation, Pesticides, Pollution, Trampling, Climate, Fire, Poultry, Predation by cats Yes No

Unknown Unknown Unknown Unknown Declining < 20% in the last 10 years; Predicted decline < 20% in the next 10 years

General field study, Informal field sighting, Literature, Hearsay/popular belief Carl Gans on distribution in 1980s; I. Das and Anslem de Silva in 1995.

VULNERABLECriteriaB1+2bcNot listedNational WL legislationFFPA1998, Vulnerable1996 Red List (IUCN)NoSinharaja, Kunckles, Udawattekele

Survey, Genetic research, Life history studies, Limiting factor research Monitoring Unknown Unknown Unknown Unknown

The ecology of most skink species is poorly known. The genus is endemic to Sri Lanka.

49,77,81

Anslem de Silva, L. Ekenayake, S.S.S. Jasinghe, t. Kapurusinghe, S. Karunarathna, B.Z. Nizam, A. Palihawadane, R. Peris, K. Parameshwaran, H.D. Rathnayake, N.D. Rathnayake, P. Vinobaba Anslem de Silva, A. Jayawickrama, M. Meegaskumbura, R. Somaweera, D. Srinath, N.D. Rathnayaka, K.D.B. Ukuwela

#### Distribution

Habitat of the taxon Habitat specificity

Current distribution (by country) Current Sri Lankan distribution Extent of occurrence (Sq. km.) Area of occupancy (Sq. km) Number of locations/sub pop. Habitat status

#### Threats

Threats to taxon Effect of threat on population Trade

Population numbers Global population Regional Pop (# sub-pop.) Number of mature individuals Generation time Population trends

Data Quality Recent field studies

#### Status

IUCN CITES National Red Data Book Presence in Protected Area

#### Recommendations

Research Management Captive breeding for Captive stocks Level of captive breeding recs. Propagation Techniques

### Other comments

Sources	49, 63
Compilers	Anslem de Silva, L. Ekenayake, S.S.S. Jasinghe, T. Kapurusinghe, S. Karunarathna, B.Z. Nizam, A. Palihawadane, R. Peris, K. Parameshwaran, H.D. Rathnayake, N.D. Rathnayake, P. Vinobaba
Reviewers	Anslem de Silva, A. Jayawickrama, M. Meegaskumbura, R. Somaweera, D. Srinath, N.D. Rathnayaka, K.D.B. Ukuwela

### Mabuya bibronii (Gray, 1833)

*Tiliqua bibronii* Scincidae Bibron's Sand Skink (English), *Vali Hikanala, Lai Hikanala* (Sinhala) Species

Dry zone A terrestrial species frequently in burrows under low vegetation and under decaying coconut leaves especially on sand dunes near the sea. Sri Lanka and India Chundikulam, Mullaitivu, Polonnaruwa, Giritale, Wasgomuwa > 20,000 >2,000 >5. Decrease in area; Deforestation

Unknown Unknown No

Unknown Unknown Unknown Unknown Unknown

Literature None

### DATA DEFICIENT

Not listed 1998, Not threatened Giritale, Wasgomuwa Unknown Habitat management, Captive breeding Education, Research None Pending Unknown

### Distribution

Habitat of the taxon Habitat specificity

Current distribution (by country) Current Sri Lankan distribution Extent of occurrence (Sq. km.) Area of occupancy (Sq. km) Number of locations/sub pop. Habitat status

Threats Threats to taxon

Effect of threat on population Trade

### **Population numbers**

Global population Regional Pop (# sub-pop.) Number of mature individuals Generation time Population trends

Data Quality Recent field studies

### Status

IUCN CITES National Red Data Book Presence in Protected Area

### Recommendations

Research Management Captive breeding for Captive stocks Level of captive breeding recs. Propagation Techniques

#### Other comments

Sources49, 63, 77CompilersAnslem de Silva, L. Ekenayake, S.S.S. Jasinghe, T. Kapurusinghe, S. Karunarathna, B.Z.<br/>Nizam, A. Palihawadane, R. Peris, K. Parameshwaran, H.D. Rathnayake, N.D.<br/>Rathnayake, P. VinobabaReviewersAnslem de Silva, A. Jayawickrama, M. Meegaskumbura, R. Somaweera, D. Srinath, N.D.<br/>Rathnayaka, K.D.B. Ukuweia

All three peneplains Lowland forests and forest clearings, open areas, human habitation. Terrestrial. Up to 1000 m. **ENDEMIC** to Sri Lanka All over Sri Lanka except higher altitudes > 20,000 > 2,000 Many; Fragmented Decreasing in area; Deforestation, Habitat modification

Scincus carinatus, Tiliqua carinata, Euprepes rufescens, Mabuya carinata

Common Skink (English), Sulaba Hikanala (Sinhala); Periya Arene (Tamil)

Mabuya carinata lankae Deraniyagala, 1953

Scincidae

Sub species

Loss of habitat, Habitat fragmentation, Habitat loss due to exotic animals, Pesticides, Pollution, Climate, Predation by exotics, Drought Yes No

Unknown Unknown Unknown Unknown Declining < 20% in the last 10 years

General field study, Informal field sighting, Literature, Hearsay/popular belief None

LOWER RISK - NEAR T	HREATENED Criteria
Not listed	National WL legislation FFPA
Not listed	1996 Red List (IUCN) Not listed
Many	

Survey, Life history studies, Limiting factor research Habitat management, Monitoring, Captive breeding Public awareness None Not required Unknown

#### Distribution

Habitat of the taxon Habitat specificity Current distribution (by country) Current Sri Lankan distribution Extent of occurrence (Sq. km.) Area of occupancy (Sq. km) Number of locations/sub pop. Habitat Status

#### Threats

Threats to taxon Effect of threat on population Trade

### **Population numbers**

Global population Regional Pop (# sub-pop.) Number of mature individuals Generation time Population trends

Data Quality Recent field studies

### Status

IUCN CITES National Red Data Book Presence in Protected Area

### Recommendations

Research Management Captive breeding for Captive stocks Level of captive breeding recs. Propagation Techniques

#### Other comments

Sources

Compilers

Reviewers

### Mabuya floweri Taylor, 1950

*Euprepes brevis* Günther, 1875 Scincidae Taylor's Skink (English), *Taylorge Hikanala* (Sinhala) Species

Coastal areas Coconut groves; Terrestrial. Above 100 m. ENDEMIC to Sri Lanka Trincomalee Unknown Unknown Unknown Decrease in area; War

Loss of habitat, Habitat fragmentation Unknown Unknown

Unknown Unknown Unknown Unknown Unknown

From Taylors' (1950) account only None

#### DATA DEFICIENT Criteria

Not listed National WL legislation FFPA 1998, Vulnerable 1996 Red List (IUCN) Not listed Unknown

Survey, Life history studies, Limiting factor research Habitat management, Monitoring, Captive breeding Public awareness, Education, Research None Initiate programme within 3 years Not known at all

Known only from the type.

118

Anslem de Silva, L. Ekenayake, S.S.S. Jasinghe, T. Kapurusinghe, S. Karunarathna, B.Z. Nizam, A. Palihawadane, R. Peris, K. Parameshwaran, H.D. Rathnayake, N.D. Rathnayake, P. Vinobaba

#### Distribution

Habitat of the taxon Habitat specificity Current distribution (by country) Current Sri Lankan distribution Extent of occurrence (Sq. km.) Area of occupancy (Sq. km) Number of locations/sub pop. Habitat status

### Threats

Threats to taxon Effect of threat on population Trade

### **Population numbers**

Global population Regional Pop (# sub-pop.) Number of mature individuals Generation time Population trends

Data Quality Recent field studies

### Status

IUCN CITES National Red Data Book Presence in Protected Area

### Recommendations

Research Management Captive breeding for Captive stocks Level of captive breeding recs. Propagation Techniques

#### Other comments

Sources

Compilers

Reviewers

#### Mabuya madaraszi Mehely, 1897

Scincidae Spotted Skink (English), *Pulli Hikanala* (Sinhala) Species

Wet and dry zones including human habitation Terrestrial, crevices, leaf litter, under logs; Up to 800 m. **ENDEMIC** to Sri Lanka Throughout the wet and dry zones > 20,000 > 2,000 Many; Contiguous Decrease in area > 20% in the last 10 years. Predicted decrease > 20% in next 10 years; Deforestation; Decrease in quality

Predation by exotics (Cat & poultry), Human interference, Loss of habitat Unknown No

Unknown Unknown Unknown Unknown Declining > 20% in the last 10 years; Predicted decline > 20% in next 10 years

General field study, Informal field sighting, Literature, Hearsay/popular belief Anslem de Silva on distribution

#### VULNERABLE Not listed 1998. Vulnerable

Yes

Criteria ...... A1c+2c National WL legislation ...... FFPA 1996 Red List (IUCN) ...... Not listed

Survey, Genetic research, Life history studies, Limiting factor research Habitat management, Monitoring, Captive breeding Public awareness, Education, Research None Initiate programme after 3 years Unknown

Threats from Domestic poultry, cats, coucal are the major threats to the animal

#### 49,63,101

Anslem de Silva, L. Ekenayake, S.S.S. Jasinghe, T. Kapurusinghe, S. Karunarathna, B.Z. Nizam, A. Palihawadane, R. Peris, K. Parameshwaran, H.D. Rathnayake, N.D. Rathnayake, P. Vinobaba

#### Distribution

Habitat of the taxon Habitat specificity Current distribution (by country) Current Sri Lankan distribution Extent of occurrence (Sq. km.) Area of occupancy (Sq. km) Number of locations/sub pop. Habitat status

Threats Threats to taxon Effect of threat on population Trade

### **Population numbers**

Global population Regional Pop (# sub-pop.) Number of mature individuals Generation time Population trends

Data Quality Recent field studies

### Status

IUCN CITES National Red Data Book Presence in Protected Area

#### Recommendations

Research Management Captive breeding for Captive stocks Level of captive breeding recs. Propagation Techniques

#### Other comments

### Sources

Compilers

**Reviewers** 

Nessia bipes Smith, 1935

Scinicidae Smith's Snake Skink (English), *Smithge Sarpahiraluva* (Sinhala) Species

Intermediate zone forests Under decaying logs, leaf litter, humus. Terrestrial and sub fossorial; 750 m. **ENDEMIC** to Sri Lanka Gammaduwa, Matalipitiya < 5,000 < 500 2; Fragmented Decrease in area; Deforestation, Commercial Plantations; Decrease in quality

Loss of habitat, Habitat fragmentation Yes No

Unknown Unknown Unknown Declining (rate of decline unknown)

Literature, Museum/records Survey by Carl Gans in 1980's

ENDANGERED	Criteria	B1+2bc
Not listed	National WL legislation	. FFPA
1998, Endangered Gammaduwa	1996 Red List (IUCN)	. Not listed

Survey, Genetic research, Life history studies, Limiting factor research Habitat management, Monitoring, Captive breeding Public awareness, Education, Research, Preservation of live genome None Initiate programme within 3 years Not known at all

Studies on distribution and ecology should be carried out

49, 63, 77

Anslem de Silva, L. Ekenayake, S.S.S. Jasinghe, T. Kapurusinghe, S. Karunarathna, B.Z. Nizam, A. Palihawadane, R. Peris, K. Parameshwaran, H.D. Rathnayake, N.D. Rathnayake, P. Vinobaba

#### Distribution

Habitat of the taxon Habitat specificity Current distribution (by country) Current Sri Lankan distribution

Extent of occurrence (Sq. km.) Area of occupancy (Sq. km) Number of locations/sub pop. Habitat status

### Threats

Threats to taxon Effect of threat on population Trade

#### **Population numbers**

Global population Regional Pop (# sub-pop.) Number of mature individuals Generation time Population trends

Data Quality Recent field studies

### Status

IUCN CITES National Red Data Book Presence in Protected Area Natl./Reg. Protection plan

#### Recommendations

Research Management Captive breeding for Captive stocks Level of captive breeding recs. Propagation Techniques

### Other comments

Sources

Compilers

Nessia burton/1 Gray, 1839 Scincidae

Three-toed Snake Skink (English), *Triyanguli Sarpahiraluva* (Sinhala) Species

Wet and dry zone forest, home gardens, plantations Leaf litter and soil, under logs; Up to 1200 m. **ENDEMIC** to Sri Lanka Gampola, Veyangoda, Lunava, Matugama, Pallevela, Kuruvita, Rakvana, Kadugannawa > 20,000 > 2,000 Many; Contiguous Decrease in area > 20% in the last 10 years; Predicted decrease > 20% in next 10 years; Deforestation; Decrease in quality; Agricultural activities

Loss of habitat, Pesticides, Poisoning, Pollution, Fire Unknown No

Unknown Unknown Unknown Unknown Unknown

Literature Carl Gans on distribution in 1980's

LOWER RISK - NEAR THREATENED Criteria ......-Not listed National WL legislation ...... FFPA 1998, Vulnerable 1996 Red List (IUCN) .......... Not listed Sinharaja forest Yes

Survey, Genetic research, Life history studies, Limiting factor research Habitat management, Monitoring, Captive breeding Public awareness, Education, Research Unknown Not required Unknown

Nessia group needs reevaluation of generic positions using biochemical assays

49, 63, 77

Anslem de Silva, L. Ekenayake, S.S.S. Jasinghe, T. Kapurusinghe, S. Karunarathna, B.Z. Nizam, A. Palihawadane, R. Peris, K. Parameshwaran, H.D. Rathnayake, N.D. Rathnayake, P. Vinobaba

Reviewers

#### Distribution

Habitat of the taxon Habitat specificity Current distribution (by country) Current Sri Lankan distribution Extent of occurrence (Sq. km.) Area of occupancy (Sq. km) Number of locations/sub pop. Habitat status

### Threats

Threats to taxon Effect of threat on population Trade

### **Population numbers**

Global population Regional Pop (# sub-pop.) Number of mature individuals Generation time Population trends

Data Quality Recent field studies

#### Status

IUCN CITES National Red Data Book Presence in Protected Area

#### Recommendations

Research Management Captive breeding for Captive stocks Level of captive breeding recs. Propagation Techniques

#### Other comments

Sources

Compilers

### Nessia deraniyagalai Taylor, 1950

Scincidae Deraniyagala's Snake Skink (English); *Deraniyagalage Sarpahiraluva* (Sinhala) Species

Coastal dry zone Terrestrial, leaf litter. Up to 50 m. **ENDEMIC** to Sri Lanka Trincomalee < 100 <10 1 Decrease in area > 20% in the last 10 years; War

Loss of habitat, War Yes No

Unknown Unknown Unknown Declining

Literature, Indirect information Unknown

<b>CRITICALLY ENDANGERED</b>
Not listed
1998, Endangered
Unknown

Criteria	B1+2bc
National WL legislation	FFPA
1996 Red List (IUCN)	Not listed

Survey, Genetic research, Limiting factor research Habitat management, Monitoring, Captive breeding Public awareness, Education, Research None Initiate programme within 3 years Unknown

Known from type only

49,63,118

Anslem de Silva, L. Ekenayake, S.S.S. Jasinghe, T. Kapurusinghe, S. Karunarathna, B.2. Nizam, A. Palihawadane, R. Peris, K. Parameshwaran, H.D. Rathnayake, N.D. Rathnayake, P. Vinobaba

Reviewers

#### Distribution

Habitat of the taxon Habitat specificity Current distribution (by country) Current Sri Lankan distribution Extent of occurrence (Sq. km.) Area of occupancy (Sq. km) Number of locations/sub pop. Habitat status

### Threats

Threats to taxon Effect of threat on population Trade

#### **Population numbers**

Global population Regional Pop (# sub-pop.) Number of mature individuals Generation time Population trends

#### **Data Quality Recent field studies**

### Status

IUCN CITES National Red Data Book Presence in Protected Area

#### Recommendations

Research Management Captive breeding for Captive stocks Level of captive breeding recs. Propagation Techniques

#### Other comments

Sources

Compilers

Anslem de Silva, L Ekenayake, S.S.S. Jasinghe, T. Kapurusinghe, S.

Reviewers

Nessia didactylus (Deraniyagala, 1934)

Acoutius (Nessia) didactylus Deraniyagala, 1934; Nessia didactyla Smith, 1935 Scincidae Two-toed Snake Skink (English), Davayanguli Sarpahiraluva (Sinhala) Species

Sub montane forests and degraded forest patches near tea plantations Sub-fossorial, terrestrial: From 500-1000m ENDEMIC to Sri Lanka Bililegama, Dewatura <100 <10 Few; Fragmented Decrease in area > 20% in the next 10 years; Deforestation; Decrease in quality; Pollution

Loss of habitat, Pollution, Predation by exotics, Fragmentation Yes No

Unknown Unknown Unknown Unknown Predicted decline > 20% in the next 10 years

Literature, Indirect information Carl Gans on distribution in 1980's

**CRITICALLY ENDANGERED** Not listed 1998, Endangered None

Criteria ..... B1+2c National WL legislation ......FFPA 1996 Red List (IUCN) ...... Not listed

Survey, Genetic research, Life history studies Habitat management, Captive breeding Education, Research, Public awareness None Initiate programme within 3 years Unknown

Reproduction biology of all taxa of Nessia group should be conducted

49, 63, 118

Karunarathna, B.Z. Nizam, A. Palihawadane, R. Peris, K. Parameshwaran, H.D. Rathnayake, N.D. Rathnayake, P. Vinobaba

#### Distribution

Habitat of the taxon Habitat specificity Current distribution (by country) Current Sri Lankan distribution Extent of occurrence (Sil. km.) Area of occupancy (Sq. km) Number of locations/sub pop. Habitat status

Threats Threats to taxon Effect of threat on population Trade

### **Population numbers**

Global population Regional Pop (# sub-pop.) Number of mature individuals Generation time Population trends

#### Data Quality Recent field studies

### Status

1UCN CITES National Red Data Book Presence in Protected Area

#### Recommendations

Research Management Captive breeding for Captive stocks Level of captive breeding recs. Propagation Techniques

#### Other comments

Sources

Compilers

Reviewers

#### Nessia hlckanala Deraniyagala, 1940

Anguenisephalus hickanala Deraniyagala, 1940 Scincidae Shark-headed Snake Skink (English); *Morahis Sarpahiraluva* (Sinhala) Species

Dry zone scrub jungle and coconut plantations Sub-fossorial. Under logs, leaf litter. Around 50 m. ENDEMIC to Sri Lanka North-west of Sri Lanka, Pomparippu, Wilpattu < 100 <10 2; Contiguous Decrease in area < 20% in last 10 years; Deforestation, War; Decrease in quality

Loss of habitat, War, Edaphic changes Yes No

Unknown Unknown Unknown Declining < 20% in the last 10 years

Literature, Museum/records, Indirect infromation Unknown

### ENDANGERED

Not listed 1998, Endangered Wilpattu Criteria ......B1+2bc National WL legislation ...... FFPA 1996 Red List (IUCN) ........Not listed

Survey, Genetic research, Life history studies Habitat management, Monitoring, Sustainable utilization, Captive breeding Education, Research, Public awareness None Initiate programme within 3 years Unknown

Locality not accessible due to prevailing civil disturbances

49, 59, 63

Anslem de Silva, L. Ekenayake, S.S.S. Jasinghe, T. Kapurusinghe, S. Karunarathna, B.Z. Nizam, A. Palihawadane, R. Peris, K. Parameshwaran, H.D. Rathnayake, N.D. Rathnayake, P. Vinobaba

### Distribution

Habitat of the taxon Habitat specificity Current distribution (by country) Current Sri Lankan distribution Extent of occurrence (Sq. km.) Area of occupancy (Sq. km) Number of locations/sub pop. Habitat status

#### Threats

Threats to taxon Effect of threat on population Trade

### **Population numbers**

Global population Regional Pop (# sub-pop.) Number of mature individuals Generation time Population trends

Data Quality Recent field studies

### Status

IUCN CITES National Red Data Book Presence in Protected Area

#### Recommendations

Research Management Captive breeding for Captive stocks Level of captive breeding recs. Propagation Techniques

Other comments

Sources

Compilers

Reviewers

### Nessia layardi (Kelaart, 1853)

Acontias layardi Kelaart, 1853 Scincidae Layard's Snakeskink (English), *Leyardge Sarpahiraluva* (Sinhala) Species

Wet zone coastal areas of Coconut plantations Decaying leaf litter, humus, fossoriai; Up to 150 m. **ENDEMIC** to Sri Lanka Millawa (near Kurunegala), Colombo, Lunava, Polgahavela >500 <10 4; Fragmented Rapid urbanization in and around Colombo

loss of habitat, Predation by exotics Unknown No

Unknown Unknown Unknown Unknown Unknown

General field study, Informal field sighting, Literature, Museum/records C. Gans, 1980s.

Not listed 1998, Endangered None	CriteriaB1+2c National WL legislation FFPA 1996 Red List (IUCN)Not listed
Survey Constin research Life	history studies
Monitoring, Captive breeding	
Survey, Genetic research, Life Monitoring, Captive breeding Public awareness, Education, None	

An conservation breeding programme of the *Nessia* group should be carried out. Studies to be carried out early.

49, 63, 76, 77

Anslem de Silva, L. Ekenayake, S.S.S. Jasinghe, T. Kapurusinghe, S. Karunarathna, B.Z. Nizam, A. Palihawadane, R. Peris, K. Parameshwaran, H.D. Rathnayake, N.D. Rathnayake, P. Vinobaba

Scientific name (author; date) Synonyms

Family Common name Taxonomic level of assessment

#### Distribution

Habitat of the taxon Habitat specificity Current distribution (by country) Current Sri Lankan distribution Extent of occurrence (Sq. km.) Area of occupancy (Sq. km) Number of locations/sub pop. Habitat status

Threats

Threats to taxon

Effect of threat on population Trade

Population numbers Global population Regional Pop (# sub-pop.) Number of mature individuals Generation time Population trends

Data Quality Recent field studies

#### Status

IUCN CITES National Red Data Book Presence in Protected Area

Recommendations

Research Management Captive breeding for Captive stocks Level of captive breeding recs. Propagation Techniques

Other comments

Sources

Compilers

Nessia monodactylus (Gray, 1839)

Evesia monodactyla (Gray, 1839), Evesia bellii (Dumeril & Bibron, 1839), Tetrapedos smithii Jan, 1860 Scincidae Toeless Snake Skink (English); Ananguli Sarpahiraluva (Sinhala) Species

Wet zone, sub montane forests and tea plantations Sub-fossorial, Leaf-litter, terrestrial; Up to 1500 m. ENDEMIC to Sri Lanka Uwa and Sabaragamuwa province, Kandy, Nawalapitiya, Deviyaya, Peradeniya < 20,000 < 2,000 Many; Fragmented Decrease in area > 20% in the last 10 years; Deforestation, Human interference, Commercial plantation: Decrease in guality

Loss of habitat, Habitat fragmentation, Pesticides, Climate, Predation by exotics, Human interference Yes No

Unknown Unknown Unknown Declining > 20% in the last 20 years

General field study, Informal field sightings, Literature S. Karanarathne in Gannoruwa; C. Gans, 1980, Island wide.

VULNERABLE Not listed 1998, Endangered Deviyaya Criteria ...... **B1+2bc** National WL legislation ...... FFPA 1996 Red List (IUCN) ........ Not listed

Survey, Genetic research, Life history studies, Limiting factor research Habitat management, Monitoring, Captive breeding Public awareness, Education, Research None Initiate programme after 3 years Unknown

Studies on the biology of this common species and the taxonomy of the montane and lowland populations should be carried out

26, 49, 63, 77, 118

Anslem de Silva, L. Ekenayake, S.S.S. Jasinghe, T. Kapurusinghe, S. Karunarathna, B.Z. Nizam, A. Palihawadane, R. Peris, K. Parameshwaran, H.D. Rathnayake, N.D. Rathnayake, P. Vinobaba

Reviewers

#### Distribution

Habitat of the taxon Habitat specificity Current distribution (by country) Current Sri Lankan distribution

Extent of occurrence (Sq. km.) Area of occupancy (Sq. km) Number of locations/sub pop. Habitat status

#### Threats

Threats to taxon Effect of throat on population Trade

### **Population numbers**

Global population Regional Pop (# sub-pop.) Number of mature individuals Generation time Population trends

Data Quality Recent field studies

#### Status

IUCN CITES National Red Data Book Presence in Protected Area Natl./Reg. Protection plan

### Recommendations

Research Management Captive breeding for Captive stocks Level of captive breeding recs. Propagation Techniques

# Other comments None

Sources 49, 63, 77, 1

Compilers

49, 63, 77, 118 Anslem de Silva, L. Ekenayake, S.S.S. Jasinghe, T. Kapurusinghe, S. Karunarathna, B.Z. Nizam, A. Palihawadane, R. Peris, K. Parameshwaran, H.D. Rathnayake, N.D. Rathnayake, P. Vinobaba

Reviewers

Anslem de Silva

Acontias sarasinorum Muller, 1889 Scincidae Sarasin's Snake Skink (English), Sarasinge Sarpahiraluva (Sinhala) Species

Dry zone scrub jungle areas. Burrowing, terrestrial. Under logs, rubble, leaf litter. **ENDEMIC** to Sri Lanka Maha - Oya, Batticaloa, Lahugala, Kumbukgam Oya, Pogahawela, Dambulla, Pollonnaruva, Galgamuva, Buttala. > 20,000 > 2,000 Many; Fragmented Decline in area > 20% in the last 10 years; Predicted decline > 20% in the next 10 years; Deforestation; Decrease in quality.

