



Ministry of Environment and
Natural Resources

IUCN
The World Conservation Union

The 2007 Red List of Threatened Fauna and Flora of Sri Lanka



IUCN Red List

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This publication has been jointly prepared by The World Conservation Union (IUCN) in Sri Lanka and the Ministry of Environment and Natural Resources. The preparation and printing of this document was carried out with the financial assistance of the Protected Area Management and Wildlife Conservation Project and Royal Netherlands Embassy in Sri Lanka.

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LIST OF ABBREVIATIONS

ADB	Asian Development Bank
BDS	Biodiversity Secretariat
CCD	Coast Conservation Department
CEA	Central Environmental Authority
DA	Department of Agriculture
DNBG	Department of National Botanical Gardens
DC	Department of Customs
DF	Department of Fisheries
DWC	Department of Wildlife Conservation
DZG	Department of Zoological Gardens
E	English vernacular name/s
FD	Forest Department
GIS	Global Information System
IAS	Invasive Alien Species
ID	Irrigation Department
IUCN	The World Conservation Union
MOENR	Ministry of Environment and Natural Resources
MOU	Memorandum of Understanding
NEC-BD	National Experts Committee on Biodiversity
NSCAG	National Species Conservation Advisory Group
NSD	National Species Database
NSF	National Science Foundation
PA	Protected Area
PGIS	Post Graduate Institute of Science
S	Sinhala vernacular name/s
SCU	Species Conservation Unit
SSC	Species Survival Commission
UNESCO	United Nations Educational, Scientific and Cultural Organization
WHT	Wildlife Heritage Trust
YZA	Young Zoologists' Association

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Red Listing Team
October 2007

MESSAGE FROM THE MINISTER OF ENVIRONMENT AND NATURAL RESOURCES

As Arahath Mahinda thero said to the King Devanampiyathissa, all life forms including the birds, wild animals and citizens have rights to live in the earth wherever they want. Although ancient Sri Lankans lived in harmony with their surroundings, this right has been neglected today with the development activities disturbing the environment. With the increasing population and rising demand for resources the species have to fight against habitat loss, climate change and over exploitation. This has caused many species to face the threat of extinction. It has been observed by the scientists that globally the rate of extinction has increased up to one species per hour.

As the mission of the Ministry of Environment and Natural Resources is to provide leadership to manage the environment in order to ensure national commitments for sustainable development for present and future generations, the conservation of plants and animals is of high priority.

One of the main objectives of conservation should be to minimize the rate of extinction. In order to achieve this goal, first step is to identify the threatened species and how they are threatened. Using this information, short term and long term plans should be prepared and implemented to recover such species.

Together with the IUCN Sri Lanka, the Ministry of Environment and Natural Resources has taken the lead role in the preparation of the 2007 Red List and a digital database of threatened plants and animals of the country. This process has laid a solid foundation for conservation and sustainable development of plants and animals.

I wish to thank The World Conservation Union (IUCN) Sri Lanka, the Director and the Staff of the Biodiversity Secretariat of my Ministry, Resource Persons and all the scientists who contributed towards the success of this activity. My special thanks are due to the Protected Area Management and Wildlife Conservation Project of the ADB and the Royal Netherlands Embassy, Sri Lanka for their financial contribution to make this important national process a reality.

Patali Champika Ranawaka
Minister of Environment and Natural Resources
October 2007

MESSAGE FROM THE SECRETARY, MINISTRY OF ENVIRONMENT AND NATURAL RESOURCES

There has been a growing recognition in recent years, of the importance of periodic analysis and assessment of the country's conservation status of Flora and Fauna. This has been also emphasized in the Convention on Biological Diversity and other related International Conservation Instruments.

Since there was no proper government endorsement and recognition for the country's species conservation status the National Species Conservation Advisory Group (NSCAG) was formulated in 2001 under the Ministry of Environment and Natural Resources to obtain advice on species Conservation issues.

With the technical assistance and approval of the National Experts Committee on Biodiversity and NSCAG the updating of the National Red List and the development of the database on species conservation was initiated in 2004 in collaboration with The World Conservation Union (IUCN). To ensure the transparency and accuracy, eleven expert groups were appointed by the NSCAG to evaluate the threatened species according to the global Red List criteria.

The significance of this process is the establishment of the Species Conservation Unit in the Biodiversity Secretariat of the Ministry of Environment and Natural Resources which will house the database and the literature collection of the Red List. The trained officers of this unit will update the Red List annually with the technical support of IUCN and the experts appointed by NSCAG. This Species Conservation Unit will provide necessary inputs to the decision makers and all others seeking information on flora and fauna.

I wish to thank all the taxonomists, naturalists, researchers and other resource persons who contributed to evaluate the status of fauna and flora of the country and the Red Listing team for their effort. I also wish to thank the Protected Area Management and Wildlife Conservation Project and the Royal Netherlands Embassy in Sri Lanka for their financial contribution to make this process a success.

I am confident that this publication and the database would contribute towards the sustainable utilization of Biodiversity.

M. A. R. D. Jayathilake
Secretary
Ministry of Environment and Natural Resources
October 2007

FOREWORD

The World Conservation Union (IUCN) has collaborated with the Ministry of Environment & Natural Resources (MOENR) in promoting species conservation activities in Sri Lanka during the last two decades. In 2001, IUCN facilitated the MOENR to institutionalize species conservation activities, through the establishment of a National Species Conservation Advisory Group (NSCAG) under the Biodiversity Secretariat. The NSCAG requested the services of IUCN to establish a digital database related to species, and to update the 1999 national list of threatened plants and animals. A team of dedicated technical staff from IUCN was involved in implementing this extremely important national task. The work spanned across several years, and involved a comprehensive literature survey of fauna and flora in Sri Lanka, data compilation and analysis of the status of species using IUCN global red list criteria and preparation of the digital database on the species assessed. Although the team faced several constraints in attending to this task, they were able to address these issues with the active support of the experts who assisted in reviewing the draft lists of threatened fauna and flora.

The findings of the assessment are alarming, when considering the fact that 33% (223 species) of inland vertebrate fauna and 61% (675 species) of the evaluated flora were found to be nationally threatened. The threatened fauna and flora include many endemic species. 21 species of endemic amphibians and 72 species of plants seem to have disappeared from the island (extinct) during the past century. These findings would serve as the baseline for the development and implementation of suitable policies and actions to conserve the threatened species for the future. The last section of this publication has provided a framework for action to facilitate the conservation of threatened species in Sri Lanka.

Shiranee Yasaratne
Country Representative
The World Conservation Union (IUCN)
Sri Lanka
October 2007



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Lowland tropical rain forests in the wet zone of Sri Lanka are home to 90% of the endemic woody plants and 75% of the endemic animals of the island.

BIODIVERSITY OF SRI LANKA: A BRIEF OVERVIEW

Sri Lanka is a tropical island located in the Indian Ocean off the southern tip of peninsular India, between latitudes 5° 55' - 9° 51' North and longitudes 79° 41' - 81° 54' East. The island is 65,610 km² in extent and consists of three peneplains; lowland (up to 300m above sea level), upland (300-900m above sea level) and highland (> 900m above sea level). According to distribution of rainfall, three major climatic zones are recognised; the dry zone (with an annual rainfall < 1900mm), wet zone (annual rainfall > 2500mm), and the intermediate zone (annual rainfall 1900-2500mm). The island also contains three distinct mountain ranges; the Central hill massif, the *Rakwana* range towards the South-west and the Knuckles range towards the North of the Central massif (Figure 1). Based on climate (temperature and rainfall), Mueller-Dombois (1968) described seven vegetation zones in Sri Lanka, while Ashton and Gunatilleke (1987) elaborated further, and designated 15 floristic regions in the island, based on the distribution of plant species in the wild.

The geo-climatic diversity in the island is reflected clearly in the variety of inland natural ecosystems and habitats (Table 1). Forest types range from dry monsoon forest in the dry coastal lowlands and closed-canopy rainforest in the South-western aseasonal lowland wet zone quarter to tropical montane cloud forest reaching a maximum altitude of 2,524m in the central highlands. In turn, these ecosystems contain a high degree of species diversity among different groups of fauna (Table 2) and flora (Table 3), including a high proportion of endemic species. Among the indigenous inland vertebrate fauna and flowering plants documented to date, nearly 40% and 30% respectively are endemic to the island (Bambaradeniya, 2004). Much of this diversity and endemism is found in the South-west wet zone, which occupies one-third of the country.

Table 1. Diversity of inland natural ecosystems in Sri Lanka

Major types	Categories
Forests	Tropical lowland rainforests
	Tropical lower-montane forests
	Tropical upper-montane forests
	Lowland dry monsoon forests
	Lowland semi-evergreen forests
	Arid Zone scrublands
	Riverine forests
Grasslands	Wet <i>Patana</i> Grasslands
	Savannahs
	Dry <i>Patana</i> Grasslands
Freshwater wetlands	Rivers and streams
	<i>Villus</i>
	Marshes
	Swamp forest
Brackish water wetlands	Salt marshes
	Mangroves
	Lagoons and estuaries

Table 2. Species richness of inland and marine fauna in Sri Lanka.

Invertebrate Fauna (Taxonomic group)	Total number of Species	Number of endemics
Bees	148	21
Dragonflies	120	57
Aphids	84	2
Ants	181	
Butterflies	243	20
Ticks	27	
Spiders	501	
Freshwater Crabs	51	51
Land Snails	246	204
Vertebrate Fauna		
Freshwater Fish	82	44
Amphibians	106+	90+
Reptiles	171	101
Birds	482	33
Mammals	91	16
Marine Fauna		
Echinoderms	213	
Marine Molluscs	228	
Sharks	61	
Rays	31	
Marine Reptiles	18	
Marine Mammals	28	

(Source: Bambaradeniya, 2006 – supplemented with subsequent species descriptions)

Table 3. Species richness of flora in Sri Lanka.

Group	No. of Species	Number of endemics	Source
Angiospermae (Flowering plants)	3771	926	Dassanayake and Fosberg (1980–2004)
Pterydophyta (Ferns)	348	48	Sledge (1982); Dassanayake (2006)
Mosses	566	63	O'Shea (2002,2003); Tan, 2005
Liverworts	222		Onraedt (1981); Abeywickrama and Jensen (1978)
Lichens	661		Brunnbauer (1984-1986); Orang <i>et al.</i> (2001)

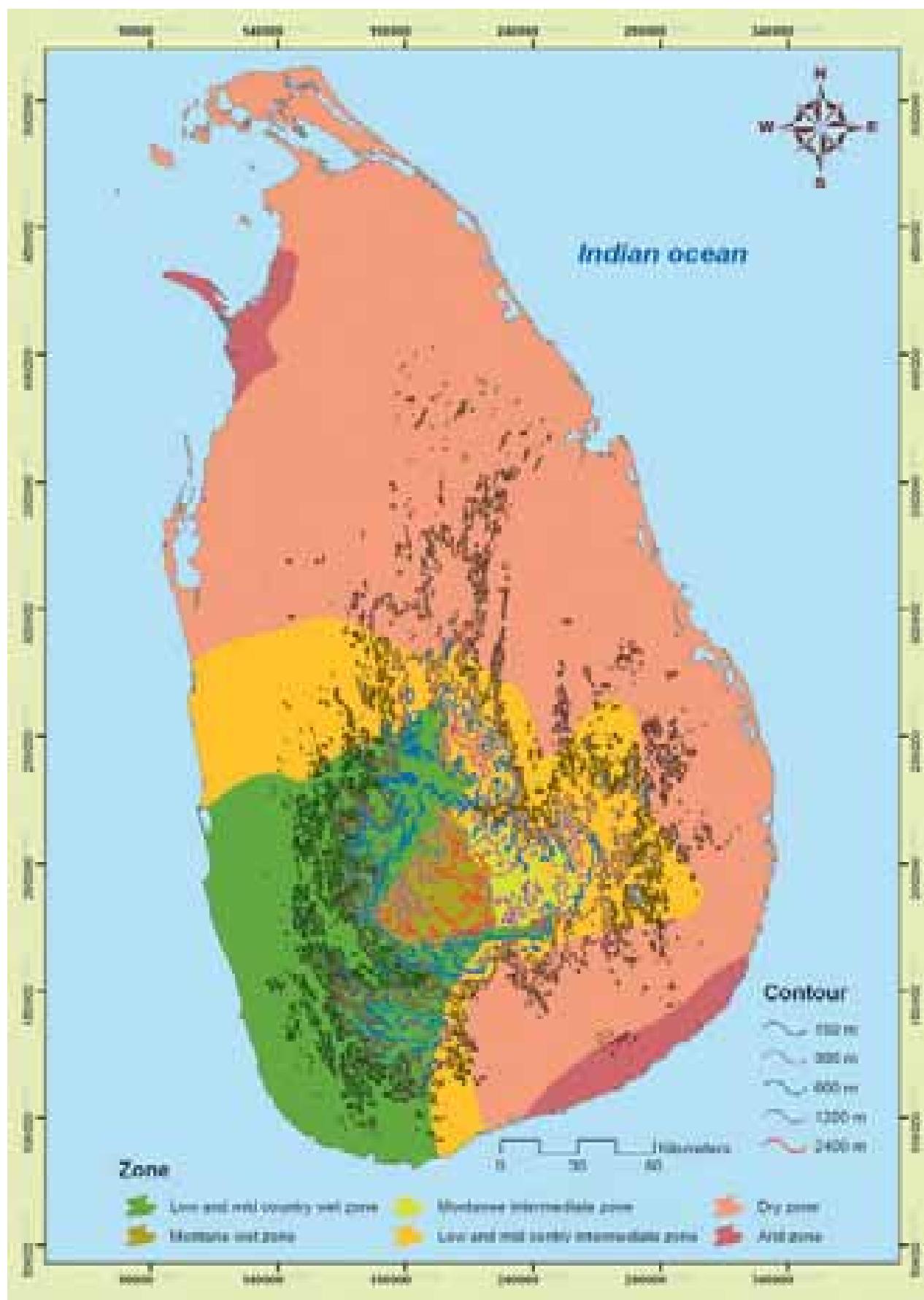


Figure 1: Bioclimatic zones of Sri Lanka (Adapted from Wijesinghe *et al.*, 1993)

Since the 1990s, there has been a tremendous surge of taxonomic research on the faunal groups of Sri Lanka. This has lead to the discovery and scientific description of several new species of invertebrate and vertebrate fauna. For example, the number of amphibian species recognised by Kirtisinghe (1957) has undergone a three-fold increase (from 34 to 106 species at present), as a result of the work carried out during the past decade by Dutta and Manamendra-Arachchi (1996); Manamendra-Arachchi and Pethiyagoda (1998); Manamendra-Arachchi and Pethiyagoda (2005); Meegaskumbura and Manamendra-Arachchi (2005). Several species of reptiles were described during the past decade (Pethiyagoda and Manamendra-Arachchi, 1998; Batuwita and Bahir, 2005; Bahir and Silva, 2005; Bahir and Maduwage, 2005; Samarawickrama *et al.*, 2005; Samarawickrama, *et al.*, 2006; Wickramasinghe, 2006; Wickramasinghe and Munindradasa, 2007). Similarly, a swell of research on Sri Lanka's freshwater crabs has resulted in the discovery of more than 40 new species (Ng, 1994, 1995a, b; Bahir, 1998, 1999; Ng and Tay, 2001; Bahir and Ng, 2005; Bahir and Yeo, 2005). It is interesting to note the discovery of new species even among popular groups of vertebrates such as birds (Warakagoda and Rasmussen, 2004) and mammals (Groves and Meijaard, 2005; Nekaris and Jayawardena, 2004), after a lapse of more than 100 years. A few researchers have begun to focus on lesser-known invertebrates such as insects, spiders and land snails in the island, leading to the discovery of new species (Karunaratne, 2004; Wijesinghe, 1991a, 1991b; Benjamin, 2000; Benjamin and Jocqué, 2000; Benjamin, 2001; Naggs *et al.*, 2005).



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The survival of a large number of endemic and threatened species depend on the upper montane and lower montane forests, which occupies less than 1% of the total land area in Sri Lanka.

Investigations have revealed a unique endemic insular radiation, especially among the less mobile faunal groups such as tree-frogs (Meegaskumbura *et al.*, 2002), agamid lizards (Macey *et al.*, 2000; Schulte *et al.*, 2002) and skinks (Austin *et al.*, 2004).

The angiosperm flora of Sri Lanka has also been revised during the past two and a half decades (Dassanayake and Fosberg, 1980–2004). Knowledge about the island's non-angiosperm floras is comparatively poor. Research conducted since the 1980's shows that both diversity and endemism among ferns, bryophytes and fungi are significantly higher than thought previously (e.g. Hale, 1981; Pegler, 1986; Sledge, 1982; O'Shea, 2002, 2003; Tan, 2005).

Recent estimates of closed-canopy forest cover in the island range from 22% (Anonymous, 2004) to 25.7% (Ratnayake *et al.*, 2002) of the total land area. The protected area (PA) network under the jurisdiction of the Department of Wildlife Conservation (DWC), extends over approximately 13% of the island's land area, under several management categories, from the strictest level of protection in strict natural reserves to national parks where entry is monitored, to sanctuaries which contain both private and state land. The Forest Department (FD) manages a total extent of 10,670 km² of natural habitats (17% of the island's land area) (Anonymous, 2004).

This recent research (especially molecular investigations) also highlights a higher degree of endemism than hitherto estimated among most groups of fauna in the island. Among the inland indigenous vertebrate species (i.e., excluding marine forms and migratory birds) described currently, 43% are endemic to Sri Lanka. A higher percentage of endemism is evident among the freshwater crabs (100%), amphibians (85%), and land snails (83%), with many of them being point endemics. Most of this endemic fauna are restricted to the wet zone of the island. Even though Sri Lanka has experienced prolonged and repeated land connections with India during much of the Pleistocene period, recent molecular

The existing protected areas include three internationally important wetland sites (Bundala National Park, Anawilundawa Sanctuary, and Maduganga Sanctuary) declared under the Ramsar Convention on wetlands of International Importance, and four International Man and Biosphere reserves (Sinharaja, Hurulu, Kanneliya and Bundala) declared under the UNESCO World Heritage Convention.

The region including the Western Ghats and Sri Lanka is considered as one of 34 biodiversity ‘hot spots’ identified in the world (Mittermeier *et al.*, 2005). These hotspots are areas that harbour an exceptionally high concentration of endemic species, but have already lost more than 75% of the primary vegetation. Of all the hotspots, the Western Ghats and Sri Lanka hotspot has the highest human population density (Cincotta *et al.*, 2000). While population density in Sri Lanka’s dry zone is 170 km⁻², density in the biodiversity-rich south-western wet zone is 650 km⁻². A burgeoning human population in the island has propelled the loss of biodiversity, because of anthropogenic factors such as habitat degradation/modification, over-exploitation of species, spread of invasive alien species and pollution. Later in this publication, the implications of these threats to Sri Lanka’s fauna and flora are detailed with specific examples.

REFERENCES

- Abeywickrama, B.A. and Jensen, M.A.B. 1978. *A checklist of the liverworts of Sri Lanka*. National Science council of Sri Lanka, Colombo, pp. 1-10.
- Anonymous 2004. Sri Lanka ecosystem component of the Western-Ghats and Sri Lanka biodiversity hotspot (Critical Ecosystem Partnership Fund - Ecosystem Profile Data Sheet – Unpublished).
- Ashton, P.S. and Gunatilleke, C.V.S. 1987. New light on the plant geography of Ceylon, I: Historical plant geography. *J. Biogeogr.*, 14: 249-285.
- Austin, C.C., Das, I. and De Silva, A. 2004. Higher-level molecular phylogenetic relationships of the endemic genus *Lankascincus* from Sri Lanka based on nuclear DNA sequences. *Lyriocephalus* 5(1&2): 11-22.
- Bahir, M. M. 1998. Three new species of montane crabs of the genus *Perbrinckia* (Crustacea: Parathelphusidae) from the central mountains of Sri Lanka. *Journal of South Asian Natural History* 3(2): 197–212.
- Bahir, M. M. 1999. Description of three new species of freshwater crabs (Crustacea: Decapoda: Parathelphusidae: *Ceylonthelphusa*) from the south-western rain forests of Sri Lanka. *Journal of South Asian Natural History* 4(2): 117–132.
- Bahir, M. M. and Ng, P. K. L. 2005. Description of ten new species of freshwater crabs (Parathelphusidae: *Ceylonthelphusa*, *Mahatha*, *Perbrinckia*) from Sri Lanka. In: Yeo, D. C. J., Ng, P. K. L. and Pethiyagoda, R. (eds), Contributions to Biodiversity Exploration and Research in Sri Lanka. *The Raffles Bulletin of Zoology*, Supplement No. 12: 47–75.
- Bahir, M.M. and Silva, A. 2005. *Otocryptis nigristigma*, a new species of agamid lizard from Sri Lanka. In: Yeo, D. C. J., Ng, P. K. L. and Pethiyagoda, R. (eds), Contributions to Biodiversity Exploration and Research in Sri Lanka. *The Raffles Bulletin of Zoology*, Supplement No.12:393-406.
- Bahir, M.M. and Maduwage, K.P. 2005. *Calotes desilvai*, a new species of agamid lizard from Morningside, Sri Lanka. In: Yeo, D. C. J., Ng, P. K. L. and Pethiyagoda, R. (eds), Contributions to Biodiversity Exploration and Research in Sri Lanka. *The Raffles Bulletin of Zoology*, Supplement No. 12:381-392.
- Bahir, M. M. and Yeo, D. C. J. 2005. A revision of the genus *Oziotelphusa* Müller, 1887 (Crustacea: Decapoda: Parathelphusidae), with descriptions of eight new species. In: Yeo, D. C. J., Ng, P. K. L. and Pethiyagoda, R. (eds), Contributions to Biodiversity Exploration and Research in Sri Lanka. *The Raffles Bulletin of Zoology*, Supplement No. 12: 77–120.
- Bambaradeniya, C.N.B. 2006. Species Richness of Fauna in Sri Lanka: Current Status and Future Prospects. In: Bambaradeniya, C.N.B. (ed.). *Fauna of Sri Lanka: Status of Taxonomy, Research and Conservation*. The World Conservation Union, Colombo, Sri Lanka, and Government of Sri Lanka. 308pp.

- Bambaradeniya, C.N.B. 2004. The Sri Lanka Biodiversity Hotspot: An Overview of its Natural History and Areas for Regional Cooperation Towards Conservation Action. Paper presented at the Combined Workshop on Regional Co-operation on Conservation of Biodiversity Hotspots of the Indian Subcontinent and Taxonomic Databases for Conservation (August 30th – September 1st 2004, Bangalore, India).
- Batuwita, S. and Bahir, M.M. 2005. Description of five new species of *Cyrtodactylus* (Reptilia: Geckkonidae) from Sri Lanka. In: Yeo, D. C. J., Ng, P. K. L. and Pethiyagoda, R. (eds), Contributions to Biodiversity Exploration and Research in Sri Lanka. *The Raffles Bulletin of Zoology*, Supplement No. 12: 351-380.
- Bauer, A.M., de Silva, A., Greenbaum E. and Jackman T. 2007. A new species of Day gecko from high elevation in Sri Lanka, with a preliminary phylogeny of Sri Lankan *Cnemaspis* (Reptilia: Squamata: Gekkonidae), *Mitt. Mus. Nat.kd., Zool. Reighe*, Supplement No. 83: 22-32.
- Benjamin, S. P. 2000. *Epidius parvati* sp. n., a new species of the genus *Epidius* from Sri Lanka (Araneae: Thomisidae). *Bull. Br. arachnol. Soc.*, 11(7): 284-288.
- Benjamin, S. P. and Jocqué R. 2000. Two new species of the genus *Suffasia* from Sri Lanka (Araneae: Zodariidae). *Revue suisse de Zoologie* 107(1): 97-106.
- Benjamin, S. P. 2001. The genus *Oxytate* L. Koch 1878 from Sri Lanka, with description of *Oxytate taprobane* sp. n. (Araneae: Thomsidae). *Journal of South Asian Natural History* 5(2): 153-158.
- Brannbauer, W. 1984-1986. Die Flechten Von Sri Lanka in der Literatur Naturist. Mus Wien. Bot. Abt Cincotta, R.P., Wisnewski, J and Engelman, R. 2000. Human population in the biodiversity hotspots. *Nature*. 404: 990 – 992.
- Dassanayake, M.D. and Fosberg, F.R. 1980–1991. *A Revised Handbook to the Flora of Ceylon*. (Vols. 1–7) Amerind Publishing Co., New Delhi.
- Dassanayake, M.D., Fosberg, F.R. and Clayton, W.D., 1994-1995. *A Revised Handbook to the Flora of Ceylon*. (Vols. 8-9) Amerind Publishing Co., New Delhi.
- Dassanayake, M.D. and Clayton, W.D., 1996-2000. *A Revised Handbook to the Flora of Ceylon*. (Vols. 10-14) Oxford and IBH Publishing Co., Calcutta.
- Dassanayake, M.D. and Shaffer-Fehre, M., 2006. *A Revised Handbook to the Flora of Ceylon*. (Vols. 15A-B) Science Publishers, Inc.
- Dutta, S. K. and Manamendra-Arachchi, K. 1996. *The amphibian fauna of Sri Lanka*. Wildlife Heritage Trust of Sri Lanka, Colombo. 232pp.
- Erdelen, W. 1989. Aspects of the biogeography in Sri Lanka. In: *Forschungen Auf Ceylon III*. Franz Steiner Verlag Stuttgart. pp. 73-100.
- Groves, C.P. and Meijaard, E. 2005. Interspecific variation in *Moschiola*, the Indian chevrotain. In: Yeo, D. C. J., Ng, P. K. L. and Pethiyagoda, R. (eds), Contributions to Biodiversity Exploration and Research in Sri Lanka. *Raffles Bulletin of Zoology*, Supplement No. 12: 413-421.
- Hale, M. E. 1981. A revision of the lichen family Thelotremaeae in Sri Lanka. *Bull. British Mus. Nat. Hist. (Botany ser.)*, 8 (3): 227–332.
- Karunaratne, W. A. I. P. 2004. *Taxonomy and Ecology of Bees of Sri Lanka*. Ph.D. Thesis (Unpublished), Faculty of Science, University of Peradeniya.
- Kirtisinghe, P. 1957. *The Amphibia of Ceylon*. Published by the author, Colombo. 112 pp.
- Kirtisinghe, P., 1957. The Amphibia of Ceylon. Colombo: i-xiii + 1–112, 1 pl.
- Macey, J.R., Schulte, J.A., Larson, A., Ananjeva, A.B., Wang, Y., Pethiyagoda, R., Rastegar-Pouyani, N. and Papenfuss, T.J. 2000. Evaluating Trans-Tethys migration: an example using acrodont lizard phylogenetics. *Systematic Biology* 49: 233-256.

- Manamendra-Arachchi, K. and Pethiyagoda, R. 1998. A synopsis of the Sri Lankan Bufonidae (Amphibia: Anura) with description of new species. *Journal of South Asian Natural History* 3(2): 213–248.
- Manamendra-Arachchi, K. and Pethiyagoda, R. 2005. The Sri Lankan shrub-frogs of the genus *Philautus* Gistel, 1848 (Ranidae: Rhacophorinae), with description of 27 new species. In: Yeo, D. C. J., Ng, P. K. L. and Pethiyagoda, R. (eds), Contributions to Biodiversity Exploration and Research in Sri Lanka. *Raffles Bulletin of Zoology*, Supplement No. 12: 163–303.
- Mittermeier, R.A., P.R. Gil, M. Hoffman, J. Pilgrim, T. Brooks, C.G. Mittermeier, J. Lamoreux, and da Fonseca, G.A.B. 2005. *Hotspots revisited: Earth's biologically richest and most threatened terrestrial ecoregions*. Conservation International, Washington D.C., USA.
- Meegaskumbura, M., Bossuyt, F., Pethiyagoda, R., Manamendra-Arachchi, K., Bahir, M., Milinkovitch, M.C. and Schneider, C.J. 2002. Sri Lanka: an amphibian hotspot. *Science* 298: 379.
- Meegaskumbura, M. and Manamendra-Arachchi, K. 2005. Descriptions of eight new species of shrub frogs (Ranidae: Rhacophorinae: *Philautus*) from Sri Lanka. In: Yeo, D. C. J., Ng, P. K. L. and Pethiyagoda, R. (eds), Contributions to Biodiversity Exploration and Research in Sri Lanka. *Raffles Bulletin of Zoology*, Supplement No. 12: 305–338.
- Mueller-Dombois, D. 1968. Ecogeographic analysis of a climate map of Ceylon with particular reference to vegetation. *The Ceylon Forester* 8: 39–58.
- Naggs, F., Raheem, D., Ranawana, K. and Mapatuna, Y. 2005. The Darwin initiative project on Sri Lankan Land snails: Patterns of diversity in Sri Lankan forests. In: Yeo, D. C. J., Ng, P. K. L. and Pethiyagoda, R. (eds), Contributions to Biodiversity Exploration and Research in Sri Lanka. *The Raffles Bulletin of Zoology*, Supplement No. 12: 23 – 29.
- Nekaris, K.A.I. and Jayawardena, J. 2004. Survey of the Slender Loris (Primates, Lorisidae Gray, 1821: *Loris tardigradus* Linnaeus, 1758 and *Loris lydekkerianus* Cabrera, 1908) in Sri Lanka. *Journal of Zoology*, London. 265: 327-338.
- Ng, P. K. L., 1995a. A revision of the Sri Lankan montane crabs of the genus *Perbrinckia* Bott, 1969 (Crustacea: Decapoda: Brachyura: Parathelphusidae). *Journal South Asian Natural History* 1(2): 129–174.
- Ng, P. K. L., 1995b. *Ceylonthelphusa scansor*, a new species of tree-climbing crab from Sinharaja Forest in Sri Lanka (Crustacea: Decapoda: Brachyura: Parathelphusidae). *Journal South Asian Natural History* 1(2): 175–184.
- Ng, P. K. L. and Tay, W.M. 2001. The freshwater crabs of Sri Lanka (Decapoda: Brachyura: Parathelphusidae). *Zeylanica* 6(1): 113–199.
- Onraedt, M. 1981. Bryophytes Recoltees a Sri Lanka (Ceylon). *Journ. Hattori.Bot.Lab.*, 50: 191-216.
- Orang A., Wolesely, P., Karunaratne, V. and Bombuwala, K. 2001. Two Cepraloid Lichens new to Sri Lanka. *Bibliotheca Lichenologica* 78:327-333.
- O'Shea, B. 2002. Checklist of the mosses of Sri Lanka. *Journal of Hattori Botanical Laboratory* 92: 125-164.
- O'Shea, B. 2003. Biogeographical relationships of the mosses of Sri Lanka. *Journal of Hattori Botanical Laboratory* 93: 293-304.
- Pegler, D. N. 1986. Agaric flora of Sri Lanka. *Kew Bull. Addl. Ser.*, 11: 1–519.
- Pethiyagoda, R. and Manamendra-Arachchi, K. 1998. A Revision of the endemic Sri Lankan agamid Lizard Genus *Ceratophora* Gray, 1835, with description of two new species. *Journal of South Asian Natural History* 3(1):1-50.
- Ratnayake, J., Abeykoon, M. and Chemin, Y. 2002. District-wise forest area variation in Sri Lanka from 1992 to 2001 for supporting the National Physical Planning Policy; *Proceedings of the Asian Conference on Remote Sensing*, Kathmandu, Nepal.

- Samarawickrama, V. A. M. P. K., Samarawickrama, V. A. P., Wijesena, N. M. and Orlov, N.O. 2005. A new species of genus *Boiga* (Serpentes: Colubridae: Colubrinae) from Sri Lanka. *Russian Journal of Herpetology* 12(3): 213–222.
- Samarawickrama, V.A.M.P.K., Ranawana, K.B., Rajapaksha, D.R.N.S., Ananjeva, N.B., Orlov, N.L., Ranasinghe, J.M.A.S. and Samarawickrama, V.A.P. 2006. A new species of the genus *Cophotis* (Squamata: Agamidae) from Sri Lanka. *Russian Journal of Herpetology* 13 (3): 207-214.
- Schulte, J.A., Macey, J.R., Pethiyagoda, R. and Larson, A. 2002. Rostral horn evolution among agamid lizards of the genus *Ceratophora* endemic to Sri Lanka. *Molecular Phylogenetics and Evolution* 22: 111-117.
- Sledge, W. A. 1982. An annotated checklist of the Pteridophyta of Ceylon. *Bot.J.Linn.Soc.* 84: 1-30.
- Tan, B.C. 2005. New Species Records of Sri Lankan mosses. In: Yeo, D. C. J., Ng, P. K. L. and Pethiyagoda, R. (eds), Contributions to Biodiversity Exploration and Research in Sri Lanka. *The Raffles Bulletin of Zoology*, Supplement No. 12: 5-8.
- Warakagoda, D.H. and Rasmussen, P.C. 2004. A new species of scops-owl from Sri Lanka. *Bull. B.O.C.* 124 (2): 85-105.
- Wickramasinghe, L. J. M. 2006. A new species of *Cnemaspis* (Sauria: Gekkonidae) from Sri Lanka. *Zootaxa* 1369: 19–33.
- Wickramasinghe L.J.M. and Munindradasa, D.A.I. 2007. Review of the genus *Cnemaspis* Strauch, 1887 (Sauria: Gekkonidae) in Sri Lanka with the description of five new species. *Zootaxa* 1490: 1-63.
- Wickramasinghe, L.J.M., Rodrigo R., Dayawansa N. and Jayantha U.L.D. 2007 Two new species of *Lankascincus* (Squamata:Scincidae) from Sripada Sanctuary (Peak Wilderness), in Sri Lanka, *Zootaxa* 1612: 1-24.
- Wijesinghe, D. P. 1991a. A new species of *Gelotia* (Araneae: Salticidae) from Sri Lanka. *Journal of the New York Entomological Society* 99 (2): 274-277.
- Wijesinghe, D. P. 1991b. New species of *Phaeacius* from Sri Lanka, Sumatra and the Philippines (Araneae: Salticidae). *Bulletin of the British Arachnological Society* 8 (8): 249-255.
- Wejesinghe, L.C.A. de S., Gunatilleke, I.A.U.N., Jayawardena, S.D.G., Kotagama, S.W. and Gunatilleke, C.V.S. 1993. *Biological Conservation of Sri Lanka: A National Status Report*. IUCN, Sri Lanka.



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The Black-necked Stork (*Ephippiorhynchus asiaticus*) is critically endangered in Sri Lanka, where less than 20 individuals are restricted to the coastal lagoons in the south-eastern dry zone of the island.

THE PROCESS OF PREPARING THE 2007 NATIONAL RED LIST

BACKGROUND

In the past, there were several attempts to compile lists of Sri Lanka's threatened species. The first list of nationally threatened plants was compiled by Abeywickrama in 1987. This list was reproduced in the publication compiled by Wijesinghe *et al* (1989), which included a list of nationally threatened fauna. The lists in the latter publication were updated and included in Wijesinghe *et al* (1993), using data obtained from the National Conservation Review that assessed the biodiversity of natural forests of Sri Lanka. These initial lists of nationally threatened fauna and flora were used widely and served to focus attention on the serious nature of threats facing the biodiversity of Sri Lanka. However, a major drawback of these lists was the fact that they were provisional, with an element of subjectivity introduced due to the reliance on personal judgements to assign a species as threatened, without the use of scientific criteria to assess the risk of extinction of a particular species.

In the latter part of 1990's, it was strongly felt that a new list of nationally threatened species of Sri Lanka should be formulated by the application of objectively and scientifically defined criteria rather than being based on individual perceptions of threat in order that there would be acceptability among all stakeholders,. This resulted in the formulation of a set of national criteria to identify threatened species, which then were used by IUCN, with the technical inputs of several stakeholders, to prepare the 1999 list of threatened fauna and flora of Sri Lanka (IUCN Sri Lanka, 2000). The information generated from the 1999 list of nationally threatened species resulted in the promotion of awareness among different stakeholders related to biodiversity conservation, including the general public, researchers, protected area managers and policy makers.

In 2001, IUCN supported the Ministry of Environment and Natural Resources under its Biodiversity Secretariat, to institutionalise species conservation activities in Sri Lanka, through the establishment of a National Species Conservation Advisory Group (NSCAG). In 2004, the NSCAG (through the Ministry of Environment and Natural Resources) requested the services of IUCN to establish a digital database related to species, and to update the 1999 national list of threatened plants and animals. The proposal submitted by IUCN was approved by the NSCAG as well as the National Experts Committee on Biodiversity (NEC-Biodiversity) and the project was initiated in mid 2004, with funding from the Asian Development Bank, and the Royal Netherlands Embassy. A team of personnel was appointed by IUCN and the Ministry of Environment and Natural Resources to implement this project, under the technical supervision and guidance of Dr. Channa Bambaradeniya and Dr. Devaka Weerakoon. The Biodiversity Secretariat of the Ministry of Environment and Natural Resources appointed expert groups under different taxa, to review the draft lists of threatened species.

METHODOLOGY

The nationally threatened species were evaluated using the IUCN Global Red List categories and criteria (version 3.1, IUCN 2001; <http://www.iucn.org/themes/ssc/redlists/RLcats2001booklet.htm>), adapted at a regional level (version 3.0, IUCN 2003; <http://www.iucn.org/themes/ssc/redlists/regionalguidelines.htm>). The Red List categories and criteria are elaborated in Annex 1 and Annex 2 respectively. A national workshop was held in mid 2004 for the expert groups, in order to explain the IUCN red list categories and criteria, and the process of preparing the 2006 national red list. Of the five IUCN Global Red List Criteria, only the first four (A - Population reduction; B – Restricted geographic range; C – Small population size and decline; D – Very small or restricted population) were used to evaluate the status of species during the current exercise. Most species were evaluated using criterion B (Geographic range – Extent of Occurrence and Area of Occupancy). A species was considered as nationally threatened, when it was evaluated to be either Critically Endangered (CR), Endangered (EN), or Vulnerable (VU).

Initially, in 2004, a series of national workshops on fauna and flora were organised by the MOENR and IUCN to upgrade the species lists under different taxonomic groups. Researchers working on different taxonomic groups were invited to present papers at these national workshops, and the updated faunal lists were published (Bambaradeniya, 2006). Only inland indigenous species of fauna and flora in Sri Lanka were evaluated. The status of all exotic animals and plants, migratory birds and marine fauna were not assessed during the current exercise. However, names of globally threatened marine vertebrates that inhabit the territorial waters of Sri Lanka, and globally threatened birds that migrate to Sri Lanka were extracted from the 2006 IUCN Global Red List of Threatened Species (IUCN, 2006), and presented separately.

Among the fauna, freshwater fish, reptiles, birds and mammals were evaluated. Because a list of threatened Sri Lankan amphibians had already been identified by the Global Amphibian Assessment (www.globalamphibians.org), these lists were supplemented by the work of Meegaskumbura & Manamendra-Arachchi, (2005) and Meegaskumubura *et al* (2007). The recently described ranid species (Fernando *et al*, 2007) was evaluated during this study. Among invertebrate fauna, butterflies, theraphosid spiders, and land snails were evaluated. Threatened odonates identified by Bedjanic (2005) and threatened freshwater crabs identified by Bahir *et al* (2005) were included in the current list.

Among plants, only selected angiosperm taxa were evaluated. The selection of plants for evaluation was based on families that had a higher number of species (and endemic species), commercially exploited species, point endemic species and species that have not been recorded for more than 50 years. Apart from the species that were evaluated, other unevaluated plant species of Sri Lanka that are considered to be globally threatened were extracted from the 2006 IUCN Global Red List of Threatened Species (IUCN, 2006), and presented separately.

Initially, distribution data on the above taxonomic groups selected for evaluation were compiled, using published papers, articles, unpublished technical reports and checklists, museum records and herbarium records (see Annex 3 for list of data sources used for the 2007 red list). The structure of the digital database was drafted and finalised, to facilitate the application of red list criteria and also to facilitate the revision, on a regular basis, of the national red list. Species information compiled from secondary sources were fed into the digital database, and the distribution of each species was plotted in a 5 x 5 km² grid map using GIS technology (see Figure 2 for the grid map). This grid map allowed for the calculation of the Extent of Occurrence (EOO) and Area of occupancy (AOO) for each species, and for the application of red list criteria. The draft lists of threatened taxa were reviewed and validated by experts during a series of expert workshops conducted during the latter half of 2006.

The nomenclature of fauna in the 2007 list of nationally threatened species follows the checklists in Bambaradeniya (2006) and other species described subsequently (Fernando *et al*, 2007; Meegaskumbura *et al*, 2007; Samarawickrama *et al*, 2006; Wickramasinghe, 2006; Wickramasinghe and Munindradasa, 2007; Bauer *et al*, 2007), while the nomenclature of flora is based on Senaratne (2001), the Angiosperm Phylogenetic Group (APG) system of classification (www.mobot.org/mobot/research/apweb), and other species described subsequently, using the International Plant Names Index (www.ipni.org) and the World Checklist of Monocotyledons (www.kew.org/wcsp/monocots).

WHAT THE LIST DOES NOT IMPLY

No inference on the risk of extinction of **Data Deficient** species can be made from the present analysis due to the paucity of information. It is possible that many of these species are threatened and are in need of conservation action, especially as the lack of recorded observations could mean that they are rare. Similarly, no assessment of the risk of extinction can be made for indigenous species that have not been evaluated.

For species that have been listed as extinct, it is important to note that there is always a possibility to rediscover an isolated population from a previously unexplored locality in Sri Lanka.

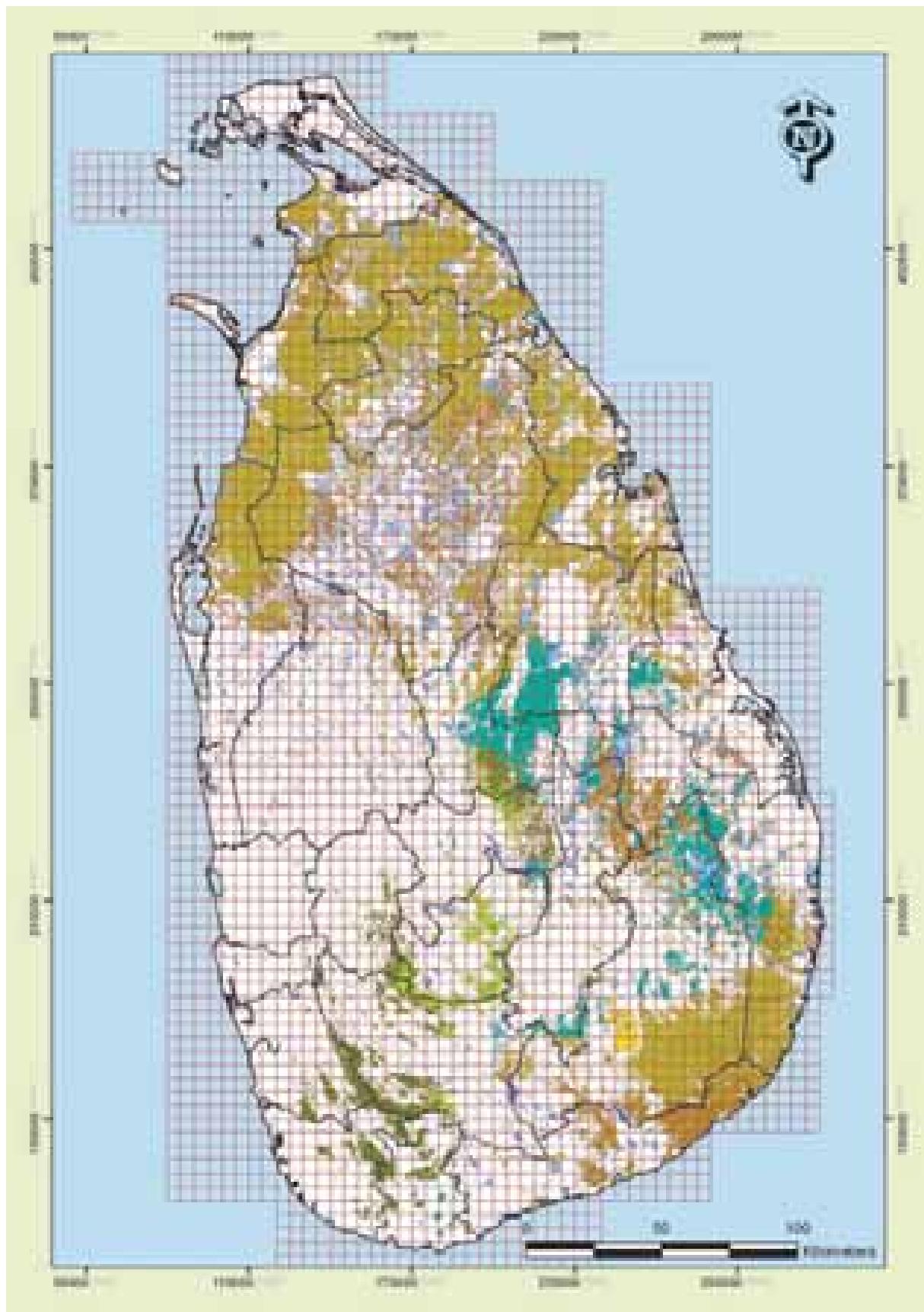


Figure 2: 25km² grid map of Sri Lanka, with vegetation cover and district boundaries

LIMITATIONS AND CONSTRAINTS

The team faced several limitations and constraints during this study. Some of the constraints were related to availability of data, while others were related to application of the IUCN Global Red List Criteria adapted for a regional scale.

These limitations and constraints are detailed below.

- Among the total indigenous plant species in Sri Lanka, only about 30% could be evaluated, mainly due to financial, time and resource constraints. Compared to fauna, the knowledge on the distribution of plants in Sri Lanka is relatively poor. Even among available information on plants, data are restricted specific taxa. Lower plants were not evaluated because there was a dearth of published information on species occurrence and distribution. Inadequate herbarium collections of plant species were a constraint to confirmation of the occurrence of species that were included in several publications.
- Lack of access to recent source material for authentication of taxa was also a constraint. This included inadequate access to recent taxonomic revisions and new distribution records, especially in relation to certain taxa which were hitherto known to be endemic and /or point endemics. Certain taxa that are being subjected currently to taxonomic revisions had to be transferred to the data deficient category. The evaluation of some species that were recently split into two or more species based on taxonomic revisions was constrained by the inability to assign or confirm previous location data.
- Because the digital database on species was a first time initiative in Sri Lanka, time was spent on refining its structure, in relation to applying the red-listing criteria. At the initial stages, this involved time and effort to convert published information into the required database format in order to facilitate analysis for identification of threatened species. There is further provision for future adjustments to the database, so that useful outputs may be generated to facilitate biodiversity conservation in Sri Lanka. Future adjustments will require additional inputs, in terms of financial resources, analysis by experts, and the development of user guides and manuals.
- The majority of the taxa in Sri Lanka lack data on population status nor are there clear statistics related to the change of natural habitats. Therefore, more than 95% of the taxa in this study were evaluated using criterion B (Restricted geographical range).
- Lack of consistency in the availability of published information on species, especially during the first two to three post colonial decades, was a constraint for determining changes in the distribution of taxa in relation to land use changes. There is a gap in research from 1950's until the mid 1980's for most faunal and floral species. Conversely, there is a surge in information during the last two decades.
- There were several problems in relation to location of species. Most publications indicated locations that referred to a wide area such as provinces, districts, major roads, or particular rivers, without specifying exact localities. Only a few papers (mostly the recent ones) had specific localities (i.e., listed geo-coordinates). Lack of an updated central gazetteer for place names made clarification of exact locations difficult. Another layer of difficulty was added by the lack of updated and accurate base maps on Sri Lanka.
- Some of the species occurrences and distribution data indicated in published material were doubtful. These doubts were clarified by experts, during review meetings.
- The grid size (25 km²) of the map adopted during this study made application of CR criteria (B1) difficult.

REFERENCES

- Abeywickrama, B.A. 1987. *The Threatened Plants of Sri Lanka*. Natural Resources, Energy and Science Authority of Sri Lanka, Colombo.
- Bahir, M.M., Ng, P.K.L., Crandall, K. and Pethiyagoda, R. 2005. A conservation assessment of the freshwater crabs of Sri Lanka. In: Yeo, D. C. J., Ng, P. K. L. and Pethiyagoda, R. (eds), Contributions to Biodiversity Exploration and Research in Sri Lanka. *The Raffles Bulletin of Zoology*, Supplement No. 12: 121-126.
- Bambaradeniya, C.N.B. (ed.). 2006. *Fauna of Sri Lanka: Status of taxonomy, research and conservation*. The World Conservation Union, Colombo, Sri Lanka and Government of Sri Lanka. 308pp.
- Bedjanic, M. 2005. *Globally Endangered Dragonflies of Sri Lanka*. Datasheets for assessing species for the IUCN Global Red List of Threatened Animals, Prepared for the IUCN SSC Odonata Specialist Group (Unpublished).
- Bauer A.M., de Silva A., Greenbaum E. and Jackman, T. 2007. A new species of Day gecko from high elevation in Sri Lanka, with a preliminary phylogeny of Sri Lankan *Cnemaspis* (Reptilia: Squamata: Gekkonidae), *Mitt. Mus. Nat.kd., Zool. Reighe*, Supplement No. 83: 22-32.
- Fernando, S.S., Wickramasinghe, L.J.M. and Rodrigo, R.K. 2007. A new species of endemic frog belonging to genus *Nannophrys* Gunther, 1869 (Anura: Dicroglossinae) from Sri Lanka. *Zootaxa* 1403: 55-68.
- Govaerts, R., Bogner, J., Boos, J., Boyce, P., Cosgriff, B., Croat, T., Goncalves, E., Grayum, M., Hay, A., Hetterscheid, W., Ittenbach, S., Landolt, E., Mayo, S., Murata, J., Nguyen, V.D., Sakuragui, C.M., Singh, Y., Thompson, S. & Zhu, G. (2006). *World Checklist of Araceae*. The Board of Trustees of the Royal Botanic Gardens, Kew. Published on the Internet; <http://www.kew.org/wcsp/>. [accessed 30 December 2006]
- Govaerts, R., Campacci, M.A., Baptista, D.H., Cribb, P., George, A., Kreuz, K. & Wood, J. (2006) *World Checklist of Orchidaceae*. The Board of Trustees of the Royal Botanic Gardens, Kew. Published on the Internet; <http://www.kew.org/wcsp/>. [accessed 30 December 2006]
- Govaerts, R., Dransfield, J., Zona, S., Hodel, D.R. & Henderson, A. (2006). *World Checklist of Arecaceae*. The Board of Trustees of the Royal Botanic Gardens, Kew. Published on the Internet; <http://www.kew.org/wcsp/>. [accessed 30 December 2006]
- Govaerts, R. & Lock, M. (2006). *World Checklist of Zingiberaceae*. The Board of Trustees of the Royal Botanic Gardens, Kew. Published on the Internet; <http://www.kew.org/wcsp/>. [accessed 30 December 2006]
- Govaerts, R., Maas, H. & Maas, P. (2006) *World Checklist of Triuridaceae*. The Board of Trustees of the Royal Botanic Gardens, Kew. Published on the Internet; <http://www.kew.org/wcsp/>. [accessed 30 December 2006]
- Govaerts, R., Saunders, R.M.K., Maas, H., Maas, P. & Zhang, D.X. (2006). *World Checklist of Burmanniaceae*. The Board of Trustees of the Royal Botanic Gardens, Kew. Published on the Internet; <http://www.kew.org/wcsp/>. [accessed 30 December 2006]
- Govaerts, R., Simpson, D.A., Goetghebeur, P., Wilson, K., Egorova, T., & Bruhl, J. (2006). *World Checklist of Cyperaceae*. The Board of Trustees of the Royal Botanic Gardens, Kew. Published on the Internet; <http://www.kew.org/wcsp/>. [accessed 30 December 2006]
- Govaerts, R. (2006). *World Checklist of Eriocaulaceae*. The Board of Trustees of the Royal Botanic Gardens, Kew. Published on the Internet; <http://www.kew.org/wcsp/>. [accessed 30 December 2006]
- IUCN 2001. *IUCN Red List Categories and Criteria: Version 3.1*. IUCN Species Survival Commission, IUCN, Glad, Switzerland and Cambridge, UK. ii + 30pp. http://www.iucnredlist.org/info/categories_criteria2001
- IUCN 2003. *Guidelines for Application of IUCN Red List Criteria at Regional Levels: Version 3.0*. IUCN Species Survival Commission, IUCN, Gland, Switzerland and Cambridge, UK. ii + 26pp. <http://www.iucn.org/themes/ssc/redlists/regionalguidelines.htm>
- IUCN 2006. *2006 IUCN Red List of Threatened Species*. [<www.iucnredlist.org>](http://www.iucnredlist.org).

- IUCN Sri Lanka 2000. *The 1999 list of Threatened Fauna and Flora of Sri Lanka*. Colombo: IUCN Sri Lanka. viii + 114pp.
- Meegaskumbura, M. and Manamendra-Arachchi, K. 2005. Descriptions of eight new species of shrub frogs (Ranidae: Rhacophorinae: *Philautus*) from Sri Lanka. In: Yeo, D. C. J., Ng, P. K. L. and Pethiyagoda, R. (eds), Contributions to Biodiversity Exploration and Research in Sri Lanka. *Raffles Bulletin of Zoology*, Supplement No. 12: 305–338.
- Meegaskumbura, M., Manamendra-Arachchi, K., Schneider, C.J. and Pethiyagoda, R. 2007. New species amongst Sri Lanka's extinct shrub frogs (Amphibia: Rhacophoridae: *Philautus*). *Zootaxa* 1397: 1-15.
- Samarawickrama, V.A.M.P.K., Ranawana, K.B., Rajapaksha, D.R.N.S., Ananjeva, N.B., Orlov, N.L., Ranasinghe, J.M.A.S. and Samarawickrama, V.A.P. 2006. A new species of the genus *Cophotis* (Squamata: Agamidae) from Sri Lanka. *Russian Journal of Herpetology* 13 (3): 207-214.
- Senaratna, L.K. 2001. *A checklist of the flowering plants of Sri Lanka*. National Science Foundation of Sri Lanka. 451pp.
- Stevens, P. F. (2001 onwards). *Angiosperm Phylogeny Website, Version 8*, June 2007 [and more or less continuously updated since]. <<http://www.mobot.org/mobot/research/APweb/>>, Downloaded on 20 May 2006.
- The International Plant Names (2004). *Plant Name Query Index* <<http://www.ipni.org>> Downloaded on 20 May 2006
- The Board of Trustees, Royal Botanic Gardens, Kew. (2002 onwards). *GrassBase - The Online World Grass Flora*. <http://www.kew.org/data/grasses-syn.html>. [accessed 30 December 2006]
- Wickramasinghe, L.J.M. 2006. A new species of *Cnemaspis* (Sauria: Gekkonidae) from Sri Lanka. *Zootaxa* 1369: 19-33.
- Wickramasinghe L.J.M and Munindradasa D.A.I. 2007. Review of the genus *Cnemaspis* Strauch, 1887 (Sauria: Gekkonidae) in Sri Lanka with the description of five new species, *Zootaxa* 1490: 1-63.
- Wijesinghe, L.C.A. de S., Gunatilleke, I.A.U.N., Jayawardana, S.D.G., Kotagama, S.W. and Gunatilleke, C.V.S. 1989. *Biological Conservation in Sri Lanka: A National Status Report*. NARESA, Sri Lanka.
- Wijesinghe, L.C.A. de SGunatilleke, .., I.A.U.N., Jayawardana, S.D.G., Kotagama, S.W. and Gunatilleke, C.V.S. 1993. *Biological Conservation in Sri Lanka: A National Status Report*. IUCN, Sri Lanka.



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The flagship mammal in Sri Lanka - the Elephant (*Elephas maximus*) is threatened due to rapid loss of habitats for expansion of agriculture and human settlements.

ANALYSIS OF SPECIES CONSERVATION STATUS

THE CONSERVATION STATUS OF FAUNA

Among the total inland indigenous vertebrate species recorded to date in Sri Lanka, 223 (33%) species were evaluated to be Nationally Threatened (Table 4). Among the threatened vertebrate species, 138 (62%) are endemic to Sri Lanka. Twenty one species of endemic amphibians have not been recorded in Sri Lanka during the past 100 years, and these should be considered



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The Vulnerable Dusky-striped jungle squirrel (*Funambulus sublineatus*) restricted to montane and lowland rain forests in the wet zone.



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The recently discovered Serendib Scops Owl (*Otus thilohofmanni*) is restricted to a few patches of lowland rainforests. It is threatened by the fragmentation of prime forest habitats in the wet zone.

as Extinct. Of the surviving inland vertebrates, 57 species are Critically Endangered: i.e., one in every 12 species of inland indigenous vertebrates of Sri Lanka is currently facing an immediate and extremely high risk of extinction (CR) in the wild. Among the total endemic vertebrate species, 34 (12%) are Critically Endangered, 68 (25%) are Endangered and 36 (14%) are Vulnerable.

Among the vertebrate fauna, the highest number of threatened species was recorded among reptiles (56 or 25%), followed by amphibians, birds, mammals and freshwater fish. One in every two species of mammals and amphibians, one in every three species of reptiles and freshwater fish, and one in every five species of birds in the island are currently facing the risk of becoming extinct.

Table 4: Summary of threatened inland indigenous vertebrate fauna in Sri Lanka

TAXON	TOTAL SPECIES	CR	EN	VU	TOTAL THREATENED
Mammals	91 (16)	9 (2)	20 (8)	12 (4)	41 (14)
Birds	227 (33)	10	15 (6)	21 (10)	46 (16)
Reptiles	171 (101)	16 (12)	23 (16)	17 (9)	56 (37)
Amphibians	106 (90)	12 (12)	34 (34)	6 (5)	52 (51)
Freshwater Fishes	82 (44)	10 (8)	7 (4)	11 (8)	28 (20)
Total	677 (284)	57 (34)	99 (68)	67 (36)	223 (138)

(Note: The total species number under different taxa excludes marine forms, and migratory species whose breeding populations have not been recorded in Sri Lanka. The numbers of endemic species is in parenthesis)



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The Endangered Barnes's cat snake (*Boiga barnesi*) is distributed in the forest habitats in wet and intermediate zones



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The Endangered Round snout pygmy tree frog (*Philautus femoralis*) is restricted to Horton plains – patches of montane forest surrounded by wet patana grasslands in the central highlands

Among the selected groups of inland invertebrate fauna evaluated, the highest number of threatened species was recorded among the butterflies (66), followed by freshwater crabs, land snails, dragonflies and theraphosid spiders (Table 5). However, within a single group of invertebrates evaluated, the highest proportion of threatened species was recorded among the freshwater crabs (72.5% of total crab species recorded to date), where one in every two species in Sri Lanka is currently facing an immediate and extremely high risk of extinction (CR) in the wild.



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The Endangered Rough horn Lizard (*Ceratophora aspera*) is restricted to lowland rain forests of the wet zone

Table 5: Summary of threatened inland indigenous invertebrate fauna in Sri Lanka

TAXON	TOTAL SPECIES	CR	EN	VU	TOTAL
Butterflies	243 (20)	21 (2)	29 (9)	16 (2)	66 (13)
Dragonflies	120 (57)	13 (13)	5 (5)	2 (2)	20 (20)
Freshwater Crabs	51 (51)	23 (23)	8 (8)	6 (6)	37 (37)
Theraphosid spiders	7 (5)	0	0	1 (1)	1 (1)
Land Snails	246 (204)	16 (15)	12 (12)	5 (5)	33 (32)

(Note: The numbers of endemic species in parenthesis).

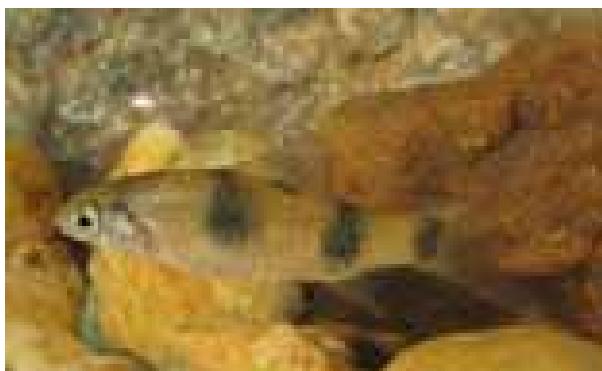
The list of extinct vertebrate fauna is presented in Table 6, while the lists of nationally threatened vertebrate fauna and invertebrate fauna are presented in Table 7 and Table 8, respectively.

Among the marine vertebrates that have been recorded from the territorial waters of Sri Lanka, 27 species are listed as globally threatened (IUCN, 2006). These include 12 species of cartilaginous fish, four species of bony fish, five species of reptiles, one off-shore bird and five marine mammals (see Table 9). Among the migratory birds that visit Sri Lanka, six species are listed as globally threatened, including the Critically Endangered Sociable Lapwing (*Vanellus gregarius*) (see Table 10).

Although ants were not evaluated during the present study, the endemic and relict *Aneuretes simoni* is listed as Critically Endangered in the IUCN Global Red List.

Of the vertebrate species evaluated, seven freshwater fish, five amphibians, 25 reptiles, 40 birds and seven mammals were assessed as Near Threatened (NT) (See Annex 4). Similarly, among the evaluated invertebrate species, two theraphosid spiders, 53 butterflies, eight freshwater crabs and 11 land snails were evaluated as Near Threatened (See Annex 5).

Among the inland vertebrate species evaluated, seven freshwater fish, three amphibians, 46 reptiles, six birds and seven mammals were included in the Data Deficient category (See Annex 6). Among the invertebrate species assessed, two theraphosid spiders, 31 butterflies and 184 land snails had to be included in the Data Deficient category (See Annex 7), because they lacked sufficient distribution data within Sri Lanka.



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The endemic and endangered Blotched Filamented Barb (*Puntius srikanensis*) is restricted to Amban and Kalu rivers that originate from the Knuckles forest. Its habitat is threatened by irrigation development activities.



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The Cornelian (*Deudorix epitarbas*) was known to be a common butterfly about 5-6 decades ago. It is rare and threatened at present, due to degradation of habitats.

of reptiles listed as Data Deficient, but species under families Scincidae, Typhlopidae and Uropeltidae are currently under taxonomic revision, and their distribution records need verification after these revisions are completed. The Data Deficient birds includes species known to have migratory as well as breeding populations in the island, but where data on the distribution of breeding populations are scarce. The distribution data on the recently rediscovered resident bird (Marshall's lora – *Aegithina nigrolutea*) are also inadequate. All the Data Deficient mammals are small mammals that lack sufficient data on their distribution.



Naalin Perera © IUCN

The Endangered *Spiralothelphusa fernandoi* is restricted to few locations in the North Western dry zone.

Although the Freshwater Crocodile (*Crocodylus palustris*) and the Spot-billed Pelican (*Pelecanus philippensis*) are listed as globally threatened, they are not found to be threatened at the national level. Although *P. philippensis* is distributed widely in Sri Lanka, only a few breeding sites have been recorded thus far. Therefore, the population of this species should be closely monitored, because of its global threat status. The genetic status of wild populations of *Bubalus arnee* needs assessment, in order to identify hybridisation with the domestic buffalo (*Bubalus bubalis*).

THE CONSERVATION STATUS OF FLORA

The conservation status of about 35% of the indigenous angiosperm flora, belonging to 68 families was assessed during the current exercise. Of the total plant species evaluated (1099), 72 species (6.5%) were assessed as Extinct (EX), while 675 species (61%) were found to be threatened (Table 11). Among the total threatened plant species, 412 species (61%) are endemic to Sri Lanka. Among the extinct plant species, nearly 60% are endemic to the island. Of the total extinct species, one species (*Alphonsea hortensis* H.

Huber) was categorised as 'Extinct in the wild' (EW), because it is found in the National Botanical Gardens at Peradeniya. About 37% of the threatened plants are Critically Endangered (CR). They are under considerable risk of extinction in the near future, especially if habitat degradation is not reversed. The Family Orchidaceae had the highest number of threatened species (122, 18%), followed by Rubiaceae (99, 14.6%), Acanthaceae (51, 7.5%), Dipterocarpaceae (42, 6.2%) and Phyllanthaceae (31, 4.6%). These five families harbour more than 50% of the threatened species identified during this present study.



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The wild populations of orchids such as *Habenaria crinifera* are declining rapidly due to over-exploitation and habitat destruction.

69 species (6%) of the total plants evaluated were Near Threatened (NT) (See Annex 8), and these could move into a threatened category in the near future, if threats affecting their populations are not removed. Nearly 5% of the evaluated plant species were listed under the Data Deficient (DD) category (See Annex 9), due to lack of adequate information on their distribution and population status in different localities. It could also mean that some of these species are rare at present, and may well be that, with additional data, they could be assessed, in a future revision as threatened.



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The Critically Endangered *Scyphiphora hydrophyllacea* is restricted to Mangrove forests of North Western Sri Lanka.

The total list of extinct plant species is presented in Table 12, while the total list of threatened plant species is presented in Table 13. Apart from the plant species that were evaluated and found to be threatened during the present exercise, a total of 81 additional species of plants under 30 families have been listed as globally threatened (source: www.redlist.org). These include 17 Critically Endangered, 14 Endangered and 50 Vulnerable species (Table 14).



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The Critically Endangered *Impatiens repens* is a runner that grows in wet rock surfaces in the wet zone forests.



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The threatened semi-parasitic *Taxillus sclerophyllus* is restricted to sub montane forests.

Table 6 : List of Extinct Amphibian Fauna in Sri Lanka

(Source: Global Amphibian Assessment www.globalamphibians.org; Meegaskumbura et al., 2007)
 (Note: *Endemic Species)

CLASS: AMPHIBIA (FROGS, TOADS)	
EXTINT (EX)	
FAMILY / SPECIES	
Family: Bufonidae	
<i>Adenomus kandianus</i> (Günther, 1872)*	
E - Kandiyan dwarf toad, S - Mahanuwara kuru gembra	
Family: Ranidae	
<i>Nannophrys guentheri</i> Boulenger, 1882*	
E - Guenther's rock frog, S - Guntherge galpara diya madiya	
<i>Philautus adspersus</i> (Günther, 1872)*	
E - Thwaite's Shrub Frog, S - Thawaitesge panduru madiya	
<i>Philautus dimbulae</i> (Shreve, 1940)*	
E - Dimbula Shrub Frog, S - Dimbula panduru madiya	
<i>Philautus eximius</i> (Shreve, 1940)*	
E - Queenwood Shrub Frog, S - Queenwood panduru madiya	
<i>Philautus extirpo</i> Manamendra-Arachchi & Pethiyagoda, 2005*	
E - Blunt snout Shrub Frog, S - Mota hombu panduru madiya	
<i>Philautus halyi</i> (Boulenger, 1904)*	
E - Pattipola Shrub Frog, S - Pattipola panduru madiya	
<i>Philautus hypomelas</i> (Günther, 1876)*	
E - Webless pygmy tree frog, S - Patala rahitha panduru madiya	
<i>Philautus leucorhinus</i> (Lichtenstein, Weinland & Von Martens, 1856)*	
E - White nosed tree frog, S - Sudu nasethi panduru madiya	
<i>Philautus maia</i> Meegaskumbura et al., 2007*	
<i>Philautus malcolmsmithi</i> (Ahl, 1927)*	
E - Malcomsmith's Shrub Frog, S - Malcomsmithge panduru madiya	
<i>Philautus nanus</i> (Günther, 1869)*	
E - Southern Shrub Frog, S - Dakunudiga panduru madiya	
<i>Philautus nasutus</i> (Günther, 1869)*	
E - Pointed snout Shrub Frog, S - Ul hombu panduru madiya	
<i>Philautus oxyrhynchus</i> (Günther, 1872)*	
E - Sharp snout Shrub Frog, S - Thiunu hombu panduru madiya	
<i>Philautus pardus</i> Meegaskumbura et al., 2007*	
E - Leopard Shrub Frog	
<i>Philautus rugatus</i> (Ahl, 1927)*	
E - Farnland Shrub Frog, S - Farnland panduru madiya	
<i>Philautus stellatus</i> (Kelaart, 1853)*	
E - Spotted Shrub Frog, S - Pulli sahitha panduru madiya	
<i>Philautus temporalis</i> (Günther, 1864)*	
E - Striped snout Shrub Frog, S - Hombu thirathi panduru madiya	
<i>Philautus variabilis</i> (Günther, 1859)*	
E - Guenther's Shrub Frog, S - Guentherge panduru madiya	
<i>Philautus zal</i> Manamendra-Arachchi & Pethiyagoda, 2005*	
E - White bloched Shrub Frog, S - Sudu pulli athi panduru madiya	
<i>Philautus zimmeri</i> (Ahl, 1927)*	
E - Rumassala Shrub Frog, S - Rumassala panduru madiya	

Table 7: List of Threatened Vertebrate Fauna

(Note: * Endemic Species)

CLASS: ACTINOPTERIGII (FRESHWATER FISH)	
CRITICALLY ENDANGERED (CR)	
FAMILY / SPECIES	CRITERIA
Family: Cyprinidae	
<i>Devario pathirana</i> (Kottelat & Pethiyagoda, 1990)*	B1ab(ii,iii)
E - Barred danio, S - Pathirana salaya	
<i>Labeo fisheri</i> Jordan & Starks, 1917*	B1ab(i,ii,iii)
E - Green Labeo, S - Gadeya	
<i>Labeo lankae</i> (Heckel, 1838)*	A2ac
E - Orange fin labeo, S - Thambalaya	
<i>Puntius asoka</i> Kottelat & Pethiyagoda, 1989*	B1ab(ii,iii)
E - Asoka barb, S - Asoka pethiya, Ranmanissa	
<i>Puntius bandula</i> Kottelat & Pethiyagoda, 1991*	Azb, B1ab(ii,iii)
E - Bandula barb, S - Bandula pethiya, Jayanthiya	
<i>Puntius martenstyni</i> Kottelat & Pethiyagoda, 1991*	B1ab(i,ii,iii)
E - Martenstyn's barb, S - Dumbara pethiya	
Family: Gobiidae	
<i>Stiphodon martenstyni</i> Watson, 1998*	B1 ab(ii,iii)
E - Martenstyn's goby, S - Martenstynige weligouwa	
Family: Mastacembelidae	
<i>Macrognathus aral</i> (Bloch & Schneider, 1801)	A2ac
E - Lesser spiny eel, S - Bata kola theliya	
Family: Synbranchidae	
<i>Ophisternon bengalense</i> Mc Clelland, 1844	B1ab(ii,iii)
E - Swamp eel, S - Potta aandha	
<i>Monopterus desilvai</i> Bailey & Gans, 1998*	B1ab(ii,iii)
E - Desilva's blind eel, S - Desilvage Potta aandha	
ENDANGERED (EN)	
FAMILY / SPECIES	CRITERIA
Family: Cyprinidae	
<i>Rasboroides vaterifloris</i> (Deraniyagala, 1930)*	B1ab(ii,iii)+2ab(ii,iii)
E - Vateria flower rasbora, S - Hal mal dandiya	
<i>Rasbora wilpita</i> Kottelat & Pethiyagoda, 1991*	B1ab(i,ii)+2ab(i,ii)
E - Wilpita Rasbora, S - Wilpita dandiya	
<i>Puntius srilankensis</i> (Senanayake, 1985)*	B1ab(i,ii,iii)+2ab(i,ii,iii)
E - Blotched filamented barb, S - Dan kudu pethiya	
Family: Cobitidae	
<i>Lepidocephalichthys jonklaasi</i> (Deraniyagala, 1956)*	B1ab(i,ii)+2ab(i,ii)
E - Jonklaas's loach, S - Pulli ahirawa	

Family: Gobiidae	
<i>Sicyopterus griseus</i> Day,1878	B1ab(i,ii)+2ab(i,ii)
E - Stone goby, S - Gal weligouwa	
<i>Sicyopterus halei</i> (Day,1888)	B1ab(i,ii)+2ab(i,ii)
E - Red-tailed goby, S - Maha gal weligouwa	
<i>Schismatogobius deraniyagalai</i>	B1ab(i,ii)+2ab(i,ii)
E - Red-neck goby, S - Kate rathu weligouwa	

VULNERABLE (VU)

FAMILY / SPECIES	CRITERIA
<i>Puntius cumingii</i> (Gunther, 1868)*	B1ab(i,ii)+2ab(i,ii)
E - Cuming's barb, S - Depulliya	
<i>Puntius nigrofasciatus</i> (Gunther, 1868)*	B1ab(i,ii)+2ab(i,ii)
E - Black ruby barb, S - Bulath hapaya	
<i>Puntius pleurotaenia</i> (Bleeker,1863)*	B1ab(i,ii)+2ab(i,ii)
E - Black lined barb, S - Heeta massa	
<i>Puntius titteya</i> Deraniyagala, 1929*	B1ab(i,ii)+2ab(i,ii)
E - Cherry barb, S - Le titteya	

Family: Balitoridae

<i>Acanthocobitis urophthalmus</i> (Gunther, 1868)*	B1ab(ii,iii)+2ab(ii,iii)
E - Tiger loach, S - Pol ahirawa, Viran ahirawa	

Family: Siluridae

<i>Wallago attu</i> (Bloch & Schneider, 1801)	A2ac
E - Shark catfish, S - Walaya	

Family: Belontidae

<i>Malpulutta kretseri</i> Deraniyagala, 1937*	B1ab(i,ii,iii)+2ab(i,ii,iii)
E - Ornate paradisefish, S - Malpulutta	

Family: Gobiidae

<i>Sicyopus jonklaasi</i> Klausewitz & Henrich,1986	B1ab(ii,iii)+2ab(ii,iii)
E - Lipstick goby, S - Thol rathu weligouwa	

Family: Aplocheilidae

<i>Aplocheilus wernerii</i> Meinken, 1966*	B1ab(ii,iii)+2ab(ii,iii)
E - Werner's killifish, S - Iri handeya	

Family: Anguillidae

<i>Anguilla nebulosa</i> Mc Clelland, 1844	A2ac
E - Long finned eel, S - Pol mal aandha	

Family: Channidae

<i>Channa ara</i> (Deraniyagala,1945)*	A2ac
E - Giant snakehead, S - Gan ara	

CLASS: AMPHIBIA

(Source: Global Amphibian Assessment www.globalamphibians.org; Meegaskumbura et al., 2005)

CRITICALLY ENDANGERED (CR)

FAMILY / SPECIES	CRITERIA
Family: Bufonidae	
<i>Adenomus dasi</i> Manamendra-Arachchi & Pethiyagoda, 1998*	B1ab(iii)+2ab(iii)
E - Das's dwarf toad, S - Dasge kuru gembra	
Family: Microhylidae	
<i>Microhyla karunaratnei</i> Fernando & Siriwardhane, 1996*	B1ab(iii)
E - Karunaratne's narrowmouth frog, S - Karunarathnage muva patu madiya	
Family: Ranidae	
<i>Nannophrys marmorata</i> Kirtisinghe, 1946*	B1ab(iii)
E - Marbled rock frog, S - Dumbara galpara diya madiya	
<i>Nannophrys naeyakai</i> Fernando et al, 2007*	B2ab(iii)
E - Sri Lanka Tribal Rock-frog	
<i>Philautus limbus</i> Manamendra-Arachchi & Pethiyagoda, 2005*	B1ab(iii)
E - Haycock shrub frog, S - Haycock panduru madiya	
<i>Philautus lunatus</i> Manamendra-Arachchi & Pethiyagoda, 2005*	B1ab(iii)+2ab(iii)
E - Handapanella shrub frog, S - Handapanella panduru madiya	
<i>Philautus macropus</i> (Günther, 1869)*	B1ab(iii)+2ab(iii)
E - Bigfoot shrub frog, S - Vishala padethi panduru madiya	
<i>Philautus nemus</i> Manamendra-Arachchi & Pethiyagoda, 2005*	B1ab(iii)+2ab(iii)
E - Whistling shrub frog, S - Uruhanbana panduru madiya	
<i>Philautus papillosum</i> Manamendra-Arachchi & Pethiyagoda, 2005*	B1ab(iii)+2ab(iii)
E - Papilated shrub frog, S - Dive gatithathi panduru madiya	
<i>Philautus procax</i> Manamendra-Arachchi & Pethiyagoda, 2005*	B1ab(iii)+2ab(iii)
E - Cheeky shrub frog, S - Kammule pallamathi panduru madiya	
<i>Philautus simba</i> Manamendra-Arachchi & Pethiyagoda, 2005*	B1ab(iii)+2ab(iii)
E - Sinharaja shrub frog, S - Sinharaja panduru madiya	
<i>Polypedates fastigo</i> Manamendra-Arachchi & Pethiyagoda, 2001*	B1ab(iii)
E - Morningside tree frog, S - Ensalwatta gas madiya	

ENDANGERED (EN)

FAMILY / SPECIES	CRITERIA
Family: Bufonidae	
<i>Bufo kotagamai</i> Fernando & Dayawansa, 1994*	B1ab(iii)+2ab(iii)
E - Kotagama's dwarf toad, S - Kotagamage kuru gembra	
<i>Bufo noellerti</i> Manamendra-Arachchi & Pethiyagoda, 1998*	B1ab(iii)
E - Noellert's toad, S - Nollertge gembra	
Family: Microhylidae	
<i>Microhyla zeylanica</i> Parker & Hill, 1949*	B1ab(iii)+2ab(iii)
E - Sri Lanka narrow mouth frog, S - Lanka Muva patu madiya	
<i>Ramanella palmata</i> (Parker, 1934)*	B1ab(iii)
E - Half- webbed Pug snout frog, S - Parkage mota hombu madiya	

<i>Fejervarya greenii</i> (Boulenger, 1904)*	B1ab(iii)+2ab(iii)
E - Sri Lanka Pddy field frog, S - Lanka kandukara madiya	
<i>Philautus alto</i> Manamendra-Arachchi & Pethiyagoda, 2005*	B1ab(iii)+2ab(iii)
E - Horton plains shrub frog, S - Mahaeliya panduru madiya	
<i>Philautus asankai</i> Manamendra-Arachchi & Pethiyagoda, 2005*	B1ab(iii)+2ab(iii)
E - Asanka's shrub frog, S - Asankage panduru madiya	
<i>Philautus auratus</i> Manamendra-Arachchi & Pethiyagoda, 2005*	B1ab(iii)+2ab(iii)
E - Golden shrub frog, S - Ranwan panduru madiya	
<i>Philautus caeruleus</i> Manamendra-Arachchi & Pethiyagoda, 2005*	B1ab(iii)+2ab(iii)
E - Blue thigh shrub frog, S - Nil kalawathi panduru madiya	
<i>Philautus cavirostris</i> (Günther, 1869)*	B1ab(iii)+2ab(iii)
E - Hollow snout shrub frog, S - Hirigadu panduru madiya	
<i>Philautus cuspis</i> Manamendra-Arachchi & Pethiyagoda, 2005*	B1ab(iii)+2ab(iii)
E - Sharp snout shrub frog, S - Thiynu hombu panduru madiya	
<i>Philautus decoris</i> Manamendra-Arachchi & Pethiyagoda, 2005 *	B1ab(iii)+2ab(iii)
E - Eligant shrub frog, S - Bushana panduru madiya	
<i>Philautus femoralis</i> (Günther, 1864)*	B1ab(iii)+2ab(iii)
E - Round snout pygmy shrub frog, S - Pala panduru madiya	
<i>Philautus folicola</i> Manamendra-Arachchi & Pethiyagoda, 2005*	B1ab(iii)+2ab(iii)
E - Leaf dwelling shrub frog, S - Wakutu kola panduru madiya	
<i>Philautus frankenbergi</i> Megaskumbura & Manamendra-Arachchi, 2005*	B1ab(iii)+2ab(iii)
E - Frankenberg's shrub frog, S - Frankenberge panduru madiya	
<i>Philautus fulvus</i> Manamendra-Arachchi & Pethiyagoda, 2005*	B1ab(iii)+2ab(iii)
E - Knuckles shrub frog, S - Dumbara panduru madiya	
<i>Philautus hoffmanni</i> Megaskumbura & Manamendra-Arachchi, 2005*	B1ab(iii)+2ab(iii)
E - Hoffmann's shrub frog, S - Hoffmannge panduru madiya	
<i>Philautus microtympanum</i> (Günther, 1859)*	B1ab(iii)+2ab(iii)
E - Small eared shrub frog, S - Kudakan panduru madiya	
<i>Philautus mittermeieri</i> Megaskumbura & Manamendra-Arachchi, 2005*	B1ab(iii)
E - Mittermeieri shrub frog, S - Mittermeierge panduru madiya	
<i>Philautus mooreorum</i> Megaskumbura & Manamendra-Arachchi, 2005*	B1ab(iii)+2ab(iii)
E - Moore's shrub frog, S - Moorege panduru madiya	
<i>Philautus ocularis</i> Manamendra-Arachchi & Pethiyagoda, 2005*	B1ab(iii)+2ab(iii)
E - Golden eyed shrub frog, S - Ranwan-as athi panduru madiya	
<i>Philautus pleurotaenia</i> (Boulenger, 1904)*	B1ab(iii)+2ab(iii)
E - Side striped shrub frog, S - Pathi thirathi panduru madiya	
<i>Philautus poppiae</i> Megaskumbura & Manamendra-Arachchi, 2005*	B1ab(iii)+2ab(iii)
E - Poppy's shrub frog, S - Poppyge panduru madiya	
<i>Philautus reticulatus</i> (Günther, 1864)*	B1ab(iii)+2ab(iii)
E - Reticulated thigh shrub frog, S - Jalaba panduru madiya	
<i>Philautus sarasinorum</i> (Müller, 1887)*	B1ab(iii)+2ab(iii)
E - Muller's shrub frog, S - Mullerge panduru madiya	
<i>Philautus schmarda</i> (Kelaart, 1854)*	B1ab(iii)+2ab(iii)
E - Schmarda's shrub frog, S - Gorahandi panduru madiya	
<i>Philautus silus</i> Manamendra-Arachchi & Pethiyagoda, 2005*	B1ab(iii)+2ab(iii)
E - Pugnosed shrub frog, S - Mukkan hombu athi panduru madiya	
<i>Philautus sylvaticus</i> Manamendra-Arachchi & Pethiyagoda, 2005*	B1ab(iii)+2ab(iii)
E - Forest shrub frog, S - Kela panduru madiya	

<i>Philautus steineri</i> Megaskumbura & Manamendra-Arachchi, 2005*	B1ab(iii)+2ab(iii)
E - Steiner's shrub frog, S - Steinerge panduru madiya	
<i>Philautus stuarti</i> Megaskumbura & Manamendra-Arachchi, 2005*	B1ab(iii)+2ab(iii)
E - Stuart's shrub frog, S - Stuartge panduru madiya	
<i>Philautus viridis</i> Manamendra-Arachchi & Pethiyagoda, 2005*	B1ab(iii)+2ab(iii)
E - Dull green shrub frog, S - Anduru kola panduru madiya	
<i>Philautus zorro</i> Manamendra-Arachchi & Pethiyagoda, 2005*	B1ab(iii)+2ab(iii)
E - Gannoruva shrub frog, S - Gannoruwa panduru madiya	
<i>Polypedates eques</i> Günther, 1858*	B1ab(iii)
E - Mountain hourglass tree frog, S - Kandukara gas madiya	
<i>Polypedates longinasus</i> (Ahl, 1931)*	B1ab(iii)+2ab(iii)
E - Long snout tree frog, S - Dik hombu gas madiya	

VULNERABLE (VU)

FAMILY / SPECIES	CRITERIA
Family: Microhylidae	
<i>Ramanella nagaoi</i> Manamendra-Arachchi & Pethiyagoda, 2001*	D2
E - Nagao's ramanella, S - Nagaoge mota hombu madiya	
Family: Ranidae	
<i>Nannophrys ceylonensis</i> (Günther, 1868)*	B1ab(iii)+2ab(iii)
E - Sri Lanka rock frog, S - Lanka galpara diya madiya	
<i>Rana aurantiaca</i> Boulenger, 1904	B1ab(iii)
E - Small Wood frog, S - Ranwan diya madiya	
<i>Philautus hallidayi</i> Megaskumbura & Manamendra-Arachchi, 2005*	B1ab(iii)
E - Halliday's shrub frog, S - Hallidayge panduru madiya	
Family: Ichthyophiidae	
<i>Ichthyophis orthoplicatus</i> Taylor, 1965*	B1ab(iii)
E - Pattipola cecillian, S - Dumburu hiridanda	
<i>Ichthyophis pseudangularis</i> Taylor, 1965*	B1ab(iii)
E - Lesser yellowbanded cecillian, S - Kuda kaha hiridanda	

CLASS: REPTILIA

CRITICALLY ENDANGERED (CR)

FAMILY / SPECIES	CRITERIA
Family: Agamidae	
<i>Calotes desilvai</i> Bahir & Maduwage, 2005*	B1ab(i,ii)
E - Maculate lizard, S - Lapawan katussa	
<i>Ceratophora erdeleni</i> Pethiyagoda & Manamendra-Arachchi, 1998*	B2ab(i,ii.)
E - Erdelen's horn lizard, S - Erdelenige angkatussa	
<i>Ceratophora katu</i> Pethiyagoda & Manamendra-Arachchi, 1998*	B2ab(i,ii.)
E - Karunaratne's horn lizard, S - Karunarathnage angkatussa	
<i>Cophotis dumbara</i> Samarakone et al., 2006*	B1ab(i,ii)
E - Dumbara pygmy lizard, S - Dumbara kurukatussa	
Family: Gekkonidae	
<i>Cyrtodactylus edwardtaylori</i> Batuwita & Bahir, 2005*	B1ab(i,ii)
E - Taylors forest gecko, S - Namunukula vakaniya huna	
<i>Cyrtodactylus ramboda</i> Batuwita & Bahir, 2005*	B1ab(i,ii)
E - Ramboda forest gecko, S - Ramboda vakaniya huna	
<i>Cyrtodactylus subsolanus</i> Batuwita & Bahir, 2005*	B1ab(i,ii)
E - Rakwana forest gecko, S - Dolahera vakaniya huna	
<i>Cyrtodactylus cracens</i> Batuwita & Bahir, 2005*	B2ab(i,ii)
E - Narrow headed forest gecko, S - Sinharaja vakaniya huna	
<i>Cyrtodactylus fraenatus</i> (Günther, 1864)*	B1ab(i,ii)
E - Great forest gecko, S - Maha kalae huna	
<i>Chemaspis ranwellai</i> Wickramasinghe, 2006*	B1ab(i,ii)
E - Ranwella's Day Gecko, S - Ranwellage diva huna	
Family: Scincidae	
<i>Chalcidoseps thwaitesii</i> (Günther, 1872)*	B2ab(i,ii)
E - Fourtoe snakeskink, S - Caturanguli sarpiyahikanala	
<i>Nessia hickanala</i> Deraniyagala, 1940*	B1ab(i,ii)+2ab(i,ii)
E - Sharkhead snakeskink, S - Morahis sarpahiraluva	
Family: Colubridae	
<i>Aspidura deraniyagalae</i> Gans & Fethke, 1982*	B2ab(i,ii)
E - Deraniyagala's roughside, S - Kandu madilla	
<i>Aspidura drummondhayi</i> Boulenger, 1904*	B2ab(i,ii)
E - Guenther's Drummond – Hay's roughside, S - Ketiwalmadilla	
<i>Boiga ranawanei</i> Samarakone et al., 2006*	B1ab(i,ii)+2ab(i,ii)
E - Ranawanei's Golden cat snake, S - Ranawanage ran mapila	
<i>Gerarda prevostianus</i> (Eydoux & Gervais, 1837)	B2ab(i,ii)
E - Gerard's water snake, S - Prevostge diyabariya	

ENDANGERED (EN)

FAMILY / SPECIES	CRITERIA
Family: Agamidae	
<i>Calotes liocephalus</i> Günther, 1872*	B2ab(i,ii)
E - Crestless lizard, S - Kondu datirahita katussa	
<i>Ceratophora aspera</i> Günther, 1864*	B1ab(i,ii)
E - Rough horn lizard, S - Raluang katussa	
<i>Ceratophora stoddartii</i> Gray, 1835*	B1ab(i,ii)
E - Rhinohorn lizard, S - Kagamuva angkatussa	
<i>Ceratophora tennentii</i> Günther & Gray, 1861*	B1ab(i,ii)+2 ab(i,ii)
E - Leafnose lizard, S - Pethi angkatussa	
<i>Cophotis ceylanica</i> Peters, 1861*	B1ab(i,ii)+2 ab(i,ii)
E - Pygmy lizard, S - Kandukara kurukatussa	
Family: Gekkonidae	
<i>Calodactylodes illingworthorum</i> Deraniyagala, 1953*	B2ab(i,ii)
E - Lankan golden gecko, S - Maha galhuna	
<i>Cnemaspis podihuna</i> Deraniyagala, 1944*	B2ab(i,ii)
E - Dwarf day gecko, S - Podi galhuna	
<i>Cnemaspis samanalensis</i> Wickramasinghe & Munindradasa, 2007*	B1ab(i,ii)+2 ab(i,ii)
E - Samanala day gecko, S - Samanala kandu diva huna	
<i>Cnemaspis tropidogaster</i> (Boulenger, 1885)	B1ab(i,ii)+2 ab(i,ii)
E - Roughbelly day gecko, S - Ralodara divasarihuna	
<i>Cyrtodactylus soba</i> Batuwita & Bahir, 2005*	B1ab(i,ii)+2 ab(i,ii)
E - Knuckles forest gecko, S - Dumbara vakniya huna	
<i>Hemiphyllodactylus typus</i> Bleeker, 1860	B1ab(i,ii)+2 ab(i,ii)
E - Slender gecko, S - Sihin Huna	
<i>Hemidactylus lugubris</i> (Duméril & Bibron, 1836)	B1ab(i,ii)+2 ab(i,ii)
E - Scaly-finger gecko, S - Salkapa huna	
Family: Scincidae	
<i>Lankascincus deignani</i> (Taylor, 1950)*	B2ab(i,ii)
E - Deignan's lankaskink, S - Deignange lakhiraluva	
<i>Lankascincus deraniyagalae</i> Greer, 1991*	B1ab(i,ii)+2 ab(i,ii)
E - Deraniyagal's lankaskink, S - Deraniyagalage lakhiraluva	
<i>Mabuya beddomei</i> (Jerdon, 1870)	B2ab(i,ii)
E - Beddome's stripe skink, S - Vairan hikanala	
<i>Mabuya bibronii</i> (Gray, 1838)	B1ab(i,ii)+2 ab(i,ii)
E - Bibron's sand skink, S - Vali hikanala	
<i>Nessia bipes</i> Smith, 1935*	B1ab(i,ii)+2 ab(i,ii)
E - Smith's snakeskink, S - Smithge sarpahiraluva	
<i>Nessia didactylus</i> (Deraniyagala, 1934)*	B2ab(i,ii)
E - Two toe snakeskink, S - Drayanguli sarpahiraluva	
<i>Nessia layardi</i> (Kelaart, 1854)*	B1ab(i,ii)+2 ab(i,ii)
E - Layard's snakeskink, S - Leyardge sarpahiraluva	
<i>Nessia monodactylus</i> (Gray, 1839)*	B1ab(i,ii)+2 ab(i,ii)
E - Toeless snakeskink, S - Ananguli sarpahiraluva	

<i>Nessia sarasinorum</i> (Müller, 1889)* E - Sarasin's snakeskink, S - Sarasinge sarpahiraluva	B2ab(i,ii)
Family: Acrochordidae <i>Acrochordus granulatus</i> (Schneider, 1799) E - Wart snake, S - Diya goya	B2ab(i,ii)
Family: Viperidae <i>Hypnale walli</i> (Gloyd, 1977)* E - Gloyd's Hump-nosed viper, S - Kuda mukalan thelissa	B1ab(i,ii)+2 ab(i,ii)
VULNERABLE (VU)	
FAMILY / SPECIES	CRITERIA
Family: Testudinidae <i>Geochelone elegans</i> (Schoepff, 1795) E - Indian Star Tortoise, S - Taraka Ibba	B1ab(i,ii)+2 ab(i,ii)
Family: Trionychidae <i>Lissemys punctata</i> (Bonnaterre, 1789) E - Flapshell Turtle, S - Kiri Ibba	B2ab(i,ii)
Family: Agamidae <i>Calotes ceylonensis</i> Müller, 1887* E - Painted lip lizard, S - Thola-visituru katussa <i>Calotes liolepis</i> Boulenger, 1885* E - Whistling lizard, S - Sivuruhandalana katussa <i>Calotes nigrilabris</i> Peters, 1860* E - Black cheek lizard, S - Kalu kopul katussa	B2ab(i,ii) B1ab(i,ii)+2 ab(i,ii) B1ab(i,ii)+2 ab(i,ii)
Family: Lacertidae <i>Ophisops leschenaultii</i> Milne- Edwards, 1829 E - Leschenault's Snake eye Lizard, S - Panduru sarpakshi katussa	B1ab(i,ii)+2 ab(i,ii)
Family: Scincidae <i>Lankascincus taylori</i> Greer, 1991* E - Taylor's lanka skink, S - Taylorge lakhiraluva <i>Mabuya floweri</i> Taylor, 1950* E - Taylor's skink, S - Taylorge hikanala	B1ab(i,ii)+2 ab(i,ii) B1ab(i,ii)+2 ab(i,ii)
Family: Boidae <i>Gongylophis conica</i> (Schneider, 1796) E - Sand boa, S - Vali pimbura	B2ab(i,ii)
Family: Colubridae <i>Cerberus rynchops</i> (Schneider, 1799) E - Dog-faced water snake, S - Kuna diya kaluwa	B1ab(i,ii)