Loss of habitat, Habitat fragmentation, Fire, Human interference YOB No

Unknown Unknown Unknown Declining < 20% in the last 10 years; Predicted decline years < 20% in the next 10 years

General field study, Informal field sighting, Literature, Hearsay/popular belief C. Gans, 1990

LOWER RISK-NEAR THREATENED Criteria ...... --Not listed National WL legislation ...... FFPA 1998, Vulnerable 1996 Red List (IUCN) ........Not listed Galgamura Yes

Survey, Genetic research, Life history studies, Limiting factor research Habitat management, Monitoring, Captive breeding Public awareness, Education, Research None Pending Unknown

### Distribution

Habitat of the taxon Habitat specificity Current distribution (by country) Current Sri Lankan distribution Extent of occurrence (Sq. km.) Area of occupancy (Sq. km) Number of locations/sub pop. Habitat Status

#### Threats

Threats to taxon Trade

### **Population numbers**

Global population Regional Pop (# sub-pop.) Number of mature individuals Generation time Population trends

Data Quality Recent field studies

#### Status

IUCN CITES National Red Data Book Presence in Protected Area

#### Recommendations

Research Management Captive breeding for Captive stocks Level of captive breeding recs. Propagation Techniques

Other comments

Sources

Compilers

Reviewers

### Riopa singha (Taylor, 1950)

Scincidae Taylor's Skink (English), *Taylorge Hiraluhikanala* (Sinhala) Species

Arid coastal areas in northeastern Sri Lanka Below 50 m **ENDEMIC** to Sri Lanka Unknown Literature None DATA DEFICIENT Criteria.....-Not listed National WL legislation ...... FFPA 1998, Data Deficient 1996 Red List (IUCN) ..... Not listed Unknown Survey, Genetic research, Life history studies, Limiting factor research Habitat management, Monitoring, Captive breeding Public awareness, Education, Research

None , Initiate programme within 3 years Not known at all

Sufficient data not available. It is hopeful that ongoing studies will provide more details. Known only from the type (*R. Singha*).

### 49,118

Anslem de Silva, L. Ekenayake, S.S.S. Jasinghe, T. Kapurusinghe, S. Karunarathna, B.Z. Nizam, A. Palihawadane, R. Peris, K. Parameshwaran, H.D. Rathnayake, N.D. Rathnayake, P. Vinobaba

### Distribution

Habitat of the taxon Habitat specificity Current distribution (by country) Current Sri Lankan distribution Extent of occurrence (Sq. km.) Area of occupancy (Sq. km) Number of locations/sub pop. Habitat status

### Threats

Threats to taxon Effect of threat on population Trade

#### **Population numbers**

Global population Regional Pop (# sub-pop.) Number of mature individuals Generation time Population trends

### **Data Quality** Recent field studies

### Status

**IUCN** CITES National Red Data Book Presence in Protected Area

#### Recommendations Research

Management Captive breeding for Captive stocks Level of captive breeding recs. Propagation Techniques

Other comments

### Sources

Compilers

B.Z. Nizam, A. Palihawadane, R. Peris, K. Parameshwaran, H.D. Rathnayake, N.D. Rathnayake, P. Vinobaba

**Reviewers** 

# Scincidae Catenated Litter Skink (English), Damwal singitihikanala (Sinhala) Species

Sphenomophus dorsicatenatus Deraniyagala, 1953

Riverine forests, beside streams Terrestrial. Among boulders and decaying vegetation along streams. Up to 500 m. **ENDEMIC** to Sri Lanka Gampola, Alapata, Angammana, Ranmalkanda < 5,000 < 2,000 Unknown Decrease in area; Decrease in habitat > 20% in the last 10 years; Predicted decrease < 20% in the next 10 years; Deforestation; Decrease in quality; Human activities

Loss of habitat, Habitat fragmentation, Predation by exotics, Human interference Unknown No

Unknown Unknown Unknown Unknown Predicted decline > 20% in next 10 years

General field study, Indirect information. Anslem De Silva, around Gampola, on going studies.

### VULNERABLE

Not listed 1998, Critically Endangered Yes

Criteria ......A2c National WL legislation ......FFPA 1996 Red List (IUCN) .....Not listed

Survey, Genetic research, Taxonomic research, Life history studies, Limiting factor research Habitat management, Monitoring, Captive breeding Public awareness, Education, Research None Initiate programme after 3 years Unknown

Revalidation of taxa should be carried out to confirm the genus and species. Threats from poultry. Coucal and domestic cats.

49, 63, 81

Anslem de Silva, L. Ekenayake, S.S.S. Jasinghe, T. Kapurusinghe, S. Karunarathna,

### Sphenomophus dussumieri (Dumeril & Bibron, 1839)

Unknown

Unknown

Peradeniva

Unknown

Unknown

Unknown

Unknown

Unknown

Unknown

Unknown

Unknown

Not listed

Unknown

None

Unknown

DATA DEFICIENT

1998, Endangered

General field studies. Informal studies

< 100

<10

<1

No

Sri Lanka and India

Lugosoma dussumierii Dumeril & Bibron, 1839 Scincidae Dussumier's Litter Skink (English), *Salkasahita Singitihikanala* (Sinhala) Species

### Distribution Habitat of the taxon Habitat specificity Current distribution (by country) Current Sri Lankan distribution Extent of occurrence (Sq. km.) Area of occupancy (Sq. km) Number of locations/sub pop. Habitat Status

#### Threats

Threats to taxon Effect of threat on population Trade

### **Population numbers**

Global population Regional Pop (# sub-pop.) Number of mature individuals Generation time Population trends

### Data Quality Recent field studies

### Status

IUCN CITES National Red Data Book Presence in Protected Area

#### Recommendations

Research Management Captive breeding for Captive stocks Level of captive breeding recs. Propagation Techniques

#### Other comments

Sources

..

Compilers

49,63,81 Anslem de Silva, L. Ekenayake, S.S.S. Jasinghe, T. Kapurusinghe, S. Karunarathna, B.Z. Nizam, A. Palihawadane, R. Peris, K. Parameshwaran, H.D. Rathnayake, N.D. Rathnayake, P. Vinobaba

Collections from Peradeniya and surrounding areas need detail study to examine

Survey, Genetic research, Life history studies, Limiting factor research

Habitat management, Monitoring, Captive breeding

Public awareness, Education, Research

Initiate programme within 3 years

the presence of the species.

Recent studies by C. Gans, 1990 have not reveald the presence of this species

Criteria.....-

National WL legislation ...... FFPA

1996 Red List (IUCN) ..... Not listed

Reviewers

# Distribution

Habitat of the taxon Habitat specificity Current distribution (by country) Current Sri Lankan distribution Extent of occurrence (Sq. km.) Area of occupancy (Sq. km) Number of locations/sub pop. Habitat status

# Threats

Threats to taxon Effect of threat on population Trade

# Population numbers

Global population Regional Pop (# sub-pop.) Number of mature individuals Generation time Population trends

Data Quality Recent field studies

# Status

IUCN CITES National Red Data Book Presence in Protected Area

# Recommendations

Research Management Captive breeding for Captive stocks Level of captive breeding recs. Propagation Techniques

Other comments

## Sources

Compilers

Reviewers

# Sphenomorphus megalops (Annandale, 1906)

Lygosoma (Keneuxia) megalops Annandale, 1906 Scincidae Annandale's Litter Skink (English), Annandalege Singitihikanala (Sinhala) Species

Unknown Up to 500 m ENDEMIC to Sri Lanka Puttalama, Kitulgala <100 <10 2; Fragmented Unknown

Unknown Unknown No

Unknown Unknown Unknown Unknown Unknown

General field studies, Informal field studies Recent studies by C. Gans, 1990 have not revealed the presence of this species.

#### DATA DEFICIENT Not listed 1998, Endangered

Unknown

Criteria.....--National WL legislation ...... FFPA 1996 Red List (IUCN) ...... Not listed

Survey, Genetic research, Life history studies, Limiting factor research Habitat management, Monitoring, Captive breeding Public awareness, Education, Research None Initiate programme within 3 years Unknown

Conduct work to establish the validity of the species

# 2, 49, 63, 81, 114

Anslem de Silva, L. Ekenayake, S.S.S. Jasinghe, T. Kapurusinghe, S. Karunarathna, B.Z, Nizam, A. Palihawadane, R. Peris, K. Parameshwaran, H.D. Rathnayake, P. Vinobaba

Anslem de Silva

#### Sphenomorphus rufogulus Taylor, 1950 Scincidae

Red-throated Litter's Skink (English); *Taylorge Singitihikanala* (Sinhala) Species

Habitat of the taxon Habitat specificity Current distribution (by country) Current Sri Lankan distribution Extent of occurrence (Sq. km.) Area of occupancy (Sq. km) Number of locations/sub pop. Habitat Status

#### Threats

Distribution

Threats to taxon Effect of threat on population. Trade

# **Population numbers**

Global population Regional Pop (# sub-pop.) Number of mature individuals Generation time Population trends

#### Data Quality Recent field studies

#### Status

IUCN CITES National Red Data Book Presence in Protected Area

# Recommendations

Research Management Captive breeding for Captive stocks Level of captive breeding recs. Propagation Techniques

#### Other comments

Sources

Compilers

Reviewers

Coastal forests Northwest of the country Forest floor, leaf litter; Up to 30 m. ENDEMIC to Sri Lanka 12 km. North of Trincomalae <100 <10 1 Unknown

Unknown Unknown No

Unknown Unknown Unknown Unknown Unknown

Unknown Unknown

#### VULNERABLE Not listed

Not listed 1988, Data Deficient Unknown Criteria ...... **D2** National WL legislation ...... FFPA 1996 Red List (IUCN) .......... Not listed

Survey, Genetic research, Life history studies, Limiting factor research Habitat management, Monitoring, Captive breeding Public awareness, Education, Research None Initiate programme within 3 years Unknown

This species is considered as a colour morph of *L. fallax*. Hence needs further study with more samples to establish the validity of S. *rufogulus*.

#### 49,57,81,118

Anslem de Silva, L. Ekenayake, S.S.S. Jasinghe, T. Kapurusinghe, S. Karunarathna, B.Z. Nizam, A. Palihawadane, R. Peris, K. Parameshwaran, H.D. Rathnayake, N.D. Rathnayake, P. Vinobaba

Anslem de Silva

Scientific name (author; date) Sphenomorphus striatopunctatus (Ahl, 1925) Synonyms Lygosoma punctatiolineatum Boulenger, 1907; Lygosoma striatopunctatum Family Scincidae Common name Ahl's Litter Skink (English); Ahlge Singitihikanala (Sinhala) Taxonomic level of assessment Species Distribution Habitat of the taxon Montane forests Habitat specificity Ground dwelling, Above 1,500 m Current distribution (by country) ENDEMIC to Sri Lanka Current Sri Lankan distribution Hakgala, Pattipola, Peradeniya Extent of occurrence (Sq. km.) < 5,000 Area of occupancy (Sq. km) <500 Number of locations/sub pop. 3; Contiguous Habitat status Decrease in area > 20% in the last 10 years; Predicted decline over years > 20% in the next 10 years; Decrease in quality; Agricultural activities. Threats Loss of habitat, Habitat fragmentation, Pesticides, Poisoning, Pollution, Climate, Threats to taxon Edaphic changes, Fire, Drought, Human Interference. Effect of threat on population Yes Trade No **Population numbers** Global population Unknown Regional Pop (# sub-pop.) Unknown Number of mature individuals Unknown Generation time Unknown Population trends Declining > 20% in the last 10 years: Predicted decline over years > 20% in the next 10 years **Data Quality** General field study, Informal field sighting, Literature, Hearsay/popular belief **Recent field studies** None Status ENDANGERED IUCN CITES Not listed National WL legislation ......FFPA 1996 Red List (IUCN) ..... Not listed National Red Data Book 1998, Endangered Presence in Protected Area Yes. Hakgala Recommendations Research Survey, Genetic research, Life history studies, Limiting factor research Habitat management, Monitoring, Captive breeding Management Public awareness, Education, Research Captive breeding for Captive stocks None Level of captive breeding recs. Initiate programme within 3 years Propagation Techniques Unknown Other comments This species need to be studied with more specimens to establish its validity. Greer (1991) has synonymised it under Lankascincus taprobanensis. Sources 15, 42, 49, 63, 81, 118 Anslem de Silva, L. Ekenayake, S.S.S. Jasinghe, T. Kapurusinghe, S. Compilers Karunarathna, B.Z. Nizam, A. Palihawadane, R. Peris, K. Parameshwaran, H.D. Rathnayake, N.D. Rathnayake, P. Vinobaba **Reviewers** Anslem de Silva

#### Distribution

Habitat of the taxon Habitat specificity

Historical distribution Current distribution (by country) Current Sri Lankan distribution Extent of occurrence (Sq. km.) Area of occupancy (Sq. km) Number of locations/sub pop. Habitat status

#### Threats

Threats to taxon Effect of threat on population Trade Effect of trade on population

### **Population numbers**

Global population Regional Pop (# sub-pop.) Number of mature individuals Generation time Population trends

Data Quality Recent field studies

Status

IUCN CITES National Red Data Book Presence in Protected Area

#### Recommendations

Research Management Captive breeding for Captive stocks Level of captive breeding recs, Propagation Techniques

Other comments

Sources

Compilers

Varanus bengalensis (Daudin, 1802)

Lacerta dracaena Linn., 1766; Tupinambis cepedianus Daudin 1802 Varanidae Land Monitor (English); Talagoya (Sinhala) Species

Terrestrial, mainly low land plantations, scrub jungle and human habitation. Terrestrial, arboreal. Tree holes and burrows in urban areas usually inside ceilings. Up to 400 m. India, Sri Lanka India, Sri Lanka Many places in low country and mid country > 20,000 > 2,000 Many; Contiguous Stable In area. Predicted habitat decline < 20% in the next 10 years; Habitat loss, Encroachment; Decrease in quality

Hunting for food, Loss of habitat, Habitat fragmentation No Flesh; Eggs for consumption. Domestic and Commercial trade Unknown

Unknown Unknown (Unknown) > 2,500 Unknown Presently stable; Predicted decline < 20% in the next 10 years

General field study, Informal field sighting Eric Wikramanayake, in Udawalawa from 1995; Anslem de Silva and Maren Gaulke in dry zone and wet zone, 1996 ongoing; Nimal Rathnayake and Kalinga, ongoing research in Kandy

Survey, Life history studies Habitat management, Monitoring, Captive breeding Education, Research Nil Initiate programme after 3 years Some techniques known for taxon or similar taxa

This species is very helpful in controling the coconut beatle. This animal is extensively hunted in some parts of Sri Lanka and sold for Rupees 100 - 300 per specimen for flesh.

16,18,41,49,63,66,67,68

Anslem de Silva, L. Ekenayake, S.S.S. Jasinghe, T. Kapurusinghe, S. Karunarathna, B.Z. Nizam, A. Palihawadane, R. Peris, K. Parameshwaran, H.D. Rathnayake, N.D. Rathnayake, P. Vinobaba

Reviewers

Anslem de Silva

Distribution Habitat of the taxon

Habitat specificity Current distribution (by country) Current Sri Lankan distribution Extent of occurrence (Sq. km.) Area of occupancy (Sq. km) Number of locations/sub pop. Habitat status

#### Threats

Threats to taxon Effect of threat on population Trade Effect of trade on population

### **Population numbers**

Global population Regional Pop (# sub-pop.) Number of mature individuals Generation time Population trends

**Data Quality Recent field studies** 

#### Status

**IUCN** CITES National Red Data Book Presence in Protected Area

### Recommendations

Research Management Captive breeding for Captive stocks Level of captive breeding recs. **Propagation Techniques** 

Other comments

Sources

Compilers

Anslem de Silva, L. Ekenayake, S.S.S. Jasinghe, T. Kapurusinghe, S. Karunarathna, B.Z. Nizam, A. Palihawadane, R. Peris, K. Parameshwaran, H.D. Rathnayake, N.D. Rathnayake, P. Vinobaba

**Reviewers** 

Anslem de Silva

Varanus salvator kabaragoya (Deraniyagala, 1947)

Lacerta monitor Linn., 1758; Stellio salvator Laurenti, 1768 Varanidae Water Monitor (English), Kabaragoya (Sinhala) Sub species

Brackish and fresh water habitats mainly in low lands, estuaries, mangroves, rivers and streams Semi aquatic river, stream banks, paddy fields, ponds and tanks; Up to 800 m **ENDEMIC** to Sri Lanka Low country wet zone and dry zone mid country up to 800 m. > 20,000 > 2,000 Many; Contiguous Increase in area; about 20%; New reservoirs, Paddy field, more garbage

Hunting for medicine, Pesticides None Skin trade was banned in 1937 None

Unknown Unknown (Unknown) > 2500 Average 10 years Declining < 20% in the last 3 generations: Predicted decline > 20% in next 3 generation

General field study, Literature, Hearsay/popular belief Rom Whitaker in late 1970's; Eric Wickramanayake from mid 1980's; Anslem de

Silva and Maren Gaulke in Kandy and Giritale,1996 and on going. N. D. Rathnayake, on going.

VULNERABLE	Criteria	A2bd
Not listed	National WL legislation	FFPA
Not listed	1996 Red List (IUCN)	Not listed
Yes (Giritale)		

Survey, Taxonomic research, Life history studies, Epidemiology Habitat management, Monitoring, Captive breeding Public awareness, Education, Research None Initiate programme after 3 years Some techniques for taxon or similar taxa

Predator of agricultural pests.

16, 20, 26, 49

Conservation Assessment and Management Plan for Amphibians and Reptiles of Sri Lanka - Report

#### Distribution

Habitat of the taxon Habitat specificity Current distribution (by country) Current Sri Lankan distribution

Extent of occurrence (Sq. km.) Area of occupancy (Sq. km.) Number of locations/sub pop. Habitat status

#### Threats

Threats to taxon Effect of threat on population Trade Effect of trade on population

# **Population numbers**

Global population Regional Pop (# sub-pop.) Number of mature individuals Generation time Population trends

#### Data Quality Recent field studies

#### Status

IUCN CITES National Red Data Book Presence in Protected Area

#### Recommendations

Research Management Captive breeding for Captive stocks Level of captive breeding recs. Propagation Techniques

# Other comments

Sources	33,51,64
Compilers	K.E. Abeysiriwardana, B.A. Daniel, Anslem de Silva, P. de Silva, J.L. Ferdinando, K. Ganegama, K.K. Hewamathes, N.D. Herath, A. Jayawickrama, S.S.S. Jayasinghe, L.G. Jayasoorya, S.A. Lasantha, P.G.D.R. Premasiri, D. Srinath, L.K. Rathnayake, VAM.P.K. Samarawickrama, R.K. Somaweera, S. Wijewardhana
Reviewers	Anslem de Silva, R.K. Somaweera, K.D.B. Ukuwela

Eryx conica brevis (Deraniyagala, 1951)

Boa conica Schneider, 1796; Gongylophis conicus Deraniyagala, 1936 Boidae Sand Boa (English), Vali pimbura, Kota pimbura (Sinhala) Sub species

Coastal area, dry zone forest, arid zone location Leaf litter, under logs in scrub land forests. Terrestrial, sub fossorial. Up to 50 m. ENDEMIC to Sri Lanka Chavakacheri (Northern province), Panama, Mannar (Northwestern province), Trincomalee (Eastern province), Yale, Matara, Mahiyangana > 20,000 > 2,000 Few; Contiguous Decrease in area > 20% in the last 10 years, Decrease in quality, Cultivation and land reforming are the primary cause of change

Loss of habitat, Habitat fragmentation, Pollution, War, Fire Yes Domestic, Commercial; Pet trade Unknown

Unknown Unknown Unknown Predicted decline > 20% in the next 20 years

Informal field sightings, Literature None

LOWER RISK-NEAR THREATENEDCriteria--Not listedNational WL legislation--1998, Vulnerable1996 Red List (IUCN)Not listedYala, Wilpattu----

Survey, Life history studies Habitat management, Monitoring, Captive breeding Public awareness, Education, Research None Initiate programme after 3 years Techniques not known at all Scientific name (author; date) Synonyms

Family Common name Taxonomic level of assessment

#### Distribution

Habitat of the taxon Habitat specificity

Current distribution (by country) Current Sri Lankan distribution Extent of occurrence (Sq. km.) Area of occupancy (Sq. km.) Number of locations/sub pop. Habitat status

Threats

Threats to taxon

Effect of threat on population Trade

# **Population numbers**

Global population Regional Pop (# sub-pop.) Number of mature individuals Generation time Population trends

# Data Quality Recent field studies

#### Status

IUCN CITES National Red Data Book Presence in Protected Area

#### Recommendations

Research Management Captive breeding for Captive stocks Level of captive breeding recs. Propagation Techniques

Other comments

Sources

Compilers

Reviewers

#### Aspidura brachyorrhos (Boie, 1758)

Scytale brachyorrhos Boie, 1827; Calamari scytale (Boie, 1827); Aspidura brachyorrhos Boulenger, 1890 Colubridae Boie's Roughside (English), *Lemadilla* (Sinhala) Species

Throughout the wet zone, sub montane forests except the coastal areas Sub-fossorial, Leaf litter, under decaying logs, loose soil and Humid paddy fields; about 250-900 m. **ENDEMIC** to Sri Lanka Gampola, Weligalla, Peradeniya, Kandy (Central province), Dambulla < 20,000 > 2,000 Many; Fragmented Decrease in area > 20% in the last 10 years, Pesticides, Cultivation, Clearing the garden are the primary cause of change, Decrease in quality, Urbanization

Loss of habitat, Habitat fragmentation, Pesticides, Poisoning, Pollution, Predation, Ploughing Yes Unknown

Unknown Unknown Unknown Unknown Predicted decline > 20% in the next 10 years

Literature, Informal field sightings R.K. Somaweera in Menkdena, Dambglla, August 1994-98; K. Ukuwela in Kandy, 1998. C. Gans in mid 1970s, island-wide survey.

VULNERABLE	Criteria	A2c; B1+2bc
Not listed	National WL legislation	.FFPA
1998, Vulnerable	1996 Red List (IUCN)	. Not listed
Gammaduwa, Knuckles, Sinharaja, Udawatthakale.		

Survey, Taxonomic research, Life history studies Habitat management, Wild population management, Monitoring, Captive breeding Education, Research None Initiate programme after 3 years Techniques not known at all

This snake is often met inside houses and compounds in Gampola, Peradeniya and Kandy area and killed by people as they consider it venomous (Anslem de Silva).

33,51,56,78,124

K.E. Abeysiriwardana, B.A. Daniel, Anslem de Silva, P. de Silva, J.L. Ferdinando, K. Ganegama, K.K. Hewamathes, N.D. Herath, A. Jayawickrama, S.S.S. Jayasinghe, L.G. Jayasoorya, S.A. Lasantha, P.G.D.R. Premasiri, D. Srinath, L.K. Rathnayake, V.A.M.P.K. Samarawickrama, R.K. Somaweera, S. Wijewardhana

# Distribution

Habitat of the taxon Habitat specificity Current distribution (by country) Current Sri Lankan distribution Extent of occurrence (Sq. km.) Area of occupancy (Sq. km.) Number of locations/sub pop. Habitat status

Threats

Threats to taxon

Effect of threat on population Trade

# **Population numbers**

Global population Regional Pop (# sub-pop.) Number of mature individuals Generation time Population trends

Data Quality Recent field studies

#### Status

IUCN CITES National Red Data Book Presence in Protected Area

#### Recommendations

Research Management Captive breeding for Captive stocks Level of captive breeding recs. Propagation Techniques

#### Other comments

Sources

Compilers

Reviewers

#### Aspidura copei Günther, 1864

Colubridae Cope's Roughside (English), *Kalu medilla* (Sinhala) Species

Upper montane forests and plantations Leaf litter, under decaying logs - Sub-fossorial, Up to 2,001 m. ENDEMIC to Sri Lanka Dikoya, Dimbulla (Central province), Balangoda (Sabaragamuwa province) < 20,000 <500 Few; Fragmented Decrease in area > 20% in the last 25 years, Agriculture, plantations and overuse of fertilizer is the primary cause of change, Decrease in quality

Loss of habitat, Habitat fragmentation, Pesticides, Poisoning, Pollution, Climate, Drought, Forest burning and clearing, Ploughing Yes No

Unknown Unknown Unknown Predicted decline > 20% in the next 10 years

Informal field sightings, Literature C. Gans in mid 1970's

# ENDANGERED

Not listed 1998, Vulnerable Horton plains, Peak Wilderness Criteria ......**B1+2bc** National WL legislation ......FFPA 1996 Red List (IUCN) ......Not listed

Survey, Taxonomic research, Life history studies Habitat management, Captive breeding Education, Research None Initiate programme after 3 years Information not available with this group of Compilers

Captive breeding is recommended for Research and Education purpose

33,51,56,78,124

K.E. Abeysiriwardana, B.A. Daniel, Anslem de Silva, P. de Silva, J.L. Ferdinando, K. Ganegama, K.K. Hewamathes, N.D. Herath, A. Jayawickrama, S.S.S. Jayasinghe, L.G. Jayasoorya, S.A. Lasantha, P.G.D.R. Premasiri, D. Srinath, L.K. Rathnayake, V.A.M.P.K. Samarawickrama, R.K. Somaweera, S. Wijewardhana

#### Distribution

Habitat of the taxon Habitat specificity Current distribution (by country) Current Sri Lankan distribution Extent of occurrence (Sq. km.) Area of occupancy (Sq. km.) Number of locations/sub pop. Habitat status

Threats Threats to taxon

Effect of threat on population Trade

#### **Population numbers**

Global population Regional Pop (# sub-pop.) Number of mature individuals Generation time Population trends

#### Data Quality Recent field studies

# Status

IUCN CITES National Red Data Book Presence in Protected Area

#### Recommendations

Research Management Captive breeding for Captive stocks Level of captive breeding recs. Propagation Techniques

#### Other comments

Sources

Compilers

Reviewers

Deraniyagala's Roughside (English), *Kandu madilla* (Sinhala) Species Dry mixed agricultural irrigated land Leaf litter, Under decaying logs, Sub-fossorial, 1000 -1520 m. **ENDEMIC** to Sri Lanka Kanwerella, Pindarawatte (Ura province). All above 1000 m. in Namunukulla. <100 <100 Few; Fragmented Decrease in area < 20% in the last 20 years, Agriculture, Decrease in quality

Loss of habitat, Habitat fragmentation, Pesticides, Poisoning, Pollution, Climate, Drought, Fire, Ploughing Yes No

Unknown Unknown Unknown Predicted decline > 20% in the next 10 years

Aspidura deraniyagalae Gans & Fetcho, 1982

Colubridae

Literature, Museum/records C. Gans, in mid 1970s

CRITIALLY ENDANGERED Not listed Critically Endangered Unknown

Survey, Life history studies Habitat management, Monitoring, Captive breeding Public awareness, Education, Research None Initiate programme after 3 years Information not available with this group of Compilers

Lays 2-4 eggs. Non venomous snake.