<i>Balanophis ceylonensis</i> (Günther, 1858)*	B1ab(i,ii)+2 ab(i,ii)
E - Sri Lanka keelback, S - Nihaluwa	
<i>Dendrelaphis caudolineolatus</i> (Günther, 1869)	B1ab(i,ii)+2 ab(i,ii)
E - Gunther's bronze back, S - Viri haldanda	
<i>Cercaspis carinata</i> (Kuhl, 1820)	B1ab(i,ii)+2 ab(i,ii)
E - The Sri Lanka wolf snake, S - Dhara radanakaya	
<i>Liopeltis calamaria</i> (Günther, 1858)	B2ab(i,ii)
E - Reed snake, S - Punbariya	
<i>Oligodon calamarius</i> (Linnaeus, 1758)	B1ab(i,ii)+2 ab(i,ii)
E - Templeton's kukri snake, S - Kabara dath ketiya	
<i>Chrysopelea taprobanica</i> Smith, 1943	B1ab(i,ii)+2 ab(i,ii)
E - Striped flying snake, S - Dangara danda	
Family: Viperidae	
<i>Echis carinatus</i> (Schneider, 1801)	B1ab(i,ii)
E - Saw scale viper, S - Vali polonga	

CLASS: AVES

CRITICALLY ENDANGERED (CR)

FAMILY / SPECIES	CRITERIA
Family: Phasianidae	
<i>Francolinus pictus</i> (Jardine & Selby, 1828)	B1ab(i,ii,iii)c(i,ii)
E - Painted Francolin, S - Tith watu-kukula	
<i>Perdicula asiatica</i> (Latham, 1790)	B1ab(i,ii,iii)c(i,ii)
E - Jungle Bush-quail, S - Wana panduru-watuwa	
Family: Anatidae	
<i>Anas poecilorhyncha</i> Forster, 1781	B1ab(i,ii,iii)+2ab(i,ii,iii)
E - Spot-billed Duck, S - Thith-hota seruwa	
Family: Alcedinidae	
<i>Alcedo meninting</i> Horsfield, 1821	B2ab(i,ii,iii)
E - Blue-eared Kingfisher, S - Nilkan pilihuduwa	
Family: Columbidae	
<i>Columba livia</i> Gmelin, 1789	B1ab(i,ii,iii)
E - Rock Pigeon, S - Podu Paraviya	
<i>Treron phoenicoptera</i> (Latham, 1790)	B2ab(i,ii,iii)
E - Yellow-footed Green-pigeon, S - Seepadu Batagoya	
Family: Glareolidae	
<i>Cursorius coromandelicus</i> (Gmelin, 1789)	B2ab(i,ii,iii)
E - Indian Courser, S - Indu Javalihiniya	
Family: Laridae	
<i>Sterna saundersi</i> Hume, 1877	B1ab(i,ii,iii)+2ab(i,ii,iii)
E - Saunders's Tern, S - Saunders Muhudulihiniya	
Family: Accipitridae	
<i>Aviceda jerdoni</i> (Blyth, 1842)	B1ab(i,ii,iii)+2ab(i,ii,iii)
E - Jerdon's Baza, S - Jerdon saratakussa	
Family: Ciconiidae	
<i>Ephippiorhynchus asiaticus</i> (Latham, 1790)	B2ab(i,ii,iii)
E - Black-necked Stork, S - Ali-manawa	

ENDANGERED (EN)

FAMILY / SPECIES	CRITERIA
Family: Coraciidae	
<i>Eurystomus orientalis</i> (Linnaeus, 1766)	B2ab(i,ii,iii)
E - Dollarbird, S - Dumkawa	
Family: Apodidae	
<i>Hirundapus giganteus</i> (Temminck, 1825)	B2ab(i,ii,iii)
E - Brown Needletail, S - Pitabora kutupenda-thurithaya	

<i>Tachymarptis melba</i> (Linnaeus, 1758) E - Alpine Swift, S - Alpine - thurithaya	B2ab(i,ii,iii)
Family: Phodilinae	
<i>Phodilus badius</i> (Horsfield, 1821) E - Oriental Bay Owl, S - Peradigu Gurubassa	B1ab(i,ii,iii)+2ab(i,ii,iii)
Family: Strigidae	
<i>Otus thiloehofmanni</i> Warakagoda & Rassmusan, 2004* E - Serendib Scops Owl, S - Panduwan Kanbassa	B1ab(i,ii,iii)+2ab(i,ii,iii)
Family: Rallidae	
<i>Porzana fusca</i> (Linnaeus, 1766) E - Ruddy-breasted Crake, S - Laya rathu wil-keraliya	B2ab(i,ii,iii)
Family: Glareolidae	
<i>Glareola maldivarum</i> Forster, 1795 E - Oriental Pratincole, S - Perodigu Javasariya	B1ab(i,ii,iii)+2ab(i,ii,iii)
Family: Muscicapidae	
<i>Myophonus blighi</i> (Holdsworth, 1872)* E - Sri Lanka Whistling Thrush, S - Sri Lanka Uruwan-thirasikaya	B1ab(i,ii,iii)+2ab(i,ii,iii)
<i>Zoothera dauma</i> (Latham, 1790)* E - Scaly Thrush, S - Kayuru Thirasikaya	B1ab(i,ii,iii)+2ab(i,ii,iii)
<i>Turdus merula</i> Linnaeus 1758 E - Eurasian Blackbird, S - Urasia Kalu Bimsariya	B1ab(i,ii,iii)+2ab(i,ii,iii)
<i>Saxicola caprata</i> (Linnaeus, 1766) E - Pied Bushchat, S - Gomera sitibichcha	B1ab(i,ii,iii)+2ab(i,ii,iii)
Family : Sturnidae	
<i>Sturnus albofrontatus</i> Gray, 1844* E - Sri Lanka White-faced Starling, S - Sri Lanka wathasudu sharikawa	B1ab(i,ii,iii)+2ab(i,ii,iii)
Family: Hirundinidae	
<i>Hirundo tahitica</i> Gmelin, 1789 E - Pacific Swallow, S - Sethkara Wahilihiniya	B1ab(i,ii,iii)+2ab(i,ii,iii)
Family: Sylviidae	
<i>Bradypterus palliseri</i> (Blyth, 1851)* E - Sri Lanka Bush Warbler, S - Sri Lanka Wanaraviya	B1ab(i,ii,iii)+2ab(i,ii,iii)
<i>Garrulax cinereifrons</i> Blyth, 1851* E - Sri Lanka Ashy-headed Laughing-thrush, S - Sri Lanka Alu-demalichcha	B1ab(i,ii,iii)+2ab(i,ii,iii)

VULNERABLE (VU)

FAMILY / SPECIES	CRITERIA
Family: Picidae	
<i>Dendrocopos mahrattensis</i> (Latham, 1802)	B2ab(i,ii,iii)
E - Yellow-crowned Woodpecker, S - Kaha-silu Gomera-karala	
<i>Picus xanthopygaeus</i> (Gray & Gray, 1846)	B1ab(i,ii,iii)+2ab(i,ii,iii)
E - Streaked-throated Woodpecker, S - Punchi Kawuru karala	
<i>Chrysocolaptes festivus</i> (Boddaert, 1783)	B2ab(i,ii,iii)
E - White-naped Woodpecker, S - Kahapita Maha-karala	
Family: Cuculidae	
<i>Surniculus lugubris</i> (Horsfield, 1821)	B2ab(i,ii,iii)
E - Drongo Cuckoo, S - Kawudukoha	
<i>Phaenicophaeus pyrrhocephalus</i> (Pennant, 1769)*	B1ab(i,ii,iii)+2ab(i,ii,iii)
E - Sri Lanka Red-faced Malkoha, S - Sri Lanka watha-ratu Malkoha	
Family: Centropodidae	
<i>Centropus chlororhynchus</i> Blyth, 1849*	B1ab(i,ii,iii)+2ab(i,ii,iii)
E - Sri Lanka Green-billed Coucal, S - Sri Lanka Bata Ati-kukula	
Family: Strigidae	
<i>Glaucidium castanonotum</i> (Blyth, 1852)*	B2ab(i,ii,iii)
E - Sri Lanka Chestnut-backed Owllet, S - Sri Lanka Pita-thambala upbassa	
Family: Columbidae	
<i>Columba torringtoni</i> Bonaparte, 1854*	B2ab(i,ii,iii)
E - Sri Lanka Wood Pigeon, S - Sri Lanka Mayila Paraviya	
Family: Glareolidae	
<i>Glareola lactea</i> Temminck, 1820	B2ab(i,ii,iii)
E - Small Pratincole, S - Punchi Javasariya	
Family: Accipitridae	
<i>Accipiter trivirgatus</i> (Temminck, 1824)	B2ab(i,ii,iii)
E - Crested Goshawk, S - Silu Ukussa	
<i>Accipiter virgatus</i> (Temminck, 1822)	B2ab(i,ii,iii)
E - Besra, S - Besra Ukussa	
<i>Spizaetus nipalensis</i> (Hodgson, 1836)	B1ab(i,ii,iii)+2ab(i,ii,iii)
E - Mountain Hawk Eagle, S - Hela Kondakussa	
Family: Falconidae	
<i>Falco peregrinus</i> Tunstall, 1771	B2ab(i,ii,iii)
E - Shaheen Falcon, S - Shahin Kurulugoya	
Family: Ciconiidae	
<i>Leptoptilos javanicus</i> (Horsfield, 1821)	B2ab(i,ii,iii)
E - Lesser Adjutant, S - Heen Bahuru-manawa	

Family: Corvidae	
<i>Urocissa ornata</i> (Wagler, 1829)*	B2ab(i,ii,iii)
E - Sri Lanka Blue Magpie, S - Sri Lanka Kehibella	
Family: Muscicapidae	
<i>Eumyias sordida</i> (Walden, 1870)*	B1ab(i,ii,iii)+2ab(i,ii,iii)
E - Sri Lanka Dull Blue Flycatcher, S - Sri Lanka Neelan-Masimara	
Family: Sturnidae	
<i>Gracula ptilogenysb</i> Blyth, 1846*	B1ab(i,ii,iii)+2ab(i,ii,iii)
E - Sri Lanka Myna, S - Sri Lanka Salalihiniya	
Family: Pycnonotidae	
<i>Pycnonotus penicillatus</i> Blyth, 1851*	B1ab(i,ii,iii)+2ab(i,ii,iii)
E - Sri Lanka Yellow-eared Bulbul, S - Sri Lanka kahakan kondaya	
Family: Sylviidae	
<i>Turdoides rufescens</i> (Sclater, 1872)*	B1ab(i,ii,iii)+2ab(i,ii,iii)
E - Sri Lanka Orange-billed Babbler, S - Sri Lanka Rathu Demalichcha	
Family: Nectariniidae	
<i>Dicaeum vincens</i> (Tickell, 1833)*	B1ab(i,ii,iii)+2ab(i,ii,iii)
E - Sri Lanka Legge's Flowerpecker, S - Sri Lanka Pililichcha	
Family: Passeridae	
<i>Lonchura kelaarti</i> (Jerdon, 1863)	B1ab(i,ii,iii)+2ab(i,ii,iii)
E - Black-throated Munia, S - Gelakalu Weekurulla	

CLASS: MAMMALIA
CRITICALLY ENDANGERED (CR)

FAMILY / SPECIES	CRITERIA
Family: Molossidae	
<i>Chaerephon plicatus</i> (Buchanan, 1800)	B1ab (iii)
E - Common wrinkled-lip bat, S - Podu Rallithol-vaula	
Family: Vespertilionidae	
<i>Kerivoula hardwickii</i> (Horsefield, 1824)	B1ab (iii)
E - Malpas's bat, S - Rathbora kehel-vavula	
<i>Miniopterus schreibersii</i> (Kuhl, 1819)	B1ab (iii)
E - Long-winged bat, S - Dickpiya-vavula	
<i>Myotis hasseltii</i> (Temminck, 1840)	B1ab (iii)
E - Brown bat, S - Bora-vavula	
<i>Murina cyclotis</i> Dobson, 1872	B1ab (iii)
E - Tube-nosed bat, S - Nalaneha-vavula	
<i>Scotophilus heathii</i> (Horsefield, 1831)	B1ab (iii)
E - Great yellow bat, S - Maha Kaha-vavula	
Family: Muridae	
<i>Mus fernandoni</i> (Phillips, 1932)*	B1ab (iii)
E - Sri Lanka spiny mouse, S - Sri Lanka Katu Heen-miya	
<i>Vandeleuria nolthenii</i> Phillips, 1929*	B1ab (iii)
E - Sri Lanka long-tailed tree mouse, S - Sri Lanka Gas-miya	
Family: Peromyidae	
<i>Petinomys fuscocapillus</i> (Jerdon, 1847)	B1ab (iii)
E - Small flying squirrel, S - Heen-hambawa	

ENDANGERED (EN)

FAMILY / SPECIES	CRITERIA
Family: Soricidae	
<i>Crocidura horsfieldi</i> (Tomes, 1856)	B1ab(iii)+2ab(iii)
E - Horsfield's shrew, S - Kunuhik-miya	
<i>Crocidura miya</i> Phillips, 1929*	B1ab(iii)+2ab(iii)
E - Sri Lanka long-tailed shrew, S - Sri Lanka Kunuhik-miya	
<i>Feroculus feroculus</i> (Kelaart, 1850)	B1ab(iii)+2ab(iii)
E - Kelaart's long-clawed shrew, S - Pirihik-miya	
<i>Solisorex pearsoni</i> Thomas, 1924*	B1ab(iii)+2ab(iii)
E - Pearson's long-clawed shrew, S - Sri Lanka Mahik-miya	
<i>Suncus fellowes-gordoni</i> Phillips, 1932*	B1ab(iii)+2ab(iii)
E - Sri Lanka pigmy shrew, S - Sri Lanka Podihik-miya	
<i>Suncus montanus</i> (Kelaart, 1850)	B1ab(iii)+2ab(iii)
E - Highland shrew, S - Kandu Hik-miya	
<i>Suncus zeylanicus</i> Phillips, 1928*	B1ab(iii)+2ab(iii)
E - Sri Lanka jungle shrew, S - Sri Lanka Kele Hik-miya	

Family: Hipposideridae	
<i>Hipposideros fulvus</i> Gray, 1838	B2ab(iii)
E - Fulvous-leaf nosed bat, S - Malekaha Pathnehe-vavula	
<i>Hipposideros galeritus</i> Cantor, 1846	B2ab(iii)
E - Dekhan leaf-nosed bat, S - Kesdiga Pathnehe-vavula	
Family: Pteropodidae	
<i>Cynopterus brachyotis</i> (Muller, 1838)	B2ab(iii)
E - Lesser Short-nosed fruit bat, S - Heen Thala-vavula	
Family: Rhinolophidae	
<i>Rhinolophus beddomei</i> Anderson, 1905	B2ab(iii)
E - Great horse-shoe bat, S - Maha Ashladan-vavula	
Family: Vespertilionidae	
<i>Kerivoula picta</i> (Pallas, 1767)	B2ab(iii)
E - Painted bat, S - Visithuru Kehel-vavula	
<i>Pipistrellus ceylonicus</i> (Kelaart, 1852)	B2ab(iii)
E - Kelaart's pipistrel, S - Rathbora kosela-vavula	
Family: Lorisidae	
<i>Loris tardigradus</i> (Linnaeus, 1758)*	B2b(i,ii,iii)c(iii)
E - Sri Lanka red slender loris, S - Sri Lanka Rath Unahapuluwa	
Family: Felidae	
<i>Prionailurus rubiginosus</i> (Geoffroy, 1831)	B2b(i,ii,iii)c(iii)
E - Rusty-spotted cat, S - Kola Diviya	
Family: Ursidae	
<i>Melursus ursinus</i> (Show & Nodder, 1791)	B2b(i,ii,iii)c(iii)
E - Sloth bear, S - Walaha	
Family: Cervidae	
<i>Axis porcinus</i> (Zimmermann, 1777)	B2b(i,ii,iii)c(iii)
E - Hog deer, S - Gona Muva	
Family: Muridae	
<i>Rattus montanus</i> Phillips, 1932*	B1ab(iii)+2ab(iii)
E - Nelu rat, S - Sri Lanka Nelu Miya	
<i>Srilankamys ohiensis</i> (Phillips, 1929)*	B1ab(iii)+2ab(iii)
E - Sri Lanka bicolored rat, S - Sri Lanka Depehe-miya	
Family: Peromyidae	
<i>Petaurista philippensis</i> (Elliot, 1839)	B1ab(iii)+2ab(iii)
E - Giant flying squirrel, S - Ma-hambawa	

VULNERABLE (VU)

FAMILY / SPECIES	CRITERIA
Family: Cercopithecidae	
<i>Semnopithecus vetulus</i> (Erxleben, 1777)* E - Purple-faced leaf monkey, S - Sri Lanka Kalu-wandura	B2b(i,ii,iii)c(iii)
Family: Felidae	
<i>Felis chaus</i> Gueldenstaedt, 1776 E - Jungle cat, S - Wal Balala	B2b(i,ii,iii)c(iii)
<i>Panthera pardus</i> (Linnaeus, 1758) E - Leopard, S - Kotiya	B2ab(i,ii,iii)
<i>Prionailurus viverrinus</i> (Bennett, 1833) E - Fishing cat, S - Handun Diviya	B2b(i,ii,iii)c(iii)
Family: Mustelidae	
<i>Lutra lutra</i> (Linnaeus, 1758) E - Otter, S - Diya-ballia	B2b(i,ii,iii)c(iii)
Family: Viverridae	
<i>Paradoxurus zeylonensis</i> (Pallas, 1778)* E - Sri Lanka golden palm cat, S - Sri Lanka Ran Kalawedda	B2b(i,ii,iii)c(iii)
Family: Elephantidae	
<i>Elephas maximus</i> Linnaeus, 1758 E - Elephant, S - Aliya	B2b(i,ii,iii)c(i, iii, iv)
Family: Bovidae	
<i>Bubalus arnee</i> (Kerr, 1792) E - Wild buffalo, S - Kulu Haraka	B1b(iii)c(iii,iv)+2b(iii)c(iii,iv)
Family: Muridae	
<i>Mus mayori</i> (Thomas, 1915)* E - Sri Lanka spiny rat, S - Sri Lanka Depahe Katu Heen-miya	B1ab(iii)+2ab(iii)
Family: Sciuridae	
<i>Funambulus layardi</i> (Blyth, 1849)* E - Sri Lanka flame-striped jungle squirrel, S - Sri Lanka Mukalan Leena	B1b(iii)c(iii)+2b(iii)c(iii)
<i>Funambulus sublineatus</i> (Waterhouse, 1838) E - Dusky-striped jungle squirrel, S - Punchi Leena	B1b(iii)c(iii)+2b(iii)c(iii)
<i>Ratufa macroura</i> (Pennant, 1769) E - Giant squirrel, S - Dandu-leena	B1b(iii)c(iii)+2b(iii)c(iii)

Table 8: List of Threatened Invertebrate Fauna

(Note: * Endemic species; ** Endemic Genus)

PHYLUM: MOLLUSCA (Land Snails)	
CRITICALLY ENDANGERED (CR)	
FAMILY/SPECIES	CRITERIA
Family: Charopidae	
<i>Thysanota elegans</i> Preston 1909*	B1a,b (i,ii,iii)
Family: Ariophantidae	
<i>Euplecta binoyaensis</i> Godwin-Austen 1899*	B1a,b (i,ii,iii)
<i>Euplecta colletti</i> Sykes 1897*	B1a,b (i,ii,iii)
<i>Euplecta gardeneri</i> (Pfeiffer 1846)*	B1a,b (i,ii,iii)
<i>Euplecta isabellina</i> (Pfeiffer 1854)*	B1a,b (i,ii,iii)
<i>Euplecta prestoni</i> (Godwin-Austen 1897)*	B1a,b (i,ii,iii)
<i>Ratnadvipia karu</i> Naggs and Raheem 2006**	B1a,b (i,ii,iii)
<i>Ravana politissima</i> (Pfeiffer 1854)**	B1a,b (i,ii,iii)
<i>Macrochlamys nepas</i> (Pfeiffer 1855)*	B1a,b (i,ii,iii)
<i>Macrochlamys woodiana</i> (Pfeiffer 1853)	B1a,b (i,ii,iii)
Family: Glessulidae	
<i>Glessula veruina</i> (Benson 1853)*	B1a,b (i,ii,iii)
Family: Corillidae (=Plectopylidae?)	
<i>Corilla beddomeae</i> (Hanley 1875)*	B1a,b (i,ii,iii)
Family: Cyclophoridae	
<i>Japonia vesca</i> (Sykes 1899)*	B1a,b (i,ii,iii)
<i>Leptopomoides poecilus</i> (Pfeiffer 1855)*	B1a,b (i,ii,iii)
Family: Pupinidae	
<i>Tortulosa decora</i> (Benson 1853)*	B1a,b (i,ii,iii)
<i>Tortulosa marginata</i> (Pfeiffer 1854)*	B1a,b (i,ii,iii)
ENDANGERED (EN)	
FAMILY / SPECIES	CRITERIA
Family: Buliminidae	
<i>Mirus stalix</i> (Benson 1863)*	B2 a,b (i,ii,iii)
Family: Ariophantidae	
<i>Euplecta hyphasma</i> (Pfeiffer 1854)*	B2 a,b (i,ii,iii)
<i>Euplecta layardi</i> (Pfeiffer 1853)*	B2a,b (i,ii,iii)
<i>Euplecta scobinoides</i> Sykes 1897*	B1,B2 a,b (i,ii,iii)
Family: Subulinidae	
<i>Allopeas layardi</i> (Benson 1863)*	B1,B2a,b (i,ii,iii)

Family: Acavidae	
<i>Oligospira waltoni</i> (Reeve 1842)**	B2a,b (i,ii,iii)
Family: Corillidae (=Plectopylidae?)	
<i>Corilla carabinata</i> (Ferussac 1821)*	B2a,b (i,ii,iii)
Family: Cyclophoridae	
<i>Theobaldius layardi</i> (H. Adams 1868)*	B2a,b (i,ii,iii)
<i>Theobaldius parma</i> (Benson 1856)*	B1,B2 a,b (i,ii,iii)
<i>Theobaldius subplicatus</i> (Beddome 1875)*	B2a,b (i,ii,iii)
Family: Pupinidae	
<i>Tortulosa haemastoma</i> (Pfeiffer 1857)*	B2a,b (i,ii,iii)
<i>Tortulosa pyramidata</i> (Pfeiffer 1852)*	B2a,b (i,ii,iii)

VULNERABLE (VU)

FAMILY / SPECIES	CRITERIA
Family: Pupillidae	
<i>Pupisoma longstaffae</i> Godwin-Austen 1910*	B1,B2 a,b (i,ii,iii)
Superfamily: Corillidoidea (=Plectopyridoidea?)	
<i>Corilla adamsi</i> Gude 1914*	B1,B2 a,b (i,ii,iii)
<i>Corilla colletti</i> Sykes 1897*	B1,B2 a,b (i,ii,iii)
<i>Corilla erronea</i> (Albers 1853)*	B1,B2 a,b (i,ii,iii)
Family: Pupinidae	
<i>Tortulosa nevilli</i> (Sykes 1898)*	B1,B2 a,b (i,ii,iii)

CLASS: INSECTA**ORDER: LEPIDOPTERA (Butterflies)****CRITICALLY ENDANGERED (CR)**

FAMILY / SPECIES	CRITERIA
Family: Pieridae	
<i>Cepora nadina</i> Lucas, 1852	B1bciii
E - Lesser Gull, S - Heen Punduru-Sudana	
<i>Appias indra</i> Moore, 1857	B1bciii
E - Plain Puffin, S - Dumbra Sudana	
Family: Nymphalidae	
<i>Phalanta alcippe</i> Cramer, 1780	B1bciii
E - Small Leopard, S - Punchi Thith-thambiliya	
<i>Libythea celtis</i> Laicharting, 1782	B1bciii
E - Beak, S - Dumburu-thuduwa	
<i>Mycalesis visala</i> Moore, 1857	B1bciii
E - Tamil Bush Brown, S - Damila Panduru-dumburuwa	
Family: Lycaenidae	
<i>Ahopala abseus</i> Hewistson, 1862	B1bciii
E - Aberrant Bushblue, S - Kela Gas-Nilaya	
<i>Catapaecilma major</i> Druce, 1895	B1bciii
E - Common Tinsel, S - Visithuru Gas-Nilaya	
<i>Tajuria arida</i> Riley, 1923	B1bciii
E - Ceylon Indigo Royal, S - Lanka Raja-nilaya	
<i>Tajuria jehana</i> Moore, 1883	B1bciii
E - Plains Blue Royal, S - Podu Raja-nilaya	
<i>Pratapa deva</i> Moore, 1857	B1bciii
E - White Royal, S - Sudu Raja-nilaya	
<i>Virachola perse</i> Hewitson, 1863	B1bciii
E - Large Guava Blue, S - Maha Pera-nilaya	
<i>Tarucus nara</i> Kollar, 1848	B1bciii
E - Striped Pierrot, S - Thith-iri Mal-nilaya	
<i>Azanus ubaldus</i> Stoll, 1782	B1bciii
E - Bright Babul Blue, S - Punchi neelaya	
<i>Udara singalensis</i> Felder	B1bciii
E - Singalese Hedge Blue, S - Sinha Udara-neelaya	
Family: Hesperiidae	
<i>Bibasis oedipodea</i> Watson	B1bciii
E - Branded Orange Awlet	
<i>Bibasis sena</i> Moore	B1bciii
E - Orange-tail Awl	
<i>Hasora badra</i> Evans	B1bciii
E - Ceylon Banded Awl	
<i>Tapena thwaitesi</i> Moore	B1bciii
E - Black Angle	

<i>Caprona alida</i> Evans	B1bciii
E - Ceylon Golden Angle	
<i>Gomalia elma</i> Moore	B1bciii
E - African Marbled Skipper	
<i>Halpe decorata</i> Moore*	B1bciii
E - Decorated Ace	
<i>Baoris penicillata</i> Moore	B1bciii
E - Paintbrush swift	

ENDANGERED (EN)

SPECIES	CRITERIA
Family: Papilionidae	
<i>Pachliopta jophon</i> Gray, 1852*	B1bciii
E - Ceylon Rose, S - Lanka rosa papilla	
<i>Pathysa antiphates</i> Cramer, 1775	B1bciii
E - Five bar Swordtail, F - Pancha Iri kaga-waligaya	
Family: Pieridae	
<i>Prioneris sita</i> Felder, 1865	B1bciii
E - Painted Saw-tooth, S - Vichitra Maha-sudda	
<i>Eurema andersoni</i> Moore, 1886	B2 bc iii
E - One-spot Grass Yellow, S - Kela kahakolaya	
Family: Nymphalidae	
<i>Junonia orithya</i> Linnaeus, 1758	B2bciii
E - Blue Pansy, S - Nil Alankarikya	
<i>Doleschallia bisaltide</i> Cramer, 1777	B2bciii
E - Autumn Leaf, S - Yoda Kela-kolaya	
<i>Symphaedra nais</i> Forster, 1771	B1bciii
E - Baronet, S - Punchi Achchilaya	
<i>Euthalia lubentina</i> Cramer, 1779	B1bciii
E - Gaudy Baron, S - Kela Achchilaya	
<i>Discophora lepida</i> Moore, 1857	B1bciii
E - Southern Duffer, S - Dumburu Kewattaya	
<i>Lethe dynaste</i> Hewitson, 1868*	B1bciii
E - Ceylon Forester, S - Kela Gas-dumburuwa	
<i>Lethe drypetis</i> Hewitson, 1868	B1bciii
E - Tamil Treebrown, S - Maha Gas-Dumburuwa	
<i>Lethe daretis</i> Hewitson, 1868*	B1bciii
E - Ceylon Treebrown, S - Lanka Gas-dumburuwa	
<i>Mycalesis rama</i> Moore, 1892*	B1bciii
E - Cingalese Bushbrown, S - Lanka Panduru-dumburuwa	
<i>Ypthima singala</i> Felder, 1868*	B1bciii
E - Jewel Four-ring, S - Ran Heen-dumburuwa	
<i>Elymnias singala</i> Moore, 1875*	B1bciii
E - Ceylon Palmfly, S - Lanka Thal-dumburuwa	

Family: Lycaenidae	
<i>Iraota timoleon</i> Stoll, 1790	B1ab (iii)+2ab (iii)
E - Silverstreak Blue, S - Redee Gas-Nilaya	
<i>Cheritra freja</i> Fabricius, 1793	B2 bc iii
E - Common Imperial, S - Digu-penda Gas-Nilaya	
<i>Spindasis lohita</i> Horsfield, 1829	B2 bc iii
E - Long -banded Silverline, S - Digu-iri Ridee-nilaya	
<i>Bindahara phocides</i> Fabricius, 1793	B2 bc iii
E - Plane, S - Visituru Digu-penda Nilaya	
<i>Rapala lankana</i> Moore, 1879	B2 bc iii
E - Malabar Flash, S - Kala Kiranaya	
<i>Prosotas noreia</i> Felder, 1868*	B1ab (iii)+2ab (iii)
E - White-tipped Lineblue, S - Sudu Nil-iriya	
<i>Jamides coruscans</i> Moore, 1877*	B1ab (iii)+2ab (iii)
E - Ceylon Cerulean, S - Lanka Seru-nilaya	
<i>Udara lanka</i> Moore*	B1ab (iii)+2ab (iii)
E - Ceylon Hedge Blue, S - Lanka Udara-neelaya	
Family: Hesperiidae	
<i>Halpe ceylonica</i> Moore	B2bcii
E - Ceylon Ace	
<i>Udaspes folus</i> Cramer	B1bcii
E - Grass Demon	
<i>Hyarotis adrastus</i> Moore	B2bcii
E - Tree Flitter	
<i>Pelopidas conjuncta</i> Fruhstorfer	B2bcii
E - Conjoined Swift	
<i>Cattoris kumara</i> Evans	B2bcii
E - Blanck Swift	
<i>Suastus minuta</i> Moore	B2bcii
E - Ceylon Palm Bob	

VULNERABLE (VU)

FAMILY / SPECIES	CRITERIA
Family: Pieridae	
<i>Colotis fausta</i> Olivier, 1807	B1ab (iii)+2ab (iii)
E - Large Salmon Arab, S - Maha Rosa Sudana	
<i>Colotis aurora</i> Cramer, 1780	B1ab (iii)+2ab (iii)
E - Plain Orange Tip, S - Podu Tembiliwan Sudana	
Family: Nymphalidae	
<i>Parantica taprobana</i> Felder, 1865*	B1bcii
E - Ceylon Tiger, S - Lanka Nil-Kotithiya	
<i>Kallima philarchus</i> Westwood, 1848*	B1bc iii
E - Blue Oakleaf, S - Nil Kela-kolaya	

Family: Lycaenidae	
<i>Hypolycaena nilgirica</i> Moore, 1883	B1ab (iii)+2ab (iii)
E - Nilgiri Tit, S - Nilgiri Nilaya	
<i>Rapala manea</i> Hewitson, 1863	B1ab (iii)+2ab (iii)
E - Slate Flash, S - Anduru Kiranaya	
<i>Deudorix epijarbas</i> Moore, 1857	B1ab (iii)+2ab (iii)
E - Cornelian, S - Podu Kirana-nilaya	
<i>Anthene lycaenina</i> Felder, 1868	B1ab (iii)+2ab (iii)
E - Pointed Ciliate Blue, S - UI Kirana-nilaya	
<i>Chilades parrhasius</i> Fabricius, 1798	B1 bc iii
E - Small Cupid, S - Punchi Panu-nilaya	
Family: Hesperiidae	
<i>Tagiades litigiosa</i> Evans	B2 bc iii
E - Water Snaw Flat	
<i>Badamia exclamationis</i> Fabricius	B1ab (iii)+2ab (iii)
E - Brown Awl	
<i>Hasora chromus</i> Cramer	B1ab (iii)+2ab (iii)
E - Common Banded Awl	
<i>Celaenorrhinus spilothyrsus</i>	B1ab (iii)+2ab (iii)
E - Black flat	
<i>Notocrypta curvifascia</i>	B1ab (iii)+2ab (iii)
E - Restricted Demon	
<i>Telicota ancilla</i>	B1bcii
E - Dark Palm Dart	

CLASS: INSECTA	
ORDER: ODONATA (Dragonflies and Damselflies)	
CRITICALLY ENDANGERED (CR)	
FAMILY / SPECIES	CRITERIA
Family: Lestidae	
<i>Sinhalestes orientalis</i> (Hagen, 1862)*	B1ab(iii)+2ab(iii)
Family: Platystictidae	
<i>Drepanosticta adami</i> (Fraser, 1933)*	B1ab(ii,iii)+2ab(ii,iii)
<i>Drepanosticta austeni</i> Lieftinck, 1940*	B1ab(ii,iii)+2ab(ii,iii)
<i>Drepanosticta hilaris</i> (Hagen 1860)*	B1ab(ii,iii)+2ab(ii,iii)
<i>Drepanosticta montana</i> (Hagen 1860)*	B1ab(ii,iii)+2ab(ii,iii)
<i>Drepanosticta submontana</i> (Fraser, 1933)*	B1ab(ii,iii)+2ab(ii,iii)
Family: Protoneuridae	
<i>Disparoneura ramajana</i> Lieftinck, 1971*	B1ab(ii,iii)+2ab(ii,iii)
<i>Elatoneura leucostigma</i> (Fraser, 1933)*	B1ab(ii,iii)+2ab(ii,iii)
Family: Gomphidae	
<i>Anisogomphus solitaris</i> Lieftinck, 1971*	B1ab(iii)+2ab
<i>Heliogomphus ceylonicus</i> (Selys, 1878)*	B1ab(iii)+2ab(iii)
<i>Heliogomphus lyratus</i> Fraser, 1933*	B1ab(iii)+2ab(iii)
<i>Heliogomphus nietneri</i> (Selys, 1878)*	B1ab(iii)+2ab(iii)
Family: Corduliidae	
<i>Macromia flinti</i> Lieftinck, 1977*	B1ab(iii)+2ab(iii)
ENDANGERED (EN)	
Family: Protoneuridae	
<i>Elatoneura caesia</i> (Hagen, 1860)*	B2ab(ii,iii)
Family: Gomphidae	
<i>Gomphidia pearsoni</i> Fraser, 1933*	B2ab(iii)
<i>Microgomphus wijaya</i> Lieftinck, 1940*	B2ab(iii)
Family: Libellulidae	
<i>Hylaeothemis fruhstorferi</i> (Karsch, 1889)*	B1ab(iii)+2ab(iii)
<i>Tetrathemis yerburii</i> Kirby, 1894*	B2ab(iii)
VULNERABLE (VU)	
SPECIES	CRITERIA
Family: Gomphidae	
<i>Cyclogomphus gynostylus</i> Fraser, 1926*	B1ab(iii)+2ab
<i>Macrogomphus lankanensis</i> Fraser, 1933*	B1ab(iii)+2ab

CLASS: CRUSTACEA	
ORDER: DECAPODA (Freshwater Crabs)	
Family: Parathelphusidae	
Note: All crab species listed below are endemic	

CRITICALLY ENDANGERED (CR)

FAMILY / SPECIES	CRITERIA
<i>Ceylonthelphusa callista</i> (Ng, 1995)	B1ab(iii)
<i>Ceylonthelphusa diva</i> Bahir & Ng, 2005	B1ab(iii)
<i>Ceylonthelphusa durrelli</i> Bahir & Ng, 2005	B1ab(iii)
<i>Ceylonthelphusa kotagama</i> (Bahir, 1998)	B1ab(iii)
<i>Ceylonthelphusa nata</i> Ng & Tay, 2001	B1ab(iii)
<i>Ceylonthelphusa orthos</i> Ng & Tay, 2001	B1ab(iii)
<i>Ceylonthelphusa sanguinea</i> (Ng, 1995)	B1ab(iii)
<i>Ceylonthelphusa savitriae</i> Bahir & Ng, 2005	B1ab(iii)
<i>Clinothelphusa kakoota</i> Ng & Tay, 2001	B1ab(iii)
<i>Mahatha helaya</i> Bahir & Ng, 2005	B1ab(iii)
<i>Mahatha iora</i> Ng & Tay, 2001	B1ab(iii)
<i>Mahatha lacuna</i> Bahir & Ng, 2005	B1ab(iii)
<i>Mahatha regina</i> Bahir & Ng, 2005	B1ab(iii)
<i>Oziothelphusa intuta</i> Bahir & Yeo, 2005	B1ab(iii)
<i>Oziothelphusa kodagoda</i> Bahir & Yeo, 2005	B1ab(iii)
<i>Perbrinckia cracens</i> Ng, 1995	B1ab(iii)
<i>Perbrinckia enodis</i> (Kingsley, 1880)	B1ab(iii)
<i>Perbrinckia fido</i> Ng & Tay, 2001	B1ab(iii)
<i>Perbrinckia morayensis</i> Ng & Tay, 2001	B1ab(iii)
<i>Perbrinckia punctata</i> Ng, 1995	B1ab(iii)
<i>Perbrinckia quadratus</i> Ng & Tay, 2002	B1ab(iii)
<i>Perbrinckia rosae</i> Bahir & Ng, 2005	B1ab(iii)
<i>Perbrinckia scitula</i> Ng, 1995	B1ab(iii).C(iii)

ENDANGERED (EN)

FAMILY / SPECIES	CRITERIA
<i>Ceylonthelphusa alpina</i> Bahir & Ng, 2005	B1ab(iii)
<i>Ceylonthelphusa armata</i> (Ng, 1995)	B1ab(iii)
<i>Oziothelphusa dakuna</i> Bahir & Yeo, 2005	B1ab(iii)
<i>Oziothelphusa gallicola</i> Bahir & Yeo, 2005	B1ab(iii)
<i>Oziothelphusa populosa</i> Bahir & Yeo, 2005	B1ab(iii)
<i>Pastilla ruhuna</i> Ng & Tay, 2001	B1ab(iii)
<i>Spiralothelphusa fernandoni</i> Ng, 1994	B1ab(iii)
<i>Spiralothelphusa parvula</i> (Fernando, 1961)	B1ab(iii)

VULNERABLE (VU)

FAMILY / SPECIES	CRITERIA
<i>Ceylonthelphusa cavatrix</i> (Bahir, 1998)	B1ab(iii),D2
<i>Oziothelphusa ritigala</i> Bahir & Yeo, 2005	B1ab(iii),D2
<i>Perbrinckia fenestra</i> Bahir & Ng, 2005	B1ab(iii),D2
<i>Perbrinckia gabadage</i> Bahir & Ng, 2005	B1ab(iii),D2
<i>Perbrinckia glabra</i> Ng, 1995	B1ab(iii),D2
<i>Perbrinckia uva</i> Bahir, 1998	B1ab(iii),D2

CLASS: ARACHNIDA	
ORDER: Araneae	
GROUP: Mygalomorphs ('Bird-eating Spiders')	
Family: Theraphosidae	

VULNERABLE (VU)

FAMILY / SPECIES	CRITERIA
<i>Poecilotheria smithi</i>	B1bc(iv)

Table 9: Globally threatened marine vertebrate fauna inhabiting the territorial waters of Sri Lanka

(Source: IUCN, 2006 <www.iucnredlist.org>).

CLASS: CHONDRICHTHYES (Sharks, Skates and Rays)	
FAMILY / SPECIES	CATEGORY AND CRITERIA
Family: Pristidae	
<i>Anoxypristes cuspidata</i> (Latham, 1794)	CR A2bcd+3cd+4bcd ver 3.1 (2001)
E - Knifetooth sawfish	
<i>Pristis microdon</i> Latham, 1794	CR A2bcd+3cd+4bcd ver3.1 (2001)
E - Largetooth sawfish	
<i>Pristis zijsron</i> Bleeker, 1851	CR A2bCd+3cd+4bcd ver3.1 (2001)
E - Narrowsnout sawfish	
Family: Rhinobatidae	
<i>Rhina aenoclostoma</i> Bloch & Schneider, 1801	VU A2bd+3bd+4bd ver 3.1 (2001)
E - Bowmouth guitarfish	
<i>Rhinobatus granulatus</i> Cuvier, 1829	VU A2bd+3d+4d ver 3.1 (2001)
E - Sharpnose guitarfish	
Family: Myliobatidae	
<i>Aetomylaeus maculatus</i> (Grey, 1832)	EN A2d+3d+4d ver 3.1 (2001)
E - Mottled eagle ray	
<i>Aetomylaeus nichofii</i> (Bloch & Schneider, 1801)	VU A2d+3d+4d ver 3.1 (2001)
E - Banded eagle ray	
Family: Dasyatidae	
<i>Taeniura meyeni</i> Muller & Henle, 1841	VU A2ad+3d+4ad ver 3.1 (2001)
E - Black-blotched stingray	
Family: Rhinopteridae	
<i>Rhinoptera javanica</i> Muller & Henle, 1841	VU A2d+3cd+4cd ver 3.1 (2001)
E - Flapnose ray	
Family: Carcharhinidae	
<i>Carcharhinus longimanus</i> (Poey, 1861)	VU A2ad+3d+4ad ver 3.1 (2001)
E - Oceanic whitetip shark	
Family: Rhinodontidae	
<i>Rhincodon typus</i> Smith, 1828	VU A1bd+2d ver 2.3 (1994)
E - Whale shark	
Family: Stegostomatidae	
<i>Stegostoma fasciatum</i> (Hermann, 1783)	VU A2abcd+3cd+4abcd ver 3.1 (2001)
E - Leopard shark	
CLASS: ACTINOPTERYGII (Bony Fishes)	
FAMILY / SPECIES	CATEGORY AND CRITERIA
Family: Labridae	
<i>Cheilinus undulatus</i> Ruppell, 1835	EN A2bd+3bd ver 3.1 (2001)
E - Giant wrasse	
Family: Scombridae	
<i>Thunnus obesus</i> (Lowe, 1839)	VU A1bd ver 2.3 (1994)
E - Bigeye tuna	

Family: Serranidae	
<i>Epinephelus lanceolatus</i> (Bloch, 1790)	VU A2d ver 3.1 (2001)
E - Brindle bass	
Family: Sygnathidae	
<i>Hippocampus spinosissimus</i> Weber, 1913	VU A4cd ver 3.1 (2001)
E - Hedgehog seahorse	
CLASS: REPTILIA	
FAMILY / SPECIES	CATEGORY AND CRITERIA
Family: Dermochelidae	
<i>Dermochelys coriacea</i> (Vandelli, 1761)	CR A1abd ver 2.3 (1994)
E - Leatherback turtle	
Family: Cheloniidae	
<i>Eretmochelys imbricata</i> (Linnaeus, 1766)	CR A1bd ver 2.3 (1994)
E - Hawksbill turtle	
<i>Caretta caretta</i> (Linnaeus, 1758)	EN A1abd ver 2.3 (1994)
E - Loggerhead turtle	
<i>Chelonia mydas</i> (Linnaeus, 1758)	EN A2bd ver 3.1 (2001)
E - Green turtle	
<i>Lepidochelys olivacea</i> (Eschscholtz, 1829)	EN A1bd ver 2.3 (1994)
E - Olive ridley turtle	
CLASS: AVES (Off-shore birds)	
FAMILY / SPECIES	CATEGORY AND CRITERIA
Family: Fregatidae	
<i>Fregata andrewsi</i> Mathews, 1914	CR B2ab(ii,iii,v) ver 3.1 (2001)
E - Christmas island frigatebird	
CLASS: MAMMALIA	
FAMILY / SPECIES	CATEGORY AND CRITERIA
Family: Dugongidae	
<i>Dugong dugon</i> (Muller, 1776)	VU A2bcd ver 3.1 (2001)
E - Dugong	
Family: Balaenopteridae	
<i>Megaptera novaeangliae</i> (Borowski, 1781)	VU A1ad ver 2.3 (1994)
E - Hump whale	
<i>Balaenoptera musculus</i> (Linnaeus, 1758)	EN A1abd ver 2.3 (1994)
E - Blue whale	
<i>Balaenoptera physalus</i> (Linnaeus, 1758)	EN A1abd ver 2.3 (1994)
E - Common rorqual	
Family: Physeteridae	
<i>Physeter macrocephalus</i> (Linnaeus, 1758)	VU A1bd ver 2.3 (1994)
E - Sperm whale	

Table 10 : Globally threatened migratory birds that visit Sri Lanka

(Source: IUCN, 2006 <www.iucnredlist.org>).