33,51,78,124

K.E. Abeysiriwardana, B.A. Daniel, Anslem de Silva, P. de Silva, J.L. Ferdinando, K. Ganegama, K.K. Hewamathes, N.D. Herath, A. Jayawickrama, S.S.S. Jayasinghe, L.G. Jayasoorya, S.A. Lasantha, P.G.D.R. Premasiri, D. Srinath, L.K. Rathnayake, V.A.M.P.K. Samarawickrama, R.K. Somaweera, S. Wijewardhana

#### Distribution

Habitat of the taxon Habitat specificity Current distribution (bycountry) Current Sri Lankan distribution Extent of occurrence (Sq. km.) Area of occupancy (Sq. km.) Number of locations/sub pop. Habitat status

### Threats

Threats to taxon Effect of threat on population Trade

#### **Population numbers**

Global population Regional Pop (# sub-pop.) Number of mature individuals Generation time Population trends

Data Quality Recent field studies

### Status

IUCN CITES National Red Data Book Presence in Protected Area

#### Recommendations

Research Management Captive breeding for Captive stocks Level of captive breeding recs. Propagation Techniques

#### Other comments

Sources

Compilers

**Reviewers** 

Colubridae Drummond-Hay's Rough side (English), *Ketiwalmadilla* (Sinhala) Species Wet zone 3rd Peneplain, wet rain forest Leaf litter, Under decaying logs. Sub fossorial. Up to 1,040 m **ENDEMIC** to Sri Lanka Balangoda, Sinharaja (Sabaragamuwa province), Deniyaya (Southern province) < 5,000

3; Fragmented Decrease in area < 20% in the next 15 years. Agriculture, Husbandry, Tea land redevelopment is the primary cause of change

Loss of habitat, Habitat fragmentation, Pesticides, Pollution, Poisoning Yes No

Unknown Unknown Unknown Predicted decline < 20% in the next 15 years

Aspidura drummond-hayi Boulenger, 1904.

Literature, Museum, records C. Gans in mid 1970's

ENDANGERED	
Not listed	
Endangered	
Sinharaja	

< 2,000

Criteria ......B1+2bc National WL legislation ...... FFPA 1996 Red List (IUCN) ........Not listed

Survey, Life history studies Habitat, management, Monitoring, Captive breeding Public awareness, Education, research None Initiate programme after 3 years Information not available with this group of compilers

Ecology of this non venomous snake is not known.

14,33,51,78,124

K.E. Abeysiriwardana, B.A. Daniel, Anslem de Silva, P. de Silva, J.L. Ferdinando, K. Ganegama, K.K. Hewamathes, N.D. Horath, A. Jayawickrama, S.S.S, Juyuainghe, L.G. Jayasoorya, S.A. Lasunlhu, P.G.D.R. Premasirl, D. Srinath, L.K. Rathnayake, V.A.M.P.K. Samarawickrama, R.K. Somaweera, S. Wijewardhana

#### Distribution

Habitat of the taxon Habitat specificity

Current distribution (by country) Current Sri Lankan distribution Extent of occurrence (Sq. km.) Area of occupancy (Sq. km.) Number of locations/sub pop.

Habitat status

Threats Threats to taxon

Effect of threat on population Trade

# **Population numbers**

Global population Regional Pop (# sub-pop.) Number of mature individuals Generation time Population trends

#### Data Quality Recent field studies

#### Status

IUCN CITES National Red Data Book Presence in Protected Area

#### Recommendations

Research Management Captive breeding for Captive stocks Level of captive breeding recs. Propagation Techniques

#### Other comments

#### Sources

Compilers

33,51,56,64,78,124

K.E. Abeysiriwardana, B.A. Daniel, Anslem de Silva, P. de Silva, J.L. Ferdinando, K. Ganegama, K.K. Hewamathes, N.D. Herath, A. Jayawickrama, S.S.S. Jayasinghe, L.G. Jayasoorya, S.A. Lasantha, P.G.D.R. Premasiri, D. Srinath, L.K. Rathnayake, V.A.M.P.K. Samarawickrama, R.K. Somaweera, S. Wijewardhana

Reviewers

#### Aspidura guentheri Ferguson, 1876

Colubridae Günther's Roughside (English), *Kudamadilla* (Sinhala), Species

Wet zone, 1st Peneplane, Lowland forests Leaf litter & loose soil. Sub-fossorial, Nocturnal, under leaf litter and rocks. Upto 500m ENDEMIC to Sri Lanka Matugama, Rathnapura, Kosgama, Deniyaya (southern province) < 20,000 > 2,000 Few; Fragmented Decrease in area > 20% in the last 15 years, Decrease in quality, Agriculture, developing minor export crops are the primary cause of change

Loss of habitat, Habitat fragmentation, Pesticides, Poisoning, Climate, Drought, Forest burning, Ploughing Yes No

Unknown Unknown Unknown Predicted decline > 20% in the next 15 years

# Informal field sighting, Literature/Museum/records C. Gans in mid 1970's

VULNERABLE Not listed Vulnerable	Criteria National WL legislation 1996 Red List (IUCN)	.FFPA
Unknown		

Survey, Life history studies Habitat management, Monitoring, Captive breeding Public awareness, Education, Research No Initiate programme after 3 years Information not available with this group of Compilers

Anslem de Silva, R.K. Somaweera, K.D.B. Ukuwela

Found in smaller colonies. Feeds on earthworms. The gravid female carry 1 to 2 eggs. These are small non poisonous snakes.

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#### Distribution

Habitat of the taxon Habitat specificity Current distribution (by country) Current Sri Lankan distribution

Extent of occurrence (Sq. km.) Area of occupancy (Sq. km.) Number of locations/sub pop. Habitat status

#### Threats

Threats to taxon

Effect of threat on population Trade

# **Population numbers**

Global population Regional Pop (# sub-pop.) Number of mature individuals Generation time Population trends

#### **Data Quality** Recent field studies

#### Status

**IUCN** CITES National Red Data Book Presence in Protected Area

#### Recommendations

Research Management Captive breeding for Captive stocks Level of captive breeding recs. Propagation Techniques

#### Other comments

Sources

Compilers

Reviewers

#### Aspidura trachyprocta Cope, 1860

Aspidura brachyorrhos, A. scytale Colubridae Common Roughside (English), Dalawa madilla (Sinhala) Species

Upper montane forests and plantations Leaf litter, under decaying logs and loose soil. Fossorial. 750-2100 m. ENDEMIC to Sri Lanka Hakgala, Nuwura Eliya, Horton Plains, Thalawakele, Ambelwela, Pattipola, Gammaduwa, Thangamale, Knuckles 20,000 > 2,000 > Many: Contiguous Decrease in area > 20% in the last 20 years, Decrease in quality, Drought, Agriculture are the primary cause of change

Loss of habitat, Habitat fragmentation, Pesticides, Poisoning, Climate, Drought, Road kills, Agriculture, Forest fire Yes No

Unknown Unknown Unknown Unknown Predicted decline > 20% in the next 10 years

Informal field sightings. Literature/museum/records C.N.B. Bambaradeniya and Ranawana in Horton plains and Hakgala, 1995; Faunal survey of montane zone PA - GEF; Anslem de Silva in Horton plains, 1998, Zoological Survey; Gans in mid 1970's

VULNERABLE Criteria ..... A2c Not listed National WL legislation ...... FFPA 1996 Red List (IUCN) ...... Not listed 1998. Vulnerable Hakgala, Horton Plains, Knuckles, Thangamale

Survey, Life history studies Habitat management, Monitoring, Captive breeding Education, Research None Initiate programme after 3 years Information not available with this group of Compilers

Non venomous, Nocturnal. Feeds on earthworms and readly accept in captivity

### 33, 51, 56, 64, 78, 124

K.E. Abeysiriwardana, B.A. Daniel, Anslem de Silva, P. de Silva, J.L. Ferdinando, K. Ganegama, K.K. Hewamathes, N.D. Herath, A. Jayawickrama, S.S.S. Jayasinghe, L.G. Jayasoorya, S.A. Lasantha, P.G.D.R. Premasiri, D. Srinath, L.K. Rathnayake, V.A.M.P.K, Samarawickrama, R.K. Somaweera, S. Wijewardhana

Scientific name (author; date) Synonyms

Family Common name Taxonomic level of assessment

#### Distribution

Habitat of the taxon Habitat specificity Current distribution (by country) Current Sri Lankan distribution

Extent of occurrence (Sq. km.) Area of occupancy (Sq. km.) Number of locations/sub pop. Habitat status

#### Threats

Threats to taxon

Effect of threat on population Trade

# **Population numbers**

Global population Regional Pop (# sub-pop.) Number of mature individuals Generation time Population trends

#### Data Quality Recent field studies

#### Status

IUCN CITES National Red Data Book Presence in Protected Area

### Recommendations

Research Management Captive breeding for Captive stocks Level of captive breeding recs. Propagation Techniques

Other comments

Sources

Compilers

Reviewers

# Belanophis ceylonensis (Günther, 1858)

*Tropidonotus chrysargus* (Günther, 1853); *Tropidonotus ceylonensis* (Günther, 1864); *Amphiesma ceylonensis* (Wall, 1921); *Belanophis ceylonensis* (Smith, 1938) Colubridae Blossom Krait, Sri Lanka Keelback (English), *Malkarawala, Nihaluwa* (Sinhala) Species

Low land and sub montane forests and rain forests Leaf litter, Terrestrial and under logs **ENDEMIC** to Sri Lanka Uva province, Lenoc estate, Bandarawella, Labugama, Peradeniya, Udugama, Deniyaya, Sinharaja, Kalupana, (Knuckles, Kottawa), Yatiyanthota, Balangoda, Kuruvita, Pallmadulla and Sinharaja rain forest, Peak Wilderness, Knuckles range > 20,000 > 2,000 Many; Fragmented

Decrease in area > 20% in the last 10 years, Decrease in quality, Agriculture, Human settlements are primary cause of change

Loss of habitat, Habitat fragmentation, Pesticides, Poisoning, Pollution, Climate, Drought, Man made fire Yes No

Unknown Unknown Unknown Predicted decline < 20% in the next 10 years

Informal field sightings, Literature, Museum, records, Hearsay/Popular belief Anslem de Silva in most locations, late 1980's, Ecology

LOWER RISK-NEAR THREATENED Criteria......-Not listed National WL legislation ...... FFPA Endangered 1996 Red List (IUCN) ......Not listed Sinharaja , Knuckles, Peak Wilderness

Survey, Life history studies Habitat management, Monitoring, Captive breeding Public awareness, Education, Research None Not recommended Techniques not known at all

This is an oviparous snake and mainly feeds on frogs. It is important to study its venom. Atmospheric moisture is important for the survival of this species.

K.E. Abeysiriwardana, B.A. Daniel, Anslem de Silva, P. de Silva, J.L. Ferdinando, K. Ganegama, K.K. Hewamathes, N.D. Herath, A. Jayawickrama, S.S.S. Jayasinghe, L.G. Jayasoorya, S.A. Lasantha, P.G.D.R. Premasiri, D. Srinath, L.K. Rathnayake, V.A.M.P.K. Samarawickrama, R.K. Somaweera, S. Wijewardhana

Anslem de Silva, R.K. Somaweera, K.D.B. Ukuwela

33, 51, 56, 67

# Distribution

Habitat of the taxon Habitat specificity

Current distribution (by country) Current Sri Lankan distribution Extent of occurrence (Sq. km.) Area of occupancy (Sq. km.) Number of locations/sub pop. Habitat status

Threats Threats to taxon

Effect of threat on population Trade

# **Population numbers**

Global population Regional Pop (# sub-pop.) Number of mature individuals Generation time Population trends

Data Quality Recent field studies

# Status

IUCN CITES National Red Data Book Presence in Protected Area

#### Recommendations

Research Management Captive breeding for Captive stocks Level of captive breeding recs. Propagation Techniques

Other comments

# Sources

Compilers

Reviewers

# Boiga barnesii (Günther, 1869)

Dipsias barnesii (Günther, 1869) Colubridae Barne's Cat Snake (English), *Panduru mapila* (Sinhala), Species

Rainforest in wet zone Rock and tree crevices and leaf litter. Arboreal, Nocturnal. Up to 500 m. **ENDEMIC** to Sri Lanka Matale, Kandy, Balangode, Labugama, Sinharaja < 20,000 <500 Few; Fragmented Decrease in area > 20% in the last 20 years

Loss of habitat, Pesticides, Poisoning, Pollution, Climate, Drought, Man made fire Hunting Yes No

Unknown Unknown Unknown Unknown Decline > 20% in the last 10 years; Predicted decline > 20% in the next 10 years

Informal field sighting, Literature, Museum, records. Anslem de Silva in Kandy from late 1980's, ecology.

# ENDANGERED

Not listed 1998, Vulnerable Udawattakele, Sinharaja

33, 51, 56, 64, 91,124

Criteria ......**B1+2bc** National WL legislation ...... FFPA 1996 Red List (IUCN) ........ Not listed

Survey, Life history studies Habitat management, Monitoring, Captive breeding Public awareness, Education, Research None Initiate programme within 3 years Techniques known for this taxon or similar taxon

Feeds on Geckos and other small lizards, it often decends to the ground. Nothing is known of its reproductive habits. This species is considered venomous and is killed. During the day it hides under decaying vegetations, rocks, ledges, hollow tree limbs and underneath barks.

K.E. Abeysiriwardana, B.A. Daniel, Anslem de Silva, P. de Silva, J.L. Ferdinando, K. Ganegama, K.K. Hewamathes, N.D. Herath, A. Jayawickrama, S.S.S. Jayasinghe, L.G. Jayasoorya, S.A. Lasantha, P.G.D.R. Premasiri, D. Srinath, L.K. Rathnayake, V.A.M.P.K. Samarawickrama, R.K. Somaweera, S. Wijewardhana

#### Distribution

Habitat of the taxon Habitat specificity Current distribution (by country) Current Sri Lankan distribution

Extent of occurrence (Sq. km.) Area of occupancy (Sq. km.) Number of locations/sub pop. Habitat status

#### Threats

Threats to taxon Effect of threat on population Trade

### **Population numbers**

Global population Regional Pop (# sub-pop.) Number of mature individuals Generation time Population trends

#### **Data Quality Recent field studies**

## Status

**IUCN** CITES National Red Data Book Presence in Protected Area

#### Recommendations

Research Management Captive breeding for Captive stocks Level of captive breeding recs. Propagation Techniques

#### Other comments

	be conducted.
Sources	33, 34, 51, 64,124
Compilers	K.E. Abeysiriwardana, B.A. Daniel, Anslem de Silva, P. de Silva, J.L. Ferdinando, K. Ganegama, K.K. Hewamathes, N.D. Herath, A. Jayawickrama, S.S.S. Jayasinghe, L.G. Jayasoorya, S.A. Lasantha, P.G.D.R. Premasiri, D. Srinath, L.K. Rathnayake, V.A.M.P.K. Samarawickrama, R.K. Somaweera, S. Wijewardhana
Reviewers	Anslem de Silva, R.Somaweera and K.D.B. Ukuwela.

# Calliophis melanurus sinhaleyus Deraniyagala, 1951

Coluber melanurus (Shaw, 1802) Colubridae Sri Lankan Coral Snake (English), Depathkaluwa (Sinhala) Subspecies

Intermediate and low country scrub jungle areas Leaf litter, loose sand, under logs. Sub fossorial. Up to 300 m. ENDEMIC to Sri Lanka Matale, Galle, Kataragama, Chillaw, Serukella, Anuradhapura, Mihintale, Kathale, Balangada, Andigama > 20,000 > 2,000 Many; Fragmented Decrease in area > 20% in the last 10 years; Agriculture, development

Loss of habitat, Habitat fragmentation, Hunting, Fire, Predation Unknown No

Unknown Unknown Unknown Unknown Predicted decline > 20% in the next 10 years

Informal field sighting, Literature/ Museum/ records Anslem de Silva, island-wide, on going study on distribution, ecology and bite

VULNERABLE Criteria .....A2c National WL legislation ......FFPA Not listed Not threatened 1996 Red List (IUCN) ...... Not listed Wilpattu National Park, Sinharaja forest reserve, Yala

Survey, Taxonomic research, Life history studies Habitat management, Wild population management, Monitoring, Captive breeding Species recovery None Initiate programme within 3 years Information not available with this group of compilers

Earlier considered a rare snake due to its secretive nature. Its bite causes local reactions. DNA studies from southern Indian and Sri Lankan specimen should he conducted

Conservation Assessment and Management Plan for Amphibians and Reptiles of Sri Lanka - Report

Scientific name (author; date) Synonyms Family Common name Taxonomic level of assessment Distribution Habitat of the taxon Habitat specificity Current distribution (by country) Current Sri Lankan distribution Extent of occurrence (Sq. km.) Area of occupancy (Sq. km.) Number of locations/sub pop. Habitat status

# Threats

Threats to taxon

Effect of threat on population Trade **Population numbers** Global population Regional Pop (# sub-pop.) Number of mature individuals Generation time Population trends **Data Quality Recent field studies** Status **IUCN** CITES National Red Data Book Presence in Protected Area Recommendations Research Management Captive breeding for Captive stocks Level of captive breeding recs. Propagation Techniques Other comments

Sources Compilers

Reviewers

# Cercaspis carinata (Kuhl, 1820)

Hurria carinata, Lycodon carinatus (Kuhl, 1820) Colubridae Sri Lanka Wolf Snake (English), Dhara radanakaya (Sinhala), Species Moist and rain forest dwellers Leaf litter, rock crevises, decaying logs. Nocturnal. Up to 1500m ENDEMIC to Sri Lanka Galle, Rathnapura, Kahawatta, Balangoda, Matale, Kandy, Sinharaja < 20,000 2,000 < Many: Fragmented Decrease in area > 20% in the last 10 years and predicted decline < 20% in the next 10 years. Decrease in quality due to major export crop culturing. Loss of habitat, Pesticides, Poisoning, Pollution, Climate, Drought, Man made fire, Hunting Yes No Unknown Unknown Unknown Unknown Predicted decline > 20% in the next 25 years Informal field sighting, Literature/Museum/records Anslem de Silva in Sinharaja and Kahawatta from 1975 -80, ecology VULNERABLE Criteria B1+2bc

Not listed National WL legislation FFPA 1998, Vulnerable 1996 Red List (IUCN) Not listed Udawattakele, Sinharaja

Survey, Life history studies Habitat management, Monitoring, Captive breeding Public awareness, Education, Research None Initiate programme after 3 years Techniques not known at all Feeds on geckos and skinks. Requires moisture, if removed from moist condition will dry up and die in a few days. Proportion of males is higher in this species. 28,33,51,124 K.E. Abeysiriwardana, B.A. Daniel, Anslem de Silva, P. de Silva, J.L. Ferdinando, K. Ganegama, K.K. Hewamathes, N.D. Herath, A. Jayawickrama, S.S.S. Jayasinghe, L.G. Jayasoorya, S.A. Lasantha, P.G.D.R. Premasiri, D. Srinath, L.K. Rathnayake, V.A.M.P.K. Samarawickrama, R.K. Somaweera, S. Wijewardhana, B.A. Daniel Anslem de Silva, R.K. Somaweera, K.D.B. Ukuwela

Scientific name (author; date) Synonym Family Common name Taxonomic level of assessment **Distribution** Habitat of the taxon Habitat specificity Current distribution (by country) Current Sri Lankan distribution Extent of occurrence (Sq. km.) Area of occupancy (Sq. km.) Number of locations/sub pop. Habitat status

#### Threats

Threats to taxon Effect of threat on population Trade Effect of trade on population Population numbers Global population Regional Pop (# sub-pop.) Number of mature individuals Generation time Population trends **Data Quality Recent field studies** Status IUCN CITES National Red Data Book Presence in Protected Area Recommendations Research Management Captive breeding for Captive stocks Level of captive breeding recs. **Propagation Techniques** Other comments Sources Compilers

**Reviewers** 

#### Chrysopelea ornata sinhaleya Deraniyagala, 1945

Coluber ornatus Shaus, 1802 Colubridae Ornate Flying Snake (English), *Malsara* (Sinhala) Subspecies Wet zone, low and intermediate zone forests and coconut plantations Arboreal; Below 500 m **ENDEMIC** to Sri Lanka. Many localities in down south. < 20,000 > 2,000 Many; Fragmented Decrease in area > 20% in the last 10 years, Urban industrialization is the primary cause of change

Loss of habitat, Habitat fragmentation, Trade Yes Pet trade Yes Unknown Unknown Unknown Declining > 20% in the last 10 years Informal field sighting, Literature/ Museum/ records Anslem de Silva island wide

#### VULNERABLE Criteria A1c; B1+2bc

Not listed National WL legislation FFPA Vulnerable 1996 Red List (IUCN) Not listed Sinharaja, Rummassala, Dombagaskande

Survey, Taxonomic research, Life history studies Habitat management, Wild population management, Monitoring, Captive, breeding Public awareness Dehiwela Zoo and personal collection Initiate programme after 3 years Techniques not known at all A popular exhibit in zoos as well as at private exhibitions 33,51,64,124 K.E. Abeysiriwardana, B.A. Daniel, Anslem de Silva, P. de Silva, J.L. Ferdinando, K. Ganegama, K.K. Hewamathes, N.D. Herath, A. Jayawickrama, S.S.S. Jayasinghe, L.G. Jayasoorya, S.A. Lasantha, P.G.D.R. Premasiri, D. Srinath, L.K. Rathnayake, V.A.M.P.K. Samarawickrama, R.K. Somaweera, S. Wijewardhana Anslem de Silva, R.K. Somaweera, K.D.B. Ukuwela

Scientific name (author; date) Chrysopelea taprobanica Smith, 1943 Family Colubridae Common name Gold and Black Tree Snake, Flying Snake (English), Dangara danda (Sinhala), Taxonomic ievel of assessment Species Distribution In the dry zone and intermediate zone, low land scrub jungle. Habitat of the taxon Arboreal, Diurnal, Up to 200 m. Habitat specificity **ENDEMIC** to Sri Lanka Current distribution (by country) Polonnaruwa, Randenigala, Willpattu, Sigiriya, Kurunegala, Jaffna, Kunthale, Current Sri Lankan distribution Trincomalee, Randenigala, Monaragala, Handapanagala, Wellawaya Extent of occurrence (Sq. km.) 20,000 > > 2,000 Area of occupancy (Sq. km.) Many; Contiguous. Number of locations/sub pop. Decrease in area > 20% in the last 10 years, Agriculture burning is the primary Habitat status cause of change Threats Loss of habitat, Habitat fragmentation, Climate, Drought Threats to taxon Effect of threat on population Yes International; Whole animals in pet trade Trade Effect of trade on population Unknown **Population numbers** Global population Unknown Regional Pop (# sub-pop.) Unknown Number of mature individuals Unknown Generation time Unknown Population trends Predicted decline >20% in the next 10 years Informal field sighting, Literature, Museum, Records **Data Quality** Samarawickrama, S. Peradeniya University research team, Zoology department. Peradeniya in V.R.R Sanctuary, 1997, V.R.R. Sanctuary management plan & Fauna **Recent field studies** survey (GEF project). Jayawickrama, A. in Wallevaya. Karunaratne, S. in Wasgomuwa. National Park, 1997, Resource inventory, Survey under GEF. Status **IUCN** VULNERABLE Criteria A2c CITES Not listed National WL legislation FFPA National Red Data Book 1998, Vulnerable 1996 Red List (IUCN) Not listed Presence in Protected Area Wilpattu, VRR Sanctuary Recommendations Research Survey, Life history studies Habitat management, Monitoring, Captive breeding Management Captive breeding for Public awareness, Education, Research Captive stocks None Level of captive breeding recs. Initiate programme after 3 years Propagation Techniques Techniques not known at all Nothing is known of its reproductive habits. A. Jayawickrama, 1997 observed this animal Other comments inside houses in Monaragala District Sources 33, 51, 56, 64, 119 Compilers K.E. Abeysiriwardana, B.A. Daniel, Anslem de Silva, P. de Silva, J.L. Ferdinando, K. Ganegama, K.K. Hewamathes, N.D. Herath, A. Jayawickrama, S.S.S. Jayasinghe, L.G. Jayasoorya, S.A. Lasantha, P.G.D.R. Premasiri, D. Srinath, L.K. Rathnayake, V.A.M.P.K.