FAMILY / SPECIES	CATEGORY AND CRITERIA
Family: Scolopacidae	
<i>Eurynorhynchus pygmeus</i>	EN C1+2a(ii) ver 3.1 (2001)
E - Spoon-billed sandpiper	
<i>Tringa guttifer</i>	EN C2a(i) ver 3.1 (2001)
E - Spotted greenshank	
<i>Gallinago nemoricola</i>	VU C1 ver 3.1 (2001)
E - Wood snipe	
Family: Falconidae	
<i>Falco naumannii</i>	VU A2bce+3bce ver 3.1 (2001)
E - Lesser kestrel	
Family: Muscicapidae	
<i>Ficedula subrubra</i>	VU B1ab(i,ii,iii,iv,v) ver 3.1 (2001)
E - Kashmir flycatcher	
Family: Charadriidae	
<i>Vanellus gregarius</i>	CR A3bc ver 3.1 (2001)
E - Sociable lapwing	

Table 11: Summary of the Status of Flora

(Note: Number of endemic species in parenthesis)

Family	Evaluated Species						Category of Evaluated Species						Category of Endemic Species				Total Threatened Species	
	EX	EW	CR	EN	VU	NT	DD	EX	EW	CR	EN	VU	NT	DD	DD	DD		
Acanthaceae	101 (43)	4	0	20	17	14	4	9	4	0	15	8	8	3	4	51 (31)		
Amaranthaceae	3 (1)	1	0	1	0	0	0	1	0	0	1	0	0	0	0	1 (1)		
Anacardiaceae	19 (15)	0	0	3	2	6	0	0	0	3	1	6	0	0	0	11 (10)		
Annonaceae	39 (18)	3	1	1	4	12	4	0	1	1	3	7	2	0	0	17 (11)		
Apiaceae	1 (1)	0	0	1	0	0	0	0	0	1	0	0	0	0	0	1 (1)		
Apocynaceae	2 (2)	0	0	2	0	0	0	0	0	2	0	0	0	0	0	2 (2)		
Aquifoliaceae	1 (1)	0	0	0	1	0	0	0	0	0	1	0	0	0	0	1 (1)		
Araceae	34 (21)	0	0	12	10	6	1	1	0	9	6	4	1	1	1	28 (19)		
Arecaceae	15 (10)	0	0	2	7	5	0	0	0	2	5	3	0	0	0	14 (10)		
Asclepiadaceae	9 (2)	1	0	5	0	0	0	3	0	2	0	0	0	1	1	5 (2)		
Asteraceae	10 (5)	3	0	5	1	0	0	1	2	0	3	0	0	0	1	6 (3)		
Balanophoraceae	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1		
Balsaminaceae	23 (16)	1	0	7	2	8	0	0	1	0	6	2	5	0	0	17 (13)		
Boraginaceae	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	2		
Burmanniaceae	2 (1)	0	0	1	0	0	1	0	0	0	0	0	0	1	1	1		
Campanulaceae	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	2		
Caryophyllaceae	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0		
Celastraceae	2 (1)	1	0	1	0	0	0	0	1	0	0	0	0	0	0	1		
Clusiaceae	1 (1)	0	0	1	0	0	0	0	0	1	0	0	0	0	0	1 (1)		
Convolvulaceae	4	1	0	2	0	0	0	1	0	0	0	0	0	0	0	2		
Cornaceae	3 (2)	0	0	1	0	1	0	0	0	1	0	1	0	0	0	2 (2)		
Cryptotropeniaceae	1 (1)	0	0	0	1	0	0	0	0	0	1	0	0	0	0	1 (1)		
Cucurbitaceae	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1		
Cyperaceae	10 (2)	1	0	7	0	0	2	0	0	2	0	0	0	1	1	7 (2)		
Dilleniaceae	1 (1)	0	0	1	0	0	0	0	0	1	0	0	0	0	0	1 (1)		
Dipterocarpaceae	58 (58)	1	0	18	9	15	6	0	1	18	9	15	6	0	0	42 (42)		
Ebanaceae	32 (19)	0	0	6	7	9	2	1	0	5	5	5	0	1	1	22 (16)		

Family	Evaluated Species	Category of Evaluated Species								Category of Endemic Species				Total Threatened Species
		EX	EW	CR	EN	VU	NT	DD	EX	EW	CR	EN	VU	
Ericaulaceae	1 (1)	0	0	1	0	0	0	0	1	0	0	0	0	1 (1)
Euphorbiaceae	69 (16)	4	0	7	5	12	15	6	2	0	2	3	4	4 (9)
Fabaceae	33 (5)	10	0	16	0	0	0	6	2	0	3	0	0	16 (3)
Gentianaceae	2 (1)	0	0	1	1	0	0	0	0	0	0	1	0	2 (1)
Gesneriaceae	1 (1)	0	0	1	0	0	0	0	0	0	1	0	0	1 (1)
Lamiaceae	3 (1)	0	0	3	0	0	0	0	0	0	1	0	0	3 (1)
Lauraceae	1	0	0	1	0	0	0	0	0	0	0	0	0	1
Leptospermidaceae	1 (1)	1	0	0	0	0	0	0	1	0	0	0	0	0
Loganiaceae	21 (12)	1	0	5	1	9	0	0	1	0	5	1	3	0 (9)
Loranthaceae	1 (1)	0	0	0	0	0	0	1	0	0	0	0	0	0
Malvaceae	38 (30)	6	0	12	7	7	1	0	6	0	12	4	5	1 (21)
Melastomataceae	32 (27)	0	0	8	9	9	3	0	0	0	6	8	8	3 (22)
Mimuliaceae	1	0	0	0	0	0	0	0	0	0	0	0	0	0
Misodendraceae	1 (1)	0	0	1	0	0	0	0	0	0	1	0	0	1 (1)
Monimiaceae	2 (1)	0	0	1	0	1	0	0	0	0	0	1	0	2 (1)
Moraceae	1 (1)	0	0	1	0	0	0	0	0	0	0	1	0	0
Myrsinaceae	40 (23)	0	0	5	2	11	0	0	0	0	1	0	0	1 (1)
Myrtaceae	181 (60)	4	0	22	47	53	23	7	2	0	13	25	15	7 (53)
Orchidaceae	10 (3)	0	0	5	2	1	0	2	0	0	1	0	1	8 (2)
Orobanchaceae	63 (28)	3	0	8	9	14	8	2	2	0	6	6	5	31 (17)
Phyllanthaceae	1 (1)	0	0	1	0	0	0	0	0	0	1	0	0	1 (1)
Piperaceae	9 (7)	0	0	7	1	1	0	0	0	0	6	0	1	9 (7)
Poaceae	2 (1)	1	0	0	1	0	0	0	0	0	0	1	0	1 (1)
Podostemaceae	1	1	0	0	0	0	0	0	0	0	0	0	0	0
Polygonaceae	6 (3)	0	0	2	1	1	0	0	0	0	1	1	0	4 (2)
Putranjavaceae	1 (1)	0	0	1	0	0	0	0	0	0	1	0	0	1 (1)
Rhamnaceae	1	0	0	0	0	0	0	1	0	0	0	0	1	0
Rosaceae	168 (96)	17	0	25	36	38	2	6	15	0	18	24	0	1 (66)
Rubiaceae	1 (1)	0	0	1	0	0	0	0	0	0	1	0	0	1 (1)
Rutaceae														

Family	Evaluated Species	Category of Evaluated Species						Category of Endemic Species						Total Threatened Species		
		EX	EW	CR	EN	VU	NT	DD	EX	EW	CR	EN	VU	NT	DD	
Santalaceae	9 (2)	0	0	3	1	3	0	0	2	0	0	0	0	0	0	7 (2)
Scrophulariaceae	3 (1)	1	0	2	0	0	0	0	1	0	0	0	0	0	0	2 (1)
Styliadiaceae	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
Surianaceae	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
Sympioremaceae	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
Thymelaeaceae	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
Tiliaceae	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Triuridaceae	3	0	0	2	0	0	0	1	0	0	0	0	0	0	0	2
Urticaceae	3 (1)	2	0	0	0	0	1	1	0	0	0	0	0	0	0	0
Verbenaceae	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Zingiberaceae	6 (5)	0	0	5	0	1	0	0	0	4	0	1	0	0	0	6 (5)
Total	1099 (553)	71	1	251	186	238	69	55	42	1	163	118	130	32	15	675 (412)

Table 12: List of extinct plant species in Sri Lanka

(Note: * Endemic species)

Family/Species
Family-Acanthaceae
<i>Ptyssiglottis sanguinolenta</i> (Vahl) B. Hansen*
<i>Strobilanthes caudata</i> T. Anders*
<i>Strobilanthes nigrescens</i> T. Anders*
<i>Strobilanthes thwaitesii</i> T. Anders*
Family-Amaranthaceae
<i>Achyranthes bidentata</i> Blume
Family – Annonaceae
<i>Anaxagorea luzonensis</i> A. Gray
<i>Orophea zeylanica</i> Hook. f. & Thoms
<i>Polyalthia moonii</i> Thw.*
Family-Asclepiadaceae
<i>Cynanchum alatum</i> Wight & Arn. ex Wight
Family-Asteraceae
<i>Blumea angustifolia</i> Thw*
<i>Blumea crinita</i> Arn.*
<i>Glossogyne bidens</i> (Retz.) Alston
Family-Balsaminaceae
<i>Impatiens subcordata</i> Arn.*
Family-Celastraceae
<i>Maytenus fruticosa</i> (Thw.) Loes.*
Family-Convolvulaceae
<i>Ipomoea staphylina</i> Roem. & Schult.
Family-Cyperaceae
<i>Rhynchospora gracillima</i> Thw.
Family-Dipterocarpaceae
<i>Doona ovalifolia</i> Thw.*
Family-Euphorbiaceae
<i>Adenochlaena zeylanica</i> (Baill.) Thw.*
<i>Croton zeylanicus</i> Muell. Arg.
<i>Euphorbia atoto</i> Forst.
<i>Trigonostemon diplopetalus</i> Thw.*

Family-Fabaceae

- Crotalaria mysorensis* Roth
Crotalaria willdenowiana DC.
Crudia zeylanica (Thw.) Benth.*
Dioclea javanica Benth.
Eleiotis monophyllos (Burm.f.) DC.
Indigofera parviflora Heyne ex Wight & Arn.
Mucuna monosperma (Roxb.) DC.
Rhynchosia densiflora (Roth) DC.
Rhynchosia nummularia (L.) DC.
Sophora zeylanica Trim.*

Family-Lemnaceae

- Lemna gibba* L.

Family-Loganiaceae

- Strychnos coriacea* Thw.*

Family-Loranthaceae

- Helixanthera ensifolia* (Thw.) Danser*

Family-Melastomataceae

- Osbeckia moonii* Thw.*
Sonerila cordifolia Cogn.*
Sonerila firma (Thw. ex Clarke in Hook. f.) Lundin*
Sonerila gardneri Thw.*
Sonerila harveyi Thw.*
Sonerila tomentella Thw.*

Family-Orchidaceae

- Diplocentrum recurvum* Lindley
Goodyera stellifera Ormerod.*
Liparis brachyglossis Reichb.f. ex Trimen*
Vanda thwaitesii Hook.f.

Family-Phyllanthaceae

- Bridelia stipularis* (L.) Blume
Glochidion gardneri Thw.*
Phyllanthus hakgalensis Thw. ex Trimen*

Family-Podostemaceae

- Zeylandium lichenoides* (Kurz) Engler

Family-Polygalaceae

- Polygala longifolia* Poir

Family-Rubiaceae

- Canthium macrocarpum* Thw.*
Gaertnera gardneri Thw.*
Hedyotis cinereo-viridis Thw.*
Hedyotis cyanescens Thw.*
Hedyotis macraei Hook.f.*
Hedyotis quinquenervia Thw.*
Hedyotis srilankensis Deb & Dutta*
Lasianthus protractus (Thw.) Thw.
Lasianthus rhizophyllus (Thw.) Thw.*
Lasianthus thwaitesii Hook.f.*
Neanotis quadrilocularis (Thw.) W.H.Lewis
Ophiorrhiza pallida Thw.*
Pavetta gardneri Bremek.*
Pavetta glomerata Bremek.*
Psychotria moonii (Thw.) Hook.f.*
Psydrax grandifolius (Thw.) Ridsd.*
Scyphostachys pedunculatus Thw.*

Family-Scrophulariaceae

- Lindernia viscosa* (Hornem.) Boldingh

Family-Tiliaceae

- Corchorus trilocularis* L.

Family-Urticaceae

- Elatostema acuminatum* (Poir.) Brongn.
Elatostema walkerae Hook.f.*

Family-Verbenaceae

- Chascanum hyderobadense* (Walp.) Moldenke

EXTINCT IN THE WILD(EW)**Family – Annonaceae**

- Alphonsea hortensis* H. Huber*

Table 13: List of Threatened Plant Species in Sri Lanka

(Note: * Endemic Species)

(A) CRITICALLY ENDANGERED (CR)

FAMILY/SPECIES	CRITERIA
Family-Acanthaceae	
<i>Andrographis macrobotrys</i> Nees	B1ab(I,ii,iii)
<i>Barleria nitida</i> Nees	B1ab(I,ii,iii)
<i>Barleria strigosa</i> Willd.	B1ab(I,ii,iii)
<i>Brillantaisia thwaitesii</i> (T. Anders.) Cramer*	B1ab(I,ii,iii)
<i>Gymnostachyum ceylanicum</i> Arn. & Nees	B1ab(I,ii,iii)
<i>Lepidagathis hyalina</i> Nees*	B1ab(I,ii,iii)
<i>Pseuderanthemum angustifolium</i> Ridley	B1ab(I,ii,iii)
<i>Strobilanthes arnottiana</i> Nees*	B1ab(I,ii,iii)
<i>Strobilanthes deflexa</i> T. Anders.*	B1ab(I,ii,iii)
<i>Strobilanthes exserta</i> C. B. Clarke*	B1ab(I,ii,iii)
<i>Strobilanthes gardneriana</i> (Nees) T. Anders.*	B1ab(I,ii,iii)
<i>Strobilanthes habracanthoides</i> J. R. I. Wood*	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Strobilanthes hypericoides</i> J. R. I. Wood*	B1ab(I,ii,iii)
<i>Strobilanthes laxa</i> T. Anders.*	B1ab(I,ii,iii)
<i>Strobilanthes pentandra</i> J. R. I. Wood*	B1ab(I,ii,iii)
<i>Strobilanthes rhamnifolia</i> (Nees) T. Anders.*	B1ab(I,ii,iii)
<i>Strobilanthes rhytisperma</i> C. B. Clarke*	B1ab(I,ii,iii)
<i>Strobilanthes stenodon</i> Clarke*	B1ab(I,ii,iii)
<i>Strobilanthes zeylanica</i> T. Anders.*	B1ab(I,ii,iii)
<i>Strobilanthus willisii</i> M. A. Canine*	B1ab(I,ii,iii)
Family-Amaranthaceae	
<i>Cyathula ceylanica</i> Hook. f.*	B1ab(I,ii,iii)
Family-Anacardiaceae	
<i>Mangifera pseudoindica</i> Kosterm.*	B1ab(I,ii,iii)
<i>Semecarpus obovata</i> Moon*	B1ab(I,ii,iii)
<i>Semecarpus pseudo-emarginata</i> Kosterm.*	B1ab(I,ii,iii)
Family-Annonaceae	
<i>Polyalthia persicaefolia</i> (Hook. f. & Thoms.) Thw.*	B1ab(I,ii,iii)+2ab(I,ii,iii)
Family-Apiaceae	
<i>Peucedanum ceylanicum</i> Gardner*	B1ab(I,ii,iii)
Family-Apocynaceae	
<i>Wrightia flavidorosea</i> Trim.*	B1ab(I,ii,iii)
<i>Wrightia puberula</i> (Thw.) Ngan*	B1ab(I,ii,iii)
Family-Araceae	
<i>Alocasia fornicate</i> (Roxb.) Schott	B1ab(I,ii,iii)
<i>Arisaema constrictum</i> Barnes*	B1ab(I,ii,iii)

<i>Cryptocoryne alba</i> de Wit*	B1ab(I,ii,iii)
<i>Cryptocoryne bogneri</i> Rataj*	B1ab(I,ii,iii)
<i>Cryptocoryne parva</i> de Wit*	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Cryptocoryne undulata</i> Wendt*	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Cryptocoryne walkeri</i> Schott*	B1ab(I,ii,iii)
<i>Cryptocoryne x willisii</i> Reitz*	B1ab(I,ii,iii)
<i>Lagenandra bogneri</i> de Wit*	B1ab(I,ii,iii)
<i>Lagenandra lancifolia</i> (Schott) Thw.*	B1ab(I,ii,iii)
<i>Rhaphidophora decursiva</i> (Roxb.) Schott	B1ab(I,ii,iii)
<i>Typhonium flagelliforme</i> (Lodd.) Blume	B1ab(I,ii,iii)
Family-Arecaceae	
<i>Areca concinna</i> Thw.*	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Calamus pachystemonius</i> Thw.*	B1ab(I,ii,iii)+2ab(I,ii,iii)
Family-Asclepiadaceae	
<i>Brachystelma lankana</i> Dassanayake & Jayasuriya*	B1ab(I,ii,iii)
<i>Ceropegia thwaitesii</i> Hook.	B1ab(I,ii,iii)
<i>Cosmostigma racemosum</i> (Roxb.) Wight	B1ab(I,ii,iii)
<i>Gymnema rotundatum</i> Thw.*	B1ab(I,ii,iii)
<i>Tylophora zeylanica</i> Decne.	B1ab(I,ii,iii)
Family-Asteraceae	
<i>Anaphalis thwaitesii</i> C.B. Clarke*	B1ab(I,ii,iii)
<i>Blumea lanceolaria</i> (Roxb.) Druce	B1ab(I,ii,iii)
<i>Gynura hispida</i> Thw.*	B1ab(I,ii,iii)
<i>Notonia walkeri</i> (Wight) C.B. Clarke	B1ab(I,ii,iii)
<i>Senecio gardneri</i> (Thw.) C.B. Clarke*	B1ab(I,ii,iii)
Family-Balanophoraceae	
<i>Balanophora fungosa</i> J.R. & G. Forst.	B1ab(I,ii,iii)
Family-Balsaminaceae	
<i>Impatiens grandis</i> Heyne ex Wall.	B1ab(I,ii,iii)
<i>Impatiens janthina</i> Thw.*	B1ab(I,ii,iii)
<i>Impatiens leucantha</i> Thw.*	B1ab(I,ii,iii)
<i>Impatiens repens</i> Moon*	B1ab(I,ii,iii)
<i>Impatiens taprobanica</i> Hiern*	B1ab(I,ii,iii)
<i>Impatiens thwaitesii</i> Hook.f. ex Grey-Wilson*	B1ab(I,ii,iii)
<i>Impatiens walkeri</i> Hook.*	B1ab(I,ii,iii)
Family-Boraginaceae	
<i>Cordia subcordata</i> Lam.	B1ab(I,ii,iii)
<i>Heliotropium supinum</i> L.	B1ab(I,ii,iii)
Family-Campanulaceae	
<i>Asyneuma fulgens</i> (Wall.) Briq.	B1ab(I,ii,iii)
<i>Campanula benthamii</i> Wall.ex Kitam.	B1ab(I,ii,iii)

Family-Celastraceae		
<i>Celastrus paniculatus</i> Willd.	B1ab(I,ii,iii)	
Family-Clusiaceae		
<i>Mesua stylosa</i> (Rhw.) Kosterm.*	B1ab(I,ii,iii)	
Family-Convolvulaceae		
<i>Argyreia splendens</i> (Roxb.) Sweet	B1ab(I,ii,iii)	
<i>Bonamia semidigyna</i> (Roxb.) Hall.f.	B1ab(I,ii,iii)	
Family-Cornaceae		
<i>Mastixia congylos</i> Kosterm.*	B1ab(I,ii,iii)	
Family-Cucurbitaceae		
<i>Mukia leiosperma</i> (Wight & Arn.) Wight	B1ab(I,ii,iii)	
Family-Cyperaceae		
<i>Eleocharis confervoides</i> (Poir.) T.Koyama	B1ab(I,ii,iii)	
<i>Eleocharis lankana</i> T.Koyama*	B1ab(I,ii,iii)	
<i>Mapania immersa</i> (Thw.) Benth.ex Ckarke*	B1ab(I,ii,iii)	
<i>Pycrus stramineus</i> (Nees) Clarke	B1ab(I,ii,iii)	
<i>Scirpodendron ghaeri</i> (Gaertn.) Merr.	B1ab(I,ii,iii)	
<i>Trichophorum subcapitatum</i> (Thw. & Hook.) D.A.Simpson	B1ab(I,ii,iii)	
<i>Tricostularia undulata</i> (Thw.) Kern	B1ab(I,ii,iii)	
Family-Dilleniaceae		
<i>Acrotrema thwaitesii</i> Hook.f. & Thoms.ex Hook.f.*	B1ab(I,ii,iii)	
Family-Dipterocarpaceae		
<i>Balanocarpus kitulgallensis</i> Kosterm.*	B1ab(I,ii,iii)	
<i>Stemonoporus affinis</i> Thw.*	B1ab(I,ii,iii)	
<i>Stemonoporus bullatus</i> Kosterm.*	B1ab(I,ii,iii)	
<i>Stemonoporus gilimalensis</i> Kosterm.*	B1ab(I,ii,iii)	
<i>Stemonoporus gracilis</i> Kosterm.*	B1ab(I,ii,iii)	
<i>Stemonoporus kanneliyensis</i> Kosterm.*	B1ab(I,ii,iii)	
<i>Stemonoporus laevifolius</i> Kosterm.*	B1ab(I,ii,iii)+2ab(I,ii,iii)	
<i>Stemonoporus latisepalum</i> Kosterm.*	B1ab(I,ii,iii)	
<i>Stemonoporus marginalis</i> Kosterm.*	B1ab(I,ii,iii)	
<i>Stemonoporus moonii</i> Thw.*	B1ab(I,ii,iii)	
<i>Stemonoporus nitidus</i> Thw.*	B1ab(I,ii,iii)	
<i>Stemonoporus petiolaris</i> Thw.*	B1ab(I,ii,iii)	
<i>Stemonoporus revolutus</i> Trimen ex Hook. f.*	B1ab(I,ii,iii)	
<i>Stemonoporus rigidus</i> Thw.*	B1ab(I,ii,iii)	
<i>Stemonoporus scalarinervis</i> Kosterm.*	B1ab(I,ii,iii)	
<i>Stemonoporus scaphifolius</i> Kosterm.*	B1ab(I,ii,iii)+2ab(I,ii,iii)	
<i>Vatica lewisiana</i> (Trimen ex Hook. f.) Livera*	B1ab(I,ii,iii)	
<i>Vatica paludosa</i> Kosterm.*	B1ab(I,ii,iii)	

Family-Ebenaceae	
<i>Diospyros atrata</i> Alston*	B1ab(I,ii,iii)+D2
<i>Diospyros crumenata</i> Thw.	B1ab(I,ii,iii)+D2
<i>Diospyros koenigii</i> Kosterm.*	B1ab(I,ii,iii)+D2
<i>Diospyros oppositifolia</i> Thw.*	B1ab(I,ii,iii)+2ab(I,ii,iii)+D2
<i>Diospyros pemadasai</i> Jayasuriya*	B1ab(I,ii,iii)+2ab(I,ii,iii)+D2
<i>Diospyros rheophytica</i> Kosterm.*	B1ab(I,ii,iii)+D2
Family-Eriocaulaceae	
<i>Eriocaulon subglaucum</i> Ruhland*	B1ab(I,ii,iii)
Family-Euphorbiaceae	
<i>Cleidion nitidum</i> (Muell. Arg.) Thw. ex Kurz	B1ab(I,ii,iii)
<i>Croton caudatus</i> Geisel	B1ab(I,ii,iii)
<i>Croton moonii</i> Thw.*	B1ab(I,ii,iii)
<i>Croton nigroviridis</i> Thw.*	B1ab(I,ii,iii)
<i>Dalechampia indica</i> Wight	B1ab(I,ii,iii)
<i>Euphorbia granulata</i> Forssk.	B1ab(I,ii,iii)
<i>Tragia muelleriana</i> Pax & Hoffm.	B1ab(I,ii,iii)
Family-Fabaceae	
<i>Albizia lankaensis</i> Kosterm.*	B1ab(I,ii,iii)
<i>Crotalaria linifolia</i> L.f.	B1ab(I,ii,iii)
<i>Crotalaria triquetra</i> Dalz.	B1ab(I,ii,iii)
<i>Crotalaria wightiana</i> Graham ex Wight & Arn.	B1ab(I,ii,iii)
<i>Cynometra iripa</i> Kostel.	B1ab(I,ii,iii)
<i>Desmodium jucundum</i> Thw.*	B1ab(I,ii,iii)
<i>Desmodium zonatum</i> Miq.	B1ab(I,ii,iii)
<i>Galactia striata</i> (Jacq.) Urban	B1ab(I,ii,iii)
<i>Indigofera constricta</i> (Thw.) Trim.	B1ab(I,ii,iii)
<i>Indigofera wightii</i> Grah.ex Wight & Arn.	B1ab(I,ii,iii)
<i>Mucuna gigantea</i> (Willd.) DC.	B1ab(I,ii,iii)
<i>Rhynchosia acutissima</i> Thw.	B1ab(I,ii,iii)
<i>Rhynchosia suaveolens</i> (L.f.) DC.	B1ab(I,ii,iii)
<i>Sesbania sericea</i> (Willd.) Link	B1ab(I,ii,iii)
<i>Sophora violacea</i> Thw.*	B1ab(I,ii,iii)
<i>Tephrosia spinosa</i> (L.f.) Pers.	B1ab(I,ii,iii)
Family-Gentianaceae	
<i>Exacum sessile</i> L.	B1ab(I,ii,iii)
Family-Gesneriaceae	
<i>Didymocarpus floccosus</i> Thw.*	B1ab(I,ii,iii)
Family-Lamiaceae	
<i>Isodon capillipes</i> (Benth.) H.Hara*	B1ab(I,ii,iii)
<i>Leucas longifolia</i> Benth.	B1ab(I,ii,iii)
<i>Plectranthus glabratus</i> (Benth.) Alston	B1ab(I,ii,iii)

Family-Lauraceae	
<i>Cassytha capillaris</i> Meissn.	B1ab(I,ii,iii)
Family-Loranthaceae	
<i>Barathranthus mabaeoides</i> (Trimen) Danser*	B1ab(I,ii,iii)
<i>Barathranthus nodiflorus</i> (Thw.) Tieghem*	B1ab(I,ii,iii)
<i>Dendrophthoe lonchiphyllus</i> (Thw.) Danser.*	B1ab(I,ii,iii)
<i>Macrosolen albicaulis</i> Wiens*	B1ab(I,ii,iii)
<i>Macrosolen barlowii</i> Wiens*	B1ab(I,ii,iii)+2ab(I,ii,iii)
Family-Melastomataceae	
<i>Medinilla maculata</i> Gardner*	B1ab(I,ii,iii)
<i>Osbeckia rheedii</i> Gardner ex Thw.*	B1ab(I,ii,iii)
<i>Sonerila glaberrima</i> Arn.*	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Sonerila glabricaulis</i> (Thw. ex Clarke in Hook. f.) Lundin*	B1ab(I,ii,iii)
<i>Sonerila guneratnei</i> Trimen*	B1ab(I,ii,iii)
<i>Sonerila hirsutula</i> Arn.*	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Sonerila hookeriana</i> Arn.*	B1ab(I,ii,iii)
<i>Sonerila lanceolata</i> Thw.*	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Sonerila pedunculosa</i> Thw.*	B1ab(I,ii,iii)
<i>Sonerila pilosula</i> Thw.*	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Sonerila robusta</i> Arn.*	B1ab(I,ii,iii)
<i>Sonerila wightiana</i> Arn.*	B1ab(I,ii,iii)
Family-Memecylaceae	
<i>Memecylon gracillimum</i> Alston*	B1ab(I,ii,iii)
<i>Memecylon leucanthemum</i> Thw.*	B1ab(I,ii,iii)
<i>Memecylon macrocarpum</i> Thw.*	B1ab(I,ii,iii)+2ab(I,ii,iii)+D1
<i>Memecylon macrophyllum</i> Thw.*	B1ab(I,ii,iii)
<i>Memecylon orbiculare</i> Thw.*	B1ab(I,ii,iii)
<i>Memecylon phyllanthifolium</i> Thw. ex Trimen*	B1ab(I,ii,iii)
<i>Memecylon sessile</i> Benth.	B1ab(I,ii,iii)
<i>Memecylon wightii</i> Thw.	B1ab(I,ii,iii)
Family-Moraceae	
<i>Maclura cochinchinensis</i> (Lour.) Corner	B1ab(I,ii,iii)
Family-Myrsinaceae	
<i>Ardisia wightiana</i> (Wall.ex.A.DC.)Mez*	B1ab(I,ii,iii)
Family-Myrtaceae	
<i>Eugenia cotinifolia</i> Jacq.	B1ab(I,ii,iii)
<i>Eugenia glabra</i> Alston*	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Eugenia sripadaens</i> Kosterm.*	B1ab(I,ii,iii)
<i>Syzygium lewisii</i> Alston*	B1ab(I,ii,iii)
<i>Syzygium sclerophyllum</i> Thw.*	B1ab(I,ii,iii)

Family-Orchidaceae	
<i>Arundina minor</i> Lindl.*	B1ab(I,ii,iii)
<i>Bulbophyllum tricarinatum</i> Petch*	B1ab(I,ii,iii)
<i>Coelogyne zeylanica</i> Hook.f.*	B1ab(I,ii,iii)
<i>Corymborkis veratrifolia</i> (Reinw.) Blume	B1ab(I,ii,iii)+D1
<i>Didymoplexis seidenfadenii</i> Sathish & Ormerod.	B1ab(I,ii,iii)+D1
<i>Dienia ophrydis</i> (J.König) Seidentf.	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Eria tricolor</i> Thw.*	B1ab(I,ii,iii)
<i>Gastrodia zeylanica</i> Schlechter*	B1ab(I,ii,iii)+D1
<i>Goodyera fumata</i> Thw.	B1ab(I,ii,iii)
<i>Habenaria dichopetala</i> Thw.*	B1ab(I,ii,iii)
<i>Habenaria dolichostachya</i> Thw.*	B1ab(I,ii,iii)
<i>Habenaria pterocarpa</i> Thw.*	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Nervilia juliana</i> (Roxb.) Schlechter	B1ab(I,ii,iii)
<i>Oberonia dolabrata</i> Jayaweera*	B1ab(I,ii,iii)
<i>Oberonia fornicata</i> Jayaweera*	B1ab(I,ii,iii)
<i>Oberonia wallie-silvae</i> Jayaweera*	B1ab(I,ii,iii)
<i>Oberonia weragamaensis</i> Jayaweera*	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Phalaenopsis mysorensis</i> Sadanha	B2ab(I,ii,iii)
<i>Schoenorchis tortifolia</i> (Jayaweera) Garay*	B1ab(I,ii,iii)
<i>Sirhookera latifolia</i> (Wight) Kuntze	B1ab(I,ii,iii)
<i>Tainia bicornis</i> (Lindley) Reichb. f.	B1ab(I,ii,iii)
<i>Zeuxine longilabris</i> (Lindl.) Trimen	B1ab(I,ii,iii)
Family-Orobanchaceae	
<i>Aeginetia pedunculata</i> Wall.	B1ab(I,ii,iii)
<i>Campbellia cytinoides</i> (Reuter) Wight	B1ab(I,ii,iii)
<i>Christisonia albida</i> Thw. Ex Benth.*	B1ab(I,ii,iii)
<i>Christisonia lawii</i> Wight	B1ab(I,ii,iii)
<i>Legoccia aurantiaca</i> (Wight) Livera	B1ab(I,ii,iii)
Family-Phyllanthaceae	
<i>Cleistanthus acuminatus</i> (Thw.) Muell. Arg.*	B1ab(I,ii,iii)
<i>Glochidion acutifolium</i> Alston*	B1ab(I,ii,iii)
<i>Phyllanthus heyneanus</i> Muell. Arg.	B1ab(I,ii,iii)
<i>Phyllanthus oreophilus</i> Muell. Arg. *	B1ab(I,ii,iii)
<i>Phyllanthus zeylanicus</i> Muell. Arg.*	B1ab(I,ii,iii)
<i>Sauropus assimilis</i> Thw.*	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Sauropus quadrangularis</i> (Willd.) Muell. Arg.	B1ab(I,ii,iii)
<i>Sauropus retroversus</i> Wight*	B1ab(I,ii,iii)
Family-Piperaceae	
<i>Peperomia wightiana</i> Miq (P. species 6)	B1ab(I,ii,iii)
Family-Poaceae	
<i>Arundinaria scandens</i> Soderstrom & Ellis.*	B1ab(I,ii,iii)
<i>Arundinella thwaitesii</i> Hook.f.*	B1ab(I,ii,iii)

<i>Garnotia fuscata</i> Thw.*	B1ab(I,ii,iii)
<i>Garnotia panicoides</i> Trimen*	B1ab(I,ii,iii)
<i>Ischaemum polystachyum</i> J.& C.Pres.	B1ab(I,ii,iii)
<i>Oplismenus thwaitesii</i> Hook.f.*	B1ab(I,ii,iii)
<i>Zenkeria obtusiflora</i> (Thw.)Benth.*	B1ab(I,ii,iii)
Family-Putranjiavaceae	
<i>Drypetes lanceolata</i> (Thw.) Pax & Hoffm.*	B2ab(I,ii,iii)
<i>Drypetes longifolia</i> (Blume) Pax & Hoffm.	B2ab(I,ii,iii)
Family-Rhamnaceae	
<i>Ziziphus lucida</i> Moon ex Thw.*	B1ab(I,ii,iii)
Family-Rubiaceae	
<i>Hedyotis evenia</i> Thw.*	B1ab(I,ii,iii)
<i>Hedyotis gardneri</i> Thw.*	B1ab(I,ii,iii)
<i>Hedyotis gartmorensis</i> Ridsd.*	B1ab(I,ii,iii)
<i>Hedyotis inamoena</i> Thw.*	B1ab(I,ii,iii)
<i>Hedyotis marginata</i> (Thw.ex Trimen) Alston*	B1ab(I,ii,iii)
<i>Hedyotis membranacea</i> Thw.	B1ab(I,ii,iii)
<i>Hedyotis neolessertiana</i> Ridsd.*	B1ab(I,ii,iii)
<i>Hedyotis obscura</i> Thw.*	B1ab(I,ii,iii)
<i>Hedyotis rhinophylla</i> Thw.ex Trimen*	B1ab(I,ii,iii)
<i>Hedyotis subverticillata</i> Alston*	B1ab(I,ii,iii)
<i>Hedyotis trichoneura</i> Alston*	B1ab(I,ii,iii)
<i>Hedyotis tridentata</i> Ridsd.*	B1ab(I,ii,iii)
<i>Lasianthus varians</i> (Thw.) Thw.*	B1ab(I,ii,iii)
<i>Mitragyna tubulosa</i> (Arn.)Havil.	B1ab(I,ii,iii)
<i>Neanotis richardiana</i> (Arn)W.H.Lewis	B1ab(I,ii,iii)
<i>Neurocalyx gardneri</i> Thw.*	B1ab(I,ii,iii)
<i>Ophiorrhiza glechomifolia</i> Thw.*	B1ab(I,ii,iii)
<i>Ophiorrhiza nemorosa</i> Thw.*	B1ab(I,ii,iii)
<i>Oxyceros rugulosus</i> (Thw.) Tirv.	B1ab(I,ii,iii)
<i>Pavetta macraei</i> Bremek.*	B1ab(I,ii,iii)
<i>Psilanthes wightianus</i> (Wight & Arn.) Leroy	B1ab(I,ii,iii)
<i>Psychotria longipetiolata</i> Thw.*	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Psydrax pergracilis</i> (Bourd.) Ridsd.	B1ab(I,ii,iii)
<i>Saprosma scabridum</i> (Thw.) Beddome*	B1ab(I,ii,iii)
<i>Scyphiphora hydrophyllacea</i> Gaertn. f.	B1ab(I,ii,iii)
Family-Santalaceae	
<i>Notothixos floccosus</i> (Thw.) Oliver*	B1ab(I,ii,iii)
<i>Ginalloa spathulifolia</i> (Thw.) Oliver*	B1ab(I,ii,iii)
<i>Viscum ramosissimum</i> Roxb.	B1ab(I,ii,iii)
Family-Scrophulariaceae	
<i>Adenosma subrepens</i> (Thw.) Benth.*	B1ab(I,ii,iii)
<i>Verbascum chinense</i> (L.) Santapau	B1ab(I,ii,iii)

Family-Styliaceae	
<i>Stylium uliginosum</i> Sw. ex Willd.	B1ab(I,ii,iii)
Family-Symplocomaceae	
<i>Symplocoma involucratum</i> Roxb.	B1ab(I,ii,iii)
Family-Thymelaeaceae	
<i>Phaleria capitata</i> Jack	B1ab(I,ii,iii)
Family-Triuridaceae	
<i>Sciaphila secundiflora</i> Thw.ex Benth.	B1ab(I,ii,iii)
<i>Sciaphila tenella</i> Blume	B1ab(I,ii,iii)
Family-Zingiberaceae	
<i>Alpinia rufescens</i> (Thw.) Schum.*	B1ab(I,ii,iii)
<i>Amomum acuminatum</i> Thw.*	B1ab(I,ii,iii)
<i>Amomum benthamianum</i> Trim.*	B1ab(I,ii,iii)
<i>Amomum hypoleucum</i> Thw.	B1ab(I,ii,iii)
<i>Amomum nemorale</i> (Thw.) Trimen*	B1ab(I,ii,iii)

(B) ENDANGERED (EN)

FAMILY/SPECIES	CRITERIA
Family-Acanthaceae	
<i>Barleria arnottiana</i> Nees	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Barleria involucrate</i> Nees	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Barleria tomentosa</i> Roth	B1ab(I,ii,iii)
<i>Barleria vestita</i> T.Anders.	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Dicliptera zeylanica</i> Nees	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Gymnostachyum hirsutum</i> T. Anders.*	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Gymnostachyum paniculatum</i> T. Anders.*	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Hemadelphis polysperma</i> (Roxb.) Nees	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Justicia prostrata</i> (Clarke) Gamble	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Lepidagathis walkeriana</i> Nees*	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Monothechium aristatum</i> (Wall. ex Nees) T. Anders.	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Rhinacanthus polonnaruwensis</i> Cramer*	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Strobilanthes nockii</i> Trimen*	B1ab(I,ii,iii)
<i>Strobilanthes punctata</i> Nees*	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Strobilanthes vestita</i> Nees*	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Strobilanthes walkeri</i> Arn. ex Nees	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Thunbergia laevis</i> Wall.ex Nees	B1ab(I,ii,iii)+2ab(I,ii,iii)
Family-Anacardiaceae	
<i>Buchanania axillaris</i> (Desr.) Ramamoorthy	B1ab(I,ii,iii)
<i>Semecarpus moonii</i> Thw.*	B1ab(I,ii,iii)+2ab(I,ii,iii)
Family-Annonaceae	
<i>Goniothalamus salicina</i> Hook. f. & Thoms*	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Miliusa tomentosa</i> (Roxb.) Sinclair	B1ab(I,ii,iii)+2ab(I,ii,iii)

<i>Miliusa zeylanica</i> Gardner ex Hook. f. & Thoms*	B2ab(I,ii,iii)
<i>Phoenicanthus coriacea</i> (Thw.) H. Huber*	B1ab(I,ii,iii)+2ab(I,ii,iii)
Family-Aquifoliaceae	
<i>Ilex knucklesensis</i> Philcox*	B1ab(I,ii,iii)
Family-Araceae	
<i>Arisaema tortuosum</i> (Wall.) Schott	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Cryptocoryne beckettii</i> Trimen*	B2ab(I,ii,iii)
<i>Cryptocoryne nevillii</i> Trimen ex Hook. f.*	B1ab(I,ii,iii)
<i>Cryptocoryne thwaitesii</i> Schott*	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Lagenandra koenigii</i> (Schott) Thw.*	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Lagenandra ovata</i> (L.) Thw.	B1ab(I,ii,iii)
<i>Lagenandra thwaitesii</i> Engl.*	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Pothos parvispadix</i> Nicolson*	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Remusatia vivipara</i> (Roxb.) Schott	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Rhaphidophora pertusa</i> (Roxb.) Schott	B1ab(I,ii,iii)+2ab(I,ii,iii)
Family-Arecaceae	
<i>Calamus delicatulus</i> Thw.*	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Calamus ovoideus</i> Thw. ex Trimen*	B1ab(I,ii,iii)
<i>Calamus radiatus</i> Thw.*	B1ab(I,ii,iii)
<i>Calamus thwaitesii</i> Becc. ex Becc. & Hook. f.	B1ab(I,ii,iii)
<i>Calamus zeylanicus</i> Becc. ex Becc. & Hook. f.*	B1ab(I,ii,iii)
<i>Loxococcus rupicola</i> (Thw.) H. Wendl. & Drude ex Hook. f.*	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Nypa fruticans</i> Wurmb	B1ab(I,ii,iii)
Family-Asteraceae	
<i>Blepharispermum petiolare</i> DC.	B1ab(I,ii,iii)
Family-Balsaminaceae	
<i>Impatiens arnottii</i> Thw.*	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Impatiens linearis</i> Arn.*	B1ab(I,ii,iii)+2ab(I,ii,iii)
Family-Burmanniaceae	
<i>Burmannia championii</i> Thw.	B1ab(I,ii,iii)
Family-Dipterocarpaceae	
<i>Balanocarpus brevipetiolaris</i> (Thw.) Alston*	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Hopea cordifolia</i> (Thw.) Trimen*	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Stemonoporus acuminatus</i> (Thw.) Beddome*	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Stemonoporus angustisepalum</i> Kosterm.*	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Stemonoporus cordifolius</i> (Thw.) Alston*	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Stemonoporus lanceolatus</i> Thw.*	B1ab(I,ii,iii)
<i>Stemonoporus lancifolius</i> (Thw.) Ashton*	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Stemonoporus reticulatus</i> Thw.*	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Stemonoporus wightii</i> Thw.*	B1ab(I,ii,iii)+2ab(I,ii,iii)

Family-Ebenaceae	
<i>Diospyros acuta</i> Thw.*	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Diospyros attenuata</i> Thw.*	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Diospyros chaetocarpa</i> Kosterm.*	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Diospyros ebenum</i> Koenig	A1bcd+B2ab(I,ii,iii)
E - Ebony	
<i>Diospyros melanoxylon</i> Roxb.	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Diospyros moonii</i> Thw.*	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Diospyros quaesita</i> Thw.*	A1bcd+B1ab(I,ii,iii)+2ab(I,ii,iii)
E - Calamander	
Family-Euphorbiaceae	
<i>Chaetocarpus ferrugineus</i> Philcox*	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Chaetocarpus pubescens</i> (Thw.) Hook. f.*	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Croton persimilis</i> Muell. Arg.*	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Jatropha glandulifera</i> Roxb.	B1ab(I,ii,iii)
<i>Tragia plukenetii</i> Radcliffe-Smith.	B2ab(I,ii,iii)
Family-Gentianaceae	
<i>Crawfurdia championii</i> (Gardn.) Trim.*	B1ab(I,ii,iii)
Family-Loranthaceae	
<i>Tolypanthus gardneri</i> (Thw.) Tieghem*	B1ab(I,ii,iii)+2ab(I,ii,iii)
Family-Melastomataceae	
<i>Kendrickia walkeri</i> (Wight ex Gardner) Triana	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Medinilla cuneata</i> (Thw.) Bremer & Lundin*	B1ab(I,ii,iii)
<i>Osbeckia buxifolia</i> Arn.	B1ab(I,ii,iii)
<i>Osbeckia walkeri</i> Arn.*	B1ab(I,ii,iii)
<i>Osbeckia zeylanica</i> L. f.	B2ab(I,ii,iii)
<i>Sonerila crassicaulis</i> Lundin*	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Sonerila rhombifolia</i> Thw.*	B1ab(I,ii,iii)+2ab(I,ii,iii)
Family-Memecylaceae	
<i>Memecylon cuneatum</i> Thw.*	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Memecylon discolor</i> Cogn.*	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Memecylon ellipticum</i> Thw.*	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Memecylon fuscescens</i> Thw.*	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Memecylon giganteum</i> Alston*	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Memecylon grande</i> Retz.*	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Memecylon hookeri</i> Thw.	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Memecylon procerum</i> Thw.*	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Memecylon rhinophyllum</i> Thw.*	B1ab(I,ii,iii)
Family-Monimiaceae	
<i>Hortonia ovalifolia</i> Wight*	B1ab(I,ii,iii)

Family-Myrtaceae	
<i>Eugenia amoena</i> Thw.*	B1ab(I,ii,iii)
<i>Eugenia rivulorum</i> Thw.*	B1ab(I,ii,iii)
Family-Orchidaceae	
<i>Acanthephippium bicolor</i> Lindley	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Aerangis hologlottis</i> (Schltr.) Schltr.*	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Apostasia wallichii</i> R. Br.	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Bromheadia srilankensis</i> Kruizinga & de Vogel.*	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Bulbophyllum crassifolium</i> Thw. ex Trimen*	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Bulbophyllum macraei</i> Reichb. f.*	B2ab(I,ii,iii)
<i>Bulbophyllum maskeliyense</i> Livera*	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Bulbophyllum purpureum</i> Thw.*	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Calanthe sylvatica</i> (Thouars) Lindl.	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Cheirostylis flabellata</i> (A.Rich.) Wight	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Chrysoglossum ornatum</i> Blume.	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Cryptostylis arachnites</i> (Blume) Hassk.	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Dendrobium haemoglossum</i> Thw.	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Dendrobium diodon</i> Reichb. f.*	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Dendrobium maccarthiae</i> Thw.*	A2(a,c,d)+A3(a,c,d)+B2ab(I,ii,iii)
<i>Didymoplexis pallens</i> Griff	B1ab(I,ii,iii)
<i>Epipogium roseum</i> (D.Don) Lindl.	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Eria articulata</i> Lindl.*	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Eria thwaitesii</i> Trimen*	B2ab(I,ii,iii)
<i>Habenaria barbata</i> Wight ex Hook.f.	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Habenaria macrostachya</i> Lindl.	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Habenaria rhynchocarpa</i> (Thw.) Trimen*	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Habenaria roxburghii</i> Nicolson	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Hetaeria oblongifolia</i> Blume	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Ipsea speciosa</i> Lindley*	A2+A3(a,c,d)
E - Daffodil orchid	
<i>Liparis atropurpurea</i> Lindl.	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Liparis barbata</i> Lindl.*	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Malaxis densiflora</i> (A.Rich.) Kuntze.	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Oberonia claviloba</i> Jayaweera*	B1ab(I,ii,iii)
<i>Oberonia forcipata</i> Lindl.	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Oberonia quadrilateral</i> Jayaweera*	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Oberonia scyllae</i> Lindl.*	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Oberonia tenuis</i> Lindl.	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Oberonia truncata</i> Lindl.*	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Peristylus aristatus</i> Lindl.	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Peristylus trimenii</i> (Hook.f.) Abeywick.*	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Phaius luridus</i> Thw.	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Phreatia elegans</i> Lindl.	B1ab(I,ii,iii)
<i>Phreatia jayaweerae</i> Ormerod.	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Robiquetia gracilis</i> (Lindley) Garay	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Taeniophyllum gilimalense</i> Jayaweera*	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Tropidia bambusifolia</i> (Thw) Trimen*	B1ab(I,ii,iii)+D1

<i>Tropidia thwaitesii</i> Hook. f.*	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Vanilla moonii</i> Thw.*	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Zeuxine blatteri</i> C.E.C. Fischer.	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Zeuxine strateumatica</i> (L.) Schltr.	B1ab(I,ii,iii)
<i>Zeuxine regia</i> (Lindl.) Trimen*	A3+A4(c,d)+B1ab(I,ii,iii)+2ab(I,ii,iii)
Family-Orobanchaceae	
<i>Christisonia bicolor</i> Gardner	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Christisonia subacaulis</i> (Benth.) Gardner	B1ab(I,ii,iii)+2ab(I,ii,iii)
Family-Phyllanthaceae	
<i>Antidesma thwaitesianum</i> Muell. Arg.	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Aporusa fusiformis</i> Thw.	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Cleistanthus robustus</i> Muell. Arg.*	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Glochidion montanum</i> Thw.*	B2ab(I,ii,iii)
<i>Glochidion pachycarpum</i> Alston*	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Phyllanthus baillonianus</i> Muell. Arg.	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Phyllanthus dealbatus</i> Alston*	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Phyllanthus myrtifolius</i> (Wight) Muell. Arg.*	B2ab(I,ii,iii)
<i>Phyllanthus wheeleri</i> G. L. Webster*	B1ab(I,ii,iii)+2ab(I,ii,iii)
Family-Poaceae	
<i>Arundinaria densifolia</i> Munro	B1ab(I,ii,iii)
Family-Podostemaceae	
<i>Farmeria metzgerioides</i> (Trimen) Willis ex Hook.f.*	B1ab(I,ii,iii)
Family-Putranjiavaceae	
<i>Putranjiva zeylanica</i> (Thw.) Muell. Arg.*	B1ab(I,ii,iii)+2ab(I,ii,iii)
Family-Rubiaceae	
<i>Canthium campanulatum</i> Thw.*	B2ab(I,ii,iii)
<i>Canthium puberulum</i> Thw.ex Hook.f.*	B2ab(I,ii,iii)
<i>Canthium rheedii</i> DC.	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Ceriscoides turgida</i> (Roxb.) Tirv.	B1ab(I,ii,iii)
<i>Diyaminauclea zeylanica</i> (Hook.f.) Ridsd.*	B1ab(I,ii,iii)
<i>Galium asperifolium</i> Wall.	B1ab(I,ii,iii)
<i>Hedyotis coprosmoides</i> Trimen*	B1ab(I,ii,iii)
<i>Hedyotis neesiana</i> Arn.	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Hedyotis nodulosa</i> Arn.*	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Hedyotis thwaitesii</i> Hook.f.*	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Knoxia spicata</i> (Thw. Ex Trimen) Ridsd.*	B1ab(I,ii,iii)
<i>Lasianthus chrysocaulis</i> Ridsd.*	B1ab(I,ii,iii)
<i>Lasianthus gardneri</i> (Thw.) Hook.f.*	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Lasianthus neolanceolatus</i> Ridsd.*	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Lucocodon reticulatum</i> Gardner*	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Neanotis nummulariformis</i> (Arn.) W.H.Lewis*	
<i>Neurocalyx calycinus</i> (R.Br.ex Benn.) Robinson	B1ab(I,ii,iii)+2ab(I,ii,iii)

<i>Neurocalyx championii</i> Benth.ex Thw.*	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Neurocalyx zeylanicus</i> Hook.*	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Oldenlandia stricta</i> L.	B1ab(I,ii,iii)
<i>Ophiorrhiza radicans</i> Gardner ex Thw.*	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Pavetta agrostiphylla</i> Bremek*	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Pavetta badullensis</i> Ridsd.*	B1ab(I,ii,iii)
<i>Pavetta zeylanica</i> (Hook. f.) Gamble	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Pleioocraterium plantaginifolium</i> (Arn.) Bremek.*	B1ab(I,ii,iii)
<i>Prismatomeris albidiiflora</i> Thw.*	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Psilanthus tranvancorensis</i> (Wight & Arn.) Leroy	B1ab(I,ii,iii)
<i>Psychotria glandulifera</i> Thw. ex.Hook.f.*	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Psychotria plurivenia</i> Thw.*	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Psychotria sohmeri</i> Kiehn	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Psychotria stenophylla</i> (Thw.) Hook.f.*	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Psydrax montanus</i> (Thw.) Ridsd.*	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Rubia cordifolia</i> L.	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Saprosma glomeratum</i> (Gardner) Beddome	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Scyphostachys coffaeoides</i> Thw.*	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Tamilnadia uliginosa</i> (Retz.) Tirv. & Sastre	B1ab(I,ii,iii)+2ab(I,ii,iii)
Family-Rutaceae	
<i>Zanthoxylum caudatum</i> Alston*	B1ab(I,ii,iii)
Family-Santalaceae	
<i>Korthalsella japonica</i> (Thunb.) Engler	B1ab(I,ii,iii)+2ab(I,ii,iii)

(C) VULNERABLE (VU)	
FAMILY/SPECIES	CRITERIA
Family-Acanthaceae	
<i>Andrographis paniculata</i> (Bunn. f.) Wall. ex Nees	B1ab(I,ii,iii)
<i>Dyschoriste depressa</i> Nees	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Gymnostachyum sanguinolentum</i> (Vahl) T. Anders.*	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Justicia ceylanica</i> (Nees) T. Anders.*	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Justicia glabra</i> Koenig ex Roxb.	B2ab(I,ii,iii)
<i>Justicia royeniana</i> (Nees) Clarke*	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Rungia longifolia</i> Nees	B2ab(I,ii,iii)
<i>Stenosiphonium cordifolium</i> (Vahl) Alston	B2ab(I,ii,iii)
<i>Strobilanthes adenophora</i> Nees*	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Strobilanthes calycina</i> Nees*	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Strobilanthes helicoides</i> (Nees) T. Anders.*	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Strobilanthes hookeri</i> Nees*	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Strobilanthes lupulina</i> Nees	B2ab(I,ii,iii)
<i>Strobilanthes pulcherrima</i> T. Anders.*	B1ab(I,ii,iii)+2ab(I,ii,iii)
Family-Anacardiaceae	
<i>Semecarpus acuminata</i> Thw.*	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Semecarpus coriacea</i> Thw.*	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Semecarpus marginata</i> Thw.*	B1ab(I,ii,iii)+2ab(I,ii,iii)

<i>Semecarpus parvifolia</i> Thw.*	B2ab(I,ii,iii)
<i>Semecarpus pubescens</i> Thw.*	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Semecarpus subpeltata</i> Thw.*	B1ab(I,ii,iii)
Family-Annonaceae	
<i>Alphonsea zeylanica</i> Hook. f. & Thoms.	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Artobotrys hexapetalus</i> (L. f.) Bhandari	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Desmos zeylanica</i> (Hook. f. & Thoms.) Safford*	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Enicosanthum acuminata</i> (Thw.) Airy Shaw*	B1ab(I,ii,iii)
<i>Goniothalamus gardneri</i> Hook. f. & Thoms.*	B2ab(I,ii,iii)
<i>Goniothalamus hookeri</i> Thw.*	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Goniothalamus thomsonii</i> Thw.*	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Phoenicanthus oblique</i> (Hook.f.Thoms.)Alston*	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Polyalthia suberosa</i> (Roxb.) Thw.	B2ab(I,ii,iii)
<i>Sageraea thwaitesii</i> Hook. f. & Thoms.*	B2ab(I,ii,iii)
<i>Uvaria cordata</i> (Dunal) Alston	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Uvaria narum</i> (Dunal) Wall.	B1ab(I,ii,iii)+2ab(I,ii,iii)
Family-Araceae	
<i>Amorphophallus paeoniifolius</i> (Dennst.) Nicolson	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Arisaema leschenaultii</i> Blume	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Cryptocoryne wendtii</i> de Wit*	B2ab(I,ii,iii)
<i>Lagenandra jacobsenii</i> de Wit*	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Lagenandra praetermissa</i> de Wit*	B1ab(I,ii,iii)
<i>Pothos remotiflorus</i> Hook.*	B1ab(I,ii,iii)+2ab(I,ii,iii)
Family-Arecaceae	
<i>Calamus digitatus</i> Becc. ex Becc. & Hook. f.*	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Calamus pseudotenuis</i> Becc. ex Becc. & Hook. f.	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Calamus rivalis</i> Thw. Ex Trimen*	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Calamus rotang</i> L.	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Oncosperma fasciculatum</i> Thw.*	B1ab(I,ii,iii)+2ab(I,ii,iii)
Family-Balsaminaceae	
<i>Impatiens acaulis</i> Arn.	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Impatiens ciliifolia</i> Grey-Wilson*	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Impatiens cornigera</i> Arn.*	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Impatiens elongata</i> Arn.*	B1ab(I,ii,iii)
<i>Impatiens flaccida</i> Arn.	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Impatiens henslowiana</i> Arn.	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Impatiens macrophylla</i> Gardner*	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Impatiens truncata</i> Thw.*	B1ab(I,ii,iii)
Family-Cornaceae	
<i>Mastixia nimalii</i> Kosterm.*	B1ab(I,ii,iii)
Family-Crypteroniaceae	
<i>Axinandra zeylanica</i> Thw.*	B1ab(I,ii,iii)+2ab(I,ii,iii)

Family-Dipterocarpaceae	
<i>Dipterocarpus glandulosus</i> Thw.*	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Doona gardneri</i> Thw.*	B1ab(I,ii,iii)+2ab(I,ii,iii)
E - Red Doon	
<i>Doona zeylanica</i> Thw.*	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Shorea dyeri</i> Thw.*	B1ab(I,ii,iii)
<i>Shorea hulanidda</i> Kosterm.*	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Shorea lissophylla</i> Thw.*	B2ab(I,ii,iii)
<i>Shorea pallescens</i> Ashton*	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Shorea stipularis</i> Thw.*	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Stemonoporus canaliculatus</i> Thw.*	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Stemonoporus elegans</i> (Thw.) Alston*	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Stemonoporus gardneri</i> Thw.*	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Stemonoporus oblongifolius</i> Thw.*	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Sunaptea scabriuscula</i> (Thw.) Trimen*	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Vatica affinis</i> Thw.*	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Vatica obscura</i> Trimen*	B1ab(I,ii,iii)+2ab(I,ii,iii)
Family-Ebenaceae	
<i>Diospyros acuminata</i> (Thw.) Kosterm.*	B1ab(I,ii,iii)
<i>Diospyros affinis</i> Thw.	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Diospyros albiflora</i> Alston*	B1ab(I,ii,iii)
<i>Diospyros ebenoides</i> Kosterm.*	B2ab(I,ii,iii)
<i>Diospyros oblongifolia</i> (Thw.) Kosterm.*	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Diospyros oocarpa</i> Thw.	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Diospyros racemosa</i> Roxb.	B2ab(I,ii,iii)
<i>Diospyros trichophylla</i> Alston*	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Diospyros walkeri</i> (Wight) Guerke	B1ab(I,ii,iii)+2ab(I,ii,iii)
E - Bastard Ebony	
Family-Euphorbiaceae	
<i>Agrostistachys hookeri</i> (Thw.) Benth.*	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Agrostistachys intramarginalis</i> Philcox*	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Cleidion spiciflorum</i> (Burm. f.) Merr.	B2ab(I,ii,iii)
<i>Euphorbia rosea</i> Retz.	B2ab(I,ii,iii)
<i>Excoecaria oppositifolia</i> Griffith	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Homonoia riparia</i> Lour.	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Macaranga digyna</i> (Wight) Muell. Arg.*	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Micrococca oligandra</i> (Muell. Arg.) Prain	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Ptychopyxis thwaitesii</i> (Baill.) Croizat*	B1ab(I,ii,iii)
<i>Sapium indicum</i> Willd.	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Trewia nudiflora</i> L.	B2ab(I,ii,iii)
E - Fever Tree	
<i>Trigonostemon nemoralis</i> Thw.	B1ab(I,ii,iii)
Family-Loranthaceae	
<i>Dendrophthoe ligulata</i> (Thw.) Tieghem*	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Dendrophthoe suborbicularis</i> (Thw.) Danser	B,ab(i,ii,iii)+2ab(i,ii,iii)

<i>Macrosolen capitellatus</i> (Wight & Arn.) Danser	B2ab(I,ii,iii)
<i>Macrosolen parasiticus</i> (L.) Danser	B1ab(I,ii,iii)
<i>Scurrula cordifolia</i> (Wall.) G. Don.	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Taxillus cuneatus</i> (Roth) Danser	B1ab(I,ii,iii)
<i>Taxillus incanus</i> (Trimen) Wiens*	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Taxillus sclerophyllus</i> (Thw.) Danser	B1ab(I,ii,iii)+2ab(I,ii,iii)
Family-Melastomataceae	
<i>Ljndenia gardneri</i> (Thw.) Bremer*	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Medinilla fuchsiodes</i> Gardner	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Osbeckia lanata</i> Alston*	B1ab(I,ii,iii)
<i>Sonerila affinis</i> Arn.*	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Sonerila arnottiana</i> Thw.*	B1ab(I,ii,iii)
<i>Sonerila pumila</i> Thw.*	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Sonerila zeylanica</i> Wight & Arn.	B1ab(I,ii,iii)+2ab(I,ii,iii)
Family-Memecylaceae	
<i>Memecylon angustifolium</i> Wight	B1ab(I,ii,iii)+2ab(I,ii,iii)
E - Blue Mist	
<i>Memecylon clarkeanum</i> Cogn.*	B1ab(I,ii,iii)
<i>Memecylon ovoideum</i> Thw.*	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Memecylon parvifolium</i> Thw.*	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Memecylon petiolatum</i> Trimen ex Alston*	B2ab(I,ii,iii)
<i>Memecylon revolutum</i> Thw.*	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Memecylon rivulare</i> Bremer*	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Memecylon rotundatum</i> (Thw.) Cogn.*	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Memecylon urceolatum</i> Cogn.*	B1ab(I,ii,iii)+2ab(I,ii,iii)
Family-Moraceae	
<i>Broussonetia zeylanica</i> (Thw.) Corner*	B1ab(I,ii,iii)
Family-Myrtaceae	
<i>Eugenia fulva</i> Thw.*	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Eugenia rotundata</i> Trimen*	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Eugenia rufo-fulva</i> Thw.*	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Eugenia terpnophylla</i> Thw.*	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Syzygium batadamba</i> Kosterm.*	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Syzygium cylindricum</i> (Wight) Alston*	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Syzygium fergusoni</i> Gamble	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Syzygium hemisphericum</i> (Walp.) Alston	B1ab(I,ii,iii)
<i>Syzygium lanceolatum</i> (Lam.) Wight & Arn.	B1ab(I,ii,iii)
<i>Syzygium makul</i> Gaertn.	B1ab(I,ii,iii)
<i>Syzygium turbinatum</i> Alston*	B1ab(I,ii,iii)
Family-Orchidaceae	
<i>Acampe ochracea</i> (Lindl.) Hochr.	B2ab(I,ii,iii)
<i>Adrorhizon purpurascens</i> (Thw.) Hook.f.*	B2ab(I,ii,iii)
<i>Aerides ringens</i> (Lindley) C.E.C.Fischer	B2ab(I,ii,iii)

<i>Agrostophyllum zeylanicum</i> Hook. f. *	B2ab(I,ii,iii)
<i>Anoectochilus regalis</i> Blume*	A3+A4(c,d)+B 2ab(I,ii,iii)
<i>Aphyllorchis montana</i> Reichb. f.	B2ab(I,ii,iii)
<i>Bulbophyllum elegans</i> Gardner ex Thw.	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Bulbophyllum petiolare</i> Thw.*	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Bulbophyllum thwaitesii</i> Reichb. f.*	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Bulbophyllum trimenii</i> (Hook. f.) J. J. Sm.*	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Bulbophyllum wightii</i> Reichb. F.	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Chiloschista fasciata</i> (F.v. Mull.) Seidenf. & Ormerod.	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Coelogyné breviscapa</i> Lindl.	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Cottonia peduncularis</i> (Lindley) Rchb.f.	B2ab(I,ii,iii)
E - Bee orchid	
<i>Cymbidium ensifolium</i> (L.) Sw.	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Dendrobium heterocarpum</i> Wall. ex Lindley	B1ab(I,ii,iii)+2ab(I,ii,iii)
E - Primrose Orchid	
<i>Disperis neilgherrensis</i> Wight	B2ab(I,ii,iii)
<i>Stichorkis disticha</i> (Thouars) Pfitzer.	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Erythrodes latiloba</i> Ormerod.	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Eulophia graminea</i> Lindl.	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Eulophia pulchra</i> (Thouars) Lindl.	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Eulophia spectabilis</i> (Dennst.) Suresh	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Eulophia zollingeri</i> (Rchb.f.) J.J.Sm.	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Flickingeria macraei</i> (Lindley) Seidenf.	B2ab(I,ii,iii)
<i>Geedorum densiflorum</i> (Lam.) Schltr.	B1,a,b(ii,iii)
<i>Goodyera procera</i> (Ker-Gawl.) Hook.	B2ab(I,ii,iii)
<i>Habenaria crinifera</i> Lindl.	A2+A3(a,c,d)+B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Liparis cespitosa</i> (Lam.)Lindl.	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Liparis elliptica</i> Wight.	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Liparis walkeriae</i> R. Graham	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Liparis wightiana</i> Thw.	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Luisia birchea</i> Blume Rumphia.	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Malaxis discolor</i> (Lindl.) Kuntze*	B2ab(I,ii,iii)
<i>Malaxis thwaitesii</i> Bennet.*	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Oberonia longibracteata</i> Lindl.*	B2ab(I,ii,iii)
<i>Oberonia recurva</i> Lindl.	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Oberonia thwaitesii</i> Hook. f. *	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Oberonia zeylanica</i> Hook.f.	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Papilionanthe cylindrica</i> (Lindl.) Seidenf.	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Peristylus gardneri</i> (Hook. f) Kraenzlin*	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Phaius wallichii</i> Lindl.	A2+A3(a,c,d)+B1ab(I,ii,iii)+2ab(I,ii,iii)
E - Star Orchid	
<i>Peristylus spiralis</i> A. Rich.	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Podochilus falcatum</i> Lindl.	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Pomatocalpa decipiens</i> (Lindley) J. J. Sm.	B2ab(I,ii,iii)
<i>Rhynchostylis retusa</i> Blume	A2+A3(a,c,d)+B1ab(I,ii,iii)+2ab(I,ii,iii)
E - Batticaloa Orchid, Fox-tail Orchid	
<i>Seidenfadeniella filiformis</i> (Rchb.f.) E.A. Christinson & Ormerod.	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Taeniophyllum alwisii</i> Lindley	B1ab(I,ii,iii)+2ab(I,ii,iii)

<i>Taprobanea spathulata</i> (L.) Christenson.	A2+A3(a,c,d)+B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Thrixspermum walkeri</i> Seidenf. & Ormerod.	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Trichoglottis tenera</i> (Lindley) Reichb. f.	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Vanda tessellata</i> (Roxb.) Hook. ex G. Don.	B2ab(I,ii,iii)
E - Anuradhapura Orchid, Gray Orchid	
<i>Vanilla walkerae</i> Wight	B2ab(I,ii,iii)
<i>Zeuxine reginaesilvae</i> Ormerod.*	A3+A4,(c,d)+B1ab(I,ii,iii)+2ab(I,ii,iii)
Family-Orobanchaceae	
<i>Christisonia tricolor</i> Gardner*	B1ab(I,ii,iii)+2ab(I,ii,iii)
Family-Phyllanthaceae	
<i>Actephila excelsa</i> (Dalz.) Muell. Arg.	B2ab(I,ii,iii)
<i>Antidesma alexiteria</i> L.	B2ab(I,ii,iii)
<i>Antidesma walkeri</i> (Tul.) Pax & Hoffm.*	B2ab(I,ii,iii)
<i>Aporusa acuminata</i> Thw.	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Aporusa cardiosperma</i> (Gaertn.) Merr.	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Aporusa lindleyana</i> (Wight) Baill.	B2ab(I,ii,iii)
<i>Glochidion moonii</i> Thw.*	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Glochidion nemorale</i> Thw.*	B1ab(I,ii,iii)
<i>Margaritaria indicus</i> (Dalz.) Airy Shaw	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Meineckia parvifolia</i> (Wight) G. L. Webster	B2ab(I,ii,iii)
<i>Phyllanthus cinereus</i> Muell. Arg.*	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Phyllanthus emblica</i> L.	B2ab(I,ii,iii)
<i>Phyllanthus rheedii</i> Wight	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Sauropolis rigidus</i> Thw.*	B2ab(I,ii,iii)
Family-Poaceae	
<i>Heteropholis nigrescens</i> (Thw.)C.E.Hubb.*	B1ab(I,ii,iii)
Family-Putranjiavaceae	
<i>Putranjiva roxburghii</i> Wall.	B2ab(I,ii,iii)
Family-Rubiaceae	
<i>Acranthera ceylanica</i> Arn.ex Meissner*	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Aidia gardneri</i> (Thw.)Tirv.*	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Anthocephalus chinensis</i> (Lam.)A.Rich.ex Walp.	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Byrsophyllum ellipticum</i> (Thw.) Hook.f.*	B1ab(I,ii,iii)
<i>Chassalia curviflora</i> (Wall.)Thw.	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Dichilanthe zeylanica</i> Thw.*	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Diplospora erythrospora</i> (Thw.)Hook.f.*	B2ab(I,ii,iii)
<i>Exallage auricularia</i> (L.)Bremek.	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Gaertnera divaricata</i> (Thw.)Thw.*	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Gaertnera ternifolia</i> Thw.*	B1ab(I,ii,iii)
<i>Gardenia crameri</i> Tirv.*	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Gardenia fosbergii</i> Tirv.*	B2ab(I,ii,iii)
<i>Geophila repens</i> (L.)Johnston	B1ab(I,ii,iii)

<i>Guettarda speciosa</i> L.	B1ab(I,ii,iii)
<i>Haldina cordifolia</i> (Roxb.)Ridsd.	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Hedyotis cyanantha</i> Kurz	B1ab(I,ii,iii)
<i>Hedyotis fumata</i> Alston*	B1ab(I,ii,iii)
<i>Ixora calycina</i> Thw.	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Ixora jucunda</i> Thw.*	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Knoxia hirsuta</i> Arn.*	B1ab(I,ii,iii)
<i>Knoxia sumatrensis</i> (Retz.)DC.	B2ab(I,ii,iii)
<i>Knoxia zeylanica</i> L.*	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Lasianthus foetulentus</i> Ridsd.*	B1ab(I,ii,iii)
<i>Lasianthus moonii</i> Wight*	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Lasianthus oliganthus</i> (Thw.) Thw.*	B1ab(I,ii,iii)
<i>Lasianthus strigosus</i> Wight*	B2ab(I,ii,iii)
<i>Mitragyna parvifolia</i> (Roxb.)Korth.	B2ab(I,ii,iii)
<i>Nargedia macrocarpa</i> (Thw.) Beddome*	B1ab(I,ii,iii)
<i>Ophiorrhiza pectinata</i> Arn.	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Pavetta blanda</i> Bremek.	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Pavetta gleniei</i> Thw. ex Hook. f.*	B1ab(I,ii,iii)
<i>Pavetta involucrata</i> Thw.*	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Psychotria dubia</i> (Wight) Alston*	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Psychotria gardneri</i> (Thw.) Hook.f.*	B2ab(I,ii,iii)
<i>Psychotria sordida</i> Thw.*	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Psychotria waasii</i> Sohmer*	B2ab(I,ii,iii)
<i>Saprosma foetens</i> (Wight) Schumann	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Tarenna flava</i> Alston	B1ab(I,ii,iii)+2ab(I,ii,iii)
Family-Santalaceae	
<i>Viscum capitellatum</i> Smith	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Viscum heyneanum</i> DC.	B1ab(I,ii,iii)+2ab(I,ii,iii)
<i>Viscum monoicum</i> Roxb. ex DC.	B1ab(I,ii,iii)+2ab(I,ii,iii)
Family-Zingiberaceae	
<i>Amomum graminifolium</i> Thw.*	B1ab(I,ii,iii)

Table 14. Unassessed plant species of Sri Lanka listed as globally threatened*

(Source: IUCN, 2006 <www.iucnredlist.org>)

(A) CRITICALLY ENDANGERED (CR)

Family	Species Name	Criteria
Apocynaceae	<i>Anodendron rhinosporum</i> Thw.	CR B1+2c ver 2.3 (1994)
Celastraceae	<i>Bhesa nitidissima</i> Kosterm.	CR B1+2c ver 2.3 (1994)
Dilleniaceae	<i>Dillenia triquetra</i> (Rottb.) Gilg	CR B1+2cd ver 2.3 (1994)
Dilleniaceae	<i>Schumacheria alnifolia</i> Hook.f. & Thoms	CR B1+2c ver 2.3 (1994)
Icacinaceae	<i>Stemonurus apicalis</i> (Thw.) Miers	CR B1+2cd ver 2.3 (1994)
Lauraceae	<i>Cinnamomum rivulorum</i> Kosterm.	CR B1+2c ver 2.3 (1994)
Loganiaceae	<i>Strychnos tetragona</i> A. W. Hill	CR B1+2c ver 2.3 (1994)
Meliaceae	<i>Dysoxylum peerisi</i>	CR B1+2c ver 2.3 (1994)
Meliaceae	<i>Walsura gardneri</i> Thw.	CR B1+2c ver 2.3 (1994)
Monimiaceae	<i>Hortonia angustifolia</i> (Thw.) Trimen	CR B1+2c ver 2.3 (1994)
Myristicaceae	<i>Horsfieldia iryaghedhi</i> (Gaertn.) Warb.	CR B1+2c ver 2.3 (1994)
Myrsinaceae	<i>Rapanea ceylanica</i>	CR B1+2cd ver 2.3 (1994)
Ochnaceae	<i>Ochna jabotapita</i> L.	CR B1+2cd ver 2.3 (1994)
Oleaceae	<i>Chionanthus albidiflora</i> Thw.	CR B1+2cd ver 2.3 (1994)
Sapindaceae	<i>Allophylus zeylanicus</i> L.	CR B1+2c ver 2.3 (1994)
Sapotaceae	<i>Palaquium laevifolium</i> (Thw.) Engl.	CR B1+2cd ver 2.3 (1994)
Urticaceae	<i>Debregeasia wallichiana</i> (Wedd.) Wedd	CR B1+2cd ver 2.3 (1994)

(B) ENDANGERED (EN)

Family	Species Name	Criteria
Celastraceae	<i>Euonymus thwaitesii</i> Lawson	EN B1+2c ver 2.3 (1994)
Clusiaceae	<i>Garcinia thwaitesii</i> Pierre	EN B1+2c ver 2.3 (1994)
Clusiaceae	<i>Garcinia zeylanica</i> Roxb.	EN B1+2c ver 2.3 (1994)
Eleocarpaceae	<i>Elaeocarpus coriaceus</i> Hook.	EN B1+2c ver 2.3 (1994)
Eleocarpaceae	<i>Elaeocarpus zeylanicus</i> (Arn.) Masters	EN B1+2c ver 2.3 (1994)
Lauraceae	<i>Beilschmiedia zeylanica</i> (Thw.) Trimen	EN B1+2c ver 2.3 (1994)
Lauraceae	<i>Cinnamomum citriodorum</i> Thw.	EN B1+2c ver 2.3 (1994)
Lauraceae	<i>Cryptocarya membranacea</i> Thw.	EN B1+2c ver 2.3 (1994)
Lauraceae	<i>Litsea glaberrima</i> (Thw.) Trimen	EN B1+2c ver 2.3 (1994)
Lauraceae	<i>Litsea nemoralis</i> (Thw.) Trimen	EN B1+2c ver 2.3 (1994)
Rosaceae	<i>Prunus ceylanica</i> (Wight) Miq.	EN B1+2c ver 2.3 (1994)
Sapotaceae	<i>Madhuca microphylla</i> (Hook.) Alston	EN B1+2c ver 2.3 (1994)
Sapotaceae	<i>Madhuca nerifolia</i> (Thw.) H.J.Lam.	EN B1+2c ver 2.3 (1994)
Sapotaceae	<i>Palaquium canaliculatum</i> (Thw.) Engl.	EN B1+2cd ver 2.3 (1994)

(C) VULNERABLE (VU)

Family	Species Name	Criteria
Apocynaceae	<i>Willughbeia cirrhifera</i> Abeywick.	VU A1c ver 2.3 (1994)
Bombacaceae	<i>Cullenia ceylanica</i> (Gardner) K.Schum.	VU A1c ver 2.3 (1994)
Burseraceae	<i>Canarium zeylanicum</i> (Retz.) Blume	VU A1c ver 2.3 (1994)
Celastraceae	<i>Bhesa ceylanica</i> (Arn.ex Thw.) Ding Hou.	VU A1c ver 2.3 (1994)
Celastraceae	<i>Euonymus walkeri</i> Wight	VU A1c ver 2.3 (1994)
Clusiaceae	<i>Garcinia quaesita</i> Pierre	VU A1c ver 2.3 (1994)
Combretaceae	<i>Terminalia zeylanica</i> van Heurck & Muell. Arg.	VU A1c ver 2.3 (1994)
Cornaceae	<i>Mastixia macrophylla</i> (Thw.) Kosterm.	VU A1c, B1+2c ver 2.3 (1994)

Eleocarpaceae	<i>Elaeocarpus glandulifer</i> (Hook.)Masters	VU A1c ver 2.3 (1994)
Eleocarpaceae	<i>Elaeocarpus subvillosus</i> Arn.	VU A1c ver 2.3 (1994)
Erythroxylaceae	<i>Erythroxylum obtusifolium</i> (Wight.)Hook.f.	VU A1c, B1+2c ver 2.3 (1994)
Fabaceae	<i>Abarema bigemina</i> (L.)Kosterm.	VU A1c ver 2.3 (1994)
Fabaceae	<i>Acacia ferruginea</i> DC.	VU A1c ver 2.3 (1994)
Fabaceae	<i>Adenanthera bicolor</i> Moon	VU A1c ver 2.3 (1994)
Fabaceae	<i>Humboldtia laurifolia</i> (Vahl)Vahl	VU A1c, B1+2cd ver 2.3 (1994)
Fabaceae	<i>Pericopsis mooniana</i> (Thw.)Thw.	VU A1cd ver 2.3 (1994)
Fabaceae	<i>Pterocarpus indicus</i> Willd.	VU A1d ver 2.3 (1994)
Fabaceae	<i>Pterocarpus marsupium</i> Roxb.	VU A1cd ver 2.3 (1994)
Fabaceae	<i>Saraca asoca</i> (Roxb.)de wild.	VU B1+2c ver 2.3 (1994)
Flacourtiaceae	<i>Hydnocarpus octandra</i> Thw.	VU A1c ver 2.3 (1994)
Flacourtiaceae	<i>Trichadenia zeylanica</i> Thw.	VU A1c ver 2.3 (1994)
Lauraceae	<i>Actinodaphne albifrons</i> Kosterm.	VU A1c ver 2.3 (1994)
Lauraceae	<i>Cinnamomum capparu-coronde</i> Blume	VU A1c, B1+2c ver 2.3 (1994)
Lauraceae	<i>Cinnamomum litseifolium</i> Thw.	VU B1+2c ver 2.3 (1994)
Lauraceae	<i>Cryptocarya wightiana</i> Thw.	VU A1c ver 2.3 (1994)
Lauraceae	<i>Litsea gardneri</i> (Thw.)Meissner	VU A1c ver 2.3 (1994)
Lauraceae	<i>Litsea iteodaphne</i> (Nees)Hook.f.	VU A1c ver 2.3 (1994)
Lauraceae	<i>Litsea longifolia</i> (Nees)Trimen	VU A1c ver 2.3 (1994)
Loganiaceae	<i>Strychnos benthami</i> C.B.Clarke	VU B1+2c ver 2.3 (1994)
Meliaceae	<i>Aglaia apiocarpa</i> (Thw.)Hiern	VU A1c ver 2.3 (1994)
Meliaceae	<i>Dysoxylum championii</i> Hook.f. & Thoms. ex Thw.	VU A1c ver 2.3 (1994)
Moraceae	<i>Artocarpus nobilis</i> Thw.	VU A1c ver 2.3 (1994)
Myristicaceae	<i>Myristica ceylanica</i> A. DC.	VU B1+2c ver 2.3 (1994)
Nepenthaceae	<i>Nepenthes distillatoria</i> L.	VU B1+2d ver 2.3 (1994)
	E - Pitcher Plant	
Rhizophoraceae	<i>Anisophyllea cinnamomoides</i> (Gardner & Champion) Alston	VU A1c ver 2.3 (1994)
Rhizophoraceae	<i>Carallia calycina</i> Benth.	VU A1c ver 2.3 (1994)
Rosaceae	<i>Prunus walkeri</i> (Wight)Kalkman	VU A1c ver 2.3 (1994)
Rutaceae	<i>Chloroxylon swietenia</i> DC.	VU A1c ver 2.3 (1994)
	E - Satinwood	
Sapindaceae	<i>Allophylus zeylanicus</i> L.	VU A1c ver 2.3 (1994)
Sapindaceae	<i>Glenniea unijuga</i> (Thw.) Radlk.	VU A1c, B1+2c ver 2.3 (1994)
Sapotaceae	<i>Madhuca fulva</i> (Thw.)Macbride	VU A1c ver 2.3 (1994)
Sapotaceae	<i>Madhuca moonii</i> (Thw.)H.J. Lam.	VU A1c ver 2.3 (1994)
Sapotaceae	<i>Palaquium grande</i> (Thw.)Engl.	VU A1c ver 2.3 (1994)
Sapotaceae	<i>Palaquium pauciflorum</i> (Thw.)Engl.	VU A1c ver 2.3 (1994)
Sapotaceae	<i>Palaquium rubiginosum</i> (Thw.)Engl.	VU A1c, B1+2c ver 2.3 (1994)
Sapotaceae	<i>Palaquium thwaitesii</i> Trimen	VU A1c ver 2.3 (1994)
Sapotaceae	<i>Palaquium zeylanicum</i> Verdc.	VU D2 ver 2.3 (1994)
Symplocaceae	<i>Symplocos bractealis</i> Thw.	VU B1+2c ver 2.3 (1994)
Symplocaceae	<i>Symplocos cordifolia</i> Thw.	VU B1+2c ver 2.3 (1994)
Symplocaceae	<i>Symplocos pulchra</i> Wight	VU A1c ver 2.3 (1994)

* Note: The status of these plant species could not be evaluated for the 2007 National Redlist



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Leopard (*Panthera pardus kotiya*) - the largest terrestrial carnivore in Sri Lanka is threatened by poaching and habitat loss

GEOGRAPHICAL DISTRIBUTION OF THREATENED SPECIES IN SRI LANKA

An analysis on the geographical distribution of threatened butterflies, vertebrate fauna and flora in the different administrative districts in the island (Table 15) revealed that districts in the lowland wet zone (ie., Galle, Matara, Ratnapura, Kalutara, Kegalle) and the central highlands (Kandy, Matale, Nuwara-Eliya, Badulla) harbour a higher number of threatened taxa. According to information compiled during this study, the highest number of threatened butterflies and vertebrate fauna occur in the Ratnapura District, and the highest number of threatened plants occurs in the Kandy District. The analyses also show clearly that districts in the Northern Province (Jaffna, Kilinochchi, Mullaitivu, Vavuniya) and the Eastern Province (Ampara, Batticaloa and Trincomalee) lack sufficient distribution data, compared to other areas of the island (see Figure 3 and 4 for details).

Table 15: Distribution of threatened fauna and flora in the administrative districts of Sri Lanka

District	Number of Threatened Species						
	Butterflies	FW Fish	Amphibians	Reptiles	Birds	Mammals	Flora
Ampara	0	3	1	8	5	1	15
Anuradhapura	1	2	0	8	3	12	68
Badulla	7	5	9	9	20	24	90
Batticaloa	0	0	0	1	0	1	9
Colombo	3	10	2	3	5	8	22
Galle	6	16	14	14	18	14	187
Gampaha	1	9	2	4	3	8	10
Hambantota	5	2	0	10	14	12	32
Jaffna ¹	0	1	0	3	2	2	7
Kalutara	14	16	2	10	16	15	126
Kandy	10	5	7	21	27	30	310
Kegalle	3	12	5	5	20	9	98
Kurunegala	3	4	2	3	3	9	44
Mannar	4	3	0	1	1	1	5
Matale	3	3	9	11	11	23	71
Matara	3	8	4	7	11	7	101
Monaragala	5	3	2	9	11	10	56
Mullaitivu	0	3	0	2	0	3	0
Nuwara Eliya	5	0	16	11	22	30	150
Polonnaruwa	0	5	0	4	4	2	26
Puttalam	8	4	0	4	1	6	21
Ratnapura	38	14	23	22	30	17	264
Trincomalee	1	3	0	0	2	6	10
Vavuniya	0	5	0	0	1	3	1

¹ Includes Kilinochchi

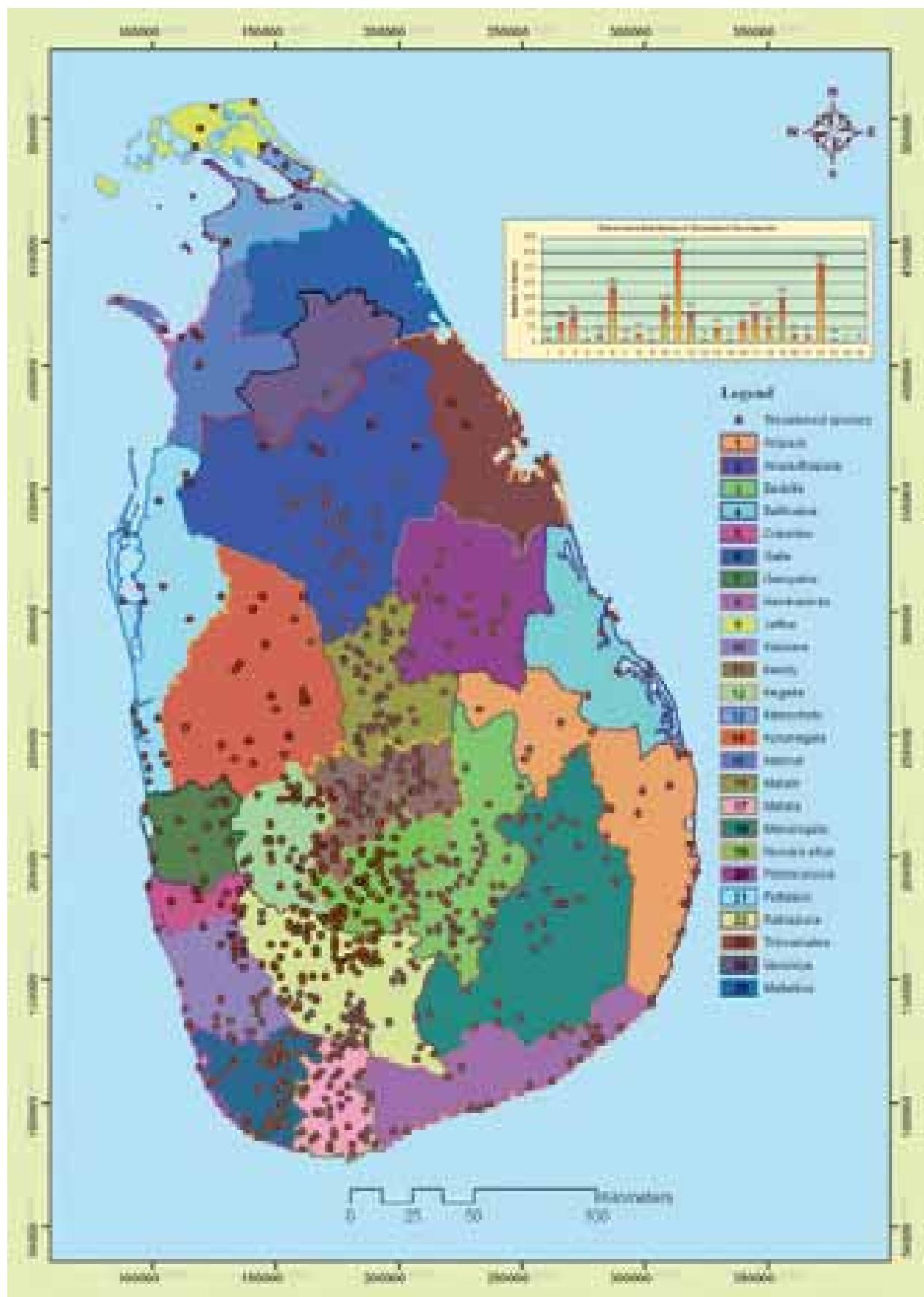


Figure 3: Distribution of threatened flora in the administrative districts of Sri Lanka

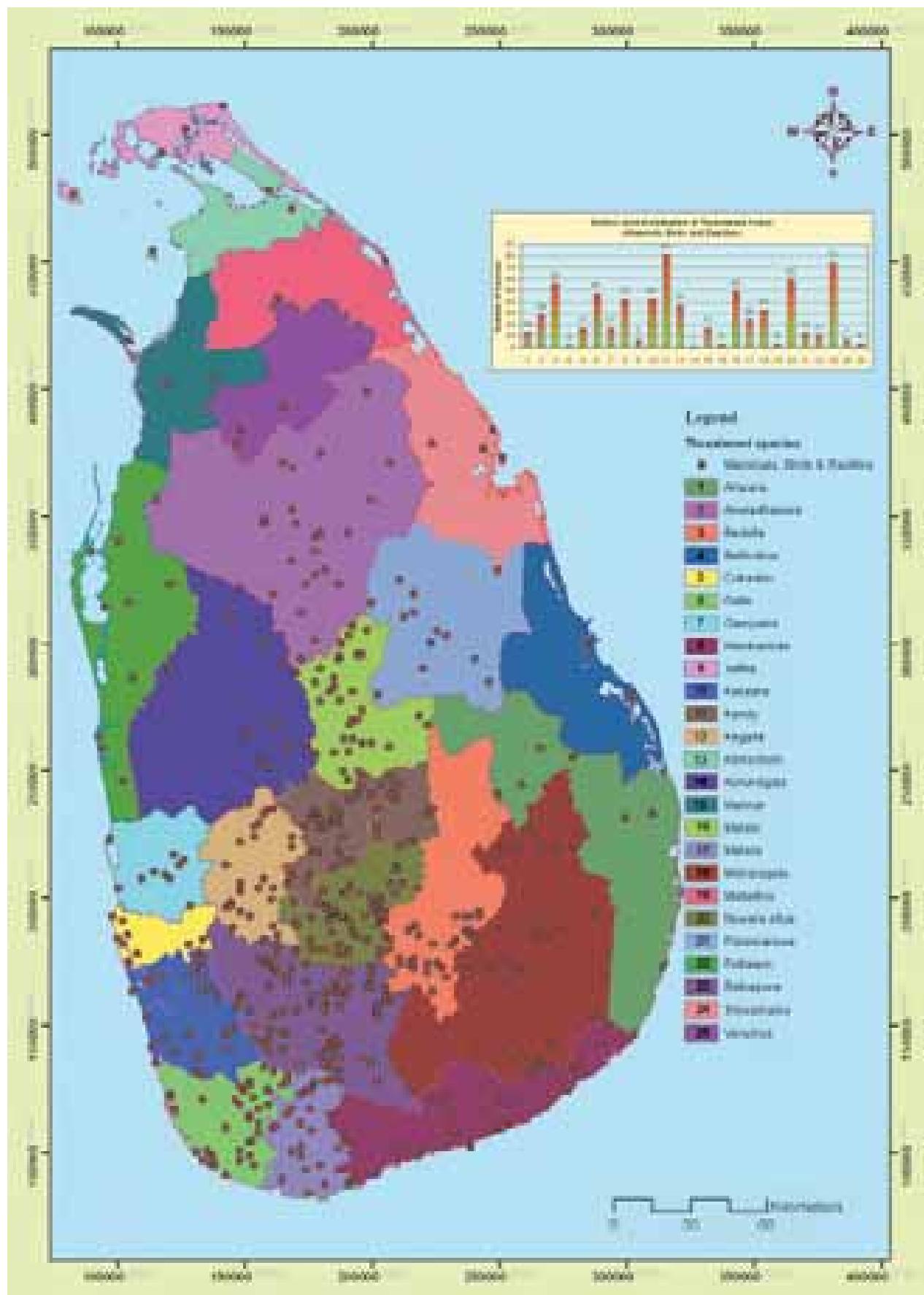


Figure 4: Distribution of threatened reptiles, birds and mammals in the administrative districts of Sri Lanka



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Shifting cultivations (chenaland) has resulted in the degradation of forests mainly in
the dry and intermediate zones of Sri Lanka

AN OVERVIEW OF THREATS TO BIODIVERSITY

AN OVERVIEW OF THE MAJOR THREATS

A combination of adverse human actions poses a major threat to the future survival of threatened species in Sri Lanka. The Millennium Ecosystem Assessment (2005) identified many drivers of biodiversity loss at a global scale, among which the primary drivers were: habitat change, overexploitation of species, invasive alien species, pollution and climate change. The following section of this publication summarises the status of the relevant primary drivers of biodiversity change in Sri Lanka, and their implications on species. Specific examples of species, whose populations are threatened as a result, will be highlighted.

Habitat loss, modification and fragmentation

According to information compiled under the present study, the loss of natural habitats, including their alteration and fragmentation is, by far, the most serious threat to a majority of the threatened species in the island. A growing human population in Sri Lanka - currently nearly 20 million - , has caused the clearance of natural habitats for human settlements, agricultural land, industrial areas and related infrastructure such as road networks. The island has lost approximately half the area of forests it had just over half a century ago, in the 1950s (Wijesinghe, 2000), and currently retains only about 23.5% of forest cover. The loss of forest cover over the past five decades has averaged over 30,000 ha per year (MOENR, 2003). Most of the remaining forests are fragmented and small with contiguous large tracts remaining only in the dry zone. The per capita land resource allocation in Sri Lanka (0.35 ha) is among the lowest in Asia, and the situation is even worse in the wet zone watershed areas, where the population density far exceeds the national average (MOENR, 2003). The wet zone districts that harbour more than 50 species of threatened vertebrates and plants, respectively, have a relatively low forest cover (see Table 16, and Figures 5 and 6). Near-primary forest cover in the wet zone accounts a little less than 5% of the total land area, what remains are small (less than a km²), isolated patches in a sea of human development. Even the existing protected forests in the wet zone, which harbour a high biodiversity, continue to be degraded due to illegal encroachment, and suffer further fragmentation. Typical examples of such forests include the Hakgala Strict Nature Reserve, Peak Wilderness Sanctuary, Kanneliya-Dediyagala-Nakiyadeniya Forest Reserves, Gilimale-Eratne Forest Reserve and the Sinharaja World Heritage Site. The implication of habitat loss, especially in the wet zone of the island, is clearly evident by the fact that 21 species of amphibians and 72 species of plants have become extinct during the past two centuries.



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Illegal expansion of tea cultivations in the forest fringes is a major threat to tropical rainforests in the wet zone, which harbour a vast number of endemic and threatened species

Recent studies on the plant biogeography in south-western hill forests by Gunatilleke *et al.* (2005) clearly highlights the conservation significance of these remaining forest patches in the island, where it was revealed that each of them are distinct floristic/bioclimatological forest communities, with ecologically distinct plant species assemblages occurring in the ridges, slopes and valleys within each forest. The current assessment revealed that a higher number of endemic trees belonging to the Family Dipterocarpaceae are threatened, and these species occupy the canopy and sub-canopy of the above forests. The future survival of the large number of threatened endemic epiphytic orchids also depends on these forest patches in the wet zone.

Table 16: Statistics on the human population density, forest cover, threatened vertebrates and threatened plants in the administrative districts in Sri Lanka

District	Area (Km ²)	Human Population Density (per Km ²) ¹	% Forest Cover ²	Threatened Vertebrates	Threatened Plants
Ampara	4318	143	37.50%	18	15
Anuradhapura	7034	111	35%	25	68
Badulla	2803	294	19%	67	90
Batticaloa	2686	204	21%	2	9
Colombo	656	3631	2.80%	28	22
Galle	1635	629	13%	76	187
Gampaha	1386	1523	0.30%	26	10
Hambantota	2579	210	20.50%	38	32
Jaffna ³	2218	337	1.10%	8	7
Kalutara	1588	688	13%	59	126
Kandy	1906	704	17%	90	310
Kegalle	1693	468	9.50%	51	98
Kurunegala	4813	311	5%	21	44
Mannar	1985	50	60%	6	5
Matale	1993	233	40.50%	57	71
Matara	1282	620	16%	37	101
Monaragala	5545	75	40.50%	35	56
Mullaitivu	2517	56	60%	8	0
Nuwara Eliya	1720	423	24.50%	79	150
Polonnaruwa	3224	117	38%	15	26
Puttalam	3013	245	25%	15	21
Ratnapura	3255	325	20%	116	264
Trincomalee	2631	147	48%	11	10
Vavuniya	1967	74	51%	9	1
Sri Lanka	65,610	314	23.50%	223	675

¹ Estimated mid year population density in year 2004: Source: Department of Census and Statistics

² Estimated from year 1998 RS images (Includes secondary vegetation, but excludes plantation forests)

³ Includes Kilinochchi

According to experts who provided information for the present assessment, several species of endemic fauna and flora in the wet zone have already undergone local extinctions during the last three decades, due to loss of natural habitats. For instance, among the threatened mammals, isolated populations of three arboreal endemic mammals - the Purple-faced Leaf Monkey (*Semnopithecus vetulus*), the Golden Palm Civet (*Paradoxurus zeylonensis*) and the Red Slender Loris (*Loris tardigradus*), have disappeared from several localities in the Western Province, due to loss of tree cover. Among the threatened endemic birds, the Orange-billed Babbler (*Turdoides rufescens*) has apparently undergone local extinction from some degraded and fragmented forest patches (ie., Nambapana) in the south-western region. Similarly, the endemic Whistling Thrush (*Myophonus blighi*) is threatened due to extensive clearance and degradation of montane forests through conversion to timber plantations and agriculture.