Samarawickrama, R.K. Somaweera, S. Wijewardhana

Anslem de Silva, R.K. Somaweera, K.D.B. Ukuwela

Reviewers

Scientific name (author; date) Dendrelaphis oliveri (Taylor, 1950) Synonyms Ahaetulla oliveri Family Colubridae Common name Oliver's Bronzeback (English), Oliverge hal danda (Sinhala) Taxonomic level of assessment Species Distribution Habitat of the taxon Drv mixed forest (Low land) Habitat specificity Arboreal, Up to 50 m. Current distribution (by country) ENDEMIC to Sri Lanka Current Sri Lankan distribution Trincomalee (Eastern province), Extent of occurrence (Sq. km.) <100 Area of occupancy (Sq. km.) <100 Number of locations/sub pop. One Habitat status Decrease in area > 20% in the last 10 years, Decrease in quality, War, Man made fire, Mining are primary cause of change Threats Threats to taxon Loss of habitat, Political unrest, War, Man made fire Effect of threat on population Yes Trade No **Population numbers** Global population Unknown Regional Pop (# sub-pop.) Unknown Number of mature individuals Unknown Generation time Unknown Population trends Predicted decline > 20% in the next 10 years **Data Quality** Literature Recent field studies None Status CRITIALLY ENDANGERED Criteria B1, 2bc **IUCN** Not listed National WL legislation FFPA CITES National Red Data Book 1998, Vulnerable 1996 Red List (IUCN) Not listed Presence in Protected Area No Recommendations Survey, Genetic research, Taxonomic research, Life history studies Research Management Habitat management, Wild population management, Monitoring, Genome resource banking, Captive breeding Captive breeding for Species recovery, Education, Research Captive stocks None Level of captive breeding recs. Initiate programme within 3 years Techniques not known at all Propagation Techniques Other comments D. Oliveri is known only from the type locality Trincomaiee Sources 33.51.56.117 Compilers K.E. Abeysiriwardana, B.A. Daniel, Anslem de Silva, P. de Silva, J.L. Ferdinando, K. Ganegama, K.K. Hewamathes, N.D. Herath, A. Jayawickrama, S.S.S. Jayasinghe, L.G. Jayasoorya, S.A. Lasantha, P.G.D.R. Premasiri, D. Srinath, L.K. Rathnayake, V.A.M.P.K. Samarawickrama, R.K. Somaweera, S. Wijewardhana Anslem de Silva, R.K. Somaweera, K.D.B.Ukuwela

**Reviewers** 

Scientific name (author; date) Synonyms Family Common name Taxonomic level of assessment **Distribution** Habitat of the taxon Habitat specificity

Current'distribution (by country) Current Sri Lankan distribution

Extent of occurrence (Sq. km.) Area of occupancy (Sq. km.) Number of locations/sub pop. Habitat status

#### Threats

Threats to taxon

Effect of threat on population Trade **Population numbers** Global population Regional Pop (# sub-pop.) Number of mature individuals Generation time Population trends **Data Quality Recent field studies** 

Status

IUCN CITES National Red Data Book Presence in Protected Area **Recommendations** Research Management Captive breeding for Captive stocks Level of captive breeding recs. Propagation Techniques **Other comments Sources Compilers** 

Reviewers

#### Haplocercus ceylonensis Günther, 1858

Aspidura carinata Jan, 1862 Colubridae Black Spine Snake, Mould Snake (English), Kurunkarawala (Sinhala), Species Sub montane forests and rain forests Fossorial, Nocturnal, Cool damp places, decaying logs in loose soil, humus soil, under rocks. Up to 1800 m. ENDEMIC to Sri Lanka Gampola, Pupuresa, Gammaduwa, Kotmale, Punduluoya (Central province), Namunukula, Balangoda, Knuckles range, Kalupahana. < 20,000 > 2,000 Many; Fragmented Decrease in area > 20% in the last 10 years, Decrease in guality. Agriculture and Multi crop cultivation are the primary cause of change Loss of habitat, Habitat fragmentation, Pesticides, Climate, Drought, Human interference Yes No Unknown Unknown Unknown Unknown Predicted decline > 20% in next 10 years Informal field sightings. Literature/Museum/records Ukuwela in Knuckles range, Kaluphana from 1998 June, Informal sightings Anslem de Silva on Distribution and Habits VULNERABLE Criteria A2c; B1+2bc Not listed National WL legislation FFPA 1998, Endangered 1996 Red List (IUCN) Not listed Knuckles, Kotmale Survev Habitat management, Monitoring, Captive breeding Public awareness, Education, Research None Initiate programme after 3 years Techniques not known at all Get killed during prepration of vegetable beds. 27. 33. 51. 56. 64.115. 120. 124 K.E. Abeysiriwardana, B.A. Daniel, Anslem de Silva, P. de Silva, J.L. Ferdinando, K. Ganegama, K.K. Hewamathes, N.D. Herath, A. Jayawickrama, S.S.S. Jayasinghe, L.G. Jayasoorya, S.A. Lasantha, P.G.D.R. Premasiri, D. Srinath, L.K. Rathnayake, V.A.M.P.K. Samarawickrama, R.K. Somaweera, S. Wijewardhana

Scientific name (author; date) Lycodon osmanhilli Taylor, 1950 Family Colubridae Common name Mal Radanakaya (Sinhala) Taxonomic level of assessment Species Distribution Low land, dry, wet and intermediate zone close to human habitation Habitat of the taxon Habitat specificity Under logs, rock crevices. Below 350 m Current distribution (by country) **ENDEMIC** to Sri Lanka Current Sri Lankan distribution Ampare, Matara, Galle, Chillaw, Tabbowa, Colombo, Balangoda, Andigama > 20,000 Extent of occurrence (Sq. km.) Area of occupancy (Sq. km.) > 2,000 Number of locations/sub pop. Many, Fragmented Habitat status Decrease in quality Threats Threats to taxon Hunting, Predation Effect of threat on population Unknown Trade No Population numbers Global population Unknown Regional Pop (# sub-pop.) Unknown Number of mature individuals Unknown Generation time Unknown Population trends Unknown Data Quality Unknown Recent field studies Anslem de Silva, on going Status 1UCN LOWER RISK - LEAST CONCERN Criteria -CITES Not listed National WL legislation FFPA National Red Data Book 1998. Endangered 1996 Red List (IUCN) Not listed Presence in Protected Area Inginiyagala, Bolgoda, Wilpathttu Recommendations Survey, Taxonomy Monitoring Research Management Captive stocks None Level of captive breeding recs. Not recommended Propagation Techniques Not known Other comments This snake is often killed when they come into houses in the night. Validity of the species should be established using DNA techniques. Sources 118 Compilers K.E. Abeysiriwardana, B.A. Daniel, Anslem de Silva, P. de Silva, J.L. Ferdinando, K. Ganegama, K.K. Hewamathes, N.D. Herath, A. Jayawickrama, S.S.S. Jayasinghe, L.G. Jayasoorya, S.A. Lasantha, P.G.D.R. Premasiri, D. Srinath, L.K. Rathnayake, V.A.M.P.K. Samarawickrama, R.K. Somaweera, S. Wijewardhana Reviewers Anslem de Silva, R.K. Somaweera, K.D.B. Ukuwela

Scientific name (author; date) Lycodon striatus sinhaleyus Deraniyagala, 1955 Synonyms Coluber striates, Shaw 1802; Lycodon striatus Stoliczka, 1870; Ophites striatus Wall, 1921 Family Colubridae Common name Shaw's Wolf Snake (English), Kabara radanakaya (Sinhala) Taxonomic level of assessment Sub species Distribution Sub montane and lowland forest including in human habitation. Habitat of the taxon Habitat specificity Found under decaying logs, earth cracks, leaf litter, loose soil. Terrestrial. Up to 500 m. ENDEMIC to Sri Lanka Current distribution (by country) Colombo, Matugama, Kotte, Dehiwala, Negombo, Chilaw, Peradeniya, Kandy, Gampola, Udahentenna, Welimada, Dambulla, Bolgoda, Galle. Current Sri Lankan distribution Extent of occurrence (Sq. km.) < 20,000. Area of occupancy (Sq. km.) > 2,000 Number of locations/sub pop. Many; Fragmented Habitat status Decrease in area > 20% in the last 10 years, Decrease in quality, Cultivation of minor export crops, urbanisation, Agriculture are the primary cause of change Threats Loss of habitat, Pesticides, Man made fire, Predation (by poultry and cats) Threats to taxon Effect of threat on population Yes Trade No **Population numbers** Global population Unknown Regional Pop (# sub-pop.) Unknown Number of mature individuals Unknown Generation time Unknown Population trends Predicted decline > 20% in the next 10 years **Data Quality** General field study, Literature/ Museum/ Records **Recent field studies** Anslem de Silva on going: Ukuwela and Somaweera in Menikdena, ongoing Status **IUCN VULNERABLE** Criteria ..... A2c; B1+2bc National WL legislation ......FFPA CITES Not listed National Red Data Book Not listed 1996 Red List (IUCN) Not listed Presence in Protected Area Manv Recommendations Survey, Taxonomic research, Life history studies Research Management Habitat management, Monitoring, Captive breeding Captive breeding for Education Research Captive stocks None Level of captive breeding recs. Initiate programme within 3 years Propagation Techniques Techniques not known at all Other comments This species is commonly misidentified as a krait and hence killed. DNA studies from Sri Lankan and Indian species should be conducted. Sources 33,51,64 K.E. Abeysiriwardana, B.A. Daniel, Anslem de Silva, P. de Silva, J.L. Ferdinando, K. Compilers Ganegama, K.K. Hewamathes, N.D. Herath, A. Jayawickrama, S.S.S. Jayasinghe, L.G. Jayasoorya, S.A. Lasantha, P.G.D.R. Premasiri, D. Srinath, L.K. Rathnayake, V.A.M.P.K. Samarawickrama, R.K. Somaweera, S. Wijewardhana Anslem de Silva, R.K. Somaweera, K.D.B. Ukuwela

**Reviewers** 

Scientific name (author; date) Macropisthodon plumbicolor palabariya Deraniyagala, 1955 Tropidonopus plumbicolor Cantor, 1839; Macropisthodon plumbicolor Synonyms Boulenger, 1893; Trigonocephalus elioti Jerdon, 1853 Family Colubridae Common name Green Keelback (English), Palabariya (Sinhala) Taxonomic level of assessment Sub species Distribution Habitat of the taxon Scrub jungle, low land mixed dry forest and grasslands Habitat specificity Terrestrial, Leaf-litter, under logs, at the base of grass tussocks. Up to 1000 m. Current distribution (by country) ENDEMIC to Sri Lanka Current Sri Lankan distribution Sigiriya, Randenigala, Dambulla, Peradeniya, Trincomalee, Kahagalle, Koslanda, Knuckles, Pupurassa, Bandarawela, Pallekele, Uva Pathana Extent of occurrence (Sq. km.) <20,000 Area of occupancy (Sq. km.) > 2,000 Number of locations/sub pop. Many; Fragmented Habitat status Decrease in area > 20% in the last 10 years; Agriculture, Grassland fire are the primary cause of change Threats Threats to taxon Loss of habitat, Habitat fragmentation, Climate, Manmade fire, Hunting Effect of threat on population Yes Trade No **Population numbers** Global population Unknown Regional Pop (# sub-pop.) Unknown Number of mature individuals Unknown Generation time Unknown Predicted decline > 20% in the next 10 years Population trends **Data Quality** General field study, Literature/Museum/records **Recent field studies** Samaravikrama in V.R.R. Sanctuary from 1997. V.R.R. Sanctuary management plan and fauna survey; R.K. Somaweera in Pallegama, Laggala from 1997 Status **IUCN** VULNERABLE Criteria ..... A2c; B1+2bc National WL legislation ...... FFPA CITES Not listed National Red Data Book Not listed 1996 Red List (IUCN) ...... Not listed Presence in Protected Area Randenigala Sanctuary, Knuckles Recommendations Research Survey, Taxonomic research, Life history studies, Venom studies Management Habitat management, Monitoring, Captive Breeding Species recovery, Education, Research Captive breeding for Captive stocks None Level of captive breeding recs. Initiate programme after 3 years Some techniques known for taxon or similar taxa. **Propagation Techniques** Other comments First time recorded from Pupurasa area by Ashoka Javawickrama in the year 1992. One of the few snakes with neural venom gland. Sources 33, 51, 56, 64, 88, 124 Compilers K.E. Abeysiriwardana, B.A. Daniel, Anslem de Silva, P. de Silva, J.L. Ferdinando, K. Ganegama, K.K. Hewamathes, N.D. Herath, A. Jayawickrama, S.S.S. Jayasinghe, LG. Jayasoorya, S.A. Lasantha, P.G.D.R. Premasiri, D. Srinath, L.K. Rathnayake, V.A.M.P.K. Samarawickrama, R.K. Somaweera, S. Wijewardhana Anslem de Silva, R.K. Somaweera, K.D.B. Ukuwela Reviewers

#### Distribution

Habitat of the taxon Habitat specificity Current distribution (by country) Current Sri Lankan distribution

Extent of occurrence (Sq. km.) Area of occupancy (Sq. km.) Number of locations/sub pop. Habitat status

#### Threats

Threats to taxon Effect of threat on population Trade

# **Population numbers**

Global population Regional Pop (# sub-pop.) Number of mature individuals Generation time Population trends

Data Quality Recent field studies

#### Status

IUCN CITES National Red Data Book Presence in Protected Area

#### Recommendations

Research Management Captive stocks Level of captive breeding recs. Propagation Techniques

Other comments

# Sources

Compilers

Reviewers

# Oligodon calamarius (Linnaeus, 1758)

*Colubar calamarius* Linneaus, 1758, *Oligodon templetoni* Günther, 1862 Colubridae Templeton's Kukri Snake (English), *Kabara dathkatiya* (Sinhala) Species

1<sup>st</sup> and 2<sup>nd</sup> peneplane, damp forest of the wet zone Terrestrial. Up to 1800 m ENDEMIC to Sri Lanka Hewissa, Balangoda, Rathnapura, Peradeniya, Gammaduwa, Mathugama, Udugama South, Galle < 20,000 < 2,000 < 2,000 7; Fragmented Decrease in area > 20% in the last 10 years; Agriculture and urbanisation are the primary cause of change

Loss of habitat, Habitat fragmentation, Pesticides, Poisoning, Pollution, Climate, Drought Yes No

Unknown Unknown Unknown Unknown Predicted decline > 20% in the next 10 years

Literature, Museum, records, general field studies D. Kandamby in Galle, 1994

# VULNERABLE

Not listed 1998, Vulnerable 1 Sinharaja, Knuckles Criteria ......A2c; B1+2bc National WL legislation ......FFPA 996 Red List (IUCN) ...........Not listed

Survey, Life history studies Habitat management, Monitoring None Initiate programmeme after 3 years Unknown

Some consider it venomous as it resembles a miniature viper.

33,61,66,64,124

K.E. Abeysiriwardana, B.A. Daniel, Anslem de Silva, P. de Silva, J.L. Ferdinando, K. Ganegama, K.K. Hewamathes, N.D. Herath, A. Jayawickrama, S.S.S. Jayasinghe, L.G. Jayasoorya, SA Lasantha, P.G.D.R. Premasiri, D. Srinath, L.K. Rathnayake, VAM.P.K. Samarawickrama, R.K. Somaweera, S. Wijewardhana

Scientific name (author; date) Synonyms Family Common name Taxonomic level of assessment	<i>Oligodon sublineatus</i> Dumeril, Bibron & Dumeril, 1854 <i>Oligodon sublineatum</i> Dumeril & Bibron, 1854 Colubridae Dumerii's Kukri Snake (English), <i>Pulli dathketiya</i> (Sinhala) Species	
Distribution Habitat of the taxon Habitat specificity Current distribution (by country) Current Sri Lankan distribution Extent of occurrence (Sq. km.) Area of occupancy (Sq. km.) Number of locations/sub pop. Habitat status	1 <sup>st</sup> and 2 <sup>nd</sup> Peneplanes, wet zone, Sub montane forests, Plantations and home gardens Among Stones, debris, earth cracks, also loose soils. Up to 1200 m. <b>ENDEMIC</b> to Sri Lanka Nawala, Negombo, Kalinthara, Matugama (Western province), Gammaduwa, Gampola, Kothmale, Kandy, Peradeniya (Central province), Ratnapura, Yatiyanthota, Weligalle > 20,000 > 2,000 Many; Fragmented Decrease in area > 20% in the last 10 years; Cultivation and urbanization are primary cause of change	
<b>Threats</b> Threats to taxon Effect of threat on population Trade	Hunting, Loss of Habtiat, Habitat Fragmentation, Over exploitation, Pesticides, Poisoning, Pollution, Climate, Drought, Predation, Hunting Yes No	
Population numbers Global population Regional Pop (# sub-pop.) Number of mature individuals Generation time Population trends	Unknown Unknown Unknown Unknown Predicted decline < 20% in the next 10 years	
Data Quality Recent field studies	Informal field sighting, Literature/ Museum/ records Ansiem de Silva ongoing studies	
<b>Status</b> IUCN CITES National Red Data Book Presence in Protected Area	LOWER RISK-NEAR THREATENEDCriteriaNot listedNational WL legislation1998, Vulnerable1996 Red List (IUCN)Not listedMany	
Recommendations Research Management Captive breeding for Captive stocks Level of captive breeding recs. Propagation Techniques	Survey, Life history Studies Habitat management, Monitoring, Captive breeding Public awareness None Not recommended Unknown	
Other comments	Commonly found near human habitation. Species killed as some consider it to be Russel's Viper hatchlings. Common in home gardens. Feed on gecko eggs. Species active at dusk.	
Sources	33,51,56,64,124	
Compilers	K.E. Abeysiriwardana, B.A. Daniel, Ansiem de Silva, P. de Silva, J.L. Ferdinando, K. Ganegama, K.K. Hewamathes, N.D. Herath, A. Jayawickrama, S.S.S. Jayasinghe, L.G. Jayasoorya, S.A. Lasantha, P.G.D.R. Premasiri, D. Srinath, L.K. Rathnayake, V.A.M.P.K. Samarawickrama, R.K. Somaweera, S. Wijewardhana	
Reviewers	Ansiem de Silva, R.K. Somaweera, K.D.B. Ukuwela	

#### Distribution

Habitat of the taxon Habitat specificity Current distribution (by country) Current Sri Lankan distribution

Extent of occurrence (Sq. km.) Area of occupancy (Sq. km.) Number of locations/sub pop. Habitat status

#### Threats

Threats to taxon

Effect of threat on population Trade

# **Population numbers**

Global population Regional Pop (# sub-pop.) Number of mature individuals Generation time Population trends

# Data Quality Recent field studies

#### Status

IUCN CITES National Red Data Book Presence in Protected Area

#### Recommendations

Research Management Captive breeding for Captive stocks Level of captive breeding recs. Propagation Techniques

Other comments

Sources

Compilers

Reviewers

#### Oligodon taeniolatus ceylonicus Wall, 1921

*Oligodon elliotti* (Günther, 1864); *Oligodon fasciatus* (Günther, 1864) Colubridae Variegated Kukri Snake (English), *Wairi dathketiya* (Sinhala); Sub species

Scrub jungle and low land dry mixed forest Under logs and rubble. Terrestrial, diurnal. Below 300 m. ENDEMIC to Sri Lanka Trincomalee, Serukele, Mullaitivu, Anuradapura, Colombo, Knuckles (lower parts), Andigama < 20,000 < 2,000 Few; Fragmented Decrease in area > 20% in the last 10 years; Decrease in Quality; War, Cash crops, Land mine, Forest fire.

Loss of habitat, Habitat fragmentation, Poisoning, Pollution, Climate, War, Human interference Unknown No

Unknown Unknown Unknown Predicted decline > 20% in the next 10 years

Informal field sightings None

# VULNERABLE

Not listed Not threatened Knuckles, Wilpattu Criteria ...... A2c; B1+2bc National WL legislation ...... FFPA 1996 Red List (IUCN) .........No

Survey, Taxonomic research, Life history studies Habitat management, Monitoring, Captive breeding Public awareness, Education, Research None Initiate programme after 3 years Unknown

This snake is active at dusk. The validity of *Oligodon taeniotus fasciatus* and *Oligodon taeniotus ceylonicus* need to be studied with more samples. DNA studies on *O. ceylonicus* and *O. fasciatus* should be carried out to establish whether both are distinct

33,51,56,64,124

K.E. Abeysiriwardana, B.A. Daniel, Anslem de Silva, P. de Silva, J.L. Ferdinando, K. Ganegama, K.K. Hewamathes, N.D. Herath, A. Jayawickrama, S.S.S. Jayasinghe, L.G. Jayasoorya, S.A. Lasantha, P.G.D.R. Premasiri, D. Srinath, L.K. Rathnayake, V.A.M.P.K. Samarawickrama, R.K. Somaweera, S. Wijewardhana

A. de Silva, R.K. Somaweera, and K.D.B. Ukuwela.

Scientific name (author; date)
Synonyms
Family
Common name
Taxonomic level of assessment

#### Distribution

Habitat of the taxon Habitat specificity Current distribution (by country) Current Sri Lankan distribution Extent of occurrence (Sq. km.) Area of occupancy (Sq. km.) Number of locations/sub pop. Habitat status

#### Threats

Threats to taxon Effect of threat on population Trade Effect of trade on population

#### **Population numbers**

Global population Regional Pop (# sub-pop.) Number of mature individuals Generation time Population trends

### **Data Quality**

# **Recent field studies**

#### Status

IUCN CITES National Red Data Book Presence in Protected Area

# Recommendations

Research Management Captive breeding for Captive stocks Level of captive breeding recs. Propagation Techniques

#### Other comments

Sources

Compilers

Reviewers

### Ptyas mucosas maximus (Deraniyagala, 1955)

*Coluberr mucosus* Linn., 1758 Colubridae Rat Snake (English), *Gerandiya* (Sinhala); Subspecies

Throughout Sri Lanka Terrestrial close to agriculture fields; Up to 2100 m. ENDEMIC to Sri Lanka Throughout Sri Lanka > 20,000 > 2,000 Many; Contiguous (Island-wide) Decrease in area > 20% in the last 10 years

Pesticides, Poisoning, Forest fire Yes Local No

Unknown Unknown Unknown Predicted decline > 20% in the next 20 years

General field study, Informal field sighting, Literature/Museum/records, Hearsay/popular belief Unknown

LOWER RISK - NEAR THREATENED Criteria ......--Listed National WL legislation ...... FFPA No 1996 Red List (IUCN) .......Not listed Virtually in all PAs.

Limiting factor research Habitat management, Wild population management No None Initiate programme after 10 years Techniques known for this taxon or similar taxon

A common snake sometimes killed -- misidentified as cobra or krait.

33, 51, 64,124

K.E. Abeysiriwardana, B.A. Daniel, Anslem de Silva, P. de Silva, J.L. Ferdinando, K. Ganegama, K.K. Hewamathes, N.D. Herath, A. Jayawickrama, S.S.S. Jayasinghe, LG. Jayasoorya, SA Lasantha, P.G.D.R. Premasiri, D. Srinath, L.K. Rathnayake, V.A.M.P.K. Samarawickrama, R.K. Somaweera, S. Wijewardhana

#### Distribution

Habitat of the taxon Habitat specificity Current distribution (by country) Current Sri Lankan distribution Extent of occurrence (Sq. km.) Area of occupancy (Sq. km.) Number of locations/sub pop. Habitat status

#### Threats

Threats to taxon

Effect of threat on population Trade

# **Population numbers**

Global population Regional Pop (# sub-pop.) Number of mature individuals Generation time Population trends

#### Data Quality Recent field studies

### Status

IUCN CITES National Red Data Book Presence in Protected Area

# Recommendations

Research Management Captive stocks Level of captive breeding recs. Propagation Techniques

#### Other comments

Sources

Compilers

K.E. Abeysiriwardana, B.A. Daniel, Anslem de Silva, P. de Silva, J.L. Ferdinando, K. Ganegama, K.K. Hewamathes, N.D. Herath, A. Jayawickrama, S.S.S. Jayaslnghe, L.G. Jayasoorya, S.A. Lasantha, P.G.D.R. Premasiri, D. Srinath, L.K. Rathnayake, V.A.M.P.K. Samarawickrama, R.K. Somaweera, S. Wijewardhana

Reviewers

#### Xenochrophis asperrimus (Boulenger, 1891)

*Hydrus piscator* Schneider, 1799 Colubridae The Checkered Keelback (English), *Diya polonga, Diya bariya* (Sinhala) Species

Aquatic habitat of all three climatic zones up to 1500 m. Lentic habitats, lotic habitats and paddy fields. Up to 1500 m. **ENDEMIC** to Sri Lanka Widely distributed in the country > 20,000 > 2,000 Many; Contiguous Decrease in area, Decrease in quality, aquatic pollution

Loss of habitat, Habitat fragmentation, Pesticides, Poisoning, Pollution, Climate, Drought, Hunting Yes

Unknown Unknown Unknown Predicted decline > 20% in the next 20 years

General field studies, Informal field sighting, Literature/Museum/ records Ruchira Somaweera in Menikdena, Dambulla, August 1994 -98, fauna of Menikdena; R. Weerawardhana in Kelaniya, 1998, food and feeding habitats

LOWER RISK - NEAR THREATENED Criteria .......--Not listed National WL legislation .......FFPA Vulnerable 1996 Red List (IUCN) .......Not listed Many

Survey Habitat management, Monitoring None Not recommended Unknown

Some kill it considering it venomous.

33,51,56,124,125

Conservation Assessment and Management Plan for Amphibians and Reptiles of Sri Lanka – Report

#### Distribution

Habitat of the taxon Habitat specificity Current distribution (by country) Current Sri Lankan distribution

Extent of occurrence (Sq. km.) Area of occupancy (Sq. km.) Number of locations/sub pop. Habitat status

# Threats

Threats to taxon Effect of threat on population Trade

# **Population numbers**

Global population Regional Pop (# sub-pop.) Number of mature individuals Generation time Population trends

**Data Quality Recent field studies** 

#### Status

**IUCN** CITES National Red Data Book Presence in Protected Area

#### Recommendations

Research Management Captive stocks Level of captive breeding recs. Propagation Techniques

Other comments

Sources

Compilers

Reviewers

Bungarus ceylonicus ceylonicus Günther, 1864 Bungarvs ceylonicus Günther, 1864 Elapidae

Sri Lankan Krait (English), Mudu karawala (Sinhala) Sub species

Wet and intermediate zone forests Decaying vegetation, rock crevices; Up to 1000 m. **ENDEMIC** to Sri Lanka Peradeniya, Kandy, Gampola, Opatha, Ratnapura, Balangoda, Sinharaja, Peak Wilderness, Gurutalawa, Mawanella, Bandarawela, Galle, Matugama > 20,000 m. > 2,000 m. Many, Fragmented Clearing for agriculture and Human settlements; over 20% decrease in habitat in 20 years; Forest clearance is the primary cause of change

Habitat loss, Killing, Human interference Unknown No

Unknown Unknown Unknown Unknown Declining >20 % in last 10 years; Predicted decline >20% in next 10 years

Literature, Museum, records and personal observations, general field studies Anslem de Silva, Survey; Somaweera and Ukuwela in Menikdena 1998 ongoing

#### VULNERABLE Not listed

Criteria ..... A1 c+2c National WL legislation ......FFPA 1998, Vulnerable 1996 Red List (IUCN) ..... Not listed Uduwattakalle, Sinharaja, Peak Wilderness

Survey Monitoring, Habitat management Few in zoos and private collections Not recommended Unknown

Due to its habit of entering into dwellings in the night, it is often killed, especially during August to November (Anslem de Silva).

31, 57, 64, 124

K.E. Abeysiriwardana, B.A. Daniel, Anslem de Silva, P. de Silva, J.L. Ferdinando, K. Ganegama, K.K. Hewamathes, N.D. Herath, A. Jayawickrama, S.S.S. Jayasinghe, L.G. Jayasoorya, S.A. Lasantha, P.G.D.R. Premasiri, D. Srinath, L.K. Rathnayake, V.A.M.P.K. Samarawickrama, R.K. Somaweera, S. Wijewardhana

Distribution Habitat of the taxon Habitat specificity

Current distribution (by country) Current Sri Lankan distribution

Extent of occurrence (Sq. km.) Area of occupancy (Sq. km.) Number of locations/sub pop. Habitat status

# Threats

Threats to taxon Effect of threat on population Trade Effect of trade on population

#### **Population numbers**

**Global** population Regional Pop (# sub-pop.) Number of mature individuals Generation time Population trends

#### **Data Quality**

**Recent field studies** 

		on of b. ceylonicus	
<b>Status</b> IUCN CITES National Red Data Book Presence in Protected Area	<b>VULNERABLE</b> Not listed 1998, Vulnerable Hakgala, Peak Wilderness,	Criteria	
Recommendations Research	Survey, Research on venor	n	

Research Management Captive stocks Level of captive breeding recs. **Propagation Techniques** 

> Species is killed extensively due to fear (highly venomous). Anslem has received many killed specimen during past 2 decades. DNA studies in B. c. ceylonicus and B. c. karawala should be carried out.

Sources 31.34.51.64.92

Compilers

Other comments

Monitoring

Unknown

Not recommended

None

K.E. Abeysiriwardana, B.A. Daniel, Anslem de Silva, P. de Silva, J.L. Ferdinando, K. Ganegama, K.K. Hewamathes, N.D. Herath, A. Jayawickrama, S.S.S. Jayasinghe, L.G. Jayasoorya, S.A. Lasantha, P.G.D.R. Premasiri, D. Srinath, L.K. Rathnayake, VAM.P.K. Samarawickrama, R.K. Somaweera, S. Wijewardhana

Reviewers

Anslem de Silva, R.K. Somaweera and K.D.B. Ukuwela

# Bungarus ceylonicus karawala (Deraniyagala, 1955)

Elapidae Sri Lankan Krait (English), Hath Karawala (Sinhala) Subspecies

Montane and upper montane forests Terrestrial. Rock crevices, under rubble, leaf litter, under perishing vegetation, under logs, stones, termite mounds; 750 to 2000 m. ENDEMIC to Sri Lanka Horton Plains, Hakgala, Rangala, Dimbula, Badulla, Balangoda, Kalupanana, Haladamula, Punagaia < 20,000 > 2.000 Many; Fragmented Decrease in area > 20% in the last 5 years; Decrease in quality; Clearing of forest, constructions, destruction of termite mounds, Human impact

Loss of habitat, Habitat fragmentation, Extensive hunting, Human interference Yes No Unknown

Unknown Unknown Unknown Approximately 5 years Declining > 20% in the last 10 years (3 generations); Predicted decline > 20% in next 10 years (3 generations)

General field study, Informal field sighting, Literature, Indirect information such as from trade etc., Museum, records, Hearsay/popular belief Anslem de Silva in all locations in wet and intermediate zone from 1982 - 87. ecological studies/ distribution of R cevlonicus

Scientific name (author; date) Synonyms

Family Common name Taxonomic level of assessment

#### Distribution

Habitat of the taxon Habitat specificity Current distribution (by country)

Current Sri Lankan distribution

Extent of occurrence (Sq. km.) Area of occupancy (Sq. km.) Number of locations/sub pop. Habitat status

#### Threats

Threats to taxon Effect of threat on population Trade Effect of trade on population

#### **Population numbers**

**Global** population Regional Pop (# sub-pop.) Number of mature individuals Generation time Population trends

# **Data Quality** Recent field studies

#### Status

**IUCN** CITES National Red Data Book Presence in Protected Area

#### Recommendations

Research Management Captive stocks Level of captive breeding recs. Propagation Techniques

#### Other comments

Sources

Compilers

**Reviewers** 

#### Leioselasma cyanocinctus (Daudin, 1803)

Hydrophis tuberculata, H. dayanus, H. subgunulata, H. aspara, H. crassicollis, H. trachyceps, H. philipsoni, H. westermanni, H. doliata, H. frontalis, H. sublaevis, H. taprobanica, Hydrus striates, H. cyanocinctus, Enhydris striates, E. cyanocinctus, Leriosefasma striata, D. tuberculata, D. lapernidoides, D. mamillaris, Chitulia fasciata Hvdrophiidae Chittul (English) Species

Coastal waters in Sri Lanka. Estuaries, Bay Coral Reefs; Sea level. Australia, Southern parts of Thailand, Malaysia, Coast line of India, Myanmar, Vietnam, Sri Lanka. Pesalai, Mulaittivu, Mannar, Vaduga bank, Trincomalee, Colombo, Mount Lavania, Panadura, Chillaw, Hikkaduwa, Galle, Mirrissa, Kirinda, Unawatuna (Southern Province) Palk Strait, Jaffna. > 20,000 > 2,000 Many; Contiguous Pollution due to oil spills from ships and sewage disposal

Fishing, Pollution, Trade Unknown By-catch in fishing -- used in restaurants in the East (HongKong, China, etc.) Unknown

Unknown Unknown Unknown Unknown Unknown

Literature. Indirect information Anslem de Silva -1994

# LOWER RISK-NEAR THREATENED Criteria ...... Not listed

Not threatened Possibe in the few marine PA's National WL legislation ...... FFPA 1996 Red List (IUCN) ...... Not listed

Survey Monitoring None Not recommended Unknown

Sea Snakes are the most poorly studied groups of reptiles in Sri Lanka.

#### 37, 51, 56, 64, 100, 105, 113, 124, 125

K.E. Abeysiriwardana, B.A. Daniel, Anslem de Silva, P, de Silva, J.L Ferdinando, K. Ganegama, K.K. Hewamathes, N.D. Herath, A. Jayawickrama, S.S.S. Jayasinghe, L.G. Jayasoorya, S.A. Lasantha, P.G.D.R. Premasiri, D. Srinath, L.K. Rathnayake, V.A.M.P.K. Samarawickrama, R.K. Somaweera, S. Wijewardhana

#### Distribution

Habitat of the taxon Habitat specificity Current distribution (by country)

Current Sri Lankan distribution

Extent of occurrence (Sq. km.) Area of occupancy (Sq. km.) Number of locations/sub pop. Habitat status

#### Threats

Threats to taxon Effect of threat on population Trade

# **Population numbers**

Global population Regional Pop (# sub-pop.) Number of mature individuals Generation time Population trends

Data Quality Recent field studies

# Status

IUCN CITES National Red Data Book Presence in Protected Area

#### Recommendations

Research Management Captive stocks Level of captive breeding recs. Propagation Techniques

#### Other comments

Sources

Compilers

Reviewers

# Microcephalophis gracilis (Shaw, 1802)

*Hydrus gracilis* Shaw, 1802; *Microcephalophis gracilis* Wall, 1921 Hydrophiidae John's Sea Snake (English), *Muhudu Naya* (Sinhala) Species

Coastal water coastal waters, Estuaries, Bay Coral Reefs; Sea level Australia, southern parts of Thailand, Malaysia, coast line of India, Myanmar, Vietnam, Sri Lanka Pesalai, Mulattivu, Mannar, Vaduga Bank, Trincomalee (Northern Province), Colombo, Mount Lavania, Panadura, Chillaw, Hikkaduwa, Galie, Mirrissa, Kirinda (southern Province) Palk Strait, Jaffna. > 20,000 > 2,000 Many, Contiguous Habitats get poluted due to oil spills from ships and sewage disposal

Pollution, Fishing Unknown No

Unknown Unknown Unknown Unknown Unknown

Literature, Indirect information Anslem de Siiva, from 1994 onwards

Survey Monitoring None Not recommended Not known at all

Sea Snakes are the most poorly studied groups of reptiles in Sri Lanka.

# 33, 51, 56, 64, 100, 109, 113, 123, 124

K.E. Abeysiriwardana, B.A. Daniel, Anslem de Silva. P. de Silva, J.L Ferdinando, K. Ganegama, K.K. Hewamathes, N.D. Herath, A. Jayawickrama, S.S.S. Jayasinghe, L.G. Jayasoorya, SA Lasantha, P.G.D.R. Premasiri D. Srinath, L.K. Rathnayake, V.A.M.P.K. Samarawickrama, R.K. Somaweera S. Wijewardhana

Scientific name (author; date) Synonyms

Family Common name Taxonomic level of assessment

#### Distribution

Habitat of the taxon Habitat specificity Current distribution (by country)

Current Sri Lankan distribution

Extent of occurrence (Sq. km.) Area of occupancy (Sq. km.) Number of locations/sub pop. Habitat status

#### Threats

Threats to taxon Effect of threat on population Trade

# Population numbers

Global population Regional Pop (# sub-pop.) Number of mature individuals Generation time Population trends

#### Data Quality Recent field studies

#### Status

IUCN CITES National Red Data Book Presence in Protected Area

#### Recommendations

Research Management Captive stocks Level of captive breeding recs. Propagation Techniques

Other comments

Sources

Compilers

Reviewers

#### Pleamis platurus (Linnaeus, 1766)

Hydrophis platura Latreille, 1802; Pelamis bicolor Daudin, 1803; Pelamis platurus Gray, 1825; Pelamis omata Gray, 1842; Hydrophis bicolor var. maculata Jan, 1872; Hydrus platurus Boulenger, 1890 Hydrophiidae Yellow-bellied Sea Snake (English), Badakaha muhudu naya (Sinhala) Species

Marine coastal waters Estuaries, Bay Coral Reefs; Sea level Australia, Southern parts of Thailand, Malaysia, Coast line of India, Myanmar, Vietnam, Sri Lanka Pesalai, Mulattivu, Mannar, Vaduga Bank, Trincomalee, Palk Strait, Jaffna (Northern Province), Colombo, Mount Lavania, Panadura, Chillaw, Hikkaduwa, Galle, Mirrissa, Kirinda (Southern Province) > 20,000 > 2,000 Many, Contiguous

Pollution due to oil spills from ships and sewage disposal

Pollution, Fishing. Unknown By-catch in fishing - used in resturants in the East (HongKong, China, etc.)

Unknown Unknown Unknown Unknown Unknown

Literature, Indirect information Anslem de Silva, from 1994 onwards

LOWER RISK-NEAR THREATENED Not listed Not threatened Possible in the few marine PA's

Survey Monitoring None Not recommended Not known at all

Most widely distributed Sea Snake in the world. Also has many colour variations.

33, 51, 56, 64, 100, 109, 113, 123, 124

K.E. Abeysiriwardana, B.A. Daniel, Anslem de Silva, P. de Silva, J.L. Ferdinando, K. Ganegama, K.K. Hewamathes, N.D. Herath, A. Jayawickrama, S.S.S. Jayasinghe, L.G. Jayasoorya, S.A. Lasantha, P.G.D.R. Premasiri, D. Srinath, L.K. Rathnayake, V.A.M.P.K. Samarawickrama, R.K. Somaweera, S. Wijewardhana

#### Distribution

Habitat of the taxon Habitat specificity Current distribution (by country)

Current Sri Lankan distribution

Extent of occurrence (Sq. km.) Area of occupancy (Sq. km.) Number of locations/sub pop. Habitat status

#### Threats

Threats to taxon Effect of threat on population Trade

# **Population numbers**

Global population Regional Pop (# sub-pop.) Number of mature individuals Generation time Population trends

Data Quality Recent field studies

#### Status

IUCN CITES National Red Data Book Presence in Protected Area

#### Recommendations

Research Management Captive stocks Level of captive breeding recs. Propagation Techniques

Other comments

Sources

Compilers

Reviewers

#### Praescutata viperinus (Schmidt, 1852)

*Thalassophis viperina* Schmidt, 1852; *Praescutata viperina* Wall, 1921 Hydrophiidae Schmidt's Sea Snake (English) Species

Marine coastal waters Estuaries, Bay Coral Reefs Australia, Southern parts of Thailand, Malaysia, Coast line of India, Myanmar, Vietnam Pesalai, Mulattivu, Mannar, Vaduga Bank, Trincomalee, Colombo, Mount Lavania, Panadura, Chillaw, Hikkaduwa, Galle, Mirrissa, Kirinda (Southern Province) Palk Strait, Jaffna. >20,000. >2,000 Many, Contiguous Pollution due to oil spills from ships and sewage disposal

Pollution, Fishing Unknown No

Unknown Unknown Unknown Unknown Unknown

Literature, Indirect information Anslem de Silva in 1994

 LOWER RISK-NEAR THREATENED
 Criteria
 - 

 Not listed
 National WL legislation
 - 

 Not listed
 1996 Red List (IUCN)
 .......Not listed

Survey Monitoring None Not recommended Not known at all

Sea snakes are the most poorly studied groups of reptiles in Sri Lanka.

#### 40, 54, 58, 67, 103, 113, 117, 128, 129

K,E. Abeysiriwardana, B.A. Daniel, Anslem de Silva, P. de Silva, J.L. Ferdinando, K. Ganegama, K.K. Hewamathes, N.D. Herath, A. Jayawlckrama, S.S.S. Jayasinghe, L.G. Jayasoorya, S.A. Lasantha, P.G.D.R, Premasiri, D. Srinath, L.K. Rathnayake, V.A.M.P.K. Samarawickrama, R.K. Somaweera, S. Wijewardhana

Scientific name (author; date) Family Taxonomic level of assessment	<b>Typhlops ceylonicus Smith, 1</b> Typhlopidae Species	943
Distribution Habitat of the taxon Habitat specificity Current distribution (by country) Current Sri Lankan distribution Extent of occurrence (Sq. km.) Area of occupancy (Sq. km.) Number of locations/sub pop. Habitat status	Sub montane forests Leaf litter, Humus. Fossorial. Up to 480 m ENDEMIC to Sri Lanka Peradeniya <100 <10 1 10% decrease in habitat over years	
<b>Threats</b> Threats to taxon Effect of threat on population Trade	Habitat loss Yes No	
<b>Population numbers</b> Global population Regional Pop (# sub-pop.) Number of mature individuals Generation time Population trends	Unknown Unknown Unknown Unknown Unknown	
Data Quality Recent field studies	Literature Gans, in 1980's	
<b>Status</b> IUCN CITES National Red Data Book Presence in Protected Area	CRITICALLY ENDANGERED Not listed No Unknown	CriteriaB <b>1+2bc</b> National WL legislationFFPA 1996 Red List (IUCN)No
Recommendations Research Management Captive breeding for Captive stocks Level of captive breeding recs. Propagation Techniques	Survey, Taxonomic research, Life history studies Habitat management, Wild population management, Monitoring, Captive breeding Species recovery, Public awareness None Initiate programme within 3 years Not known at all	
Other comments	This species is known from a single specimen. Presently Carl Gans is reviewing the entire group.	
Sources	51,115,116	
Compilers	K.E. Abeysiriwardana, B.A. Daniel, Anslem de Silva, P. de Silva, J.L. Ferdinando, K. Ganegama, K.K. Hewamathes, N.D. Herath, A. Jayawickrama, S.S.S. Jayasinghe, L.G. Jayasoorya, S.A. Lasantha, P.G.D.R. Premasiri, D. Srinath, L.K. Rathnayake, V.A.M.P.K. Samarawickrama, R.K. Somaweera, S. Wijewardhana	
Reviewers	Anslem de Silva	

#### Distribution

Habitat of the taxon Habitat specificity Current distribution (by country) Current Sri Lankan distribution Extent of occurrence (Sq. km.) Area of occupancy (Sq. km.) Number of locations/sub pop. Habitat status

### Threats

Threats to taxon Effect of threat on population Trade

#### **Population numbers**

Global population Regional Pop (# sub-pop.) Number of mature individuals Generation time Population trends

Data Quality Recent field studies

### Status

IUCN CITES National Red Data Book Presence in Protected Area

# Recommendations

Research Management Captive breeding for Captive stocks Level of captive breeding recs. Propagation Techniques

Other comments

Sources

Compilers

Reviewers

#### *Typhlops lankaensis* Taylor, 1947 Typhlopidae

Species

Arid coastal areas Sandy Soil. Fossorial in forests. Up to 10 m ENDEMIC to Sri Lanka Trincomalee (Eastern) <100 <100 1 Decrease in area; Decrease in Quality; Oil pollution and war related activities.

Human Interference, Pollution, War, Loss of habitat. Yes No

Unknown Unknown Unknown Unknown Unknown

Literature, Indirect information C. Gans, island-wide survey in late 1970s

CRITICALLY	ENDANGERED
Not listed	

1998, Endangerd

Unknown

Criteria ......B1+2bc National WL legislation ......FFPA 1996 Red List (IUCN) .......Not listed

Survey, Taxonomic research, Life history studies Habitat management, Wild population management, Monitoring, Captive breeding Species recovery, research, Public awareness None Initiate programme within 3 years Not known at all

As Taylor's (1947) 5 new species of *Typhlops* are from a single locality (12 miles north of Trincomalee), the validity of the species need to be established.

9,11,51,64,116,121,122

K.E. Abeysiriwardana, B.A. Daniel, Anslem de Silva, P. de Silva, J.L. Ferdinando, K. Ganegama, K.K. Hewamathes, N.D. Herath, A. Jayawickrama, S.S.S. Jayasinghe, L.G. Jayasobrya, S.A. Lasantha, P.G.D.R. Premasiri, D. Srinath, L.K. Rathnayake, V.A.M.P.K. Samarawickrama, R.K. Somaweera, S. Wijewardhana

Anslem de Silva

### Distribution

Habitat of the taxon Habitat specificity Current distribution (by country) Current Sri Lankan distribution Extent of occurrence (Sq. km.) Area of occupancy (Sq. km.) Number of locations/sub pop. Habitat status

### Threats

Threats to taxon Effect of threat on population Trade

### **Population numbers**

Global population Regional Pop (# sub-pop.) Number of mature individuals Generation time Population trends

Data Quality Recent field studies

### Status

IUCN CITES National Red Data Book Presence in Protected Area

### Recommendations

Research Management Captive breeding for Captive stocks Level of captive breeding recs. Propagation Techniques

Other comments

Sources

Compilers

Reviewers

### Typhlops mirus Jan, 1860

Typhlopidae Jan's Blind Snake (English), *Heen Kanaulla* (Sinhala) Species

Submontane forests Leaf litter. Fossorial. 1500 m. ENDEMIC to Sri Lanka Namunukula, Peradeniya, Colombo < 5,000 < 500 3; Fragmented Decreasing in area 20% over 10 years (Colombo 80%) due to urbanization, Agriculture and plantations, Decrease in quality.

Loss of habitat, Fragmentation, Human interference Yes No

Unknown Unknown Unknown Unknown Unknown

Literature, Informal field sighting, indirect information C. Gans, island-wide survey in late 1970s

ENDANGERED Not listed 1998, Endangered Criteria ......B1+2bc National WL legislation ...... FFPA 1996 Red List (IUCN) ........ Not listed

Survey, Taxonomic research, Life history studies Habitat management, Wild population management, Monitoring, Captive breeding Species recovery, Research, Public awareness None Initiate programme within 3 years Techniques not known at all

Very little data is available about this species. The collections from Peradeniya are reported to be deposited in Kansas, USA

51,53,64,83,116,124

K.E. Abeysiriwardana, B.A. Daniel, Anslem de Silva, P. de Silva, J.L. Ferdinando, K. Ganegama, K.K. Hewamathes, N.D. Herath, A. Jayawickrama, S.S.S. Jayasinghe, L.G. Jayasoorya, S.A. Lasantha, P.G.D.R. Premasiri, D. Srinath, L.K. Rathnayake, V.A.M.P.K. Samarawickrama, R.K. Somaweera, S. Wijewardhana

### Distribution

Habitat of the taxon Habitat specificity Current distribution (by country) Current Sri Lankan distribution Extent of occurrence (Sq. km.) Area of occupancy (Sq. km.) Number of locations/sub pop. Habitat status

### Threats

Threats to taxon Effect of threat on population Trade

### **Population numbers**

Global population Regional Pop (# sub-pop.) Number of mature individuals Generation time Population trends

Data Quality Recent field studies

### Status

IUCN CITES National Red Data Book Presence in Protected Area

### Recommendations

Research Management Captive breeding for Captive stocks Level of captive breeding recs. Propagation Techniques

Other comments

### Sources

Compilers

Reviewers

### Typhlops tenebrarum Taylor, 1947

Typhlopidae Species

Arid zone lowland Fossorial, Leaf litter. Up to 30 m. Endemic to Sri Lanka 12 miles north of Trincomalee <100 < 100 1 Decrease in quality

Habitat loss, War Unknown Unknown

Unknown Unknown Unknown Unknown

Literature, Indirect information C. Gans, island-wide study in 1970s.

### CRITICALLY ENDANGERED Not listed

1998, Endangered

Unknown

Survey, Taxonomic research, Life history studies Habitat management, Wild population management, Monitoring, Captive breeding Species recovery, Research, Public awareness None Initiate programme within 3 years Techniques not known at all

As Taylor's (1947) 5 new species of *Typhlops are* from a single locality (12 miles north of Trincomalee), the validity of the species need to be studied with more samples.