The current threatened list of mammals includes 10 species of endemic small mammals (6 rodents and 4 shrews). Wijesinghe (2006) has stated that several ecological traits of endemic small mammals render them more susceptible to anthropogenic habitat destruction than the widespread species. A study carried out in Sinharaja rainforest across habitats representing varying levels of disturbance has clearly demonstrated that endemic rodents and shrews are incapable of utilizing disturbed areas surrounding the natural forest (Wijesinghe, 2001). The latter survey clearly highlights the importance of undisturbed natural forests in the wet zone of Sri Lanka, to sustain the populations of threatened endemic small mammals.

Several studies have highlighted the pressures of deforestation and forest fragmentation, on the unique and threatened shrub frogs (*Philautus* spp.) restricted to the wet zone of Sri Lanka (Bahir *et al.*, 2005; Meegaskumbura *et al.*, 2007; Manamendra-Arachchi, & Pethiyagoda, 2005).



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Illegal encroachment in montane forests

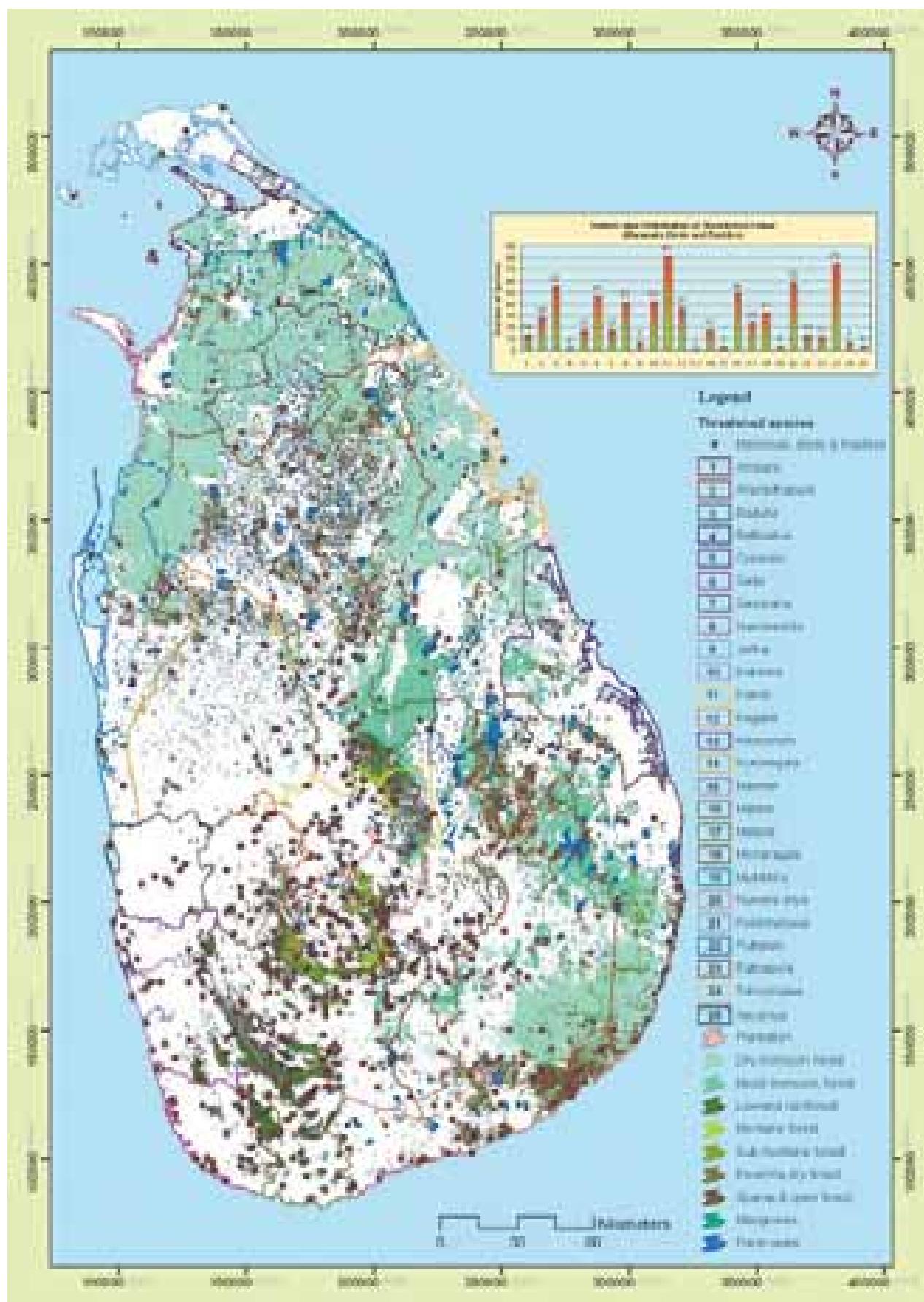


Figure 5: Distribution of threatened reptiles, birds and mammals in relation to forest cover

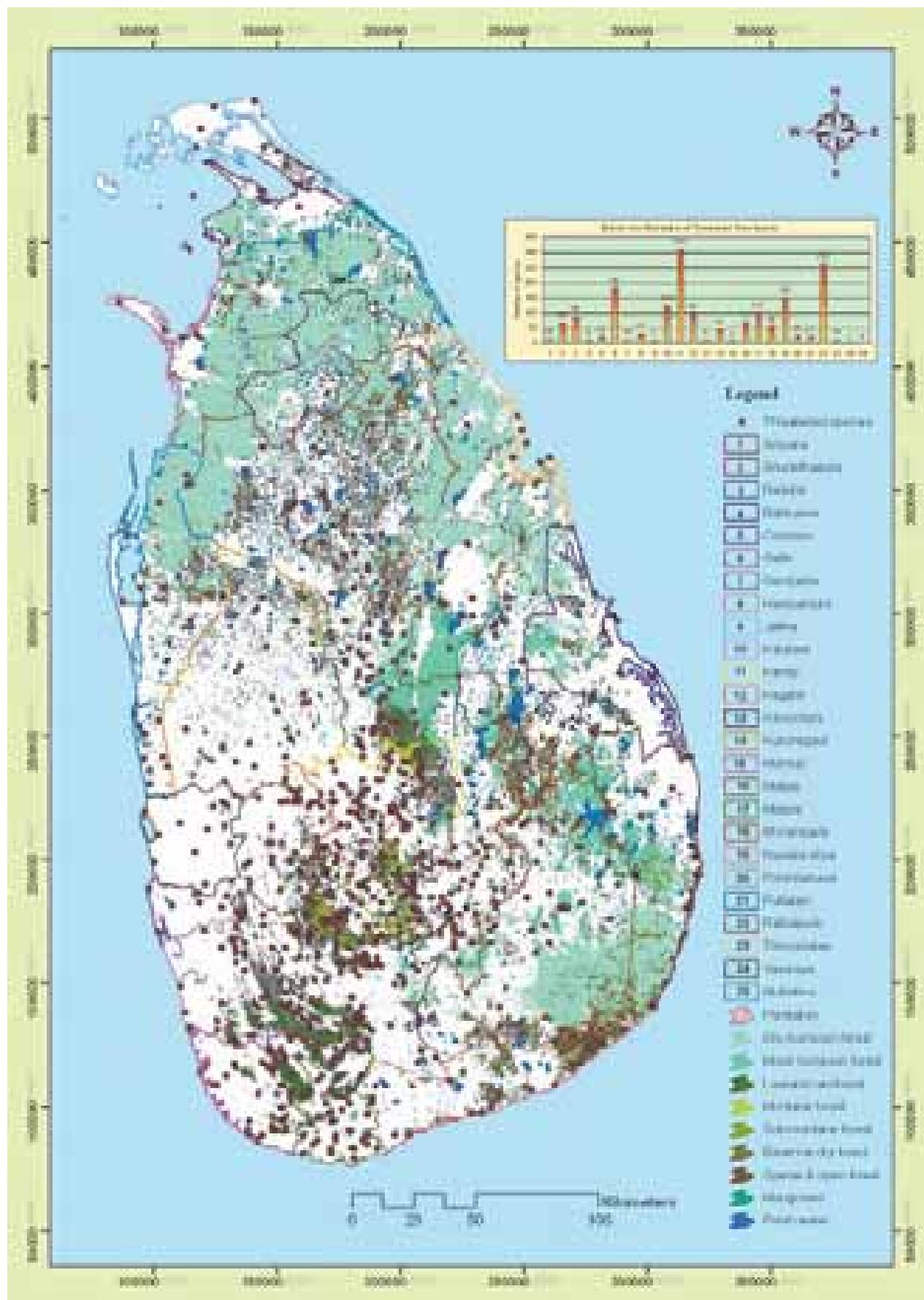


Figure 6: Distribution of threatened plant species in relation to forest cover

The status of most aquatic ecosystems in Sri Lanka has deteriorated over the last three decades, as a result of reclamation, deforestation, hydrological alterations, over extraction of fresh water, improper land use practices, mining of mineral resources, agro-chemical run-off and industrial effluents (Kotagama and Bambaradeniya, 2006).

Threatened endemic freshwater fish such as *Lepidocephalichthys jonklaasi*, *Acanthocobitis urophthalmus*, *Rasbora wilpita*, *Puntius pleurotaenia*, and *P. nigrofasciatus* prefer shaded streams with riparian forest cover (Pethiyagoda 1991; Senanayake and Moyle, 1982), and these species could be adversely affected by deforestation (Amarasinghe *et al.*, 2006). Deforestation, improper cultivation practices in upper catchment areas of drainage basins of rivers and gem mining leads to heavy siltation in streams and rivers. According to a study by Hewawasam *et al.* (2003) in the upper Mahaweli catchment, the local rates of soil loss from agricultural plots on hill slopes in Sri Lanka are as high as $7000 \text{ t-km}^{-2} \cdot \text{yr}^{-1}$, suggesting extremely high level of erosion from these lands, degrading habitats and increasing silt loads in streams and rivers. Researchers have predicted that siltation of rivers and streams could lead to population declines of threatened endemic fish such *Puntius nigrofasciatus*, *Sicyopterus halei*, *Devario pathirana*, *Malpulutta kretseri* and *Rasboroides vaterifloris* which prefer habitats with unsilted clear water (Pethiyagoda 1991; Pethiyagoda, 1994; Senanayake and Moyle, 1982). Given that a majority half of the threatened endemic freshwater crab species are restricted to the montane and sub-montane habitats, poor sloping-land management and unwise land-use change in the highlands continues to be a serious problem for their future survival (Hewawasam *et al.*, 2003). Many parathelphusids are extremely sensitive to polluted or silted waters, and will not survive when exposed to these factors (Bahir *et al.*, 2005).

A majority of the threatened freshwater fish species are concentrated in the major river basins of the wet zone (ie., Kelani, Kalu, Nilwala and Gin) (see Figure 7) and the water quality of these rivers and their tributaries are adversely affected by gem mining, sand mining, and agro-chemical residues. The lower reaches of the Kelani river basin in particular is also affected by harmful industrial effluents, and salinity intrusion, as a result of over-extraction of water for human use, and sand mining.



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Excessive use of agrochemicals leads to accumulation of chemical residues in aquatic habitats which is a serious threat to aquatic organisms

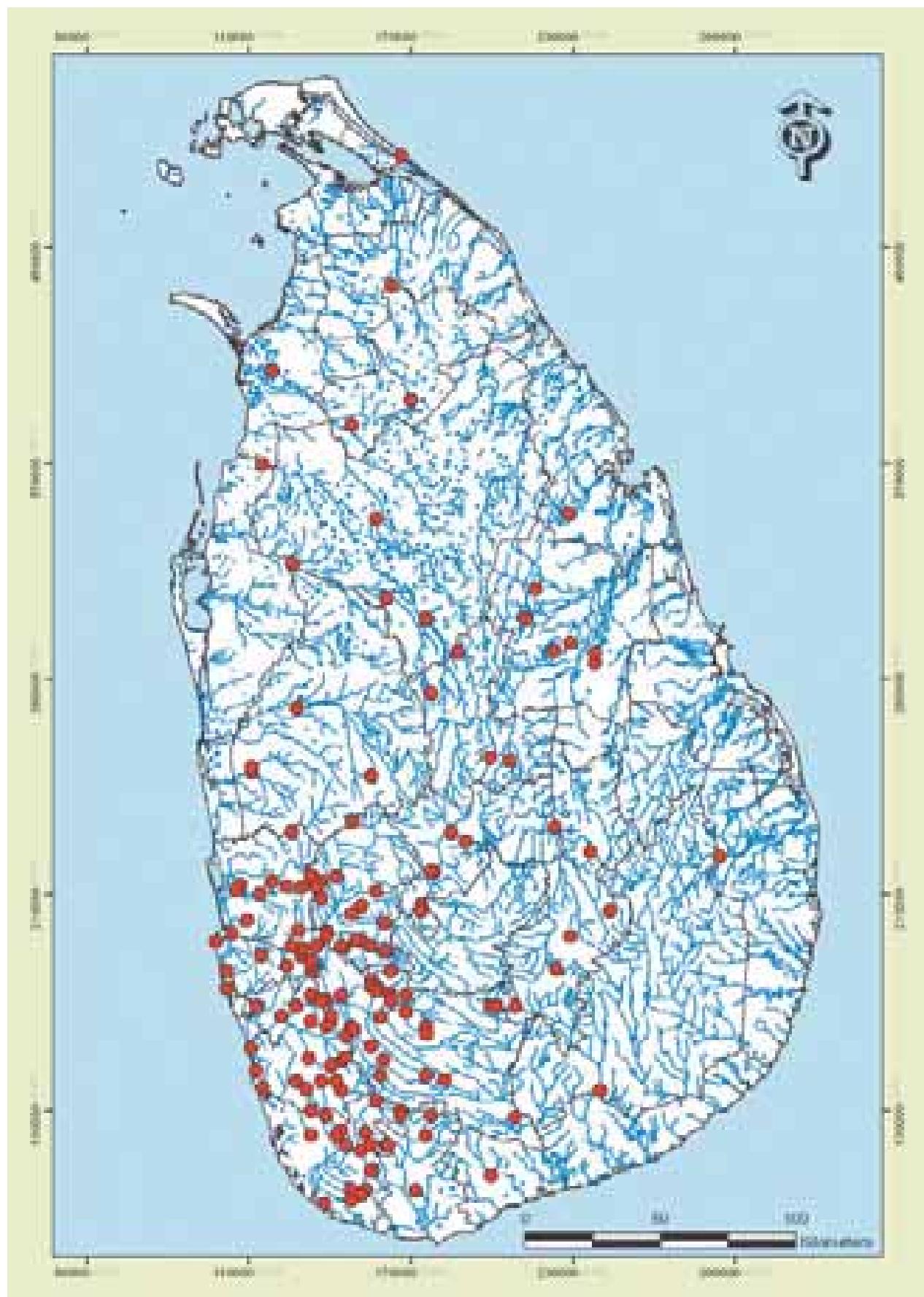


Figure 7: Distribution of threatened freshwater fish species in river basins

Uncontrolled and excessive use of agro-chemicals (pesticides, chemical fertilizers) is a serious concern given that these substances are freely and widely used in Sri Lanka. Regulation presently addresses only human safety issues, and no pesticides have been tested in Sri Lanka for toxicity to non-target organisms. Sri Lanka has the highest fertilizer consumption (101.5 kg/ha) in the South Asia region. About 100 active ingredients of pesticides have been registered in the country. The most commonly used herbicides include Propanil and MCPA, while the popular fungicides include Sulphur and Copper salts and Dithiocarbamate. Carbamates are the most widely used insecticide (Mubarak, 2000). According to Pethiyagoda (2000), more than 1.5 million kg of insecticides, 2 million kg of herbicides and 800,000 kg of fungicides are used annually in Sri Lanka. Harmful residues of agrichemicals could lead to further population declines among threatened aquatic taxa (ie., fish, ranid amphibians, crabs and dragonflies), particularly among the endemic forms which are sensitive to pollution.

Hydrological alterations (dams, diversions etc.) have also resulted in the loss and/or displacement of several endemic and threatened freshwater fish species. For instance, the breeding habitat of *P. asoka* affected by mini-hydro development (Perera, 2005), while the habitat of the Green Labeo (*Labeo fisheri*) has been displaced due to the construction of large dams across river Mahaweli (Senanayake and Moyle, 1982; Pethiyagoda, 1994). The distribution of the Blotched filamented barb (*Puntius srilankensis*), and Martenstyn's Barb (*P. martenstyni*) have been reduced by the Elahera anicut, and the ongoing major irrigation development in this region will result in further loss of habitats of these two species. The populations of the Lesser Spiny Eel (*Macrognathus aral*) and the Orange Fin Labeo (*Labeo lankae*), which were once considered as common and widely distributed (Senanayake, 1980), had declined drastically within a decade, and virtually disappeared from many of their original localities in a mysterious manner (Pethiyagoda, 1994). At present, the habitats of most threatened endemic freshwater fish are located outside protected areas. For instance, the critically endangered Bandula Barb (*Puntius bandula*) is restricted to a single locality in a stream in Galapitamada, which is surrounded by agricultural land (Gunawardena, 1998).

Reclamation of lowland marshes and swamps especially in the Western Province has led to local extinction and drastic reduction of the populations of two species of blind eels (*Monopterus desilvai* and *Ophisternon bengalense*). These species were once known to be common and widely distributed in lowland marshes in the western part of Sri Lanka (Deraniyagala, 1952). Among the threatened mammals, the Fishing Cat (*Prionailurus viverrinus*) and the Otter (*Lutra lutra*) have also been subjected to local extinctions, due to loss of lowland marshes. The latter two species of threatened mammals are also subjected to frequent road accidents, due to access roads built across marshes and paddy fields.

Poaching and over-exploitation of species

Several species of threatened animals in Sri Lanka are subjected to poaching. A two year field research conducted by Kittle and Watson (2002) has enabled to document 26 skins of the threatened Leopard (*Panthera pardus kotiya*) near National Parks. This top carnivore in Sri Lanka is also affected by wire snares purportedly set for wild boar and deer; poisoning of cattle carcasses on which they feed; shooting and spearing (Jayewardene, 2002; Kittle & Watson, 2002).

The threatened wild Elephant (*Elephas maximus*) in Sri Lanka is on the verge of becoming locally extinct from the wet zone of the island. According to recent records of the Department of Wildlife Conservation, a death of a wild elephant is reported every two days, mostly as a result of gunshot injuries.

The threatened endemic fish species such as *Rasboroides vaterifloris*, *Puntius titteya*, *Puntius nigrofasciatus*, *P. cumingii*, *Acanthocobitis urophthalmus*, *Aplocheilus werneri* and *Schismatogobius deraniyagali* are over-exploited from wild habitats for the export ornamental fish trade. The collectors mainly target the most colourful varieties of the above species, resulting in local extinction of their populations from several habitats (Gunasekara, 1996).

All species of threatened endemic aquatic plants (ie., *Cryptocoryne* spp., *Lagenandra* spp.) have been adversely affected as a result of over-exploitation from wild habitats for export ornamental trade, and most of these species have disappeared from several localities where they used to be common earlier.

Threatened edible and/or medicinal plants such as *Brachistelma lankana* ("Pathan ala") have declined in abundance due to over-exploitation (Ekanayake, 1994). The populations of several other threatened plant species are adversely affected by over-exploitation. For instance, a study by Ekanayake *et al.* (2005) in Kanneliya forest revealed that frequency of occurrence of plants under exploitation pressure, such as *Coscinium fenestratum* ("Weniwelgeta"), *Dipterocarpus glandulosus* ("Dorana") and *Enicosanthum accuminata* ("Wal waraka"), was low in sites located in the buffer zone of the forest which is frequently exploited by local communities, in comparison to interior undisturbed areas. The sustainability of the populations of these species was also affected by detrimental methods of exploitation.

Spread of invasive alien species

The introduction and spread of invasive alien species (IAS) is a growing concern in Sri Lanka, with several species of exotic fauna and flora having established well in wild habitats, and threatening native biodiversity (Bambaradeniya, 2002).

The alien invasive Clown Knife Fish (*Chitala ornata*) was introduced to Sri Lanka as an ornamental aquarium fish, and soon escaped into wild habitats. Today, this voracious carnivore has established breeding populations in streams and reservoirs in the wet zone, which harbour several species of threatened endemic freshwater fish. It has been reported that the populations of many species of endemic fish have been reduced subsequent to the introduction and spread of *C. ornata* (Gunawardane, 2002).

The spread of invasive alien plants such as *Annona glabra*, *Dillenia suffruticosa* and *Eichhornia crassipes* has resulted in further degradation of the remaining marshy habitats of the threatened blind eels (*Monopterus desilvai* and *Ophisternon bengalense*) in the western part of Sri Lanka.

In most instances, invasive alien function as superior competitors for resources. For instance, Wijesinghe (2001) had recorded negative abundance relationships between endemic (ie., *Srilankamys ohiensis*) and non-endemic (ie., *Rattus rattus*) rat species in study sites within Sinharaja rainforest suggesting that these species are competing.

Large herds of feral domestic buffalo

(*Bubalus bubalis*) are widespread in many protected areas in Sri Lanka (Bambaradeniya, 2002), where it has hybridized with the threatened wild water buffalo (*Bubalus arnee*), resulting in the local extinction of genetically pure populations of the latter species in locations such as the Wilpattu National Park (Deraniyagala, 1964).



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Dillenia suffruticosa - an invasive alien plant spreading in the lowland wetzone

Other imminent threats

Although a few researches have been conducted on potential impacts of global climate change on forest distribution in Sri Lanka (Somaratne and Dhanapala, 1996), there is no knowledge on the effect of climate change on inland species. However, as experienced in other parts of the world, local climate change and acidification of rainwater could pose a major threat to the survival of threatened endemic herpetofauna and land snails, which have a restricted distribution. Meegaskumbura *et al.* (2007) suspect that recent climatic changes may have stressed the endemic shrub-frog populations in the island, leading to the extinction of some species. A pioneering study on reproduction and development in Sri Lankan shrub frogs (Bahir *et al.*, 2005) clearly highlights the critical humidity dependence of *Philautus* eggs, making them extremely vulnerable to global warming. Forest die-back in the montane region, perhaps a result of air pollution and acid rain, is a potential threat to many species of threatened endemic shrub frogs, reptiles and land snails which are restricted to this region.

REFERENCES

- Amarasinghe, U.S., Shirantha, R.R. and Wijeyaratne, M.J.S. 2006. Some aspects of ecology of endemic freshwater fishes of Sri Lanka. In: Bambaradeniya, C.N.B. (ed.), *Fauna of Sri Lanka: Status of Taxonomy, Research and Conservation*. The World Conservation Union, Colombo, Sri Lanka, and Government of Sri Lanka. 113-124.
- Bahir, M.M., Ng, P.K.L., Crandall, K. and Pethiyagoda, R. 2005. A conservation assessment of the freshwater crabs of Sri Lanka. In: Yeo, D. C. J., Ng, P. K. L. and Pethiyagoda, R. (eds), Contributions to Biodiversity Exploration and Research in Sri Lanka. *The Raffles Bulletin of Zoology*, Supplement No. 12: 121–126.
- Bahir, M.M., Meegaskumbura, M., Manamendra-Ararachchi, K., Schneider, C.J., and Pethiyagoda, R. 2005. Reproduction and terrestrial direct development in Sri Lankan shrub frogs (Ranidae: Rhacophorinae: *Philautus*). In: Yeo, D. C. J., Ng, P. K. L. and Pethiyagoda, R. (eds), Contributions to Biodiversity Exploration and Research in Sri Lanka. *The Raffles Bulletin of Zoology*, Supplement No. 12:339-350.
- Bambaradeniya, C.N.B. 2002. The status and implications of invasive alien species in Sri Lanka. *Zoos' Print Journal* 17 (11): 930-935.
- Department of Census and Statistics www.statistics.gov.lk/population/index
- Deraniyagala, P.E.P. 1952. A coloured Atlas of Some Vertebrates of Ceylon. Vol. 1, Ceylon Government Press, Colombo, 149pp.
- Deraniyagala, P.E.P. 1964. Some aspects of the fauna of Ceylon. *Journal of the Royal Asiatic Society* 9(2): 164-219.
- Ekanayake, S.P. 1994. *A phytosociological study of semi-evergreen forests of Knuckles and Udawalawe, Sri Lanka*. M.Phil thesis, University of Peradeniya.
- Ekanayake, S. P., Angammanna, D., Fernando, S., Samarawickrama, P., Perera, N. and Perera, S. 2005. Sustainable of Extraction of Non Timber Forest Products (NTFP) in Dipterocarp Dominant Lowland Rain Forests – A Case Study in South Western Lowland Rain Forest in Sri Lanka. *Proceedings of the APAFRI - 8th Round-Table Conference on Dipterocarps*, 15–17 November 2005, Ho Chi Minh City, Vietnam.
- Gunasekara, S. 1996. A cross section of the exports of endemic freshwater fishes of Sri Lanka. *Loris*, Journal of the Wildlife and Nature Protection Society of Sri Lanka. 21(2), 64-69.
- Gunatilleke, I.A.U.N., Gunatilleke, C.V.S., and Dilhaan, M.A.A.B. 2005. Plant biogeography and conservation of the south-western hill forests of Sri Lanka. In: Yeo, D. C. J., Ng, P. K. L. and Pethiyagoda, R. (eds), Contributions to Biodiversity Exploration and Research in Sri Lanka. *The Raffles Bulletin of Zoology*, Supplement No. 12: 9-22.
- Gunawardena, J. 1998. *Puntius bandula*. *Loris*, Journal of the Wildlife and Nature Protection Society of Sri Lanka. 21(5): 191-194.

- Gunawardane, J. 2002 Occurrence of *Chitala chitala* (Syn. *Notopterus chitala*) in native freshwater habitats. *Sri Lanka Naturalist* 5(1): 6-7.
- Hewawasam, T., von Blanckenburg, F., Schaller, M. and Kubik, P. 2003. Increase of human over natural erosion rates in tropical highlands constrained by cosmogenic nuclides. *Geology* 31: 597–600.
- Kittle, A. M. and Watson A. 2002. Leopard poaching in Sri Lanka. *Loris*, Journal of the Wildlife and Nature Protection Society of Sri Lanka. 23(1&2): 42-49.
- Kotagama, S.W. and Bambaradeniya, C.N.B. 2006. An overview of the wetlands of Sri Lanka and their conservation significance. In: IUCN Sri Lanka and the Central Environmental Authority (2006) National Wetland Directory of Sri Lanka, Colombo, Sri Lanka.
- Manamendra-Arachchi, K. And Pethiyagoda, R. 2005. The Sri Lankan shrub-frogs of the genus *Philautus* Gistel, 1848 (Ranidae: Rhacophorinae), with description of 27 new species. In: Yeo, D. C. J., Ng, P. K. L. and Pethiyagoda, R. (eds), Contributions to Biodiversity Exploration and Research in Sri Lanka. *The Raffles Bulletin of Zoology*, Supplement No. 12: 163–303.
- Meegaskumbura, M., Manamendra-Arachchi, K., Schneider, C.J and Pethiyagoda, R. 2007. New species amongst Sri Lanka's extinct shrub frogs (Amphibia: Rhacophoridae: *Philautus*). *Zootaxa* 1397: 1-15.
- Millenium Ecosystem Assessment 2005. *Ecosystems and Human Well-being: Biodiversity Synthesis*. World Resources Institute, Washington, DC.
- Ministry of Environment and Natural Resources – MOENR 2003. *Caring for the Environment 2003-2007 – Path to Sustainable Development*. Ministry of Environment and Natural Resources, Colombo. 152pp.
- Mubarak, A. 2000. Water pollution. In: Arulpragasam, K.D. (ed.) *Natural resources of Sri Lanka*, National Science Foundation, pp 213-248.
- Perera R.N. 2005 *Estimate of the present population and ecological parameters of Puntius asoka in Sitawake river*. B. Sc. Dissertation, Department of Zoology, Open University of Sri Lanka. Unpublished report. 39pp.
- Pethiyagoda, R. 1991. *Freshwater fishes of Sri Lanka*. Wildlife Heritage Trust, Colombo, Sri Lanka. 362pp.
- Pethiyagoda, R. 1994. Threats to the indigenous freshwater fishes of Sri Lanka and remarks on their conservation. *Hydrobiologia* 285: 189–201.
- Pethiyagoda, R. 2000. Fishes in trouble - the decline and fall of Sri Lanka's freshwater fish fauna. *Loris*, Journal of the Wildlife and Nature Protection Society of Sri Lanka. 22 (2), 56-64.
- Senanayake, F.R. 1980. *The biogeography and ecology of the inland fishes of Sri Lanka*. Unpublished Ph.D. dissertation, Department of Wildlife and Fisheries Biology, University of California, Davis.
- Senanayake, F.R. and Moyle, P.B. 1982. Conservation of freshwater fishes of Sri Lanka. *Biological Conservation* 22: 181-195.
- Somaratne, S. and Dhanapala, A.H. 1996. Potential impacts of global climate change on forest distribution in Sri Lanka. *Water, Air, and Soil Pollution* 92: 129–135.
- Wijesinghe, M. R. 2001. *Habitat selection of endemic and non-endemic vertebrates in Sinharaja, a rainforest in Sri Lanka*. Unpublished Ph.D. Thesis. Cambridge University, U.K.
- Wijesinghe, M. R. 2006. Ecological Traits of Endemic Small Mammals in Rainforests of Sri Lanka, and Their Implications for Conservation. In: Bambaradeniya, C.N.B. (ed.), *Fauna of Sri Lanka: Status of Taxonomy, Research and Conservation*. The World Conservation Union, Colombo, Sri Lanka, and Government of Sri Lanka. 232-234.
- Wijesinghe, L. 2000. Forest resources. In: K. D. Arudpragasam (ed.) in *Natural Resources of Sri Lanka 2000*, National Science Foundation, Colombo. pp 153-165.

POTENTIAL APPLICATIONS OF THE NATIONAL RED LIST AND THE WAY FORWARD

A national red list provides the conservation status of the assessed species in a given country at that particular time. Identifying species at risk is only the first step in species conservation.

A red list

- Provides baseline information necessary for the preparation of species profiles of threatened species, a basis for prioritising conservation efforts and information necessary for the preparation and implementation of recovery plans;
- Indicates information gaps regarding specific taxa and geographic areas;
- Provides a scientific base for the development of a country's research agenda on biodiversity;
- Allows for objective prioritisation of funding for conservation-oriented research;
- Indicates priority areas for the conservation of species;
- Provides a scientific basis for the formulation and revision of legislation related to biodiversity conservation;
- Provides a scientific framework for new policies and regulations related to biodiversity conservation;
- Provides information for the creation of awareness and conservation education among different stakeholders;
- Provides a sound decision-making platform for regional and local administration bodies (i.e., at provincial and town level planning) for formulation of local development plans; and
- Provides a framework from which monitor the spatial and temporal changes in biodiversity can be monitored and trends objectively assessed.

The aim of this chapter is to propose a set of actions that are needed along with detailed action plans in order to achieve effective biodiversity conservation in Sri Lanka. The following actions are proposed to ensure the future sustenance of the redlisting process, and facilitate its use towards the conservation of threatened species in Sri Lanka. Some of the proposed activities would also facilitate the conservation of threatened species in Sri Lanka.

1. Establishing a sustainable mechanism for future redlisting:

All species are subjected to dynamic changes driven by both extrinsic and intrinsic factors. Therefore the conservation status of a species changes with time. Therefore it is essential that the assessment of the conservation status of species is a continuing process. Even though redlisting of Sri Lankan biodiversity has been carried out at least four times over the past two decades, there has been a lack of continuity between each of these events. Thus, a sustainable mechanism that allows for constant monitoring and regular updating of the conservation status of species is urgently needed to ensure continuity and consistency of the redlisting process. Further, it must be ensured that redlisting process is based on objective and careful scientific evaluation of all available data on species. Finally, the responsibility of the redlisting process should lie with a government institute to ensure transparency and reliability of the final outcome. Therefore, the following set of actions is proposed to ensure that all these concerns are addressed adequately.

A. Establishment of a Species Conservation Unit (SCU)

The Ministry of Environment and Natural Resources is (MOE) should be the focal point for the redlisting process in Sri Lanka. Within the MOENR, the responsibility of dealing with issues related to threatened species should be vested upon the Biodiversity Secretariat (BDS) which is the most suitable agency to handle such matters. As this would entail a great deal of work, it is essential that a dedicated Species Conservation Unit (SCU) be established within the BDS to coordinate all activities related to conservation of threatened species. The responsibilities of this unit should include constant monitoring and collection of all research publications related to fauna and flora of Sri Lanka, expanding, constant updating, management and administration of the species database, coordinating species recovery actions and periodic updating of the national and global lists of threatened species in collaboration with National Expert groups on different taxonomic groups appointed by the Biodiversity Secretariat. The personnel to be hired for this unit should include a database administrator, a GIS expert, technical support staff and an overall coordinator. These staff should be given a comprehensive training in order to develop their capacity to perform efficiently the duties listed above.

Area of focus	Responsible Institution/s	Technical support	Time Frame
Prepare TOR of SCU	MOENR - BDS	NASCAG, NEC-BD	June 2007
Establish infra-structure	MOENR - BDS		December 2008
Hire personnel	MOENR - BDS		December 2008
Source funding to sustain the SCU	MOENR - BDS		December 2008
Develop capacity of staff	MOENR - BDS		December 2011

NASCAG: National Species Conservation Advisory Group, NEC-BD: National Experts Committee on Biodiversity

B. Maintenance of the species database and regular updating of national red lists

Evaluation of the conservation status of species is based on an objective process that requires great deal of information on species. In order to facilitate collection and analysis of such data, a National Species Database (NSD) has been established in the BDS. However, this database at present contains information on only a select group of taxa. Therefore, the database has to be expanded in order to accommodate as many species as possible. Further, the information on available species has to be updated as new information becomes. Thus, the NSD should be maintained and updated on a regular basis, by the SCU, with inputs from individual researchers and other institutions. In order to ensure wider use of NSD, it should be made available to researchers and students through the Internet. However, this should be made possible only after ensuring data safety and integrity as well as a detailed set of guidelines for users. Researchers should be encouraged to use the database for non-commercial purposes, analyse it to identify trends and also contribute to update it with their research findings. Such a process could be facilitated through a formal agreement between the Ministry of Environment and Natural Resources and the individual researcher and/or research institute. A MOU should be developed to facilitate such information exchange. Further an incentive/ a rewarding mechanism should be established to encourage individual researchers to deposit publications (research papers, articles, books, monographs, thesis etc.) in the SCU library. As a part of this exercise, a virtual library containing all published information on Sri Lankan biodiversity should be established in the BDS. As a part of their terms of reference, the SCU should prepare quarterly catalogues on new research outputs related to biodiversity, and forward it to researchers. Further, the national red list should be updated annually based on new data that becomes available on species. The NSD should be integrated with other relevant databases (ie., the national wetland database) after formulation of necessary guidelines for data sharing.

Area of focus	Responsible Institution/s	Technical support	Time Frame
Expansion of the database to include taxa that are not currently available	BDS (SCU)	IUCN, NASCAG, Individual researchers	Ongoing process
Collection of new information on taxa that are already listed in the database	BDS (SCU)	IUCN, NASCAG, Individual researchers	Ongoing process
Evaluation or reevaluation of species based on new information	BDS (SCU)	IUCN, NASCAG, Individual researchers	Ongoing process
Updating and publication of the	BDS (SCU)	IUCN, NASCAG National redlist	January 2008 and annually thereafter
Propose revisions to the IUCN global redlist	SCU	IUCN, researchers	January 2008 and annually thereafter
Ensure data safety and integrity	BDS (SCU)	NEC-BD	
Prepare guidelines to use the database	BDS (SCU)	NASCAG, NEC-BD	June 2007
Host the database in the Worldwide Web	BDS (SCU)	IUCN	December 2007
Establish a network of researchers that can contribute to the redlist	BDS (SCU)	NASCAG	December 2007
Publish a quarterly catalogue on research outputs related to Biodiversity of Sri Lanka	SCU, NSF	NASCAG	December 2007 and annually thereafter
Establish a virtual library on Sri Lankan Biodiversity at the Biodiversity Secretariat	BDS (SCU)	NASCAG, IUCN	Ongoing process
Formulate guidelines for sharing and integrating the NSD with other relevant databases	BDS (SCU)	NASCAG	June 2007
Integrate NSD with other relevant databases	BDS (SCU)	NASCAG	December 2007

2. Linking the red list with ongoing cross-sectoral initiatives

Although three National red lists were published during the last two decades, these lists have not been adequately integrated to National Policy nor have they been included into other ongoing national conservation actions. Because of this, previous red lists have failed to make a significant impact on overall conservation of species in Sri Lanka. This may be because there was a lack of awareness among relevant line agencies about the different purposes, significance and relevance of the National Red list and the need to integrate it into their planning processes. It could also be a result of lack of ownership of the red list as being a truly national tool for conservation. Therefore, as a follow on action it is essential that awareness is created among relevant line agencies in order to develop a framework in each of the line agencies so that they integrate the results of the red list into their ongoing activities. Some of the key conservation-related activities that should be considered and the corresponding line agencies are listed below. It is proposed that a two day residential workshop be held with the participation of at least one high-ranking representative from each of these line agencies with the specific aim of drafting a document including the activities to be undertaken by each of the line agencies to implement various facets of the red list and to develop mechanisms through which these outcomes are achieved. This activity should be completed by July 2007.

Area of focus	Responsible Institution/s
Protected area gap analysis	MOENR, DWC, and FD
Habitat mapping and biodiversity baseline surveys in selected protected areas of DWC	DWC
National Species Conservation Strategy	MOENR, IUCN
Protected area management plan preparation	DWC, FD, CEA
Revision of fauna and flora protection ordinance	DWC
Revision of other conservation-related legislation	DWC, FD, CCD, DF., DC, CEA, ID etc.
Regulation of species subjected to export trade	DWC, FD, DC, DF
Conservation of crop wild relatives	DA
Funding and conducting biodiversity related research	NSF, Universities, Research Institutes Non Governmental Organizations
Conservation of medicinal species	Ministry of indigenous medicine
<i>Ex situ</i> conservation of species	DBG, DZG, etc.,
National policy and planning	Department of physical planning

MOE: Ministry of Environment, DWC: Department of Wildlife Conservation, FD: Forest Department, CEA: Central Environmental Authority, CCD: Coast Conservation Department, DC: Department of Customs, DF: Department of Fisheries, ID: Irrigation Department, DA: Department of Agriculture, NSF: National Science Foundation, DBG: Department of National Botanical Gardens, DZG: Department of Zoological Gardens

3. Prepare local level biodiversity profiles

The NSD contains a wealth of information that can be used to prepare regional biodiversity profiles to assist decision-making at a regional level. However, awareness about the red list and its implications to local developmental planning should also be created among local government bodies. A series of district level workshops should be held with the participation of representatives from local government bodies with the aim of formulating a set of local level actions to implement various facets of the red list results. The Biodiversity Secretariat (BDS) of the Ministry of Environment and Natural Resources (MOENR) should organise these workshops, between the period of June to December 2007.

4. Implement programmes to recover populations of threatened species

The primary aim of assessing the conservation status of species to identify conservation actions needed to protect these species so that natural populations can recover to a point where they can be down-listed or de-listed after a period of time. However, a simple comparison of the red lists published to date indicates that the status of most threatened species has remained unchanged or has worsened with time and this is therefore a very serious issue. This may be because necessary conservation measures have not been taken despite red list data. Therefore, it is proposed that the proposed species conservation strategy be completed as an essential and immediate follow-up action of the red list. As a part of the species conservation strategy, a set of single or multi species recovery plans should be identified and developed, and a mechanism should be devised to implement these plans, in order that as many of the species that are listed are recovered.

Area of focus (links)	Responsible Institution/s	Technical support	Time Frame
Complete the species conservation strategy	BDS (NSCAG) IUCN	BDS, selected stakeholders	June 2007
Identify a set of single and multi species recovery plans	BDS (NASCAG)	Selected stakeholders	June 2007
Prepare recovery plans the BDS	Teams identified by	BDS (NASCAG)	December 2007
Seek funds for the implementation of recovery plans	MOENR-BDS, NSF, Other sources of funding	BDS (NASCAG)	June 2008
Implement recovery plans	Relevant line agencies	Teams involved in preparation of recovery plans	June 2008

5. Initiatives to conserve point endemics occurring outside PA's

According to the NSD, a number of endemic species in Sri Lanka have highly restricted distribution patterns, where they are known to exist only in one or a few locations. The NSD also reveals that many such point endemics exist outside the protected area network. Therefore, these species are at a high risk of extinction if appropriate conservation measures are not taken. In many of these cases simply integrating these locations into the existing protected area network may not be possible. Therefore, it will be desirable to develop other conservation models - such as community-based conservation actions where local communities and civil society can play a major role in conserving these species. The NSD provides a platform to identify such point endemics. Therefore, it is proposed that such point endemics who need immediate conservation action should be identified and management plans prepared for their conservation.

Area of focus (links)	Responsible Institution/s	Technical support	Time Frame
Identify point endemics that occur outside the PA network	MOENR-BDS	NASCAG, IUCN	June 2007
Prepare management plans to conserve these point endemics	DWC, FD	NASCAG, IUCN	December 2007
Implementation of these management plans	DWC, FD, NGO's	NASCAG, IUCN	January 2008

6. Develop a research agenda for threatened species and initiate island-wide surveys on biodiversity

One of the major constraints during the redlisting process was lack of data - except for their distribution - on most of the evaluated taxa. Basic biological and ecological data are not available from most species. Even baseline data – particularly for invertebrates – is not available for several key ecosystems in Sri Lanka. National expertise for many invertebrate and lower plant groups may be scarce. Therefore, it is essential that a research agenda is developed to fill these gaps, including capacity building in areas where expertise is lacking or weak.

Another constraint was that temporal changes could not be assessed for most species as data had not been gathered using standard procedures. The following set of activities is proposed to overcome these limitations.

Area of focus	Responsible Institution/s	Technical support	Time Frame
Develop a research agenda for biodiversity -related work	National Science Foundation	NASCAG	June 2007
Award research contracts to implement the research agenda	NSF, DW, FD	NASCAG	June 2007
Develop guidelines for a standard, methodological approach for conducting biodiversity-related research	NSF, MOENR-BDS	NASCAG	June 2007
Conduct a series of workshops to create awareness about research gaps as well as use of standard methods for data collection	NSF, MOENR-BDS	NASCAG	June 2007
Conduct a series of workshops to develop capacity for research on lower taxa	MOENR-BDS and National Science Foundation	NASCAG	December 2007
Initiate baseline biodiversity surveys in selected sites	NSF, DW, FD	NASCAG	January 2008

7. Assess status of infra-species variations for useful species

Even though the species is considered as the unit of conservation, there are number of taxa that show much infra species variation. In such cases, it may be prudent to plan conservation action at an infra species level in order to ensure conservation of genetic diversity. Therefore, an attempt should be made to document the diversity below the species level, especially for agro-biodiversity, given that that several indigenous crops and livestock varieties and their wild relatives have lost their genetic variability in the recent past.

Area of focus	Responsible Institution/s	Technical support	Time Frame
Prepare checklists of crop varieties and their wild relatives	Department of Agriculture	Crop Wild Relatives Project	June 2007
Prepare checklists of livestock varieties and their wild relatives	Department of Livestock	Indigenous Livestock Project	June 2007
Identify indigenous species that show appreciable infra species variability	MOENR-BDS	Individual experts on such taxa	December 2007
Identify a set of actions needed to conserve such infra species variation	MOENR-BDS	Individual experts on such taxa	December 2007

These actions are necessary to ensure long term conservation of Sri Lanka's biodiversity. The SCU based at the biodiversity secretariat will act as the coordinating body to initiate these actions. However, as can be seen, successful completion of these tasks will require great deal of inter-agency cooperation without which conservation of the biodiversity of Sri Lanka will indubitably fail.

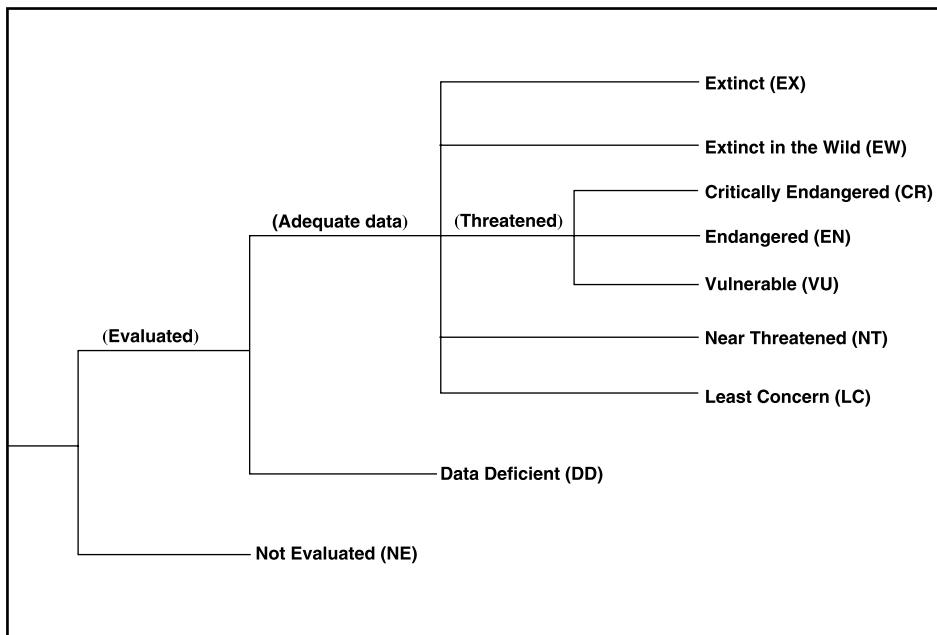
The future of the species diversity of Sri Lanka lies in gathering solid scientific baseline data, analysing these data using the best possible methods, identifying gaps and priorities based on these scientific foundations and developing conservation action plans from the information gathered. It is essential that these efforts are buttressed by conservation education that creates awareness not only about the threats facing species and their current status, but also about the role each stakeholder can play in the conservation of Sri Lanka's flora and fauna. It is only when such a holistic and scientifically-based effort is made that engages and involves all stakeholders that conservation will move from being rhetoric to effective action. In such an effort, redlisting is pivotal as a scientific tool that facilitates conservation.

UNDERSTANDING THE IUCN RED LIST CATEGORIES, CONCEPTS AND DEFINITIONS

(source: www.redlist.org)

Taxa are listed in the IUCN Red List under categories that indicate the varying degrees of their probability of extinction. There are **nine** clearly-defined IUCN categories under which every species (or lower taxonomic unit) in the world can be classified (figure 1.1).

Figure 1.1. The IUCN Red List Categories



NOTE: Technical definitions of the IUCN Red List Categories and Criteria are given in the *IUCN Red List Categories and Criteria: Version 3.1* booklet and the *Guidelines for using the IUCN Red List Categories and Criteria*.

Extinct (EX)

A taxon is Extinct when there is no reasonable doubt that the last individual has died. A taxon is presumed Extinct 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.

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 naturalized 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.

Critically Endangered (CR)

A taxon is Critically Endangered when the best available evidence indicates that it meets any of the criteria A to E for Critically Endangered, and is therefore considered to be facing an extremely high risk of extinction in the wild.