### 51,53,64,116

K.E. Abeysiriwardana, B.A. Daniel, Anslem de Silva, P. de Silva, J.L. Ferdinando, K. Ganegama, K.K. Hewamathes, N.D. Herath, A. Jayawickrama, S.S.S. Jayasinghe, L.G. Jayasoorya, S.A. Lasantha, P.G.D.R. Premasiri, D. Srinath, L.K. Rathnayake, V.A.M.P.K. Samarawickrama, R.K. Somaweera, S. Wijewardhana

### Distribution

Habitat of the taxon Habitat specificity Current distribution (by country) Current Sri Lankan distribution Extent of occurrence (Sq. km.) Area of occupancy (Sq. km.) Number of locations/sub pop. Habitat status

### Threats

Threats to taxon Effect of threat on population Trade

### **Population numbers**

Global population Regional Pop (# sub-pop.) Number of mature individuals Generation time Population trends

Data Quality Recent field studies

### Status

IUCN CITES National Red Data Book Presence in Protected Area

### Recommendations

Research Management Captive breeding for Captive stocks Level of captive breeding recs. Propagation Techniques

Other comments

### Sources

Compilers

**Reviewers** 

*Typhlops veddae* Taylor, 1947 Typhlopidae Species

Coastal secondary forest Decaying wood debris. Up to 30 m ENDEMIC to Sri Lanka 12 miles north of Trincomalee <100 <100 1 Decrease in quality

War, Loss of habitat Unknown No

Unknown Unknown Unknown Unknown Unknown

### Literature

C. Gans, Island wide study in 1970s '

### CRITICALLY ENDANGERED

Not listed Endangered Unknown Criteria ......B1+2c National WL legislation ...... FFPA 1996 Red List (IUCN) ......Not listed

Survey, Taxonomic research, Life history studies Habitat management, Wild population management, Monitoring, Captive breeding Species recovery, Research, Public awareness None Initiate programme within 3 years Techniques not known at all

5 new species of Typhlops are from a single locality (12 miles north of Trincomalee) the validity of the species need to be studied with more samples.

51, 53, 84, 116

K.E. Abeysiriwardana, B.A. Daniel, Anslem de Silva, P. de Silva, J.L. Ferdinando, K. Ganegama, K.K. Hewamathes, N.D. Herath, A. Jayawickrama, S.S.S. Jayasinghe, L.G. Jayasoorya, S.A. Lasantha, P.G.D.R. Premasiri, D. Srinath, L.K. Rathnayake, V.A.M.P.K. Samarawickrama, R.K. Somaweera, S. Wijewardhana

### Distribution

Habitat of the taxon Habitat specificity Current distribution (by country) Current Sri Lankan distribution Extent of occurrence (Sq. km.) Area of occupancy (Sq. km.) Number of locations/sub pop. Habitat status

### Threats

Threats to taxon Effect of threat on population Trade

### **Population numbers**

Global population Regional Pop (# sub-pop.) Number of mature individuals Generation time Population trends

Data Quality Recent field studies

### Status

IUCN CITES National Red Data Book Presence in Protected Area

### Recommendations

Research Management Captive breeding for Captive stocks Level of captive breeding recs. Propagation Techniques

Other comments

### Sources

Compilers

**Reviewers** 

### *Typhlops violaceus* Taylor, 1947 Typhlopidae

Species

Coastal secondary forests Decaying vegetation. Fossorial. Up to 30 m. **ENDEMIC** to Sri Lanka 12 miles north of Trincomalee < 100 <100 1 Decrease in quality

War, Loss of habitat Unknown No

Unknown Unknown Unknown Unknown Unknown

Literature, Indirect information C. Gans, Island-wide study in 1970s

CRITICALLY ENDANGERED
Not listed
1998, Endangered
No

Criteria B1+2c	
National WL legislation FFPA	
1996 Red List (IUCN)Not listed	

Survey, Taxonomic research, Life history studies Habitat management, Wild population management, Monitoring, Captive breeding Species recovery, Research, Public awareness None Initiate programmeme within 3 years Techniques not known at all

5 new species of *Typhlops* are from a single locality (12 miles north of Trincomalee) the validity of the species need to be studied with more samples.

### 51,53,84,116

K.E. Abeysiriwardana, B.A. Daniel, Anslem de Silva, P. de Silva, J.L. Ferdinando, K. Ganogama, K.K. Howamathos, N.D. Hornth, A Jayawickrnma, S.S.S. Jayasinghe, L.G. Jayasoorya, S.A. Lasantha, P.G.D.R. Premasiri, D. Srinath, L.K. Rathnayake, V.A.M.P.K. Samarawickrama, R.K. Somaweera, S. Wijewardhana

Scientific name (author; date) Synonym Family Common name Taxonomic level of assessment

### Distribution

Habitat of the taxon Habitat specificity

Current distribution (by country) Current Sri Lankan distribution Extent of occurrence (Sq. km.) Area of occupancy (Sq. km.) Number of locations/sub pop. Habitat status

### Threats

Threats to taxon Effect of threat on population Trade

### **Population numbers**

Global population Regional Pop (# sub-pop.) Number of mature individuals Generation time Population trends

Data Quality Recent field studies

### Status

IUCN CITES National Red Data Book Presence in Protected Area

### Recommendations

Research Management Captive breeding for Captive stocks Level of captive breeding recs. Propagation Techniques

### Other comments

Sources

Compilers

Reviewers

### Cylindrophis maculata (Linnaeus, 1758)

Anguis maculata (Linnaeus, 1758) Uropeltidae Ceylon Pipe Snake (English), *Depathnaya, Vataulla* (Sinhala) Species

Home garden, cultivated land, plantations, paddy fields, lowland and sub-montane forests Under decaying vegetation, Moist loose soil, Fossorial; From low land to 1000 m. except arid zones and northern province **ENDEMIC** to Sri Lanka Matugama, Colombo, Kandy, Gampola > 20,000 > 2,000 Many, Contiguous Predicted decline < 20% in the next 10 years

Loss of habitat, Pesticides, Climate changes, Drought, Fire, Hunting Yes No

Unknown Unknown Unknown Predicted decline < 20% in the next 15 years

General field study, Informal field sighting, Literature, Museum, records. E.S. Bachman, 1985 and Anslem de Silva ongoing on Biology and distribution. Kandambi, D.S. at Galle (SP) (1989). Primary reports of snakes.

LOWER **RISK**-NEAR THREATENED Criteria .......--Not listed National WL legislation ...... FFPA Endangered 1996 Red List (IUCN) ......Not listed Sinharaja Peak Wilderness, Uduwatte kelae

Survey, Taxonomic research, Life history studies Habitat management, Monitoring, Captive breeding Education, Research, Public awareness None Initiate programme after 3 years Techniques not known at all

Encounting in home gardens is not uncommon. Seldom it is killed as some consider it venonmous.

5, 30, 33, 36, 51, 124

K.E. Abeysiriwardana, B.A. Daniel, Anslem de Silva, P. de Silva, J.L. Ferdinando, K. Ganegama, K.K. Hewamathes, N.D. Herath, A. Jayawickrama, S.S.S. Jayasinghe, L.G. Jayasoorya, S.A. Lasantha, P.G.D.R. Premasiri, D. Srinath, L.K. Rathnayake, V.A.M.P.K. Samarawickrama, R.K. Somaweera, S. Wijewardhana

Scientific name (author; date) Pseudotyphlops philippinus Schiegel, 1839 Uropeltis philippinus (Cuvier, 1829); Uropeltis grandis (Kelaart, 1853) A Synonyms Family Uropeltidae Large Shield Tail (English), Maha bim ulla (Sinhala) Common name Taxonomic level of assessment Species Distribution Habitat of the taxon Low land dry, intermediate and wet areas Fossorial and nocturnal snake. Loose humid soil. Up to 500 m. Habitat specificity Current distribution (by country) ENDEMIC to Sri Lanka Current Sri Lankan distribution Namunukula, Kirinda, Timbulketiya, Palapathwela, Matale Extent of occurrence (Sq. km.) < 5.000 Area of occupancy (Sq. km.) <500 Number of locations/sub pop. Few; Fragmented Habitat status > 20% predicted decline over years; Cultivation, Deforestation Threats Loss of habitat, Pesticides, Pollution, Climate, Drought, Fire, Road kills, Ploughing Threats to taxon Effect of threat on population Yes Trade No Population numbers Global population Unknown Regional Pop (# sub-pop.) Unknown Number of mature individuals Unknown Generation time Approximately 3 years Declining >20% in the last 3 generations'/Predicted decline < 20% in next 3 Population trends generations Informal field sightings, Literature/ Museum/ records Data Quality Recent field studies C. Gans; Anslem de Silva ongoing. Status ENDANGERED **IUCN** Criteria ......B1+2c National WL legislation ...... FFPA CITES Not listed National Red Data Book 1998, Vulnerable 996 Red List (IUCN) ..... Not listed Presence in Protected Area Many Recommendations Research Survey, Taxonomic research, Life history studies, Limiting factor research Management Habitat management, Monitoring, Captive breeding Education, Research, Public awareness Captive breeding for Captive stocks None Level of captive breeding recs. Initiate programme after 3 years Propagation Techniques Some techniques known for taxon or similar taxa Other comments Presently, C. Gans is revising the entire group of Uropeltids of Sri Lanka. Sources 33,51,64 Compilers K.E. Abeysiriwardana, B.A. Daniel, Anslem de Silva, P. de Silva, J.L. Ferdinando, K. Ganegama, K.K. Hewamathes, N.D. Herath, A. Jayawickrama, S.S.S. Jayasinghe, L.G. Jayasoorya, S.A. Lasantha, P.G.D.R. Premasiri, D. Srinath, L.K. Rathnavake, V.A.M.P.K. Samarawickrama, R.K. Somaweera, S. Wijewardhana Reviewers Anslem de Silva, R.K. Somaweera, K.D.B. Ukuwela

Scientific name (author; date) Synonyms Family Common name Taxonomic level of assessment

### Distribution

Habitat of the taxon Habitat specificity Current distribution (by country) Current Sri Lankan distribution Extent of occurrence (Sq. km.) Area of occupancy (Sq. km.) Number of locations/sub pop. Habitat status

### Threats

Threats to taxon

Effect of threat on population Trade

### **Population numbers**

Global population Regional Pop (# sub-pop.) Number of mature individuals Generation time Population trends

### Data Quality Recent field studies

### Status

IUCN CITES National Red Data Book Presence in Protected Area

### Recommendations

Research Management Captive breeding for Captive stocks Level of captive breeding recs. Propagation Techniques

Other comments

Sources

Compilers

Reviewers

### Rhinophis blythii Kelaart, 1853

Mytilia templetonii Gray, 1858 Uropeltidae Blyth's Earth Snake (English), *Gomarathudulla* (Sinhala) Species

Montane forest, Home gardens, plantations Humus, leaf litter. Fossorial. Up to 1700 m. ENDEMIC to Sri Lanka Hatton, Balangoda, Pundoluoya, Kotagalla < 5,000 < 500 Few; Fragmented Decrease in area > 50% decrease in 25 years, Decrease in Quality; Cultivation, Extensive agriculture practice.

Loss of habitat, Habitat fragmentation, Pesticides, Trampling, Ploughing, Human interference Yes

Unknown Unknown Unknown Predicted decline > 20% in the next '10 years

Informal field sighting, Literature/ Museum/ records, Indirect information C. Gans from late 1970's

### ENDANGERED

33,51,56,64,124

No

Not listed 1998, Endangered Peak Wilderness Criteria .......B1+2abc National WL legislation ......FFPA 1996 Red List (IUCN) ........ Not listed

Survey, Taxonomic research, Life history studies Habitat management, Wild population management, Monitoring, Captive breeding Species recovery, Preservation of live genome, Public awareness None Initiate programme within 3 years Techniques not known at all

Ploughing leads to the death of many animals. Captive breeding techniques have to be developed with the support of experts. Taxonomic studies required as there could be an additional undescribed species. Presently C. Gans is revising the entire group of Uropeltids of Sri Lanka.

K.E. Abeysiriwardana, B.A. Daniel, Anslem de Silva, P. de Silva, J.L. Ferdinando, K. Ganegama, K.K. Hewamathes, N.D. Herath, A. Jayawickrama, S.S.S. Jayasinghe, L.G. Jayasoorya, S.A. Lasantha, P.G.D.R. Premasiri, D. Srinath, L.K. Rathnayake, V.A.M.P.K. Samarawickrama, R.K. Somaweera, S. Wijewardhana

### Distribution

Habitat of the taxon Habitat specificity Current distribution (by country) Current Sri Lankan distribution Extent of occurrence (Sq. km.) Area of occupancy (Sq. km.) Number of locations/sub pop. Habitat status

### Threats

Threats to taxon

Effect of threat on population Trade

### **Population numbers**

Global population Regional Pop (# sub-pop.) Number of mature individuals Generation time Population trends

Data Quality Recent field studies

### Status

IUCN CITES National Red Data Book Presence in Protected Area

Recommendations Research

Management

Captive breeding for Captive stocks Level of captive breeding recs. Propagation Techniques

Other comments

### Sources

Compilers

Reviewers

*Rhinophis dorsimaculatus* Deraniyagala, 1941 Uropeltidae Species

Dry zone, low land scrub jungles Moist loose soil. Fossorial. Up to 50 m. ENDEMIC to Sri Lanka Marichikate (Northwestern Province) < 100 < 100 1 Predicted decline < 20% in the next five years; Decreasing quality; War and Agriculture are the primary cause of change

Loss of habitat, Habitat fragmentation, Pesticides, Poisoning, War, Climate, Drought, Human interference Yes No

Unknown Unknown Unknown Predicted decline <20% in the next 10 years.

Literature, Indirect information C. Gans, since mid 1970s

### CRITIALLY ENDANGERED

Not listed Critically Endangered Wilpattu National Park

CriteriaB1+2abc
National WL legislation FFPA
1996 Red List (IUCN) Not listed

Survey, Taxonomic research, Life history studies Habitat management, Wild population management, Monitoring, Translocation, Captive breeding Species recovery, preservation of live genome None Initiate programme within 3 years Techniques not known at all

No recent field study has been done in these areas. Presently C. Gans is revising the entire group of Uropeltids of Sri Lanka

33,51,64,75

K.E. Abeysiriwardana, B.A. Daniel, Anslem de Silva, P. de Silva, J.L. Ferdinando, K. Ganegama, K.K. Hewamathes, N.D. Herath, A. Jayawickrama, S.S.S. Jayasinghe, L.G. Jayasoorya, S.A. Lasantha, P.G.D.R. Premasiri, D. Srinath, L.K. Rathnayake, V.A.M.P.K. Samarawickrama, R.K. Somaweera, S. Wijewardhana

### Distribution

Habitat of the taxon Habitat specificity Current distribution (by country) Current Sri Lankan distribution

Extent of occurrence (Sq. km.) Area of occupancy (Sq. km.) Number of locations/sub pop. Habitat status

### Threats

Threats to taxon Effect of threat on population Trade

### **Population numbers**

Global population Regional Pop (# sub-pop.) Number of mature individuals Generation time Population trends

Data Quality Recent field studies

### Status

IUCN CITES National Red Data Book Presence in Protected Area

### Recommendations

Research Management Captive breeding for Captive stocks Level of captive breeding recs. Propagation Techniques

Other comments

Sources

Compilers

Rhinophis drummond-hayi Wall, 1921

Uropeltidae Drummond-Hay's Earth Snake (English); *Thapothudulla* (Sinhala) Species

Savana forests. Moist soil. Fossorial. Up to 1200 m. ENDEMIC to Sri Lanka Haludumulla, Kaluphana Estate, Uva pathana (Uva Province), Namunukulla (Uva province) < 5,000 <500 Few, Fragmented Decrease in area; predicted decline >20% in the next 10 years; Man made fire and Human interference

Loss of habitat, Pesticides, Pollution, Fire, Ploughing, Human interference Yes No

Unknown Unknown Unknown Unknown Declining > 20% in the last 15 years

Literature, Museum/records, Indirect information C. Gans, since 1970s

### ENDANGERED

Not listed 1998, Critically Endangered Unknown Criteria ......B1+2bc National WL legislation ......FFPA 1996 Red List (IUCN) ......Not listed

Taxonomic research, Survey, Life history studies Habitat management, Wild population management, Monitoring/Captive Breeding Education, Research None Initiate programme within 3 years Techniques not known at all

Presently C. Gans is revising the entire group of Uropeltids of Sri Lanka

33,51,64,75,113,123,124

K.E. Abeysiriwardana, B.A. Daniel, Anslem de Silva, P. de Silva, J.L. Ferdinando, K. Ganegama, K.K. Hewamathes, N.D. Herath, A. Jayawickrama, S.S.S. Jayasinghe, L.G. Jayasoorya, S.A. Lasantha, P.G.D.R. Premasiri, D. Srinath, L.K. Rathnayake, V.A.M.P.K. Samarawickrama, R.K. Somaweera, S. Wijewardhana

Reviewers

Scientific name (author; date) Synonym Family Common name Taxonomic level of assessment

### Distribution

Habitat of the taxon Habitat specificity Current distribution (by country) Current Sri Lankan distribution

Extent of occurrence (Sq. km.) Area of occupancy (Sq. km.) Number of locations/sub pop. Habitat status

### Threats

Threats to taxon Effect of threat on population Trade

### **Population numbers** Global population

Regional Pop (# sub-pop.) Number of mature individuals Generation time Population trends

Data Quality Recent field studies

### Status

IUCN CITES National Red Data Book Presence in Protected Area

### Recommendations

Research Management Captive breeding for Captive stocks Level of captive breeding recs. Propagation Techniques

Other comments

Sources

Compilers

Reviewers

### Rhinophis oxyrhynchus (Schneider, 1801)

*Typhlops oxyrhynchus* (Schneider, 1801) Uropeltidae Schneider's Earth Snake (English), *Ulthudulla* (Sinhala) Species

Dry zone low land forests, Agricultural fields and Home gardens Fossorial. Under heap of leafs, dry zone soils. **ENDEMIC** to Sri Lanka Mulaithivu (North central), Trincomalee, Vavuniya (North eastern), Polonnaruwa (North central) > 20,000 > 2,000 Many, Fragmented Decrease in area; decrease in habitat 50% in the last 15 years; Decrease in Quality; Agriculture practice and war are the primary cause of change

Loss of habitat, Pesticides, War, Climate, Drought, Ploughing Unknown No

Unknown Unknown Unknown Predicted decline > 20% in the next 5-10 years

Literature/ Museum/ records, Indirect information C. Gans; Anslem de Silva ongoing.

VULNERABLE Not listed 1998, Endangered Odusudan Criteria ...... A2c National WL legislation ...... FFPA 1996 Red List (IUCN) ......... Not listed

Survey, Life history studies Habitat management, Monitoring, Captive Breeding Research None Initiate programme within 3 years Techniques not known at all

Taxonomic studies urgent. Presently C. Gans is revising the entire group of Uropeltids of Sri Lanka. Declining in natural habitats due to land preparation during the Mahaweli development system.

K.E. Abeysiriwardana, B.A. Daniel, Anslem de Silva, P. de Silva, J.L. Ferdinando, K. Ganegama, K.K. Hewamathes, N.D. Herath, A. Jayawickrama, S.S.S. Jayasinghe, L.G. Jayasoorya, S.A. Lasantha, P.G.D.R. Premasiri, D. Srinath, L.K. Rathnayake, V.A.M.P.K. Samarawickrama, R.K. Somaweera, S. Wijewardhana

Anslem de Silva, R.K. Somaweera and K.D.B. Ukuwela

Scientific name (author; date) Synonym Family Common name Taxonomic level of assessment

### Distribution

Habitat of the taxon Habitat specificity Current distribution (by country) Current Sri Lankan distribution Extent of occurrence (Sq. km.) Area of occupancy (Sq. km.) Number of locations/sub pop. Habitat status

### Threats

Threats to taxon Effect of threat on population Trade

### **Population numbers**

Global population Regional Pop (# sub-pop.) Number of mature individuals Generation time Population trends

**Data Quality Recent field studies** 

### Status

**IUCN** CITES National Red Data Book Presence in Protected Area

### Recommendations

Research Management Captive breeding for Captive stocks Level of captive breeding recs. Propagation Techniques

Other comments

Sources

Compilers

K.E. Abeysiriwardana, B.A. Daniel, Anslem de Silva, P. de Silva, J.L. Ferdinando, K. Ganegama, K.K. Hewamathes, N.D. Herath, A. Jayawickrama, S.S.S. Jayasinghe, L.G.

Reviewers

### Rhinophis philippinus (Cuvier, 1829)

Typhlops philippinus (Cuvier, 1829) Uropeltidae Peter's Earth Snake (English) Species

Wet zone forests and plantations Fossorial. Leaf litter, under logs. Distributed from 100-900 m. ENDEMIC to Sri Lanka Yatiyantota, Rakwana, Balangoda, Buluthota (Sabaragamuwa province). < 20,000 < 2,000 Few, Fragmented Decrease in Area; decrease in habitat > 20% in the last 10 years; Decrease in quality; Agriculture is the primary cause of change

Human Interference, Loss of habitat, Pesticides, Ploughing Yes No

Unknown Unknown Unknown Unknown Predicted decline > 20% in the next 10 years/generations

Literature/Museum/records, Indirect information C. Gans since 1970's

VULNERABLE Not listed 1998, Endangered Unknown

Criteria ..... A2c; B1+2bc National WL legislation ...... FFPA 1996 Red List (IUCN) .....Not listed

Survey, Taxonomic research, Life history studies Habitat management, Wild population management, Monitoring, Captive breeding Research None Initiate programme within 3 years Techniques not known at all

Presently C. Gans is revising the entire group of Uropeltids of Sri Lanka.

33, 51, 56, 64, 75

Jayasoorya, S.A. Lasantha, P.G.D.R. Premasiri, D. Srinath, L.K. Rathnayake, V.A.M.P.K. Samarawickrama, R.K. Somaweera, S. Wijewardhana

Conservation Assessment and Management Plan for Amphibians and Reptiles of Sri Lanka - Report

Anslem de Silva, R.K. Somaweera K.D.B. Ukuwela

### Distribution

Habitat of the taxon Habitat specificity Current distribution (by country) Current Sri Lankan distribution Extent of occurrence (Sq. km.) Area of occupancy (Sq. km.) Number of locations/sub pop. Habitat status

### Threats

Threats to taxon Effect of threat on population Trade

### **Population numbers**

Global population Regional Pop (# sub-pop.) Number of mature individuals Generation time Population trends

Data Quality Recent field studies

### Status

IUCN CITES National Red Data Book Presence in Protected Area

### Recommendations

Research Management Captive breeding for Captive stocks Level of captive breeding recs. Propagation Techniques

Other comments

### Sources

Compilers

Reviewers

### Rhinophis porrectus Wall, 1921

Uropeltidae Willey's Earth Snake (English), *Digthudulla* (Sinhala) Species

Arid dry zone Fossorial. Leaf litter, loose soil. Up to 100 m. ENDEMIC to Sri Lanka North western province - Puttlam and Chillaw < 5000 <500 2; Fragmented Predicted decline > 20% in the next 10 years; Human settlements and Urbanisation are the primary cause of change

Human Interference, Loss of habitat, Habitat fragmentation, Climate, Drought Unknown No

Unknown Unknown Unknown Predicted decline > 20% in next 5 years/generations

Literature/ Museum/ records, Indirect information

ENDANGERED
Not listed
Data Deficient

Unknown

Criteria ......B1+2c National WL legislation ......FFPA 1996 Red List (IUCN) ....... Not listed

Survey Habitat management, Wild population management, Monitoring, Captive breeding Education, Research None Initiate programme within 3 years Techniques not known at all

Presently C. Gans is revising the entire group of Uropeltids of Sri Lanka. The validity of *R. porrectus* and *R. punctatus* need to be studied with more specimens.

33, 51, 64, 75, 124

K.E. Abeysiriwardana, B.A. Daniel, Anslem de Silva, P. de Silva, J.L. Ferdinando, K. Ganegama, K.K. Hewamathes, N.D. Herath, A. Jayawickrama, S.S.S. Jayasinghe, L.G. Jayasoorya, S.A. Lasantha, P.G.D.R. Premasiri, D. Srinath, L.K. Rathnayake, V.A.M.P.K. Samarawickrama, R.K. Somaweera, S. Wijewardhana

Anslem de Silva, R.K. Somaweera, K.D.B. Ukuwela

### Distribution

Habitat of the taxon Habitat specificity Current distribution (by country) Current Sri Lankan distribution Extent of occurrence (Sq. km.) Area of occupancy (Sq. km.) Number of locations/sub pop. Habitat status

### Threats

Threats to taxon

Effect of threat on population Trade

### **Population numbers**

Global population Regional Pop (# sub-pop.) Number of mature individuals Generation time Population trends

Data Quality Recent field studies

### Status

IUCN CITES National Red Data Book Presence In Protected Area

### Recommendations

Research Management Captive breeding for Captive stocks Level of captive breeding recs. Propagation Techniques

Other comments

### Sources

Compilers

Reviewers

Rhinophis punctatus **Muller**, **1832** Uropeltidae Muller's Earth Snake (English), *Tithudulla* (Sinhala) Species

Rain forests and home gardens Fossorial. Moist soil. Up to 500 m. ENDEMIC to Sri Lanka Peradeniya (Central province) <500 < 500 Few Predicted decline > 20% in the next 10 years; Human Interference is the primary cause of change

Pesticides, Poisoning, Pollution, Climate, Drought, Human Interference, Loss of habitat, Ploughing Yes No

Unknown Unknown Unknown Predicted decline > 20% in the next 10 years

Museum, records/ Literature, Indirect information C. Gans, since 1970s.

### ENDANGERED

Not listed 1998, Endangered Unknown Criteria ......**B1+2c** National WL legislation ...... FFPA 1996 Red List (IUCN) ........Not listed

Survey, Taxonomic research, Life history studies Habitat management, Monitoring, Captive breeding Education, Research None Initiate programme within 3 years Information not available with this group of compilers

Presently C. Gans is revising the entire group of Uropeltids of Sri Lanka. The validity of *R. porrectus* and *R. punctatus* need to be studied with more specimens.

33, 51, 64, 75, 124

K.E. Abeysiriwardana, B.A. Daniel, Anslem de Silva, P. de Silva, J.L. Ferdinando, K. Ganegama, K.K. Hewamathes, N.D. Herath, A. Jayawickrama, S.S.S. Jayasinghe, L.G. Jayasoorya, S.A. Lasantha, P.G.D.R. Premasiri, D. Srinath, L.K. Rathnayake, V.A.M.P.K. Samarawickrama, R.K. Somaweera, S. Wijewardhana

Anslem de Silva, R.K. Somaweera and K.D.B. Ukuwela

Scientific name (author; date) Synonyms Family Common name Taxonomic level of assessment

### Distribution

Habitat of the taxon Habitat specificity Current distribution (by country) Current Sri Lankan distribution Extent of occurrence (Sq. km.) Area of occupancy (Sq. km.) Number of locations/sub pop. Habitat status

### Threats

Threats to taxon

Effect of threat on population Trade

### **Population numbers**

Global population Regional Pop (# sub-pop.) Number of mature individuals Generation time Population trends

### Data Quality Recent field studies

### Status

IUCN CITES National Red Data Book Presence in Protected Area

### Recommendations

Research Management

Captive breeding for Captive stocks Level of captive breeding recs. Propagation Techniques

### Other comments

Sources

Compilers

Reviewers

### Rhinophis trevelyanus (Kelaart, 1853)

*RhinophJshomolepis* (Hemprich, 1820) Uropeltidae Trevelyan's Earth Snake (English), *Depaththudulla* (Sinhala) Species

Rain forests, Plantations, Home gardens Leaf litter, loose soil, Fossorial, Below 900m. ENDEMIC to Sri Lanka Rathnapura, Yatiyanthota, Peradeniya, Weligalla, Gampola (Central province) < 20,000 <2,000 Many; fragmented Decrease in area; decrease in habitat over years more than 20% in the last 10 years; Decrease in quality; Human settlements are the primary cause of change

Human interference, Loss of habitat, Pesticides, Pollution, Poisoning, Climate, Drought, Agriculture, Ploughing Yes Unknown

Unknown Unknown Unknown > 20% in the next 10 years

Literature, museums, records C. Gans, since 1970s.

VULNERABLECriteriaB1+2bcNot listedNational WL legislationB1+2bc1998, Endangered1996 Red List (IUCN)FFPAUdawaththakele, Gannoruwa (Central province), Sinharaja

Survey, Life history studies Habitat management, Monitoring, Wild population management, Captive breeding, Education, Research None Initiate programme after 3 years Information not available with this group of Compilers

Presently C. Gans is revising the entire group of Uropeltids of Sri Lanka

33,51,64,75,124

K.E, Abeysiriwardana, B.A. Daniel, Anslem de Silva, P. de Silva, J.L. Ferdinando, K. Ganegama, K.K. Hewamathes, N.D. Herath, A. Jayawickrama, S.S.S. Jayasinghe, L.G. Jayasoorya, S.A. Lasantha, P.G.D.R. Premasiri, D. Srinath, L.K. Rathnayake, V.A.M.P.K. Samarawickrama, R.K. Somaweera, S. Wijewardhana

Anslem de Silva, R.K. Somaweera, K.D.B. Ukuwela

Scientific name (author; date) Synonyms Family Common name Taxonomic level of assessment

### Distribution

Habitat of the taxon Habitat specificity Current distribution (by country) Current Sri Lankan distribution Extent of occurrence (Sq. km.) Area of occupancy (Sq. km.) Number of locations/sub pop. Habitat status

### Threats

Threats to taxon

Effect of threat on population Trade

**Population numbers Global** population Regional Pop (# sub-pop.) Number of mature individuals Generation time Population trends

**Data Quality** Recent field studies

### Status

IUCN CITES National Red Data Book Presence in Protected Area

### Recommendations

Research Management Captive breeding for Captive stocks Level of captive breeding recs. Propagation Techniques

Other comments

Sources

Compilers

K.E. Abeysiriwardana, B.A. Daniel, Anslem de Silva, P. de Silva, J.L. Ferdinando, K. Ganegama, K.K. Hewamathes, N.D. Herath, A. Jayawickrama, S.S.S. Jayasinghe, L.G. Javasoorva, S A. Lasantha, P.G.D.R. Premasiri, D. Srinath, L.K. Rathnayake, V.A.M.P.K. Samarawickrama, R.K. Somaweera, S. Wijewardhana

**Reviewers** 

### Uropeltis melanogaster (Gray, 1858)

Mvtilia melanogaster (Gray, 1858) Uropeltidae Gray's Earth Snake (English), Kaluwakathudulla (Sinhala) Species

Montane evergreen forests Fossorial, Loose soil. Up to 1000m ENDEMIC to Sri Lanka Hills of Central Province < 20,000 > 2,000 Many (within Central province), Fragmented Decrease in area: Decrease in habitat > 20% in the last 10 years: Decrease in quality: Cultivation of vegetable, tea plantations, Human settlements are the primary cause of change

Human Interference, Loss of habitat, Pesticides, Poisoning, Pollution, Climate, Ploughing, Drought Yes No

Unknown Unknown Unknown Unknown Unknown

Informal field sighting, Literature C. Gans, since 1970s.

### VULNERABLE

Criteria .....B1+2bc National WL legislation ...... FFPA Not listed Data Deficient 1996 Red List (IUCN) ..... Not listed Many PA's in the Central Province

Survey Habitat management, Monitoring, Captive breeding Public awareness, Education, Research None Initiate programme after 3 years Techniques not known at all

Only reported from the hills of central province where man made fire is a threat. Presently C. Gans is revising the entire group of Uropeltids of Sri Lanka.

33, 51, 56, 64, 75

Anslem de Silva, R.K. Somaweera, K.D.B. Ukuwela

### Distribution

Habitat of the taxon Habitat specificity Current distribution (by country) Current Sri Lankan distribution Extent of occurrence (Sq. km.) Area of occupancy (Sq. km.) Number of locations/sub pop. Habitat status

Threats Threats to taxon

Effect of threat on population Trade

### **Population numbers**

Global population Regional Pop (# sub-pop.) Number of mature individuals Generation time Population trends

Data Quality Recent field studies

### Status

IUCN CITES National Red Data Book Presence in Protected Area

### Recommendations

Research Management Captive breeding for Captive stocks Level of captive breeding recs. Propagation Techniques

### Other comments

### Sources

Compilers

Reviewers

### Uropeltis phillipsi (Nicholls, 1929)

Uropeitidae Phillips's Earth Snake (English), *Iriwakatulla* Sinhala Species

Sub montane, dry mixed forest, home gardens Fossorial. Moist soil; 760m ENDEMIC to Sri Lanka Maousakanda Estate, Gammaduwa of East Matale < 100 <100 2; Fragmented Decrease in area; decrease in habitat < 20% in the last 10 years; Minor export plant cultivation (Spices)

Human Interference, Loss of habitat, Pesticides, Pollution, Drought, Fire Ploughing Yes No

Unknown Unknown Unknown Unknown Predicted decline > 20% in the next 10 years

Informal field sightings, Literature, Museum, records, Indirect information. C. Gans, since 1970s.

CRITIALLY ENDANGEREDCriteriaB1+2bcNot listedNational WL legislationFFPA1998 Critically Endangered1996 Red List (IUCN)Not listedKnuckles (Strict nature forest reserve)Strict nature forest reserveStrict nature forest reserve

Survey, Life history studies Habitat management, Wild population management, Monitoring, Captive breeding Education, Research, Public awareness None Initiate programme within 3 years Techniques not known at all

Original letters by Dr. L. Nicholls to Mr. W.W.A. Phillips in naming this species are in "Anslem de Silva Collection". Presently C. Gans is revising the entire group of Uropeltids of Sri Lanka.

33,51,64,76,103

K.E. Abeysiriwardana, B.A. Daniel, Anslem de Silva, P. de Silva, J.L. Ferdinando, K. Ganegama, K.K. Hewamathes, N.D. Herath, A. Jayawickrama, S.S.S. Jayasinghe, L.G. Jayasoorya, S.A. Lasantha, P.G.D.R. Premasiri, D. Srinath, L.K. Rathnayake, V.A.M.P.K. Samarawickrama, R.K. Somaweera, S. Wijewardhana

### Distribution

Habitat of the taxon Habitat specificity Current distribution (by country) Current Sri Lankan distribution Extent of occurrence (Sq. km.) Area of occupancy (Sq. km.) Number of locations/sub pop. Habitat status

### Threats

Threats to taxon

Effect of threat on population Trade

### **Population numbers**

Global population Regional Pop (# sub-pop.) Number of mature individuals Generation time Population trends

Data Quality Recent field studies

### Status

IUCN CITES National Red Data Book Presence in Protected Area

### Recommendations

Research Management Captive breeding for Captive stocks Level of captive breeding recs. Propagation Techniques

Other comments

### Sources

Compilers

Reviewers

*Uropeltis ruhunae* Deraniyagala, 1954 Uropeltidae Species

Evergreen rain forest in southern province Fossorial. Moist soil. Up to 100 m. ENDEMIC to Sri Lanka Galle (Southern province) < 100 <100 1 Decrease in habitat over years > 20% in the next 10 years; Decrease in quality; New industrial development, Cultivation are the primary cause of change.

Human interference, Loss of habitat, Habitat fragmentation, Poisoning, Pollution, Climate, Drought Yes No

Unknown Unknown Unknown Predicted decline > 20% in the next 10 years

Literature, Indirect information, Museum/records None

### CRITICALLY ENDANGERED

Not listed 1998, Critically Endangered Unknown Criteria ......B1 +2c National WL legislation ......FFPA 1996 Red List (IUCN) ......Not listed

Survey Monitoring Unknown None Initiate programme within 3 years Information not available with this group of compilers

Presently C. Gans is revising the entire group of Uropeltids of Sri Lanka.

### 33,51,56,64,75

K.E. Abeysiriwardana, B.A. Daniel, Anslem de Silva, P. de Silva, J.L. Ferdinando, K. Ganegama, K.K. Hewamathes, N.D. Herath, A. Jayawickrama, S.S.S. Jayasinghe, L.G. Jayasoorya, S.A. Lasantha, P.G.D.R. Premasiri, D. Srinath, L.K. Rathnayake, V.A.M.P.K. Samarawickrama, R.K. Somaweera, S. Wijewardhana

Anslem de Silva, R.K. Somaweera, K.D.B. Ukuwela

Scientific name (author; date) Synonym Family Common name Taxonomic level of assessment

### Distribution

Habitat of the taxon Habitat specificity Current distribution (by country) Current Sri Lankan distribution

Extent of occurrence (Sq. km.) Area of occupancy (Sq. km.) Number of locations/sub pop. Habitat status

### Threats

Threats to taxon Effect of threat on population Trade

### **Population numbers**

Global population Regional Pop (# sub-pop.) Number of mature individuals Generation time Population trends

**Data Quality Recent field studies** 

### Status

IUCN CITES National Red Data Book Presence in Protected Area

### Recommendations

Research Management Captive breeding for Captive stocks Level of captive breeding recs. Propagation Techniques

### Other comments

Sources

Compilers

Reviewers

### Hypnale nepa (Laurenti, 1768)

Coluber nepa (Laurenti, 1768) Viperidae Millard's Hump-nose Viper (English), Mukalan thelissa (Sinhala) Species

Rain forest Leaf litter under stone, 1800 m. Terrestrial ENDEMIC to Sri Lanka Gampola, Pallepola, Dolosbage, Hakgala, Ambewela, Matugama, Horana, Haputale, Sinharaja forest, Peak Wilderness < 20,000 > 2,000 Many: Fragmented Decrease in area > 20% in the next 10 to 12 years; Decrease in quality; Deforestation is the primary cause of change

Loss of habitat, killing. Yes No

Unknown Unknown > 2500 (Unknown) 4 years Predicted decline < 20% in the next 3 generations

General field study, Informal field sightings, Literature, Museum, records Dr. Roger Conant and Anslem de Silva in Middle 1980's.

### VULNERABLE

Criteria .....B1+2c National WL legislation ...... FFPA Not listed 1996 Red List (IUCN) ..... Not listed 1998. Critically Endangered. Sinharaja, Hakgala, Peak wildness

Survey Sustainable utilisation, Captive breeding Species recovery, research None initiate programme after 3 years Some techniques known for taxon or similar taxa

Due to high incidence of viperine bites, the snakes in killed on sight.

### 33, 34, 51, 64, 124

K.E. Abeysiriwardana, B.A. Daniel, Anslem de Silva, P. de Silva, J.L. Ferdinando, K. Ganegama, K.K. Hewamathes, N.D. Herath, A. Jayawickrama, S.S.S. Jayasinghe, L.G. Jayasoorya, S.A. Lasantha, P.G.D.R. Premasiri, D. Srinath, L.K. Rathnayake, V.A.M.P.K. Samarawickrama, R.K. Somaweera, S. Wijewardhana

Scientific name (author; date) Synonym Family Common name Taxonomic level of assessment

### Distribution

Habitat of the taxon Habitat specificity Current distribution (by country) Current Sri Lankan distribution Extent of occurrence (Sq. km.) Area of occupancy (Sq. km.) Number of locations/sub pop. Habitat status

### Threats

Threats to taxon Effect of threat on population Trade

### **Population numbers**

Global population Regional Pop (# sub-pop.) Number of mature individuals Generation time Population trends

### Data Quality Recent field studies

### Status

IUCN CITES National Red Data Book Presence in Protected Area

### Recommendations

Research Management Captive breeding for Captive stocks Level of captive breeding recs. Propagation Techniques

### Other comments

Sources

Compilers

Reviewers

### Hypnale wal/i (Gloyd, 1977)

Ancistrodon walli Viperidae Gloyd' s Hump-nose Viper (English), Kuda mukalan thelissa (Sinhala) Species

Rain forest Leaf litter, base of shrubs and grass. 1800m ENDEMIC to Sri Lanka Udagama, Hakgala, Peak Wilderness, Maskeliya < 20,000 > 2,000 5; fragmented Decrease in area < 20% in the last 10 years; Deforestation **is the** primary cause of change

Loss of habitat, Poisoning, Pollution, Climate, Drought, Hunting. Yes No

Unknown Unknown Unknown Unknown Predicted decline < 20% in the next 10 years

General field study, Informal field sighting, Literature, Indirect information Roger Conant and Anslem de Silva in middle 1980's

 VULNERABLE
 Criteria
 B1+2bc

 Not listed
 National WL legislation
 FFPA

 1998, Critically Endangered
 1996 Red List (IUCN)
 Not listed

 Sinharaja, Knuckles, Kanelliva, Hakgala
 Kanelliva, Hakgala
 Not listed

Survey, Life history studies Habitat management, Monitoring, Captive breeding Public awareness None Initiate programme after 3 years Some techniques known for taxon or similar taxa.

Further studies are required to establish the validity of H. walli.

### 33,51,80

K.E. Abeysiriwardana, B.A. Daniel, Anslem de Silva, P. de Silva, J.L. Ferdinando, K. Ganegama, K.K. Hewamathes, N.D. Herath, A. Jayawickrama, S.S.S. Jayasinghe, LG. Jayasoorya, S.A. Lasantha, P.G.D.R. Premasiri, D. Srinath, L.K. Rathnayake, V.A.M.P.K. Samarawickrama, R.K. Somaweera, S. Wijewardhana

Scientific name (author; date) Synonym Family Common name Taxonomic level of assessment	<i>Trimeresurus trigonocephalus</i> (Sonnini & Latriele, 1801) <i>Vipera trigonocephala Sonnini</i> et Latriele, 1801 Viperidae Green Pit Viper (English), <i>Pala Polonga</i> (Sinhala) Species
Distribution Habitat of the taxon Habitat specificity Current distribution (by country) Current Sri Lankan distribution Extent of occurrence (Sq. km.) Area of occupancy (Sq. km.) Number of locations/sub pop. Habitat status	Wet, dry and intermediate zone forests and montane forests Trees, bushes, bamboos; Up to 1750 m, Arboreal <b>ENDEMIC</b> to Sri Lanka Sinharaja Forest, Central Provience, Puttalam (Northwestern province), Dambulla (Northcentral province), Sabara Gamuwa province > 20,000 > 2,000 Many, Fragmented Decrease in area; decrease in habitat > 20% in the last 20 years; Deforestation for agriculture and human settlements are the primary cause of change
<b>Threats</b> Threats to taxon Trade Effect of trade on population	Loss of habitat, Over exploitation, Hunting, Human interference Yes, Commercial; Smuggling for pet Trade Unknown
<b>Population numbers</b> Global population Regional Pop (# sub-pop.) Number of mature individuals Generation time Population trends	Unknown Unknown Unknown 10 years Declining > 20% in the last 10 years
Data Quality Recent field studies	General field study, Informal field sighting, Literature, Indirect information such as from trade etc., Museum/records Somaweera and Ukuwela in Menikdena, ongoing; N. Rathnayake in Kandy, 1977, Reptiles of Udawathakella; D. Kandambi in Galle, 1989; Samarawikrama in Kandy, Gannorua, 1992 -1994; P. Ginigae in Knuckles Range, 1989; Anslem de Silva, Island-wide study.
<b>Status</b> IUCN CITES National Red Data Book Presence in Protected Area	VULNERABLECriteriaA1cNot listedNational WL legislationFFPA1998, Vulnerable1996 Red List (IUCN)Not listedSinharaja, Knuckles, Peak wildeness, Uduwattakele
<b>Recommendations</b> Research Management Captive breeding for Captive stocks Level of captive breeding recs. Propagation Techniques	Survey Monitoring, Captive breeding Public awareness, Education, Research, Commercial, Venom extraction None Initiate programme after 3 years Techniques known for this taxon or similar taxon
Other comments	As it is a handsome snake it is often smuggled for pet trade and for exhibition.
Sources	29, 33, 34, 64,124
Compilers	K.E. Abeysiriwardana, B.A. Daniel, Anslem de Silva, P. de Silva, J.L. Ferdinando, K. Ganegama, K.K. Hewamathes, N.D. Herath, A. Jayawickrama, S.S.S. Jayasinghe, L.G. Jayasoorya, S.A. Lasantha, P.G.D.R. Premasiri, D. Srinath, LK. Rathnayake, V.A.M.P.K. Samarawickrama, R.K. Somaweera, S. Wijewardhana
Reviewers	Anslem de Silva

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### ANNEXURES

### CONSERVATION ASSESSMENT AND MANAGEMENT PLAN WORKSHOP FOR AMPHIBIANS AND REPTILES OF SRI LANKA

REPORT 2000

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144	AMPHIBI	ANS AND REP	TILES OF SRI	LANKA		Page 1
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2E. Current region	al distribution (in Sri Lanka	ı): <u> </u>			·	ala di sana
	ting the first second				· · · · · · · · · · · · · · · · · · ·	
nferred or projected or sq.km.	FENT OF OCCURENCE ( d as the area contained w i sites of present occuren	of the taxon in and a rithin the shortest co ce of the taxon): (tic ) sq.km.	nround the area of s ontinuous imaginar of appropriate box) 5,001 - 20,000 sq	study/ sighting y boundary e .km.	ncompassing a > 20,001 sq.ki	<b>all known,</b> <b>m.</b>
s defined as the are	a occupied by the taxon	within the 'extent of	occurence'): (tick a	appropriate b	ox)	- A Marine State
□ < 10 sq.km.			501 - 2,000 sq.km		> 2,001 sq.km	<b>t.</b> English the
Number of Loca	tions or Subpopulation	s in which the taxon	is distributed:			<del></del>
5A. Are the locati	ons or populations:	Contiguous 🛛	Fragmented	tin an sin	an an Island	glag en stran
. Habitat status:						
	change in the habitat wh		rs: 🖸 Yes Stable in area		lf yes, Is i Unknown	ta
6B. If Decreasing, □ < 20%	, what has been the decree $\Box > 20\%$	ase in habitat (app > 50%	roximately, in perce %	ent) over year □ > 80%	s?: in the last	years
□ < 20%	nknown, do you predict a	· 🗆 > 50%	6	🗆 > 80%	in the next	years
6D. State primary of	ause of change:					
6E. Is there any cl Decrease in qua	hange in the quality of ha ality	ibitat where the tax quality	on occurs: D Y Stable in quality	les DN	o <b>if yes,</b> Unknown	
	use of change:					• • •

			i .	
7 7				Page
7. Threats: 7A. What are the threats to the				
Human interference [P] [F] Damming [P] [F] Grazing [P] [F] Hunting [P] [F]	Trade of parts [	P] [F] et or medicine [P] [F]	Nutritional disorders Pathogens [P] [F] Predation [P] [F]	uqua su l'u Mu
Hunting for medicine [P] [F] Hunting for food [P] [F] Hunting for timber [P] [F] Loss of habitat [P] [F] Habitat fragmentation [P] [F] Habitat loss due to exotic animal Habitat loss due to exotic plan	Natural/ Man ir Climate [P] [F] Disease [P] [F] Decline in prey s [P] [F] Drowning [P] [F] its [P][F] Edaphic change	es [P] [F]	Catastrophes [P] [F Drought [P] [F] El Nino [P] [F] Fire [P] [F] Hurricane [P] [F]	<b>P][F]</b>
Overexploitation [P] [F] Pesticides [P] [F] Poisoning [P] [F] Pollution [P] [F] Powerlines [P] [F] Political unrest [P] [F]	Genetic problem Hybridization [P Interspecific com Interspecific comp Interspecific comp	] [F] apetition [P] [F] petition from exotics [P]	Landslide [P] [F] Tsunami [P] [F] Volcano [P] [F] [F] [F] Others (please spec	
7B. Are these threats resulting it	n (perceived or inferred) o	or may result in (predic	ted) population decline	?: 🗆 Yes 🗆 No
8. Trade:	· · · · ·	• • • •	10 78 - <b>1</b>	
8A. Is the taxon in trade?:	I Yes 🛛 No	If yes, is it	tere er utter <del>b</del> erre	
	Domestic		D Internatio	l
🗆 Meat	Legs Eggs Bones	Scales     Skin     Laboratory	□ Sheil □ Whole a □ Pet trade	nimal
8C. Which form of trade (specifie	ed form) is resulting in a pe	erceived or inferred pop	oulation decline?:	······································
				Na Maria Ing Ta
9. Population numbers: 9A. Global population:				n na ser <del>en d</del> e en 1 Alemanie - Alemanie Tragenie
9B. Regional population (No. of s	sub population):			
9C. Number of Mature Individ		<b>D</b> < 50 <b>D</b>	< 250 🖸 < 2,50	0 🗆 > 2,500
9D. Generation time (Defined he				
<b>10. Population trends:</b> 10A. Is the population size/ num		<b>F</b> - <b>F</b>		
	Increasing	C Stable		· · · · · · · · · · · · · · · · · · ·
10B. If Declining, what has been	the rate of population dec			·····
□ < 20% □ > 20%	□ > 50%	□ > 80%	1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1	ars/ generations
10C. If Stable or Unknown, do y If yes, please specify rate and fac	you predict a future declir ctors e.g. habitat loss, thre	ne in the population. ats, trade, etc.	🗆 Yes 👘 🔲 No	,
□ < 20% □ > 20%	□ > 50%	□ > 80%	in the next ye	ars/generations
11. Data Quality:			<ul> <li>A summary second s</li></ul>	- ,
11A. Are the above estimates ba			and an the second s	
	General field study	Informal field sigh		grie with the second

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s). Indicate year of study not year of publication.