Endangered (EN)

A taxon is Endangered when the best available evidence indicates that it meets any of the criteria A to E for Endangered, and is therefore considered to be facing a very high risk of extinction in the wild.

Vulnerable (VU)

A taxon is Vulnerable when the best available evidence indicates that it meets any of the criteria A to E for Vulnerable, and is therefore considered to be facing a high risk of extinction in the wild.

Near Threatened (NT)

A taxon is Near Threatened when it has been evaluated against the criteria but does not qualify for Critically Endangered, Endangered or Vulnerable now, but is very close to qualifying for or is likely to qualify for a threatened category in the near future.

Least Concern (LC)

A taxon is Least Concern when it has been evaluated against the criteria and does not qualify for Critically Endangered, Endangered, Vulnerable or Near Threatened. Widespread and abundant taxa are included in this category.

Data Deficient (DD)

A taxon is Data Deficient when there is inadequate information to make a direct, or indirect, assessment of its risk of extinction based on its distribution or population status. A taxon in this category may be well studied, and its biology well known, but appropriate data on abundance and/or distribution are lacking. DD is therefore not a category of threat. Listing of taxa in this category is **only** justified after ensuring that maximum use has been made of the available data.

Not Evaluated (NE)

A taxon is Not Evaluated when it has not yet been evaluated against the criteria.

ANNEX 2

**SUMMARY OF THE FIVE CRITERIA (A-E) USED TO EVALUATE IF A SPECIES BELONGS IN A
CATEGORY OF THREAT
(CRITICALLY ENDANGERED, ENDANGERED OR VULNERABLE)**

(source: www.redlist.org)

Use any of the criteria A-B	Critically Endangered	Endangered	Vulnerable
A. Population reduction	Declines measured over the longer of 10 years or 3 generations		
A1	$\geq 90\%$	$\geq 70\%$	$\geq 50\%$
A2, A3 & A4	$\geq 80\%$	$\geq 50\%$	$\geq 30\%$
AI. Population reduction observed, estimated, inferred, or suspected in the past where the causes of the reduction are clearly reversible AND understood AND have ceased, based on and specifying any of the following:			
	(a) direct observation		
	(b) an index of abundance appropriate to the taxon		
	(c) a decline in AOO, EOO and/or habitat quality		
	(d) actual or potential levels of exploitation		
	(e) effects of introduced taxa, hybridisation, pathogens, pollutants, competitors or parasites.		
A2. Population reduction observed, estimated, inferred, or suspected in the past where the causes of reduction may not have ceased OR may not be understood OR may not be reversible, based on (a) to (e) under AI			
A3. Population reduction projected or suspected to be met in the future (up to a maximum of 100 years) based on (b) to (e) under AI.			
A4. An observed, estimated, inferred, projected or suspected population reduction (up to a maximum of 100 years) where the time period must include both the past and the future, and where the causes of reduction may not have ceased OR may not be understood OR may not be reversible, based on (a) to (e) under AI.			
B. Geographic range in the form of either B1 (extent or occurrence) AND/OR B2 (area or occupancy)			
B1. Extent of occurrence	$< 100 \text{ km}^2$	$< 5,000 \text{ km}^2$	$< 20,000 \text{ km}^2$
B2. Area of occupancy	$< 10 \text{ km}^2$	$< 500 \text{ km}^2$	$< 2,000 \text{ km}^2$
AND at least 2 of the following:			
(a) Severely fragmented or # locations	$= 1$	≤ 5	≤ 10
(b) Continuing decline in any of: (i) extent of occurrence; (ii) area of occupancy; (iii) area, extent and/or quality of habitat; (iv) number of locations or subpopulations; (v) number of mature individuals			
(c) Extreme fluctuations in any of: (i) extent of occurrence; (ii) area of occupancy; (iii) number of locations or subpopulations; (iv) number of mature individuals			

C. Small population size and decline

Number of mature individuals < 250 < 2,500 < 10,000

AND either C1 or C2:

C1. An estimated continuing decline of at least:
(up to a maximum of 100 years) 25% in 3 years or
1 generation 20% in 5 years or
2 generations 10% in 10 years or
3 generations

C2. A continuing decline **AND** (a) and/or (b):

a (i) # mature individuals in each subpopulation: < 50 < 250 < 1,000

a (ii) or % individuals in one sub-population at least 90% 95% 100%

(b) extreme fluctuations in the number of mature individuals

D. Very small or restricted population**Either:**

(1) number of mature individuals ≤ 50 ≤ 250 ≤ 1,000

AND/OR

(2) restricted area of occupancy na na AOO < 20 km² or
locations ≤ 5

E. Quantitative Analysis

Indicating the probability of extinction in the wild to be: ≥ 50% in 10 years or
3 generations (100 years max) ≥ 20% in 20 years or
5 generations (100 years max) ≥ 10% in 100 years

ANNEX 3

DATA SOURCES

(A) Published papers and articles

- Abeyaratne, B.L. 1993. The Large Ceylon Grey Flying squirrel *Petaurista philippensis lanka*. *Loris*, Journal of the Wildlife and Nature Protection Society of Sri Lanka. 20(1): 23-24.
- Abeyratne, B.L. 1990. Letter to the editor. *Loris*, Journal of the Wildlife and Nature Protection Society of Sri Lanka. 19(2):80.
- Adamicka, P. 1983. Contributions to the functional anatomy of the feeding apparatus of five Cyprinids of Parakrama samudra (Sri Lanka). *Development in Hydrobiology, Limnology of Parakrama Samudra, Sri Lanka*. W. Junk Publishers, the Hague, 12: 171-175.
- Ahamad, R., Dharmaretnam, M. and de Silva, A. 2004. Snakes from Batticalao District: deposited in the Zoology Museum, Eastern University, Sri Lanka. *Lyriocephalus Special Issue 5(1&2)*: 130-134.
- Amarasinghe, U.S. 1985. Studies on the exploitation of minor cyprinids in Parakrama Samudra, a man-made lake in Sri Lanka, using gillnets. *Journal of National Aquatic Research Agency of Sri Lanka* 32: 11-23.
- Amarasinghe, U.S. and Pushpalatha, K.B.C. 1997. Gillnet selectivity of *Ompok bimaculatus* (Siluridae) and *Puntius dorsalis* (Cyprinidae) in a small-scale Riverine fishery. *Journal of National Science Council of Sri Lanka* 25(3): 169-184.
- Amaratunga, K.L.D. 1973. *Spermacoce latifolia* Alblen, a new record for Sri Lanka. *The Ceylon Journal of Science* 10(2): 155-157.
- Amudesh, P. (ed.). 2002. Sinharaja. *Malkoha*, Field Ornithology Group of Sri Lanka. 24(2): 5.
- Anon 1999. The pygmy shrew. *Sri Lanka Nature* 2(2): 5.
- Anon (2002) Birdwatching in Maduruoya National Park. *Malkoha*, Field Ornithology Group of Sri Lanka. 24(3):5-9.
- Athnatake, R.M.W.R. and Jayasuriya, L.R. 1998. Threatened endemic vegetation in the upper montane rain forest in Hakgala Strict Nature Reserve. *Sri Lanka Forester* 23(1&2): 18-22.
- Atputhanathan, M. and Chitravadivelu, K. 1969. Fish population of the Thondaimannar Lagoon, its distribution and economic potential. *Hydrobiological survey*, Research Council and Northern Province Science Teacher's Association of Sri Lanka. 9: 1-81.
- Bahir, M. 1999. Scaring the enemy-The slender coral snake. *Sri Lanka Nature* 2(2): 22-24.
- Bahir, M. 1998. The Painted Bat. *Sri Lanka Nature* 2(1): 30-31.
- Bahir, M. and Nanayakkara, S. 2000. Captive life history and siblicide in the Field Mouse *Mus booduga*. *Loris*, Journal of the Wildlife and Nature Protection Society of Sri Lanka. 22(3): 63-64.
- Bahir, M.M. and Silva, A. 2005. *Otocryptis nigristigma*, a new species of agamid lizard from Sri Lanka. In: Yeo, D. C. J., Ng, P. K. L. and Pethiyagoda, R. (eds), Contributions to Biodiversity Exploration and Research in Sri Lanka. *The Raffles Bulletin of Zoology*, Supplement No. 12:393-406.
- Bahir, M.M. and Maduwage, K.P. 2005. *Calotes desilvai*, a new species of agamid lizard from Morningside, Sri Lanka. In: Yeo, D. C. J., Ng, P. K. L. and Pethiyagoda, R. (eds), Contributions to Biodiversity Exploration and Research in Sri Lanka. *The Raffles Bulletin of Zoology*, Supplement No. 12:381-392.

- Bahir, M.M., Ng, P.K.L., Crandall, K. and Pethiyagoda, R. 2005. A conservation assessment of the freshwater crabs of Sri Lanka. In: Yeo, D. C. J., Ng, P. K. L. and Pethiyagoda, R. (eds), Contributions to Biodiversity Exploration and Research in Sri Lanka. *The Raffles Bulletin of Zoology*, Supplement No. 12: 121-126.
- Baker, J. 1971. The Sinharaja Rain Forest, Ceylon. *Loris*, Journal of the Wildlife and Nature Protection of Sri Lanka. 7(4): 190-194.
- Balasubramaniam, A. and Krishnarajah, P. 2004. *Sphenomorphus rufogulus*, a new record of an endemic skink from Arasaddy, Jaffna, Sri Lanka (Lacertilia: Scincidae). *Lyriocephalus Special Issue* 5(1&2): 23-24.
- Balasubramaniam, S., Ratnayake, S. and White, R. 1993. The montane forests of the Horton Plains Nature Reserve. *Proceedings of International and Interdisciplinary Symposium. Ecology and Landscape Management in Sri Lanka*. 95-108.
- Balasubramanium, S., Santiapillai, C. and Chambers, M.R. 1980. Seasonal shifts in the pattern of habitat utilization by the Spotted Deer (*Axis axis* Erxleben, 1777) in the Ruhuna National Park. *Spixiana* 3(2):157-166.
- Balasuriya, L.K.S.W. 1982. Preliminary trials on induced Breeding of the Local Carp "Labeo dussumieri" in Sri Lanka. *Journal of Inland Fish* 1: 62-65.
- Bambaradeniya, C.N.B. and Ranawana, K.B. 1996. The Swallowtail Butterflies (Lepidoptera: Papilionidae) of Sri Lanka - A plea for their conservation. *Loris*, Journal of the Wildlife and Nature Protection Society of Sri Lanka. 21(2):33-36
- Bambaradeniya, C.N.B. 2003. An overview of the flora and fauna of the Kanneliya- Dediyalgala-Nakiyadeniya forest Complex- A Proposed Biosphere Reserve in Sri Lanka. *Journal of the National Science Foundation of Sri Lanka*. 31 (1&2): 389-392.
- Bambaradeniya, C.N.B. 1996. The Victoria Randenigala- Rantambe Sanctuary. *Loris*, Journal of the Wildlife and Nature Protection of Sri Lanka. 21(2): 2-4.
- Bambaradeniya, C.N.B. and Gunatilleke, C.V.S. 2002. Ecological aspects of weed flora in an irrigated rice field ecosystem at Bathalagoda in Sri Lanka. *Journal of National Science. Foundation Sri Lanka*. 30(3&4): 123-147.
- Bambaradeniya, C.N.B. and Ranawana, K.B. 1998. Composition of the vertebrate fauna in three-montane zone protected areas of Sri Lanka. *Proceedings of the 2nd Annual Forestry Symposium* 1996. 248-268.
- Bambaradeniya, C.N.B., Edirisinghe, J.P., de Silva, D.N.; Gunatilleke, C.V.S., Ranawana, K.B., and Wijekoon, S. 2004. Biodiversity associated with an irrigated rice agro-ecosystem in Sri Lanka. *Biodiversity and Conservation* 13: 1715-1753.
- Bambaradeniya, C.N.B., Ekanayake, S.P., Fernando, R.H.S.S., Perera, W.P.N. and Somaweera, R. 2002. A biodiversity status profile of Bundala National Park- A Ramsar Wetland in Sri Lanka. IUCN Sri Lanka, Country Office. *Occasional Paper No. 2*: 37pp.
- Bambaradeniya, C.N.B., Ekanayake, S.P., Kekulandala, L.D.C.B., Fernando, R.H.S.S., Samarawickrama, V.A.P. and Priyadarshana, T.G.M. 2002. An Assessment of the status of Biodiversity in the Maduganga Estuary. IUCN Sri Lanka, Country Office. *Occasional Paper No. 1*: 49pp.
- Bambaradeniya, C.N.B., Ekanayake, S.P., Kekulandala, L.D.C.B., Samarawickrama, V.A.P., Ratnayake, N.D. and Fernando, R.H.S.S. 2002. An assessment of the status of Biodiversity in the Muthurajawela Wetland Sanctuary. IUCN Sri Lanka, Country Office, Colombo. *Occasional Paper No. 3*: 48pp.

- Bambaradeniya, C.N.B., Perera, M.S.J., Perera, W.P.N., Wickramasinghe, L.J.M., Kekulandala, L.D.C.B., Samarawickrama, V.A.P., Fernando, R.H.S.S., and Samarawickrama, V.A.M.P.K. 2003. Composition of faunal species in the Sinharaja World Heritage Site in Sri Lanka. *The Sri Lanka Forester* 26: 21-40.
- Bambaradeniya, C.N.B. and Ekanayake, S.P. 2003. *A Guide to the biodiversity of Knuckles forest region*. IUCN – The World Conservation Union, Sri Lanka Country Office, Colombo. 68pp.
- Bambaradeniya, C. N. B., Ekanayake, S. P. and Amarasinghe, S. 2006. *Guide to Sinharaja: A Biodiversity Hotspot of the World*. The World Conservation Union in Sri Lanka 55pp.
- Bandara, N.M.S.A. and Mahatantila, K.C.P. 1996. A survey of medicinal plants in Ritigala and its surrounding plain. *Sri Lanka Forester* 22(3&4): 3-21.
- Banks, J and Banks, J. 1986. Notes on the discovery of the nest and eggs of the Ashy - Headed Babler *Garrulax cinereifrons*. *Loris*, Journal of the Wildlife and Nature Protection Society of Sri Lanka, 18(3): 110-111.
- Banks, J. 1980. The Black tailed Godwit - *Limosa limosa*. *Loris*, Journal of the Wildlife and Nature Protection Society of Sri Lanka. 15(3): 168-169.
- Bates, P.J.J. and Harrison, D.L. 1997. *Bats of the Indian sub continent*. Harrison Zoological Museum. London. 288pp.
- Batuwita, S. and Bahir, M.M. 2005. Description of five new species of *Cyrtodactylus* (Reptiles, Geckkonidae) from Sri Lanka. In: Yeo, D. C. J., Ng, P. K. L. and Pethiyagoda, R. (eds), Contributions to Biodiversity Exploration and Research in Sri Lanka. *The Raffles Bulletin of Zoology*, Supplement No. 12: 351-380.
- Batuwita, S., Maduwage, K.P, and Silva, A. 2004. Snakes of Mount Gannoruwa, Central Sri Lanka. *Lyriocephalus Special Issue* 5(1&2): 150.
- Batuwita, S. 2001. *Liopeltis calamaria* (Gunther,1858)(Serpentes:Colubridae) first record from the Galle District, Southern Sri Lanka. *Loris*, Journal of the Wildlife and Nature Protection Society of Sri Lanka. 22(6):11.
- Batuwita, S. 2000. Lizards of Mount Gannoruwa. *Loris*, Journal of the Wildlife and Nature Protection Society of Sri Lanka. 22(3):13-15.
- Batuwita, S. and Alagiawadu, I. 2004. Some observations on *Hemiphyllodactylus typus* Bleeker, 1860: Sri Lanka (Squamata: Gekkonidae). *Lyriocephalus Special Issue* 5(1&2): 146-149.
- Bauer, A., de Silva, A., and Austin, C.C. 2004. The use of abandoned Wasp nests by *Hemidactylus depressus* in Sri Lanka. *Lyriocephalus Special Issue*. 5(1&2): 221-222.
- Bauer, A.M., de Silva, A., Greenbaum, E. and Jackman, T. 2007. A new species of Day gecko from high elevation in Sri Lanka, with a preliminary phylogeny of Sri Lankan *Cnemaspis* (Reptilia, Squamata, Gekkonidae), *Mitt. Mus. Nat.kd., Zool. Reighe*. Supplement No. 83: 22-32.
- Barathie, K.P.S. 1979. Natural regeneration in the exploited section of the Sinharaja MAB reserve. *Sri Lanka Forester* 14(1&2): 41-42.
- Bibile, R. 1994. Some notes on the Gal Oya valley and National Park. *Loris*, Journal of the Wildlife and Nature Protection Society of Sri Lanka. 20(4): 174-182.
- Bryson, J. 2001. Black - tailed Godwits (*Limosa limosa*) and the question they raise for conservation in Bundala National Park. *Loris*, Journal of the Wildlife and Nature Protection Society of Sri Lanka. 22(5): 36-37.
- Carine, M. A., Jayasekara, P. and Scotland, R. W. 2000. A new species of *Strobilanthes* Blume (Acanthaceae) from Sri Lanka. *Kew Bulletin*.

- CBC 1996. *Ceylon bird club notes*. Ceylon Bird Club Publication. 88pp.
- CBC 1997. *Ceylon bird club notes*. Ceylon Bird Club Publication. 75pp.
- CBC 1998. *Ceylon bird club notes*. Ceylon Bird Club Publication. 115pp.
- CBC 1999. *Ceylon bird club notes*. Ceylon Bird Club Publication. 162pp.
- CBC 2000. *Ceylon bird club notes*. Ceylon Bird Club Publication. 192pp.
- CBC 2001. *Ceylon bird club notes*. Ceylon Bird Club Publication. 207pp.
- Chamikara, S.S. and Sumanarathne, B.S. 1998. Records of Southern Duffer *Diseophora lepida ceylonica* (Lepidoptera: Amathusiidae) from Madakada Mukalana and Dombagaskanda Kaluthara District. *Sri Lanka Naturalist* 2(3):20.
- Collure, D. 1984. Kandy Lake: A Bird Sanctuary. *Loris*, Journal of Wildlife and Nature Protection Society of Sri Lanka, 16(5): 244-246.
- Cooray, R. 1998. The marine turtles in Rekawa; a survey on nesting activities and exploitation. *Sri Lanka Naturalist* 2(1&2):1-7.
- Cramer, L.H. 1990. Contributions to the flora of Ceylon (Sri Lanka). *Journal of National Science Council Sri Lanka*. 18(2):167-176.
- Cramer, L.H. 1993. *A forest Arboretum in the dry zone*. Institute of Fundamental Studies. 241pp.
- D'abrerat, B. 1998. *The Butterflies of Ceylon*. Wildlife Heritage Trust, Colombo, Sri Lanka. 221pp.
- Dharmasena, C., Ekanayake, H., Abesinghe, S. and Dharmasena, N. 2001. Dunumadalawa Forest Reserve. *Loris*, Journal of the Wildlife and Nature Protection of Sri Lanka. 22(5): 55-57.
- Dassanayake, M.D. and Fosberg, F.R. 1980–2004. *A Revised Handbook to the Flora of Ceylon*. (Vols. 1–9 edited by Dassanayake M.D., F.R. Fosberg and W.D. Clayton; Vols. 10–15 edited by Dassanayake M.D. and W.D. Clayton). 15 Vols. Oxford and IBH Publishing Co., New Delhi.
- David, J. 1987. An encounter with a Ceylon small civet-cat. *Loris*, Journal of the Wildlife and Nature Protection Society of Sri Lanka. 17(5): 213-214.
- de Fonseka, T. 1998. *The Dragonflies of Sri Lanka*. Wildlife Heritage Trust, Colombo, Sri Lanka. 123pp.
- de Silva, M. and De Silva, P.K. 1998. Status, diversity and conservation of the mangrove forests of Sri Lanka. *Journal of South Asian Natural History* 3(1): 79-102.
- de Silva, M. and de Silva, P.K. 2004. *The Yala Wildlife Reserves Bio Diversity and Ecology*. WHT Publications (Private) Limited. 238pp.
- de Silva, A. 1975. The Ceylon Krait, record of a large specimen. *Loris*, Journal of the Wildlife and Nature Protection Society of Sri Lanka. 15(2):97-98.
- de Silva, A. 1983. A relict snake of Sri Lanka. *Loris*, Journal of the Wildlife and Nature Protection Society of Sri Lanka. 16(3): 13-14.
- de Silva, A. 1990. A Cobra without the spectacle marking. *Loris*, Journal of the Wildlife and Nature Protection Society. 19(2):71-72.
- de Silva, A., Bauer, A., Austin, C.C., Goonewardene, S., Hawke, Z., Vanneck, V., Drion, A., de Silva, P., Perera, B.J.K., Jayaratne, R.L. and Goonasekera, M.M.. 2004. The diversity of Nilgala Forest, Sri Lanka, with special reference to its Herpetofauna. *Lyriocephalus Special Issue* 5(1&2):164-182.

- de Silva, A., Bauer, A., Austin, C.C., Goonewardene, S., Hawke, Z., Vanneck, V., Drion, A., de Silva, P., Perera, B.J.K., Jayaratne, R.L. and Goonasekera, M.M. 2004. Distribution and natural History of *Calodactyloides illingworthorum* (Reptilia: Gekkonidae) in Sri Lanka: Preliminary findings. *Lyriocephalus Special Issue 5(1&2)*: 192-198.
- de Silva, M. and Premachandra, S.P.U. 1998. An ecological study of the sand-dune vegetation of the Ruhuna National Park, Sri Lanka. *Journal of South Asian Natural History 3(2)*:173-192.
- de Silva, M.A. 1997. The study report of freshwater fish in Ma-Dola Galle District Southern Sri Lanka. *Loris, Journal of the Wildlife and Nature Protection Society of Sri Lanka. 21(3)*: 101-103.
- de Silva, M.P. 1998. Biodiversity in the catchments of Hiyare Reservoir. *Proceeding of the 2nd Annual Forestry Symposium 1996*. pp237-247.
- de Silva, P.H.D.H. 1980. Notes on the Fauna collected from the Hunuwela escarpment and from the upper reaches of the Hunuwela Ganga (Ratnapura District, Sabaragamuwa Province, Ceylon). *Spolia Zeylanica 30(1)*: 55-61.
- de Silva, R.I. 2001. The Rufous - necked Stint (*Calidris ruficollis*) in Sri Lanka. *Loris, Journal of the Wildlife and Nature Protection Society of Sri Lanka. 22(5)*: 48.
- de Silva, R.I. 1999. Waterbird study in Malala Lewaya (Sri Lanka). *Loris, Journal of Wildlife and Nature Protection Society. 22(2)*: 45-51.
- de Silva, R.I. 1997. Some random notes on Bundala - A National Park Under Stress. *Loris, Journal of the Wildlife and Nature Protection Society of Sri Lanka. 21(3)*: 95-100.
- de Silva, R.I. 2000. An Australian Wader, *Himantopus himantopus leucocephalus*, in Sri Lanka. *Loris, Journal of the Wildlife and Nature Protection Society of Sri Lanka. 22(3)*: 15-16.
- de Silva, R.I. and Jakobsson, A. 2001. Water birds of Bundala National Park. *Loris, Journal of Wildlife and Nature Protection Society. 3(2)*: 4-7.
- de Zilva, T.S.U. 1973. Nesting Habitats of the White Breasted Kingfisher. *Loris, Journal of the Wildlife and Nature Protection Society of Sri Lanka. 13(2)*: 100-101.
- de Zilva, T.S.U. 1980. The nest of Blue Magpie (*Kitta ornata*) in Sinharaja. *Loris, Journal of the Wildlife and Nature Protection Society of Sri Lanka. 15(4)*: 222.
- de Zoysa, N.D., Gunatilleke, C.V.S. and Gunatilleke, I.A.U.N. 1989. Secondary vegetation on an abandoned shifting cultivation site in the Sinharaja Rain Forest. *Sri Lanka Forester 19(1&2)*: 3-16.
- de Zoysa, N.D., Gunatilleke, C.V.S. and Gunatilleke, I.A.U.N. 1986. Vegetation studies of a Skid-trail planted with Mahogany in Sinharaja. *Sri Lanka Forester 17(3&4)*: 142-156.
- de Zoysa, N.D.; Gunatilleke, C.V.S. and Gunatilleke, I.A.U.N. 1988. Diversity of understorey vegetation in the Sinharaja rainforest. *Sri Lanka Forester 18(3&4)*: 121-130.
- de Zoysa, N.D. 1986. Studies on the storage, germination and initial development of *Doona trapezifolia*. *The Sri Lanka Forester 16(3&4)*:116-137.
- Dela. J. 2004. Protecting the endemic Purple Face Langur, *Loris, Journal of the Wildlife and Nature Protection Society of Sri Lanka, 23(5&6)*: 14-22.
- Dening R.C. 1992. Butterflies in tourist resorts of Nuwara Eliya, Sri Lanka. *Loris, Journal of the Wildlife and Nature Protection Society of Sri Lanka. 19(5)*:168-170.
- Department of Wildlife Conservation 1997. *Resource Inventories for Protected Areas: Victoria-Randenigala-Rantambe Sanctuary*. Department of Zoology, University of Peradeniya. 1:1-310.

- Deraniyagala, P.E.P. 1960. Some Southern Temperate Zone Snakes, Birds and Whales that enter Ceylon Area. *Spolia Zeylanica* 29(1): 79-85.
- Deraniyagala, P.E.P. 1953. A new *Calodactylodes* Gecko from Ceylon. *Journal of Royal Asiatic Society (Ceylon)*. 3(1):7-28.
- Deraniyagala, P.E.P. 1960. Some of Linne's Reptiles and Mammals from Ceylon and elsewhere that are in Sweden. *Spolia Zeylanica* 29(1): 195.
- Deraniyagala, P.E.P. 1963. A new record of the Sand Boa from Ceylon. *Spolia Zeylanica*. 30(1): 75.
- Deraniyagala, P.E.P. 1955. *A colored atlas of some vertebrates from Ceylon (Serpentoid Reptiles)*. National Museum of Ceylon, Colombo. 3: 1-121.
- Deraniyagala, P.E.P. 1953. *A colored atlas of some vertebrates from Ceylon (Tetrapod Reptiles)*. National Museum of Ceylon, Colombo.2: 1-101.
- Devapriya, W.S. 2004. A survey of the saltwater Crocodile (*Crocodylus porosus*) in the Muthurajawela Urban Marsh. *Lyriocephalus Special Issue*. 5(1&2): 25-26.
- Dharmasena, C. 2001. Purple Nillu in bloom again at Horton Plains. *Loris*, Journal of the Wildlife and Nature Protection Society of Sri Lanka. 22 (5): 47.
- Dharmasena, C. 1989. The Highland Ceylon Slender Loris. *Loris*, Journal of the Wildlife and Nature Protection Society of Sri Lanka. 18(3):141-142.
- Digana, P.M.C.B., Yapa, W.B., Randeniya, P.V. and Ratnasooriya, W.D. 2000. Predators of Sri Lankan Bats. *Loris*, Journal of the Wildlife and Nature Protection Society of Sri Lanka. 22(4): 46-48.
- Dissanayake, A. 1976. Observation of a Scops Owl. *Loris*, Journal of the Wildlife and Nature Protection Society of Sri Lanka. 14(2): 97.
- Dittus, W.P. and Ratnayake, S.M. 1989. Individual and Social behavioral response to injury in wild Toque Macaques (*Macaca sinica*). *International Journal of Primatology* 10(3): 215-234.
- Dottlinger, H. and Hoffmann, T.W. 1999. Status of the Black Shaheen or Peregrine Falcon *Falco peregrinus peregrinator* in Sri Lanka. *Journal of Bombay Natural History Society* 96(2): 239-243.
- Ekanayake, S.P., Bambaradeniya, C.N.B., Perera, W.P.N., Perera, M.S.J., Rodrigo, R.K., Samarakrama, V.A.M.P.K. and Peiris, T.N. 2005. A Biodiversity Status Profile of Lunama-Kalamatiya Wetland Sanctuary. IUCN Sri Lanka, Country Office. *Occasional paper* 08: 43pp
- Ekanayake, H.M.A.R., Weerakoon, C.K., Warusamanna, N.D. Kuoaratna, W.J.J., Nathanael, S., Samarakoon, S.M.M., Goonasekera, M.M. and de Silva, A. 2004. Preliminary observations on the status of captive Star Tortoises (*Geochelone elegans*) in Sri Lanka. *Lyriocephalus Special Issue* 5(1&2): 65-72.
- Ekaratne, K., Fernando R.H.S.S., de Silva S., Bambaradeniya C.N.B. and de Silva, D. 2003. *A Comparison of the Conservation and Legal Status of the Fauna and Flora of Sri Lanka*. IUCN Sri Lanka, Colombo. 163pp.
- Erdelen, W. 1984. The Genus *Calotes* (Sauria, Agamidae) in Sri Lanka; distribution patterns. *Journal of Biology* 11: 515-525.
- Erdelen, W. 1988. Population Dynamics and Dispersal in Three species of Agamid Lizards in Sri Lanka; *Calotes calotes*, *C. versicolor* and *C. nigrilabris*. *Journal of Herpetology* 22(1):42-52.
- Fernando, S.S., Wickramasingha, L.J.M. and Rodrigo, R.K. 2007. A new species of endemic frog belonging to genus *Nannophrys* Gunther, 1869 (Anura: Dicroglossinae) from Sri Lanka, *Zootaxa* 1403: 55-68

- Fernando, R.H.S.S. 2002. A new record of rare mistletoe species *Dendrophthoe lonchiphyllus* (Thw.) Danser. (Loranthaceae) from Ratnapura District. *Sri Lanka Naturalist* 5(3&4): 36-38.
- Fernando, R.H.S.S. 2000. Flowering of *Stemonoporus moonii* (Thwaites 1893). *Sri Lanka Naturalist* 3(2):29.
- Fernando, R.H.S.S. 2005. Unpublished records of Sri Lanka Flora.
- Fernando, R.H.S.S. and Priyadarshana, T.G.M. 1997. A recent record of the rare Swamp Eel *Ophisternon bengalense* (Synbranchidae). *Sri Lanka Naturalist* 1(3&4): 34-35.
- Fernando, S.S., Priyadarshana, T.G.M. and Perera, R. 1993. Namunukula Kaduwetiya Ashritha addyanayak. *News Letter*, Young Zoologists Association of Sri Lanka. 4: 8-9 +16.
- Fernando, R.H.S.S. and Palihawadana, A. 2001. *Bromheadia srilankensis* Kruizinga and de Vogel. New orchid species from Sri Lanka: note on phenology, ecology and conservation measures Sri Lanka. *Sri Lanka Naturalist* 4(4): 66-71.
- Fernando, S.S. and Gunasekara, S. 2005. *Habenaria roxburghii* R.Br. new addition to Sri Lanka mOchid flora. *Journal of National Science Foundation Sri Lanka* 33(4): 273-275.
- Fosberg, F.R. 1971. Psidium L. (Myrtaceae) in Ceylon. *The Ceylon Journal of Science (Bio. Sci.)*. 9(2): 58-60.
- Gabadage, D., Kandenearachchi, L.I., Perera R. and Fernando, S.S. 1993. Kanneliya Rakshithaya, Addyana Warthawa. *News Letter*, Young Zoologists Association of Sri Lanka. 8(4): 9.
- Galappaththi, R.P. and Jayasuria, G. 1997. A checklist of some of the fauna and flora at Halwathura marshland. *Sri Lanka Naturalist* 1(2): 13-17.
- Gamage, H.K., Singhakumara, B.M.P. and Ashton, P.M.S. 1999. Seedling leaf-structure of some leaf-successional canopy tree species in simulated light and soil moisture environments of Sri Lanka rain forest. 1996 regional seminar on forest of the humid tropics of South and South East Asia. 121-142.
- Gans, C. 1995. New records of Skinks from Sri Lanka. *Lyriocephalus* 2(1&2): 21-24.
- Goonatilake, M.R.M.P.N. and Goonatilake, W.L.D.P.T.S. de A. 2001. A Sight record of the Large Cuckoo-shrike *Coracina macei layardi* Blyth, 1866; from Lawalhena Estate Baddegama in Wet Zone of Sri Lanka. *Sri Lanka Naturalist* 4(2): 34.
- Goonatilake M.R.M.P.N. and Goonatilake, W.L.D.P.T.S. de A. 2000. Butterflies (Lepidoptera: Papilioidea) of Handurumulla-Pohonaruwa Forest. *Loris*, Journal of the Wildlife and Nature Protection Society of Sri Lanka. 22(4):8-10.
- Goonatilake, M.R.M.P., Yapa, W.B., Schnidith, S. and Ratnasooriya, W.D. 2001. Amphibians as a prey of *Megaderma lyra* Geoffrey, 1810 (Chiroptera; Megadermatidae). *Proceedings of the 4th World Congress of Herpetology, Sri Lanka*. 35-36 (Abstract).
- Goonatilake W.L.D.P.T.S. de A. 1996. Notes on the Life Cycle of Two Common Butterflies *Danaus chrysippus* L. (Family : Danaidae) and *Phalanta phalanta* (Family : Nymphalidae). *Newsletter Young Zoologist Association of Sri Lanka*. 4 (1&2): 3-4.
- Goonatilake, W.L.D.P.T.S. de A. 1993. Zoological Research in Peak Wilderness Sanctuary. *News Letter*, Young Zoologists Association of Sri Lanka. 4(3&4): 3-4.
- Goonatilake, W.L.D.P.T.S. de A. 2000. Rediscovery of Endemic Brown Blind Swamp-eel, *Monopterus desilvai* Bailey and Gans, 1998; Family: Synbranchidae, after twenty years from Sri Lanka. *Loris*, Journal of the Wildlife and Nature Protection Society of Sri Lanka. 22(4): 42-44.
- Goonatilake, W.L.D.P.T.S. de A. 1997. A new record of *Hyporhamphus xanthopterus* (Cuvier and Vale, 1846) Pisces, Hemiraphidae, from inland waters in Sri Lanka. *Loris*, Journal of the Wildlife and Nature Protection Society of Sri Lanka. 21(3): 126-127.

- Goonatilake, W.L.D.P.T.S. de A. 1993. Some scientific results of a visit to Ruhuna (Yala) National Park. *News Letter*, Young Zoologists Association of Sri Lanka. 4(3&4): 6-7.
- Goonatilake, W.L.D.P.T.S. de A. 1993. Faunal Checklist of the Pelwatta Sugar Plantation in Buttala. *News Letter*, Young Zoologists Association of Sri Lanka. 4(1&2): 6.
- Goonatilake, W.L.D.P.T.S. de A. 1994. Some Stone implements from Warnagala Cave in Peak Wilderness Sanctuary. *News Letter*, Young Zoologists Association of Sri Lanka. 7(1): 8.
- Goonatilake, W.L.D.P.T.S. de A. and Perera, L.J.K.R. 1994. Two Rock Caves from Aduragala. *News Letter*, Young Zoologists Association of Sri Lanka. 2(2): 6-7.
- Goonatilake, W.L.D.P.T. de A. and Peries, A.L. 2001. Range extension of *Calodactylodes illingworthorum* Deraniyagala, 1953. (Gekkonidae Reptilia). *Loris*, Journal of the Wildlife and Nature Protection Society of Sri Lanka, 22(6): 23-26.
- Goonatilake, W.L.D.P.T. de A. 2001. Notes on Herpetofauna in two isolated forest-patches of Matale District. *Sri Lanka Naturalist* 4(3): 50-52.
- Goonatilake, W.L.D.P.T. de A., Yapa, W.B., Jayatunga, W.N.A. and Ratnasooriya, W.D. 1999. Range extension of the red-throat little skink, *Sphenomorphus rutogulus*. *Loris*, Journal of the Wildlife and Nature Protection Society of Sri Lanka. 22(2):10.
- Green, M. and Jayasuriya, M. 1996. Lost and Sri Lanka's rare and endemic plants revealed. *Plant Talk* 18-21.
- Greer, A.E. 1991. *Lankascincus*, a new genus of scincid lizards from Sri Lanka with description of three new species. *Journal of Herpetology* 25(1): 59-64.
- Greller, A.M., Balasubramaniam, S., Goonatileke, C.V.S. and Gunatileke, I.A.U.N. 1981. A botanical excursion across the Peak Wilderness. *Loris*, Journal of the Wildlife and Nature Protection Society of Sri Lanka. 15(5): 263-264 and 276.
- Greller, A.M., Gunatileke, C.V.S., Gunatileke, I.A.U.N. and Balasubramaniam, S. 1980. A phytosociological analysis of three stands of forest in the vicinity of Peradeniya, Kandy district. *Sri Lanka Forester* 14(3&4): 153-161.
- Greller, A.M., Gunatileke, I.A.U.N., Gunatileke, C.V.S., Balasubramaniam, S. and Jayasuriya, A.H.M. 1985. Exploring for *Stemonoporus* (Dipterocarpaceae) forest in the Peak Wilderness. *Loris*, Journal of the Wildlife and Nature Protection Society of Sri Lanka. 17(1): 5-7.
- Grierson, A.J.C. 1972. Critical notes on the compositae of Ceylon. The Ceylon Journal of Science (Bio. Sci.) 10(1): 42-69.
- Gunasekara, S. 2002. Another rare Orchid species near Endangered (Text in Sinhala). *Soba* 8: 67-68.
- Gunatileke, C.V.S. and Gunatileke, I.A.U.N. 1980. The floristic composition of Sinharaja- a rain forest in Sri Lanka with special reference to endemics. *Sri Lanka Forester* 14(3&4): 171-179.
- Gunatileke, C.V.S. and Ashton, P.S. 1987. New light on the plant geography of Ceylon. The ecological biogeography of the lowland endemic tree flora. *Journal of Biogeography* 14:295-327.
- Gunatileke, I.A.U.N. 1985. Floristics of the lowland wet zone forest of Sri Lanka. *Sri Lanka Forester* 17(1&2): 12-20.
- Gunatileke, I.A.U.N. and Gunatileke, C.V.S. 1991. Threatened woody endemics of the wet lowlands of Sri Lanka and their conservation. *Biological Conservation* 55: 17-36.
- Gunatileke, C.V.S. 1999. Understanding long-term vegetation dynamics for management of biodiversity: a Sri Lanka perspective. *1996 Regional Seminar on Forests of the Humid Tropics of South and South East Asia* 19-25.

- Gunatilleke, C.V.S. and Gunatilleke, I.A.U.N. 2000. Pollination secrets of canopy giants. *Sri Lanka Nature* 4(2): 52-64.
- Gunatilleke, C.V.S. and Wejesundara, D.S.A. 1982. Ex-situ conservation of Woody plant species in Sri Lanka. *Loris, Journal of the Wildlife and Nature Protection Society of Sri Lanka*. 16(2): 73-79.
- Gunatilleke, C.V.S., Gunatilleke, I.A.U.N. and Ashton, P.M.S. 1995. Rain forest research and conservation: the Sinharaja experience in Sri Lanka. *Sri Lanka Forester* 22(1&2): 49-60.
- Gunatilleke, I.A.U.N. and Gunatilleke, C.V.S. 1999. Distribution of floristic richness and its conservation in Sri Lanka. *Conservation Biology* 4(1): 21-31.
- Gunatilleke, I.A.U.N., Gunatilleke, C.V.S., and Dilhan, M.A.A.B. 2005. Plant Biogeography and Conservation of the South-Western hill Forests of Sri Lanka. In: Yeo, D. C. J., Ng, P. K. L. and Pethiyagoda, R. (eds), Contributions to Biodiversity Exploration and Research in Sri Lanka. *The Raffles Bulletin of Zoology*, Supplement No. 12: 9-22.
- Gunawardana, J. 1990. *Hirundo rustica tytleri* (Jerdon) Tytler's swallow / Chestnut bellied swallow First Sight Records from Sri Lanka. *Loris, Journal of the Wildlife and Nature Protection Society of Sri Lanka*, 19(1): 46.
- Gunawardana, J. 1994. *Checklist of the Birds of the Bellanwila - Attidiya Sanctuary*. Ceylon Bird Club Publication. 18pp.
- Gunawardena, J. 1998. *Puntius bandula*. *Loris, Journal of the Wildlife and Nature Protection Society of Sri Lanka*. 21(5): 191-194.
- Gunawardena, K. 2002. The First Record of the nesting of the Black Eagle (*Ictinaetus malayensis*). *Loris, Journal of the Wildlife and Nature Protection Society of Sri Lanka*, 23(1&2): 14-19.
- Hegoda, D. 2001. A Record of the Blue Throated Flycatcher. *Sri Lanka Naturalist* 4(2): 25.
- Henkanaththe gedara, S.M., Jayaweera, S. and Perera, N. 2001. A new record of Necked Goby *Schismatogobius deraniyagalai* Kottelat and Pethiyagoda, 1989. from Bentota river basin. *Sri Lanka Naturalist* 4(1): 14-17.
- Henry, G.M. 1998. *A guide to the birds of Sri Lanka*. Oxford University Press. 3rd edition. 488pp.
- Herath, H.M.T.C. 1997. The Second Sight Record of the Desert Wheatear *Oienanthe deserti* from Sri Lanka. *Sri Lanka Naturalist* 1(3&4): 26-27.
- Hettige, U.S.B. 2001. A New Sight Record of Bay-backed Shrike (*Lanius vittatus*). *Sri Lanka Naturalist* 4(2): 35.
- Hettige, U.S.B., Wickramasinghe, L.J.M., Priyadarshana, T.M.G., Gunawardena, K., Perera, L.I. and Manorathna, A. 2000. Fauna of Gal Oya National Park. *Sri Lanka Naturalist* 3 (4): 55-60.
- Hitinayake, G.; Peris, C. and Ekanayake, U. 1999. Nature on the Lake, will the Kandy lake retain its beauty? *Loris, Journal of the Wildlife and Nature Protection of Sri Lanka*. 22 (1): 19-21.
- Hoffmann, T.W. 1985. The Status of the Broad - billed Roller in Sri Lanka. *Loris, Journal of the Wildlife and Nature Protection Society of Sri Lanka*, 17(10): 4.
- Hoffmann, T.W. 1998. Notes from the Ceylon Birds Club 1987 A Brief Avifauna Survey. *Loris, Journal of the Wildlife and Nature Protection Society of Sri Lanka*. 18(1): 23-25.
- Hoffmann, T.W. 1987. Report on Wilpattu National Park. *Loris, Journal of the Wildlife and Nature Protection of Sri Lanka*. 17(5): 195-202.
- Hoffmann, T.W. 1976. Emergency- Wilpattu. *Loris, Journal of the Wildlife and Nature Protection of Sri Lanka*. 14 (2): 101-104.

- Hoffmann, T.W. 1973. The Gal Oya National Park. *Loris*, Journal of the Wildlife and Nature Protection of Sri Lanka.13 (2): 69-79.
- Hoffmann, T.W. 1999. Ceylon Bird Club Notes, 1997. *Loris*, Journal of the Wildlife and Nature Protection Society of Sri Lanka, 22(1): 57-58.
- Ilangakoon, A. 1990. Observations on the Horned Lizard- *Ceratophora stoddartii*. *Loris*, Journal of the Wildlife and Nature Protection Society of Sri Lanka,19(1):44-45.
- IUCN/FAO 1997. *Designing an Optimum Protected Areas System for Sri Lanka's Natural Forests*, Vol: 2.IUCN and FAO. 399pp.
- Jansen, M. 1991. Kalu Ganga Multi-purpose Project: Ecological and Environmental concerns. *Loris*, Journal of the Wildlife and Nature Protection of Sri Lanka.19 (4):127-131.
- Jayaneththi H.B. and Lakmal, P. 2004. A new record of endangered Jonklass Loach *Lepidocephalichthys jonklaasi* Deraniyagala, 1956 from Pahiyangala, Kalu river basin. *Sri Lanka Naturalist* 4(3&4): 49-50.
- Jayaneththi, H.B. and Maduranga, H.G.S. 2004. A Preliminary Study on the diversity of Ichthyofauna of Kukulugala Proposed Forest Reserve, Ratnapura District. *Sri Lanka Naturalist* 6(1&2): 17-23.
- Jayantha, U.L.D. and de Silva, D.D.N. 2004. Diagnosis, treatment and management of a cranial abscess in a Wild cat snake (*Boiga forsteni*). *Lyriocephalus Special Issue* 5(1&2): 43-44.
- Jayasekara, R.D.B. 1971. Hornbills the Mystic Nesters. *Loris*, Journal of the Wildlife and Nature Protection Society of Sri Lanka. 7(4): 219-221.
- Jayasingam, T. 1998a. Transformation dynamics of the Damana Grasslands, Sri Lanka: field study and a model synthesis. *Sri Lanka Forester*.23(1&2): 4-17.
- Jayasingam, T. 1998b. Vegetation of Wasgomuwa National Park: analysis of the riverine vegetation. *Sri Lanka Forester*. 23(1&2): 36-50.
- Jayasuriya, A.H.M. 1995. National conservation review: the discovery of extinct plant in Sri Lanka. *Ambio* 24(5): 55-58.
- Jayasuriya, A.H.M. 1998. A new species of *Diospyros* (Ebanaceae) from Sri Lanka. *Journal of South Asian Natural History* 3(1): 55-58.
- Jayasuriya, A.H.M. 1991. Review of the flora and phytosociology of Ritigala Strict Natural Reserve and some suggestions for its conservation and management. *Sri Lanka Forester* 20(1&2): 51-58.
- Jayasuriya, A.H.M. 1984. Flora of Ritigala Strict Natural Reserve. *Sri Lanka Forester* 16(3&4): 61-155.
- Jayasuriya, A.H.M., Greller, A.M., Balasubramaniam, S., Gunatileke, C.V.S., Gunatileke, I.A.U.N. and Dassanayake, M.D. 1993. Phytosociological studies of mid-elevational (lower montane) evergreen mixed forests in Sri Lanka. *Proceeding of International and Interdisciplinary Symposium. Ecology and Landscape Management in Sri Lanka*. 79-94.
- Jayawardena, H.U. 1979. The Northern Orange Headed Ground Thrush - *Zootheras citrina citrinia*. *Loris*, Journal of the Wildlife and Nature Protection Society of Sri Lanka. 15(1): 41-42.
- Jayawickrama, A. and Bandara, W.M.N. 1995. Preliminary observation on Amphibians and Reptiles at Ritigala, Sri Lanka. *Lyriocephalus*. 2(1&2): 58-59.
- Jinadasa J. 1998. Impact of Kukule Ganga Hydro Power Project on Aquatic Fauna *Vidyodaya Journal of Science* 7:119-138.
- Jinasena, J. 1980. An Orange Headed Ground Thrush. *Loris*, Journal of the Wildlife and Nature Protection Society of Sri Lanka. 18(1): 13.