Page 3

Researcher names		Dates	Topics
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PART TWO 3. Status:			
		IUCN Criteria based on:	
	k:		
	e specify):		
	tected areas (please list):		
•			
T3H. National of regionally e	ndorsed protection plan:		
PART THREE	commended for the taxon:	🗆 Yes 🗖 No	If yes, is it
•• •	<ul> <li>Genetic research</li> <li>Epidemiology</li> </ul>		Life history studies
-	bitat Viability Assessment reco	mmended: 🛛 Yes	D No D Pending
5. Management recomme			
<ul> <li>Habitat management</li> <li>Sustainable utilisation</li> <li>Captive breeding</li> </ul>	U Wiki population management	Monitoring     Genome Resource Bankin	□ Translocation g □ Limiting factor managemen
16. If Captive breeding is re □ Species recovery □ Research	ecommended, is it for: D'Education D Husbandry	Reintroduction     Preservation of live genometers	Benign introduction     Gommercial/ sustainability
17. Do Captive stocks already 17. Names of facilities:		D No If yes,	
		Takal	Nativasura D
	fale     Female     U       pecies Management Program       cilitias)		Not known D Yes D No If yes, which
	les Management Programme	recommended for Sri Lanka	? 🖸 Yes 🗆 No
8. Level of captive breed		C. A. Louis - and the	
A. Ongoing program inte		B. Ongoing program decr	reased
A. Origoing program inte		D. Initiate program after 3	

### 19. Are techniques established to propagate the taxon:

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Techniques known for this taxon or similar taxon
 Techniques not known at all

Some techniques known for taxon or similar taxa
 Information not available with this group of compilers

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### Sri Lanka Amphibian/Reptile Conservation Assessment Management Plan<sup>Page 1</sup> Biological Information Sheet

and the second				
Phone:	rax:	E-mail	•	
Piease	answer the following	questions only with res	pect to	
the geogra	aphical area of your an	nphibian/reptile study i	n the wild.	
. Scientific Name (With authority and	d date)			
1A. Synonyms:	·		·····	
1B. Family:	•	1	ing a line line	
		<del>de la constance de la constance d</del> e		
1D. Taxonomic level of assessmen	it: C Species	Sub species	C Variety	
Distribution of the taxon				
2A. Geographical area of your study:				i in the second s
2B. Habitat of the taxon:	······································	· · · · · · · · · · · · · · · · · · ·		
· · · · · · · · · · · · · · · · · · ·				n na star servición. A servición
2C. Habitat specificity (niche, elevatio	on, etc.):			
2D. Names of localities in which the	taxon was studied or sid	hted by you (plagsa give	dataile of places as as	
possible):	anon mas studied of sig			•
		••••		
Approximate EXTENT OF OCCURE	ince of the taxon in and in and in a sector of the short set of the sector of the sect	around the area of study/	sighting/ collection (Ext	entof
curence is defined as the area contain erred or projected sites of present occ	ned within the shortest co	ontinuous imaginary bour	idary encompassing all	known,
$] < 100 \text{ sq.km}.$ $\Box 101 -$	5 000 sa km	ck appropriate box)		
Approximate AREA OF OCCUPANC	Y of the taxon in and aro	und the area of study/ sig	hting/ collection (Area o	f occupancy
remieu as me alea occupieu by the ta	axon within the 'extent of	occurence'); (tick approp	riate box)	
□ < 10 sq.km. □ 11 - 50	•	1 501 - 2,000 sq.km		
Number of Locations or Subnonut	atlang in which the town			
termore of Looadona of Suppopul	acions in which the taxon	is distributed:		
A. Are the locations or populations:		is distributed: Fragmented		
A. Are the locations or populations: labitat status:	Contiguous	is distributed: Fragmented		······
A. Are the locations or populations: labitat status:		Fragmented		
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Poisoning [P] [F]		competition [P] [F]	Volcano	[P][F]	Pa
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7B. Are these threats result	ing in (perceived or inferr	red) or may result in (pred	licted) popu	lation decline	?: 🖸 Yes 🖸
			un Na Stra		
8. Trade: 8A. Is the taxon in trade?		If yes, is it			
				C Internatio	nal
8B. Parts in trade/ kinds		Legs	•••••	C Shell	n kan di sa kas
	Meat	🖾 Bones		CI Scientifc	collections
Pet trade	<ul> <li>A second sec second second sec</li></ul>	•			LE D'ALEYAR
Others, please specify	·				
8C. Which form of trade (spe	cified form) is resulting in	a perceived or inferred po	pulation dec	line?:	
·.		·			
Population numbers:	<b>.</b>				
9A. Number of Mature Ind			<b>3</b> < 250		0 👾 🖅 🖬 >2,5
9B. Generation time (Define	I here as the average age	of parents in population):	······		
). Population trends:			1999 <b>-</b> 1997 - 1997	· · · ·	
10A. Is the population size/				1	na internet de la companya de la com Esta de la companya d
Declining	C Increasing	C Stable	·	Unknown	
10B. If Declining, what has b					
			in the las		ears/generation
10C. If Stable or Unknown,		ecline in the population.	C Yes	D No-	
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**IUCN RED LIST CATEGORIES** 

I. INTRODUCTION

have become widely recognised internationally, and they are now used in a whole range of governmental organisations. The Red Data Book categories provide an easily and widely 1. The threatened species categories now used in Red Data Books and Red Lists have been understood method for highlighting those species, under higher extinction risk, so as to focus publications and listings, produced by IUCN as well as by numerous governmental and non in place, with some modification, for almost 30 years. Since their introduction these categories and the state of the second attention on conservation measures designed to protect them

2. The need to revise the categories has been recognised for some time ...In 1984, the SSC However, no single proposal resulted. The current phase of development began in 1989 with a request from the SSC Steering Committee to develop a new approach that would provide held a symposium. The Road to Extinction (Fitter & Fitter, 1987), which examined the issues in some detail, and at which a number of options were considered for the revised system the conservation community with useful information for action planning.

in this document, proposals for new definitions for Red List categories are presented. The general aim of the new system is to provide an explicit, objective framework for the classification of species according to their extinction risk.

to provide a system that can be applied consistently by different people; The revision has several specific aims: 

to improve the objectivity by providing those using the criteria with clear guidance on how to evaluate different factors which affect risk of extinction; 

to provide a system which will facilitate comparisons across widely different taxa; 

to give people using threatened species lists a better understanding of how individual species were classified. 

als led to some confusion, especially as each draft has been used for classifying some set of species for conservation purposes. To clarify matters, and to open the way for modifications as consultation and validation. It was clear that the production of a large number of draft propos-3. The proposals presented in this document result from a continuing process of drafting, and when they became necessary, a system for version numbering was applied as follows:

Version 1.0: Mace & Lande(1991)

The first paper discussion a new basis for the calegories, and presenting numerical critéria especially relevant for large vertebrates.

Version 2.0: Mace et al. (1992)

A major revision of Version 1.0, including numerical criteria appropriate to all organ isms and introducing the non-threatened categories.

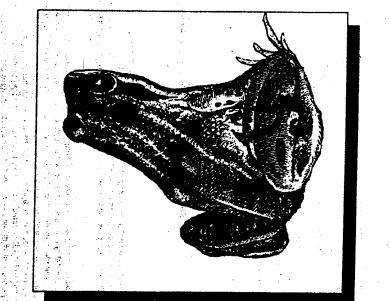
Version 2.1: IUCN (1993)

Following an extensive consultation process within SSC, a number of changes were made to the details of the criteria, and fuller explanation of basic principles was included. A more explicit structure clarified the significance of the non-threatened categories.

Version 2.2: Mace & Stuart (1994)

changes to the criteria were made. In addition, the Susceptible category present in Versions 2.0 and 2.1 was subsumed into the Vulnerable category. A precautionary Following further comments received and additional validation exercises, some minor application of the system was emphasised.

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**UCN Red List** COMPANY AND TANK WEED 

Categories

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Repared by IUCN Species Survival Commission - 西部には、新子道路になった。 sadi't Rise. 

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II. PREAMBLE The following points present important information on the use and interpretation of the categories (= Critically Endangered, Endangered, etc.), criteria (= A to E), and sub-criteria (= a, b The criteria can be applied to any taxonomic unit at or below the species level. The term taxon' in the following notes, definitions and criteria is used for convenience, and may repre-There is a sufficient range among the different oriteria to enable the appropriate listing of taxa from the complete taxonomic spectrum, with the exception of micro-organisms. The oriteria and: to populations resulting from benign introductions (defined in the draft HJCN Guidelines may also be applied within any specified geographical or political area although in such cases special notice should be taken of point 11 below. In presenting the results of applying the criteria, the taxonomic unit and area under consideration should be made explicit. The for Re-introductions as "...an attempt to establish a species. for the purpose of conservation, outside its recorded distribution, but within an appropriate habitat and eco-geodephical area"). sent species of lower taxonomic levels, including forms that are not yet formally described. calegorisation process should only be applied to wild populations inside their natural range, 大学的复数形式 化学生的 大田一田 人名阿丁 王 -Near Threatened - Least Concern Conservation - Critically Endangered -Exfinct in the Wild Data Delicient -Not Evaluated - Endangered Lower Risk --- Vulnerable Extinct 1. Taxonomic level and scope of the categorisation process Figure 1 : Structure of the Categories (Threatened) ÷ ł, into one of the categories (see Figure 1). の一般などの感覚ない。  $\tilde{3}$ إهرابتي (Adequate data) 2. Nature of the categories - (Evaluated) etc., tr.li etc.): This final document, which incorporates changes as a result of comments from IUCN All future taxon lists including categorisations should be based on this version, and not the and the procedures that are to be followed in applying the definitions to species. This is followed by the quantitative ofteria used for Cassification within the threatened categories. It is 4: In the rest of this document the proposed system is outlined in several sections. The important for the effective functioning of the new system that all sections are read and under-Mace, G. M., and Lande, R. (1991) "Assessing extinction threats:toward a re-evaluation of IUCN threatened species categories." Conservation Biology 5-2: 148-157. Preamble presents some basic information about the context and structure of the proposal followed by a section phing definitions of terms used. Finally the definitions are presented 101年 - 1411年 1.100 A G. M., et al. (1992) "The development of new criteria for listing species on the IUCN Mace, G.M., & Stuart. S. N. (1994) "Dran IUCN Red List Categories, Version 2.2" Species Fitter, R.; and M. Fitter; ed. (1987) The Road to Extinction. Gland, Switzenland: NUCN. members, was adopted by the IUCN Council in December, 1994. UCN. (1983) Draft IUCN Red List Categories. Cland. Switzerland: IUCN. . ŝ, دن ارد ارد 0 4 4 5 4 V 0.000000 19 O V stood; and the guidelines followed. Ś previous ones. Manage and and ŝ Red List." Species 19: 18-22. Final Version REFERENCES 2004 21-22: 13-24. 1.1.1.1.2. 1.4 :/ : openal a l Mace,

1. S. S. S.

All taxa listed as Critically quality for Vulgerable and Endangered, and all listed as Endangered quality for Vulnerable. Together these categones are described as 'threatened'. The threat-ened species categoines form a part of the overall scheme. It will be possible to place all taxa

Role of the different criteria

diverse life histories they exhibit. Even though some criteria will be inappropriate for certain-tara (some tara will river) quality, under these however chose to extinction they come), there should be criterial appropriate for assessing threat levels for any taxon (other than micro-orgat-tama). The field is the contrained in the second of the set are the any taxon (other than micro-orgat-tama). The field is the contrained in the second of the contrained and the contrained of the or all are mat. Boolitise it will never be clear which criteria are appropriate for a particular from a wide review aimed at detecting risk factors across the broad range of organisms and the Endangered or Vuinerable there is a range of quantitative criteria; meeting any one of these criteria qualifies a taxon for listing at that level of threat. Each species should be evaluated against all the criteria. The different criteria (A-E) are derived species in advance, each species should be evaluated against all the criteria, and any criterion For listing as Critically Endangered,

4. Demostratión de la superior de servicio de la se appropriate levels, even if no formal justification for these values exists. The levels for different criteria within categorides were set independently but against a common standard. 'Some broad consistency' between them was sought. However, a given taxon should not be expected to were developed through wide consultation and they are set at what are generally judged to be meet all chiefla (A E) in a category, meeting any one criterion is sufficient for listing.

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 Implications of listing
 Listing in the categories of Not Eväluated and Data Deficient indicates that no assessment of extinction risk has been made, though for different reasons. Until such time an assessment is and it may be appropriate (especially for Data Deficient forms) to give them the same degree of made, species listed in these categories should not be treated as if they were non-threatened. protection as threatened taxa, at least until their status can be evaluated.

category implies a higher expectation of extinction, and over the time-frames specified more. taxa listed in a higher category are expected to go extinct tran in a lower one (without effective Thus. a listing in a higher extinction risk conservation action). However, the persistence of some taxa in high risk categories does not necessarily mean their initial assessment was inaccurate. Extinction is assumed here to be a chance process.

## Data quality and the importance of inference and projection ശ്

based on extrapolation of current or potential threats into the future (including their rate of change), or of factors related to population abundance or distribution (including dependence on the absence of high quality data should not deter attempts at applying the criteria, as methods involving estimation, inference and projection are emphasised to be acceptable throughout. Interence and projection may be other taxia), so long as these can reasonably be supported. Suspected or inferred patterns in either the recent past, present or near future can be based on any of a series of related factors. The criteria are clearly quantitative in nature. However, and these factors should be specified.

Taxa at risk from threats posed by future events of low probability but with severe consequences (catastrophes) should be identified by the criteria (e.g. small distribution, few locations). Some threats need to be identified particularly early, and appropriate actions taken. because their effects are irreversible, or nearly so (pathogens, invasive organisms, hybridiza-

7. Uncertainty

are rarely available for the whole range or population of a taxon, it may often be appropriate to The criteria should be applied on the basis of the available evidence on laxon numbers, trend use the information that is available to make thighing but inference about the overall status of the precautionary principle and use the estimate (providing it is credible) that leads to listing in taxon in question. In cases where a wide variation in estimation is found, it is legitimate to apply and distribution, making due allowance for statistical and other uncertainties. the category of highest risk.

Where data are insufficient to assign a category (including Lower Risk), the category of 'Data Deficient' may be assigned. However, it is important to recognise that this category indicates

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Data Deficient is not a threatened category, attough it indicates a need to that the taxon is poorly known. In cases where there are evident threats to a taxon through, for example. deterioration of its only known habitat, it is important to attempt threatened fating, even though there may be little direct information on the piciogogical status of the taxon heat: that data are inadequate to determine the degree of threat faced by a taxon, not necessarily Ē obtain more information on a taxon to determine the appropriate listing a reaction of The category

The criteria for the threatened categories and to be applied to a taxon whatever the tevel of the conservation action affecting it. In cases where it is only conservation action that prevents the Acri taxon from meeting the threatened criteria, the designation of "Conservation Dependent is appropriate. It is important to emphasize here that a taxon requires conservation action even if Conservation and the industriant is even processing to the first sector in the sector is the first of the sector is a sector in the industriant of the sector is a sector in the sector is a sector in the sector is a sector in the sector in the sector is a sector in the sector in the sector is a sector in the se it is not listed as threatened.

## T CHARLONS 9. Documentation

sub-criteria that were met. No listing can be accepted as valid unless at least one criterion is given. If more than one criterion or sub-criterion was met, then each should be listed. Howfailure to mention a criterion should not necessarily imply that it was not met. Therefore, in automatic down-listing. Instead, the faxon should be re-evaluated with respect to all criteria ence and projection are used, should at least be logged by the evaluator, even if they cannot if a re-evaluation indicated that the documented criterion is no longer met, this should not result to indicate its status. The factors responsible for inggening the criteria, especially where infercriteria and All taxon lists including categorisation resulting from these criteria should state the be included in published lists.  $_{\odot}$ ever, I

### Threats and priorities ë

The category of threat is not necessarily sufficient to determine priorities for conservation ac-tion. The category of threat simply provides an assessment of the likelihood of extinction undercurrent circumstances. whereas a system for assessing priorities for action with include numerous other factors concerning conservation action such as costs, logistics, chances of success, and even perhaps the taxonomic distinctiveness of the subject ţj.

## Use at regional level

nes, which are aimed at including taxa that are threatened at regional or national levels (but not The criteria are most appropriately applied to whole taxa at a global scale, rather then to those units defined by regional or national boundaries. Regionally or nationally based threat categonecessarily throughout their global ranges), are best used with two key pieces of information: the global status category for the taxon. and the proportion of the global population or range that occurs within the region or nation. However, if applied at regional or national level it must be recognised that a global category of threat may not be the same as a regional or national category for a particular taxon. For example, taxa classified as Vulnerable on the basis of their global declines in numbers or range might be Lower Risk within a particular region where their populations are stable. Conversely, taxa classified as Lower Risk globally might be Critically Endangered within a particular region where numbers are very small or declining, perhaps only because they are at the margins of their global range. IUCN is still in the process of developng guidelines for the use of national red list categories.

### 12. Re-evaluation

especially important for taxa listed under Near Threatened, or Conservation Dependent, and His. Evaluation of taxa against the criteria should be carried out at appropriate intervals. for threatened species whose status is known or suspected to be deteriorating.

## 13. Transfer between categories

These are as follows: (A) A taxon may be moved from a category of higher threat to a category of lower threat if none of the criteria of the higher category has been met for 5 years or more. (B) If the onginal classification is found to have been erroneous, the taxon may be transferred to the appropriate category or removed from the threatened categories altogether, without delay (but see Section 9). (C) Transfer from categories of lower to higher risk should be made without delay.

		「「「「「「「」」」、「「」」、「」、「」、「」、「」、「」、「」、「」、「」、		Ing. A reduction should not be interpreted as part of a natural fluctuation unless that is good we evidence for this. Downward trends that are part of natural fluctuations will not formally count as a performance	いた 建築学術 地理学習変形。 新学校 単物 バイン・ドーム ちゅうし かかいしょう ちがか 本語 アイエム・ドライン・ドライト しょうしょう かいしょう かいかい たいかい たいかい しゅうしょう かいかい たいかい たいかい たいかい たいかい しゅうしょう しょう ひょうしょう しょうしょう しょうしょう しょうしょう しょうしょう しょうしょうしょう	4. Extrome fluctuations Extreme fluctuations occur in a number of taxa where population size or distribution area varies.	widely, rapidly and frequently, typically with a vanation greater than one of a magnitude to the a tenfold increase or decrease).	Construction and the second second and the second s second second secon second second sec	Severely tragmented talers to the situation where increased extinction risks to the taxion result from the fact that most individuals within a taxon are found in small and individual biodrated subpoolutions. These stands informations are not not individual standard to be achieved with a standard taken areas and the individual standard taken areas and taken areas and taken areas areas and taken areas areas and taken areas a			···· -	ous imaginary boundary which can be drawn to en-	compass all the known, in- lerred or projected sites of present incriminance of		vagrancy this measure may secture discontinuities or disjunctions within the	overall distributions of taxa	ously unsurtable habitat) (but see "area of occu-	pancy'). Extent of occur- rence can often be mea-	polygon (the smallest poly-	angle exceeds 180 degrees and which contains all the sites of occurrence)	10. Area of occupancy Area of occupancy is de-	integration occurrence' (see Fig. 1. Two examples of the distinction between the	deminion) which is occupied exitem of occurrence and area of occupancy. (a) and (b) by a taxon, excluding cases are the spatial discribution of haom, interred, or of vagrancy. The measure are the spatial discribution of haom, interred, or other area of occupancy of the spatial discribution of haom.	•	extent of occurrence, which we measure of anta of occupancy which can be measures of any of the sum of the occupancy which can be measures may for example a contained and mutures.
	<ol> <li>Problems of scale in the set of the state of</li></ol>		Nabitats of taxa are mapped, the smaller will be the area that they are found to occupy. Map- ping at their science reveals more areas in which the taxon is unrecorded. It is impossible to	<b>T X I</b>	mapping at a fine scale was rear ways and the set of th	·····································		<ol> <li>T. Population and the resonance of the reson</li></ol>	Population is defined as the total number of individuals of the taxon. For functional reasons, primarily owing to differences between life-forms. population numbers are avvices of an one	pers or mature individuals only. In the case of taxa obligately dependent on other taxa for all or part of their life cycles, biologically appropriate values for the bost toxon should be made	2. Subpopulations	Subpoputations are defined as geographically or otherwise distinct groups in the population between which there is little exchange (typically one successful migrant individual or name)			be borne in mind:	Where the population is characterised by natural fluctuations the minimum number should be used.		cat the associate is memored to count individuals capable of reproduction and should there fore exclude individuals that are environmentally. Dehaviourally or otherwise repro ductively suppressed in the wild.	In the case of populations with biased adult or breeding sex ratios it is concorrect to	use lower estimates for the number of mature individuals which take this into account (e.g. the estimated effective population size)	Reproducing units within a clone should be counted as individuals, except where such units are unable to survive atone (e.g. corals).	In the case of taxa that naturally lose all or a subset of mature individuals at some point in their life cycle, the estimate should be made at the appropriate time. When mature	www.uuars are available for breeding.	Contentation enteration may be measured as the average age of paren an the age at first breeding, except in taxa where individ	5. Continuing decline	recommung decarte is a recent, current or projected future decline whose causes are not known or not adequately controlled and so is liable to continue unless remedial measures are

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populations of a taxon (e.g. colonial nesting sites. feeding sites for migratory). The size of the area of occupancy will be a function of the scale at which it is measured. and should be at a The area of occupancy is the smallest area essential at any stage to the survival of existing scale appropriate to relevant biological aspects of the taxon. The criteria include values in sq. km., and thus to avoid errors in classification. the area of occupancy should be measured on grid squares (or equivalents) which are sufficiently small (see Figure 2)

### 11. Location

Location defines a geographically or ecologically distinct area in which a single event (e.g. pollution) will soon affect all individuals of the taxon present. A location usually, but not always, contains all or part of a subpopulation of the taxon, and is typically a small proportion of the taxon's total distribution.

## 12. Quantitative analysis

agement options. In presenting the results of quantitative analyses the structural equations (PVA), or any other quantitative form of analysis, which estimates the extinction probability of a taxon or population based on the known life history and specified management or non-man-A quantitative analysis is defined here as the technique of population viability analysis and the data should be explicit.

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## IV THE CATEGORIES

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EXTINCT (EX)

4. - C. A taxon is Extinct when there is no reasonable doubt that the last individual has died. . . . . . . . EXTINCT IN THE WILD (EW)

A taxon is Extinct in the wild when it is known only to survive in cultivation, in captivity or as a naturalised population (or populations) well outside the past range. A taxon is presumed extinct in the wild when exhaustive surveys in known and/or expected habitat, at appropriate times (diurnal, seasonal, annual), throughout its historic range have failed to record an individual. Surveys should be over a time frame appropriate to the taxon's life cycle and life form.'' st

CRITICALLY ENDANGERED (CR)

A taxon is Critically Endangered when it is facing an extremely high risk of extinction in the wild in the immediate future, as defined by any of the criteria (A to E) on subsequent pages.

## ENDANGERED (EN)

A taxon is Endangered when it is not Critically Endangered but is facing a very high risk of extinction in the wild in the near future, as defined by any of the criteria (A to E) on subsequent pages.

## **VULNERABLE (VU)**

risk of extinction in the wild in the medium-term future, as defined by any of the criteria (A to D) A taxon is Vulnerable when it is not Cricically Endangered or Endangered but is facing a high on subsequent pages.

## LOWER RISK (LR)

A taxon is Lower Risk when it has been evaluated, does not satisfy the criteria for any of the categories Critically Endangered, Endangered or Vulnerable. Taxa inculded in the Lower Risk category can be separated into three subcategories:

- Conservation Dependent (cd). Taxa which are the focus of a continuing taxon-specific or habitat specific conservation programme targeted towards the taxon in question, the cessation of which would result in the taxon qualifying for one of the threatened categories above within a period of five years. ÷
- Near Threatened (nt). Taxa which do not quality for Conservation Dependent, but which are close to qualifying for Vulnerable. ~i
- Least Concern (Ic). Taxa which do not qualify for Conservation Dependent or Near Threatened. ń

### DEFICIENT (DD) DATA

in this category may be well studied, and its biology well known, but appropriate data on abundance and/or distribution is lacking. Data Deficient is therefore not a category of threat or acknowledges the possibility that future research will show that threatened classification is assessment of its risk of extinction based on its distribution and/ or population status. A taxon appropriate. It is important to make positive use of whatever data are available. In many cases A taxon is Data Deficient when there is inadequate information to make a direct, or indirect, Lower Risk. Listing of taxa in this category indicates that more information is required and great care should be exercised in choosing between DD and threatened status. If the range of a taxon is suspected to be relatively circumscribed, if a considerable period of time has elapsed since the last record of the taxon, threatened status may well be justified.

## NOT EVALUATED (NE)

A taxon is Not Evaluated when it has not yet been assessed against the criteria.

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## **VULNERABLE (VU)**

A taxon is Vulerable when it is not Critically Endangered or Endangered but is facing a high risk of extinction in the wild in the medium-term future, as defined by any of the following criteria (A ີ ຜູ

## A. Population reduction in the form of either of the following:

1. An observed, estimated, inferred or suspected reduction of at least 20% over the last 10 years or three generations, whichever is the longer, based on (and specifying) any of the following:

(a) direct observation
 (b) an index of abundance appropriate for the taxon
 (c) a decline in area of occupancy, extent of occurrence and/or quality of habitat
 (d) actual or potential levels of exploitation
 (e) the effects of introduced taxa, hybridisation, pathogens, pollutants, competitors or parasites.

2. A reduction of at least 20% projected or suspected to be met within the next ten years or three generations, whichever is the longer, based on (and specifying) any of (b), (c), (d), or (e) above.

# B. Extert of occurrence estimated to be less than 20,000 km<sup>2</sup> or area of occupancy estimated to be less than 2000 km<sup>2</sup>, and estimates indicating any two of the following:

1. Severely fragmented or known to exist at no more than ten locations.

Continuing decline, inferred, observed or projected, in any of the following: N

(a) extent of occurrence

(b) area of occupancy

(c) area, extent and/or quality of habitat
 (d) number of locations or subpopulations
 (e) number of mature individuals

Extreme fluctuations in any of the following: e,

(a) extent of occurrence
 (b) area of occupancy
 (c) number of locations or subpopulations
 (d) number of mature individuals

C. Population estimated to number less than 10,000 mature individuals and either:

1. An estimated continuing decline of at least 10% within 10 years or 3 generations ő whichever is longer.

2. A continuting decline, observed, projected, or inferred, in numbers of mature individuals and population structure in the form of either

(a) severely fragmented (i.e. no subpopulation estimated to contain more than 1000 mature individuals)

(b) all individuals are in a single subpopulation

D. Population very small or restricted in the form of either of the following:

1. Population estimated to number less than 1000 mature individuals.

less than 100km<sup>3</sup>) or in the number of locations (typically less than 5). Such a taxon would thus be prone to the effects of human activities (or stochastic events whose impact is increased by human activities) within a very short period of time in an unforeseeable future, and is thus capable of becoming Critically Endangered or even 2. Population is characterised by an acute restriction in its area of occupancy (typically Extinct in a very short period.

E. Quantitative analysis showing the probability of extinction in the wild is at least 10% within 100 years.