- Jinasena, J. 1982. Notes on a clutch of eggs and hatchlings of *Natrix* piscator. *Loris*, Journal of the Wildlife and Nature Protection Society of Sri Lanka. 16(1):16-17.
- Kaluthota, C. 2006.. Discovery of a new resident bird species from Sri Lanka. *Siyoth*,1: 45-47-49.
- Kandamby, D.S. and Batuwita, S. 2004. Some reptiles from Galle district, Southern Sri Lanka (Reptilia: Sauria and Ophidia). *Lyriocephalus Special Issue 5(1&2)*: 152-155.
- Kapurusinghe, T. 2000. Some aspect of the Biodiversity of the Kaduru Doova Mangrove Forest. *Sri Lanka Naturalist* 3 (1): 7-13.
- Karunarathna, D.M.S.S., Silva, D.H.P.U., Peiris, H.T.A.P., Asela, M.D.C., Abeywardena, U.T.I., Udayakumara, A.A.D.A., Sirimanna, D.G.R. and Soysa, W.C.C. 2004. Two New Sightings of *Liopeltis calamaria*. *Loris*, Journal of the Wildlife and Nature Protection Society of Sri Lanka. 23(5&6): 23-26.
- Karunaratne, N. 1986. *Udawattekale the forbidden forest of the king of Kandy*. National Archives Department of Sri Lanka. 15-22.
- Karunaratne, P.B. 1974. Random notes on Mammals and Birds of the Kanneliya Jungles. *Loris*, Journal of the Wildlife and Nature Protection Society of Sri Lanka. 13(3): 164-168.
- Karunaratne, P.B. 1989. Small mammal survey- Udawalawe National Park. Preliminary report March to May 1989. *Loris*, Journal of the Wildlife and Nature Protection Society of Sri Lanka. 18(3):126-128.
- Karunaratne, P.B. 1992. *Fauna of the Samanalawewa Area*. Wildlife and Nature Protection Society of Sri Lanka. Scientific Publication series, Vol 1 No. 2; 63pp.
- Kathriarachchi, H.S., Tennakoon, K.U., Gunatilleke, C.V.S., Gunatilleke, I.A.U.N. and Ashton, P.M.S. 2004. Ecology of two selected liana species of utility value in a lowland rain forest of Sri Lanka: implications for management. *Conservation & Society* 2(2): 273-288.
- Katugaha, H.I.E. 1984. Black necked Storks at Buttuwa. *Loris*, Journal of the Wildlife and Nature Protection Society of Sri Lanka. 16(5): 217-218.
- Katugaha, H.I.E. 2001. Ruhuna National Park. *Sri Lanka Nature* 3 (2): 16-20.
- Kekulandala, L.D.C.B. 2002. A Survey of Fish in Kalugala Proposed Forest Reserve. *Sri Lanka Naturalist* 5(2): 20-25.
- Kekulandala, L.D.C.B. and Wickramasinghe, L.J.M. 2006. Some notes on Distribution and Conservation of File Snake, *Acrochordus granulatus* Scheider, 1799 (Family - Achochordidae). *Tiger paper* 33(2): 31-32
- Kelaart, E.F. 1853. *Prodromus Faunae Zeylanicae: Being contributions to the Zoology of Ceylon*. Reprint WHT Publications Ltd. vii+xxxiii+197+62+ivpp.
- Kostermans, A.J.G.H. 1992. *A handbook of the Dipterocarpaceae of Sri Lanka*. Wildlife Heritage Trust of Sri Lanka. 244pp.
- Kostermans, A.J.G.H. 1982. The genus *Vatica* L. (Dipterocarpaceae) in Ceylon. *Reinwardtia* 10(1): 69-79.
- Kotagama, S.W. 1980. A further Addition to the Sea Birds of Sri Lanka. *Loris*, Journal of the Wildlife and Nature Protection Society of Sri Lanka. 15(3): 171.
- Kotalawala, A.B. 1994. Impact of weirs on fish fauna of Wak-oya, A tributary of the Kelani River. *Journal of National Science Council of Sri Lanka* 22(1) 65-86.
- Kratzer, W. 1980. On the territorial behavior of the Agamid Lizard; (*Sitana ponticeriana ponticeriana*). *Loris*, Journal of the Wildlife and Nature Protection Society of Sri Lanka. 15(3):162-163
- Kulasuriya, W. (ed.). 2000. Bird watching in the Foothills of the Holy Peak. *Malkoha*, Field Ornithology Group of Sri Lanka. 22.

- Kulatunga, S. 1996. Gently flows the Kiridi Oya. *Loris*, Journal of the Wildlife and Nature Protection of Sri Lanka. 21(2): 53-55.
- Kulatunga, S. 1997. In the Medawachchiya Wilderness. *Loris*, Journal of the Wildlife and Nature Protection of Sri Lanka. 21(4): 154-156.
- Kulatunga, S. 1994. The Call of the Curlew. *Loris*, Journal of the Wildlife and Nature Protection Society of Sri Lanka. 20(4): 162-171.
- Maduranga, H.G.S. 1996. Tharjanayata Lakwoo Dam Silutu Dae Tuduwa (Glossy ibis). *News Letter*, Young Zoologists' Association Publication. 4(1&2): 6-8.
- Maduranga, H.G.S. 2000. The Caspian Tern: *Sterna caspia* Pallas; A Sight Record from an Inland Tank. *Loris*, Journal of the Wildlife and Nature Protection Society of Sri Lanka. 22(4): 41.
- Maduranga, H.G.S. 2004. A new record of the White Wagtail *Motacilla alba* Sykes from Wellawaya, Monaragala District. *Sri Lanka Naturalist* 6(1&2): 15-16.
- Maduranga, H.G.S. 2002. Evidence of the Nesting of the Wooly Necked Stork *Ciconia episcopus episcopus* (Bobdaert) near Human Habitation in Sri Lanka. *Sri Lanka Naturalist* 5(3&4): 50-52.
- Maduranga, H.G.S. 2005. Ichthyofauna of Bellanwila-Attidiya sanctuary and its environs in Colombo, Sri Lanka. *Tigerpaper* 32(1): 26-32.
- Manamendra-Arachchi, K.N. 1997. Gecko !. *Sri Lanka Nature* 1(1):45-54.
- Mapatuna, Y., Gunasekera, M.B., Ratnasooriya, W.D., Goonasekere, N.C.W. and Bates, P.J.J. 2002. Unraveling the taxonomic status of the genus *Cynopterus* (Chiroptera: Pteropodidae) in Sri Lanka by multivariate morphometrics and mitochondrial DNA sequence analysis. *Mammalian Biology* 67: 321-337.
- Mcdermott, M., Gunatilleke, C.V.S. and Gunatilleke, I.A.U.N. 1990. The Sinharaja rain forest: conserving both biological diversity and a way of life. *Sri Lanka Forester* 19(3&4): 3-22.
- Mitchell, R.J. and Tilaekratene, L.K.D. 1980. Understory vegetation structure of the Sinharaja tropical wet evergreen forest type. *Sri Lanka Forester* 14(3&4): 181-186.
- Meegaskumbura, M. and Manamendra-Arachchi, K. 2005. Descriptions of eight new species of shrub frogs (Ranidae: Rhacophorinae: *Philautus*) from Sri Lanka. In: Yeo, D. C. J., Ng, P. K. L. and Pethiyagoda, R. (eds), Contributions to Biodiversity Exploration and Research in Sri Lanka. *The Raffles Bulletin of Zoology*, Supplement No. 12: 305–338.
- Meegaskumbura, M., Manamendra-Arachchi, K., Schneider, C.J. and Pethiyagoda, R. 2007. New species amongst Sri Lanka's extinct shrub frogs (Amphibia: Rhacophoridae: *Philautus*). *Zootaxa* 1397: 1-15.
- Moyle, P.B. and Senanayake, F.R. 1984. Resource partitioning among the fishes of rainforest streams in Sri Lanka. *Journal of Zoology* 202: 195-223.
- Munidasa, K.G.H. 1995. *Papilio crino*, The Common Banded Peacock Butterfly. *Loris*, Journal of the Wildlife and Nature Protection Society of Sri Lanka. 20(5): 224-225
- Murawski, D.A., Gunatilleke, I.A.U.N. and Bawa, K.S. 1994. The effects of selective logging on inbreeding in *Shorea megistophylla* (Dipterocarpaceae) from Sri Lanka. *Conservation Biology* 8(4): 997-1002.
- Nadaraja, L. 1999. Bearing up. *Sri Lanka Nature* 3(2): 25-29.
- Nagendren, A. 1982. Birds. *Loris*, Journal of the Wildlife and Nature Protection Society of Sri Lanka. 16(1): 51.
- Nalinda, M.A.K. 1992. Trip Report of Kukulu Ganga. *News Letter of Young Zoologist Association of Sri Lanka*. 8(1): 5-8.

- Nalinda, M.A.K. 1980. Checklist of the Fishes (Pisces) of the Bellanwila-Attidiya marshes. Young Zoologists' Association of Sri Lanka. *Occasional Papers No. 3*: 4pp.
- Nanayakkara, H.P.S. 1987. Sighting of Rufous bellied Hawk Eagle at Sinharaja East. *Loris*, The Journal of Wildlife and Nature Protection Society of Sri Lanka, 17(6): 222-223.
- Nanayakkara, S. 2000. Nest and Eggs of Black Robin. *Loris*, Journal of the Wildlife and Nature Protection Society of Sri Lanka, 22(3): 64.
- Nanayakkara, G.L.A. 1989. An observation on the feeding of the Merrem's Hump-nosed viper, *Hypnale hypnale* in the wild. *Loris*, Journal of Wildlife and Nature Protection Society of Sri Lanka, 18(4):165.
- Nanayakkara, G.L.A. 1987. An experiment with Wolf snakes (Genus: *Lycodon*). *Loris*, Journal of the Wildlife and Nature Protection Society of Sri Lanka. 17(5):215.
- Nanayakkara, G.L.A. 1988. Checklist of the Reptiles inhabiting the Bellanwila-Attidiya Marshes (Preliminary Study). Young Zoologists association of Sri Lanka. *Occasional papers No. 4*: 6pp.
- Nandesena, M. 1994. *Stemonoporus moonii* Thwaites (Family-Dipterocarpaceae). *News Letter*, Young Zoologists' Association of Sri Lanka. 2(3): 1-2.
- Nathanael, S., Pradeep, D.M.N., Samarakoon, S.M.M. and de Silva, A. 2004. Herpetological diversity with special reference to endemic and nationally threatened species at Polgolla, an Upland area in the mid country wet zone of Sri Lanka. *Lyriocephalus Special Issue 5(1&2)*: 86-95.
- Nekaris, K.A.I. and Jayawardena, J. 2004. Survey of the Slender Loris (Primates, Lorisidae Gray, 1821: *Loris tardigradus* Linnaeus, 1758 and *Loris lydekkerianus* Cabrera, 1908) in Sri Lanka. *Journal of Zoology* 265: 327-338.
- Ormiston, W. 1924. *The Butterflies of Ceylon*. AES, New Delhi, (Reprint 2003) xii, 187 pp.
- Paliyawadana, A. 1987. the Buff striped Keelback, *Amphiesma stolata* (Linne). *Loris*, Journal of the Wildlife and Nature Protection Society of Sri Lanka.17(6): 225.
- Perera, C.J. 1998. Bird watching at natural water tanks at Puttalam. *Malkoha*, Field Ornithology Group of Sri Lanka. 5(1): 8-9.
- Perera M. S. J., Perera W. P. N., Rodrigo R. K., Ekanayake S. P., Bambaradeniya C.N.B., Samarawickrema V.A. P. and Wickramasinghe L. J. M. 2005. Biodiversity Status Profile of Anawilundawa sanctuary - A Ramsar Wetland in the Western Dry Zone of Sri Lanka. IUCN Sri Lanka, Country Office. *Occasional Paper No. 39*pp.
- Perera, N. 1997. A new record of an endangered Rasbora, *Rasbora wilpita* (Kottelat and Pethiyagoda- 1991) from Indikada Mukalana. *Sri Lanka Naturalist* 1(2): 20.
- Perera, N. 2001. An unusual habitat of *Puntius nigrofaciatus*. *Sri Lanka Naturalist* 4(1): 11-13.
- Perera, N. 2001. Some Notes on Migration of Lesser Albatross (*Appias paulina*) in Badulla District. *Sri Lanka Naturalist* 4(3): 60-61.
- Perera N. and Perera, M.S.J. 2001. From the Field Note Books. *Sri Lanka Naturalist* 4(1): 18-19.
- Perera, S.J. 2001. Orange Headed Ground Thrush *Zoothera citrina citrina*: A Sight Record from Buttala, Monaragala District. *Sri Lanka Naturalist* 4(2): 32-33.
- Perera, W.P.N. 2002. An observation on the emigration of Pioneer Butterfly (*Belonois aurota*) in Southern Sri Lanka. *Sri Lanka Naturalist* 5(3&4): 53-55.
- Perera, W.P.N. 2002. Preliminary Survey of Fishes of Upper Attanagalu River Basin in South West Ichthyological Zone of Sri Lanka. *Sri Lanka Naturalist* 5(2): 16-19.

- Perera, W.P.N. and Perera, R.N. 2004. The Rich Diversity of Fish of the Diyawanna Oya Wetland system. *Loris*, Journal of the Wildlife and Nature Protection Society of Sri Lanka. 23(5&6):27-31.
- Perera, W.P.N., Angammana D. and Bambaradeniya, C.N.B. 2003. A Record of a rare endemic butterfly- Cingalese Bushbrown (*Mycalesis rama* Moore, 1892), *Loris*, Journal of the Wildlife and Nature Protection Society of Sri Lanka. 23 (3&4): 40-42.
- Peris, L. 1973. The sand boa (one of our rare snakes). *Loris*, Journal of the Wildlife and Nature Protection Society of Sri Lanka. 13(2): 108-110.
- Perumal, S.K. 1985. Bundala: An ornithologist's paradise. *Loris*, Journal of the Wildlife and Nature Protection Society of Sri Lanka. 17(2): 57.
- Perera, B.M.K. (ed.) 2002. *Biological Diversity and Conservation Strategy, Kuruluukelle Area of the Kegalle Sanctuary*. Sri Lanka Environment Exploration Society. 75pp.
- Pethiyagoda, R. 1991. *Freshwater Fishes of Sri Lanka*. Wildlife Heritage Trust, Colombo, Sri Lanka. 362pp.
- Pethiyagoda, R and Manamendra-Arachchi, K. 1998. A Revision of the endemic Sri Lankan agamid Lizard Genus *Ceratophora* Gray, 1835, with description of two new species. *Journal of South Asian Natural History* 3(1): 1-50.
- Phillips, W.W.A. 1935. Manual of the Mammals of Ceylon. *Ceylon Journal of Science*, Dulau and Company, London. 371pp.
- Phillips, W.W.A. 1980. *Manual of the mammals of Sri Lanka*. Wildlife and Nature Protection Society of Sri Lanka. (2nd rev. ed) parts 1: 116pp.
- Phillips, W.W.A. 1980. *Manual of the mammals of Sri Lanka*. Wildlife and Nature Protection Society of Sri Lanka. (2nd rev. ed) parts 2: 267pp.
- Phillips, W.W.A. 1984. *Manual of the mammals of Sri Lanka*. Wildlife and Nature Protection Society of Sri Lanka. (2nd rev. ed) parts 3: 389pp.
- Popham, F.H. 1981. The grounds of the cottage Kandalama road, Dambulla, Sri Lanka. Year Book. *International dendrology society, London*. 1-2.
- Popham, F.H. and Neil, P.E. 1994. Dambulla Arboretum-Sri Lanka. *Arboriculture Journal*. AB Academic Publishers.18: 53-67.
- Pradeep, D.M.N. and Ukuwela, K. 2004. Some observations on *Boiga barnensi* (Reptilia: Serpentes: Colubridae). *Lyriocephalus Special Issue* 5(1&2): 156-159.
- Premathilake, R., Epitawatta, S. and Nilsson, S. 1999. Pollen morphology of some selected plant species from Horton Plains, Sri Lanka. *Grana* 38: 289-295.
- Priyadarshana, T.G.M. and Fernando, S.S. 1996. Biological Exploration of Ritigala Strict Nature Reserve. *News Letter*, Young Zoologists Association of Sri Lanka. 4 (3&4): 5-8.
- Radda, A.C. 1973. Collection of Fishes (Osteichthyes). Results of the Austrian-Ceylonese Hydrobiological mission. *Bull. Fish. Res. Stn. Sri Lanka (Ceylon)*. 24(1&2): 135-151.
- Rajakaruna,N., and Baker, A.J. 2004. Serpentine: a model habitat for botanical research in Sri Lanka. *The Ceylon journal of Science (Bio.Sci.)* 32:1-19.
- Ranasingha, P.N. 1997. A new record of *Malpulutta kretseri*. *Sri Lanka Naturalist*, the Journal of the Young Zoologists Association of Sri Lanka 1(1) :6.
- Ranasinghe, P.N. and Ratnayake, A. 1992. *Fauna and Flora of Dombagaskanda Forest, and its Conservation*. Young Zoologists Association of Sri Lanka. 33pp.

- Ranasinghe, P.N. and Senarathne, C.V. 1994. Life at Horton Plains. *News Letter*, Young Zoologists Association of Sri Lanka. 4(2): 1-8.
- Ranasinghe, P.N. and Fernando, S.S. 1994. Some Ecological observations at Gilimale Proposed Reserve with special reference to Family: Orchidaceae, Class: Aves and Class: Osteichthyes. *News Letter*, Young Zoologists Association of Sri Lanka. 2(1): 2-6.
- Ranasinghe, P.N. and Illeperuma, D. 2001. *Flora of Dombagaskanda; the report of the floral study*. Young Zoologists' Association of Sri Lanka. 61pp.
- Ranwella, S.P. 1993. A provisional account of some rain forest Orchids of Sri Lanka. *News Letter*, Young Zoologists Association of Sri Lanka. 3(2): 4-8.
- Ranwella, S.P. 1991 Four days in a rain forest. *Loris*, the Journal of the Wildlife and Nature Protection of Sri Lanka. 19(4): 132-134.
- Ranwella, S.P. 1995. *A Checklist of vertebrates of Bolgoda South Lake Area: with insight on ecology and Conservation*. Young Zoologists Association of Sri Lanka. 59pp.
- Rathnayake, A. 1997. An Observation report on Orange Headed Ground Thrush. *Sri Lanka Naturalist* 1(2): 21-22.
- Rathnayake, N.D. 2004. The Great Rock Gecko (*Calodactylodes illingworthorum*) of Sri Lanka. *Gecko*, Journal of the Global Gecko Association. 4(2):42-44.
- Ratnayake, N.D. and Weerasinghe, N. 1998. Snakes and Agamids of Hanthana Area. *Sri Lanka Naturalist*, Journal of the Young Zoologists Association of Sri Lanka, 2(1&2):11-14.
- Rathnayake, N.D., Herath, N., Hewamathes, K.K. and Jayalath, S. 2004. The thermal behaviour, diurnal activity patterns and body temperate of water monitor *Varanus salvator* in central Sri Lanka. *Lyriocephalus Special Issue* 5(1&2): 51.
- Rathnayake, R.M.W. 2002. Undergrowth vegetation in dry mixed evergreen forest. *The Sri Lanka Forester* 25(1&2): 37-49.
- Rathnayake, R.M.W., Jayasekera, L.R. and Solangaarachchi, S.M. 1996. A Quantitative Study of Overstorey Vegetation of an Upper Montane Rain Forest. *The Sri Lanka Forester* 3&4: 43-49.
- Ratnapala, S.R. 1998. A mother Bear and the war. *Loris*, Journal of the Wildlife and Nature Protection Society of Sri Lanka. 21(5): 216-217.
- Ratnayake, S. 2004. Sloth Bear project in Sri Lanka. *Eurasia*, International Journal of Bear News. 13(1): 11-13.
- Rodrigo, R.K. 1998. A Sight Record of the Red - faced Malkoha *Phaenicophaeus pyrohocephalus* from Haputale Forest Range. *Sri Lanka Naturalist* 2(3): 19.
- Sajithiran, T.M., Wijeyamohan, S. and Santiapillai, C. 2004. A comparative study of the diversity of birds in three reservoirs in Vavuniya, Sri Lanka. *Tigerpaper* 31(4): 27-32.
- Samarakoon, G.V. 1999. Conserving the leopard in Sri Lanka. The need for a management strategy. *Loris*, Journal of the Wildlife and Nature Protection Society of Sri Lanka. 22(1): 14-16.
- Samarakoon, S.M.M. 2004. *Dasia haliyana* (Reptilia: Scincidae) a new locality record. *Lyriocephalus Special Issue* 5(1&2): 160.
- Samarakoon, S.P. 1999. Flora of Oliyagankele forest reserve. *Sri Lanka Forester* 23(2&4): 35-49.
- Samarasinghe M.D.P., Paranagama P. and Veediyabandara, S. 1998. Survey of the Butterfly Fauna of Udawalawa National Park. *Proceeding of the Second Annual Forestry Symposium 1996*. Department of Forestry and Environmental Science, University of Peradeniya. 98pp.

- Samarasinghe, J. 1996. Regeneration dynamics of silviculturally assisted dry zone scrub vegetation at Dambulla Arboretum. Proceedings of *Annual Forestry Symposium 1995*. Department of forestry and environmental science, University of Jayawardene. 291-299.
- Samaraweera, P. 1985. The Nesting habitat of the Three - toed Kingfisher (*Ceyx erithacus*). *Loris*, The Journal of Wildlife and Nature Protection Society. 17(2): 36-37.
- Samarawickrama, V. A. M. P. K., Samarawickrama, V. A. P., Wijesena, N. M. and Orlov, N.L. 2005. A new species of genus *Boiga* (Serpentes: Colubridae: Colubrinae) from Sri Lanka. *Russian Journal of Herpetology* 12(3): 213–222.
- Samarawickrama, V.A.M.P.K., Ranawana, K.B., Rajapaksha, D.R.N.S., Ananjeva, N.B., Orlov, N.L., Ranasinghe, J.M.A.S. and Samarawickrama,, V.A.P. 2006. A new species of the genus *Cophotis* (Squamata: Agamidae) from Sri Lanka. *Russian Journal of Herpetology* 13 (3): 207-214.
- Santiapillai, C., de Silva, M. and Dissanayake, S.R.B. 2000. The Status of Mongoose (Family: Herpestidae) in Ruhuna National Park Sri Lanka. *Journal of Bombay Natural History Society* 97(2): 208-214.
- Santiapillai, C. and de Silva, M. 2001. Crocodiles in Sri Lanka, their conservation and management. *Sri Lanka Nature* 3 (1):10-19.
- Santiapillai, C. and Chambers, M.R. 1980. Aspects of the population dynamics of the wild pig (*Sus scrofa* Linnaeus, 1758) in the Ruhuna National Park, Sri Lanka. *Spixiana* 3 (3): 239-250.
- Santiapillai, C. and Wijeyamohan, S. 2002. A comparison of the abundance of the Ass (*Equus africanus*) in Kalpitiya and Mannar, Sri Lanka. *Tiger Paper* 29(3): 1-3.
- Santiapillai, C., Wijemohan, S. and Kenneth R.A. 2000. The Ass in Sri Lanka- its ecology, biological significance and Conservation. *Sri Lanka Nature* 2(4): 4-7.
- Senanayake, F. R. 1987. A Checklist of the Freshwater Fishes of Sri Lanka. *Loris*, Journal of the Wildlife and Nature Protection Society of Sri Lanka. 17(5): 211-213.
- Senanayake, F.R. 1979. Notes on the lizards of the Genus *Ceratophora*. *Loris*, Journal of the Wildlife and Nature Protection Society of Sri Lanka, 15(1):18-19.
- Senarathne, C.V. 1997. A synopsis of life histories of some Pierids in Sri Lanka. *Sri Lanka Naturalist* (1): 5-6
- Senarathne, C.V. 1997. An unusual flight of the Fivebar Swordtail (*Graphium antiphates ceylonicus*). *Sri Lanka Naturalist* 1(2): 18-19.
- Senaratna, C.V. 1998. Oriental Turtle Dove *Streptopelia orientalis*: A Sight Record from Galge, Moneragala District. *Sri Lanka Naturalist* 2(1&2): 8.
- Senaratna, C.V. 2000. The Second Sight Record of Black Stork *Ciconia nigra* from Sri Lanka. *Sri Lanka Naturalist* 3(1): 1-2.
- Senaratne, C.V. 1993. Fauna and Orchids of Ritigala: A checklist. *News Letter*, Young Zoologists Association of Sri Lanka. 3(2): 2-3.
- Seneratna, C.V. 1998. A Sight Record of Broad - billed Roller (Dollarbird) *Eurystomus orientalis* from Trincomalee. *Sri Lanka Naturalist* 2(4): 43-44.
- Seneviratne, S.C. 1976. A Little Minivet's Nest. *Loris*, Journal of the Wildlife and Nature Protection Society of Sri Lanka, 14(2): 109.
- Seneviratne, G.I., Abeynayake, K. and Legagala, M.R.K. 1999. Floral diversity of Kalatuwawa-Labugama Forest Reserve. *1996 Regional Seminar on Forests of the Humid Tropics of South and South East Asia*. 95-106.

- Serasinghe, R. 1992. Communal Roosting of the Common Sandpiper (*Actitis hypoleucus*). *Loris*, Journal of the Wildlife and Nature Protection Society of Sri Lanka. 19(5):174-175.
- Silva, E.I.L. and Davies, R.W. 1986. Movements of some indigenous riverine fish in Sri Lanka. *Hydrobiologia* 137: 263-270.
- Singhakumara, B.M.P. 1995. *Floristic Survey of Adam's Peak Wilderness*. Sri Lanka Forest Department. 156pp.
- Singhakumara, B.M.P., Gamage, H.K. and Ashton, P.M.S. 2002. Influence of irradiance on seeding ecology of *Syzygium* tree species (Myrtaceae) in southwest rain forest, Sri Lanka. *The Sri Lanka Forester* 25(1&2): 5-20.
- Singhakumara, B.M.P. and Ashton, P.M.S. 1999. Seedling growth of four co-occurring canopy tree species on different light and soil moisture environments. *1996 regional seminar on forests of the humid tropics of south and South East Asia*. 107-119.
- Siriwardhane, M. 1992. Rufous Turtle Dove - A new Sight Record. *Loris*, The Journal of Wildlife and Nature Protection Society. 19(5): 177-178.
- Somaweera, R. 2004. A Bark Gecko (*Hemidactylus leschenaultii*) preying on a Wolf snake (*Lycodon striatus sinhaleyus*). *Gecko*, Journal of Global Gecko Association. 4(2): 8-10.
- Somaweera, R., Ukuwela, K. and Karunaratne, S. 2001. Menikdena: a local herpetofauna hotspot. ARROS. *Occasional Paper No. 2*: 8pp.
- Somaweera, R., Sarathchandra, K., Karunaratne, S. and Nuwansiri, C. 2004. A study on the avifauna and herpetofauna of Panama, Eastern province, Sri Lanka. *Sri Lanka Naturalist* 6(1&2): 1-9.
- Somaweera, R., Karunaratne, S. and Ukuwela, K. 2001. The Kandyan tetrapod Herps. *Loris*, Journal of the Wildlife and Nature Protection Society of Sri Lanka. 22(6):3-10.
- Soysa, A.M.T. 1973. Natural Durability of twelve timber found in Sri Lanka. *The Sri Lanka Forester* 11(1&2): 24-31.
- Stacy, E.A., Dayanandan, S., Dancik, B.P., and Khasa, P.D. 2001. Microsatellite DNA markers for the Sri Lankan rainforest tree species, *Shorea cordifolia* (Dipterocarpaceae), and cross-species amplification in *S. megistophylla*. *Molecular Ecology Notes* 1:53–54.
- Stacy, E.A., Harischandran, S. and Gunatilleke, I.A.U.N. 1999. Reproductive ecology of *Syzygium rubicundum* Wight and Arn. (Myrtaceae) in selectively logged forest in Sinharaja World Heritage site. *The Sri Lanka Forester* 23(3&4): 18-29.
- Sukumar, R. 1993. Minimum viable populations for elephant Conservation. *Gajah* 11: 48-52.
- Sunil, A.G., Ashton, P.M.S., Gunatilleke, C.V.S. and Gunatilleke, I.A.U.N. 1999. Conservation of *Pinus* plantations in the buffer zone of the Sinharaja MAB Reserve to rain forest analogs. *1996 regional seminar on forests of the humid tropics of south and South East Asia*. 303-314.
- Taylor, E.H. 1953. A Review of the Lizards of Ceylon. *The University of Kansas Science Bulletin*. 35(12):1525-1585.
- Tirimanna, V. 1985. The Ceylon Long Tailed Nightjar (*Caprimulgus macrurus aequabilis*). *Loris*, Journal of the Wildlife and Nature Protection Society of Sri Lanka. 17(2): 53-54.
- Tirimanna, V. 1996. A Red Turtle Dove (?) at Kitulgala. *Loris*, Journal of the Wildlife and Nature Protection Society of Sri Lanka. 21(2): 48-49.
- Tissar, M. 2001. Wilpattu; looking back. *Sri Lanka Nature* 3(2): 34-39.

- Turnbull, J. 1998. The Fish Owls of Rothschild Garden, Pussellawa. *Loris*, Journal of the Wildlife and Nature Protection Society of Sri Lanka. 18(1): 16-17.
- Udupooruwa, R.S.J.P., Singhakumara, B.M.P. and Alston, P.M.S. 1999. Floristics of soil seed banks in relation to light and topographic position in a Sri Lanka rain forest. *1996 Regional Seminar on Forests of the Humid Tropics of South and South East Asia*. 235-247.
- Ukuwela, K. 2004. Observations on a cannibalistic habitat of *Boiga ceylonensis* (Reptilia: Serpentes: Colubridae). *Lyriocephalus Special Issue* 5(1&2): 161.
- Ukuwela, K. and Pradeep, D.M.N. 2004. Reptile diversity of Ambagamuwa, in the Mid country wet zone of Sri Lanka. *Lyriocephalus Special Issue* 5(1&2):103-110.
- Van der Pooten N. 1996. Butterflies in Sri Lanka. *Loris*, Journal of the Wildlife and Nature Protection Society of Sri Lanka. 21(3): 5-7
- Vidalankara, K.N.K. and Bandara, R.W. 2004. Some observations on *Lyriocephalus scutatus*. *Lyriocephalus Special Issue* 5(1&2): 151.
- Waduge, R.W. 1995. The Knuckles: a montane forest. *Loris*, Journal of the Wildlife and Nature Protection Society of Sri Lanka. 20(5): 218-219.
- Warakagoda, D. 2001. Seeking and studying the new Owl: the Serendib Scops Owl project in the period July - December 2001. *Loris*, Journal of the Wildlife and Nature Protection Society of Sri Lanka. 22(6): 19-20.
- Warakagoda, D. 1992. The Lanceolated Warbler (*Locustella lanceolata*): A new species for Sri Lanka with two other rare warblers. *Loris*, Journal of the Wildlife and Nature Protection Society of Sri Lanka. 19(5):166-167.
- Warakagoda, D. and Rasmussen, P.C. 2004. A New species of Scops - Owl from Sri Lanka. *Bulletin of the British Ornithologists' Club*. 12(2): 85-105.
- Watson, R.E. 1998. *Stiphodon martenstyni*, a new species of freshwater goby from Sri Lanka. (Teleostei: Gobiidae: Sicydiini). *Journal of South Asian Natural History* 3(1): 69-78.
- Weerawardane, N.D.R. 1999. Natural regeneration of some dry zone forest species assisted by silvicultural management in a dry zone woodland at Dambulla. *The Sri Lanka Forester* 23(3&4):7-17.
- Werner, W.L. 1986. Monaragala - an outpost of Sri Lanka; Rain forest. *Loris*, Journal of the Wildlife and Nature Protection of Sri Lanka. 17(3): 97-99.
- Wickramasinghe, L.J.M. (2000) A new record of *Cnemaspis podihuna* from Budulla District. *Sri Lanka Naturalist* 3(1): 3-6.
- Wickramasinghe, L.J.M. 2004. Breeding biology of the Green Pit Viper (*Trimeresurus trigonocephalus*) under captive conditions. *News letter of the South Asian Reptile Network*. Reptile Rap. 6: 9-10.
- Wickramasinghe, L. J. M. 2006. A new species of *Cnemaspis* (Sauria: Gekkonidae) from Sri Lanka. *Zootaxa* 1369: 19–33
- Wickramasinghe, L.J.M. and Bambaradeniya, C.N.B. 2004. Composition and distribution of reptiles in the Walawe River Basin of Sri Lanka. *News letter of the South Asian Reptile Network*. *Reptile Rap*. 6: 9
- Wickramasinghe, M and Somaweera, R. 2003. Distribution and current status of the endemic geckos of Sri Lanka. *Gecko*, Journal of the Global Gecko Association. 3(1): 2-13.
- Wickramasinghe, L.J.M. and Munindradasa, D.A.I. 2007. Review of the genus *Cnemaspis* Strauch, 1887 (Sauria: Gekkonidae) in Sri Lanka with the description of five new species, *Zootaxa* 1490: 63pp.

- Wickramasinghe, L.J.M., Rodrigo R., Dayawansa N. and Jayantha U.L.D. 2007 Two new species of *Lankascincus* (Squamata:Scincidae) from Sripada Sanctuary (Peak Wilderness), in Sri Lanka, *Zootaxa* 1612: 1-24.
- Wickramasinghe, S. 1984. Our readers write. *Loris*, Journal of the Wildlife and Nature Protection Society of Sri Lanka. 16(5): 268.
- Wickramatilake, P. 2003. Freshwater Fishes of the Udugama Stream. *Loris*, Journal of the Wildlife and Nature Protection Society of Sri Lanka. 23(3&4):19-21.
- Wijesinghe, R. 2001. Uda Walawe; where man meets elephants. *Sri Lanka Nature* 3 (2): 41-15.
- Wijeyamohan, S., Baheerathi, T., Luxmy, S., Prabha, k., Sajithran, T.M., Sivagini, S., Sivagnanam, V., Theeban, S., Wijesundara, C. and Santiapillai, C. 2002. Diversity of Birds in the Giant's Tank Wanni region, Sri Lanka. *Tigerpaper* 29 (4): 11-14.
- Wijeyeratne, M.J.S. and Costa, H.H. 1992. Resource partitioning of two commercially important cichlid species in three minor perennial reservoirs in the north-western province of Sri Lanka. *Journal of Aquaculture* 21: 131-140.
- Wijeyeratne, G.D.S. 2000. Red - faced Malkoha Captured on Film. *Loris*, Journal of the Wildlife and Nature Protection Society of Sri Lanka. 22(4): 44-45.
- Williams, N. and Senarathne, C. 1998. Flight of butterflies at Kirinda - Hambanthota District. *Sri Lanka Naturalist* 2(3): 21.
- Wisumperuma, D. 2001. The Indian Chameleon (*Chamaeleo zeylanicus* Laurenti). *Loris*, Journal of the Wildlife and Nature Protection Society of Sri Lanka. 22(5): 49-50.
- Yapa, W.B., Digana, P.M.C.B. and Ratnasooriya, W.D. 2005. Are Bats an endangered group? Evidence from Sri Lanka. Natural Resource Utilization and Environmental Preservation: Issues and Challenges. *Proceedings of Second Regional Symposium on Environmental and Natural Resources* 2:22-23.
- Yapa, W.B., Digana, P.M.C.B. and Ratnasooriya, W.D. 1999. First record of an albino bat in Sri Lanka. *Loris*, Journal of the Wildlife and Nature Protection Society of Sri Lanka. 22(1): 3.
- YZA 1989. Trip Report of Labugama expedition. *News Letter*, the Young Zoologists Association of Sri Lanka. 1(2): 1-4.

(B) Unpublished technical documents

- Bambaradeniya C.N.B., Ekanayake S.P., Perera M.S.J., Perera W.P.N., Wickramasinghe L.J.M., Samarawickrama V.M.P. and Perera, D.C.K. 2005. *Report on the Status of Biodiversity in Kandakuliya - Kalpitiya CRMP/SAM Site*. Unpublished Technical Report of IUCN Sri Lanka.
- Bedjanic, M. 2005. Globally Endangered Dragonflies of Sri Lanka. Datasheets for assessing species for the IUCN Global Red List of Threatened Animals, Prepared for the IUCN SSC Odonata Specialist Group (Unpublished).
- Chamikara, S.S. 2002. *The diversity of freshwater fishes and current status*. The Society for Environmental Education. Unpublished report.
- Chamikara, S.S. 2003. *Fish diversity and present status of wt forests in Pahiyangala, Weligalpotta and Horanekanda*. The Society for Environmental studies. Unpublished report. 38pp.
- Dilhan, M.A.A.B. 2005. *Vegetation structure and floristic composition in the irrigation extension area of the lower Walawe Basin Sri Lanka*. M.Phil dissertation, University of Peradeniya. (unpublished) 156pp.
- Ekanayake, S.P. 2003. *Operational guidelines on sustainable utilization of non timber forest products in demonstration plots at Pitadeniya (Sinharaja) and Kanneliya forest, Sri Lanka*. Unpublished report. 80pp.
- Ekanayake, S.P. 1994. *A phyto-sociological study of semi-evergreen forests of Knuckles and Uda Walawe, Sri Lanka*. M.Phil Dissertation, Department of Botany, Faculty of Science, University of Peradeniya. (unpublished). 180pp.
- Goonatilake, W.L.P.T. de A. 1997. *A preliminary study of freshwater stream fishes in selected streams at Eratne*. B.Sc. Dissertation, Department of Zoology, Open University of Sri Lanka. Unpublished. 66pp.
- Gunatileke, I.A.U.N., Dassanayake, M.D., Gunatileke, C.V.S., Wijesundara, S. and Amarasingha, A.A.L. 1882. *Phytosociological studies at Hinidumkanda (Haycock). a lowland rainforest In Sri Lanka and Its endemic tree flora*. Unpublished report. 16pp.
- IUCNSL and Forest Department 1993. *Management plan for the conservation of the Sinharaja forest. Phase-2*. Unpublished report.
- Martin, D. and Gilhespy, J. 1996. *Species composition of secondary dry zone forest following chena cultivation in the Sigiriya area of Sri Lanka*. Unpublished report. 25pp.
- Perera, R.N. (2005) *Estimate of the present population and ecological parameters of Puntius asoka in Sitawake river*. B. Sc. Dissertation, Department of Zoology, Open University of Sri Lanka. Unpublished report. VI-39pp.
- Perera, B.M.K. (ed.) 2002. *Biological Diversity and Conservation Strategy, Kuruluukele Area of the Kegalle Sanctuary*. Sri Lanka Environment Exploration Society. Unpublished Report.
- Senanayake, F.R. 1980. *The Biogeography and Ecology of the Inland Fishes of the Sri Lanka*. Ph.D. dissertation (Unpublished), Department of Wildlife and Fishes biology ; University of California, Davis. 421pp.
- Shirantha, R.R.A.R., Wijeyaratne M.J.S. and Amarasinghe, U.S. 2006. *Current status of ecology and population dynamics of Golden Rasbora (Rasbora vaterifloris Deraniyagala) Endemic to Sri Lanka: Remarks on Conservation Management*. Unpublished report. 25pp.
- Wickramasinghe, L.J.M. 2006. *Reptile Fauna of Lower Walawa Irrigation Extension Area*. IUCN Sri Lanka / IWMI (Unpublished checklist)
- IUCN Sri Lanka 2007. *Resource Inventory of the Wilpattu National Park*. Unpublished Technical Report of the World Conservation Union (IUCN) Sri Lanka.

(C) Fauna and flora repositories

National Museum (Natural History Section)
National Herbarium
Wildlife Heritage Trust (Agra arboretum)

(D) Researchers who provided unpublished distribution data

Birds: Mr. Deepal Warakagoda, Mr. Upali Ekanayake, Mr. Lester Perera, Mr.Udaya Siriwardana, Mr. Uditha Hettige, Mr.Gehan de Silva Wijeyeratne

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ANNEX 4:

VERTEBRATE FAUNA LISTED UNDER THE NEAR THREATENED (NT) CATEGORY (* ENDEMIC SPECIES)

CLASS: ACTINOPTERIGII (Freshwater Fish)
Family- Cyprinidae
<i>Rasboroides atukorali</i> (Deraniyagala, 1943)
E - Horadandia, S - Horadandia
Family – Balitoridae
<i>Schistura notostigma</i> (Bleeker, 1863)*
E - Banded mountain loach, S - Puwak badilla
Family – Aplocheilidae
<i>Aplocheilus dayi</i> (Steindachner, 1892)*
E - Day's killifish, S - Uda handeya
Family – Belontidae
<i>Xenentodon cancila</i> Hamilton, 1822
E - Freshwater garfish, S - Yonna
Family –Belontidae
<i>Belontia signata</i> (Gunther 1861)*
E - Combtail, S - Thalkossa
Family Channidae
<i>Channa orientalis</i> (Bloch & Schneider, 1801)*
E - Smooth-breasted snakehead, S - Kola kanaya
Family – Anguillidae
<i>Anguilla bicolor</i> Mc Clelland, 1844
E - Level finned eel , S - Kalu aanda
CLASS: AMPHIBIA
Family: Microhylidae
<i>Ramanella obscura</i> (Günther, 1864)*
E - Obscure ramanella, S - Dumburu mota hombu madiya
Family: Ranidae
<i>Rana temporalis</i> (Günther, 1864)*
E - Bronzed frog, S - Thambawan diya madiya
<i>Philautus rus</i> Manamendra-Arachchi & Pethiyagoda, 2005*
E - Kandian shrub frog, S - Nuwara panduru madiya
<i>Philautus sordidus</i> Manamendra-Arachchi & Pethiyagoda, 2005*
E - Grubby shrub frog, S - Anduru lapawan panduru madiya
<i>Philautus stictomerus</i> (Günther, 1876)*
E - Orange canthal shrub frog, S - Thambil-hombu thirathi panduru madiya
CLASS: REPTILIA
Family: Crocodylidae
<i>Crocodylus porosus</i> Schneider, 1801
E - Estuarine crocodile, S - Gata Kimbula

Family: Bataguridae
<i>Melanochelys trijuga</i> (Schweigger, 1814)
E - Parker's Black Turtle, S - Gal Ibba
Family: Agamidae
<i>Lyriocephalus scutatus</i> (Linnaeus, 1758)*
E - Lyre head lizard/ Hump snout Lizard, S - Karamal bodiliya
<i>Otocryptis wiegmanni</i> Wagler, 1830*
E - Sri Lankan kangaroo lizard, S - Pinum kattussa
Family: Chameleonidae
<i>Chamaeleo zeylanicus</i> Laurenti, 1768
E - Sri Lankan Chameleon, S - Bodilima
Family: Gekkonidae
<i>Geckoella triedrus</i> (Günther, 1864)*
E - Spotted bowfinger gecko, S - Pulli vakaniyahuna
<i>Hemidactylus maculatus</i> Duméril & Bibron 1836
E - Spotted giantgecko / Rock gecko, S - Davanta tit huna
<i>Cnemaspis molligodai</i> Wickramasinghe and Munindradasa 2007
E - Molligoda's day gecko, S - Molligodage diva huna
Family: Scincidae
<i>Dasia halianus</i> (Haly & Nevill et Nevill, 1887).
E - Haly's treeskink, S - Halige rukhiraluwa
<i>Lankascincus gansi</i> Greer, 1991*
E - Gans's lankaskink, S - Gansge lakhiraluwa
<i>Lankascincus taprobanensis</i> (Kelaart, 1854) *
E - Smooth Lanka skink, S - Sumudu lakhiraluwa
<i>Mabuya madaraszi</i> Méhely, 1897*
E - Spotted skink, S - Pulli hikanala
<i>Nessia burtonii</i> Gray, 1839*
E - Threetoe Snakeskink, S - Triyanguli sarpahiraluwa
Family - Cylindrophidae
<i>Cylindrophis maculata</i> (Linnaeus, 1758)
E - Pipe snake, S - Depath naya
Family – Colubridae
<i>Ahaetulla pulverulenta</i> (Duméril, Bibron & Duméril, 1854)
E - Brown vine snake, S - Henakandaya
<i>Aspidura brachyorrhos</i> (Boie, 1827)
E - Boie's roughside, S - Le madilla
<i>Aspidura guentheri</i> Ferguson, 1876
E - Ferguson's roughside, S - Kudamadilla
<i>Aspidura trachyprocta</i> Cope, 1860
E - Common roughside, S - Dalawa madilla
<i>Boiga barnesii</i> (Günther, 1869)
E - Barnes's cat snake, S - Panduru mapila
<i>Chrysopela ornata</i> (Shaw, 1802)
E - Ornate flying snake, S - Malsara
<i>Dryocalamus nymphus</i> (Daudin, 1803)
E - Bridal snakeGeta, S - Radanakaya/ Geta karawala
<i>Macropisthodon plumbicolor</i> (Cantor, 1839)

E - The green keelback, S - Palabariya

Family – Elapidae

Bungarus ceylonicus Günther, 1864

E - Sri Lanka krait, S - Mudu karawala/ Hath karawala

Calliophis melanurus (Shaw, 1802)

E - Sri Lanka coral snake, S - Depath kaluwa

Family – Viperidae

Hypnale nepa (Laurenti, 1768).

E - Merrem's hump-nosed viper, S - Mukalan thelissa

CLASS: AVES

Family: Phasianidae

Galloperdix bicalcarata (Forster, 1781)*

E - Sri Lanka Spurfowl, S - Sri Lanka Haban-kukula

Francolinus pondicerianus (Gmelin, 1789)

E - Grey Francolin, S - Alu Watu-kukula

Family: Picidae

Dendrocopos nanus (Gmelin, 1788)

E - Brown-capped Pygmy Woodpecker, S - Bora Esasi Gomera-Karela

Celeus brachyurus (Vieillot, 1818)

E - Rufous Woodpecker, S - Borath koda karela

Picus chlorolophus (Vieillot, 1818)

E - Lesser Yellow-naped Woodpecker, S - Heen kaha-gelasi karela

Chrysocolaptes lucidus (Scopoli, 1786)**

E - Greater Flameback, S - Lepita Maha-karela

Family: Bucerotidae

Anthracoceros coronatus (Boddaert, 1783)

E - Malabar Pied Hornbill, S - Poru-kandaththa

Family: Upupidae

Upupa epops Linnaeus, 1758

E - Common Hoopoe, S - Podu Poroluwa

Family: Trogonidae

Harpactes fasciatus (Pennant, 1769)

E - Malabar Trogon, S - Lohawannichchiya

Family: Alcedinidae

Ceyx erithacus (Linnaeus, 1758)

E - Oriental Dwarf Kingfisher, S - Peradiga Ran-pilihuduwa

Family: Cuculidae

Hierococcyx varius (Vahl, 1797)

E - Common Hawk Cuckoo, S - Ukusukoha

Phaenicophaeus leschenaultii (Lesson, 1830)

E - Southern Sirkeer, S - Patan Malkoha

Family: Psittacidae

Psittacula calthropae(Blyth, 1849)*

E - Sri Lanka Layard's Parakeet, S - Sri Lanka Alu girawa

Family: Apodidae

Collocalia unicolor (Jerdon, 1840)

E - Indian Edible-nest Swiftlet, S - Indu Upa-thurithaya

Family: Tytonidae

Tyto alba (Scopoli, 1769)

E - Barn Owl, S - Atu Wesbassa

Family: Strigidae

Bubo nipalensis Hodgson, 1836

E - Spot-bellied Eagle Owl, S - Ulama

Strix leptogrammica Temminck, 1832

E - Brown Wood Owl, S - Bora Wana-bakamoona

Glaucidium radiatum (Tickell, 1833)

E - Jungle Owlet, S - Wana upabassa

Family: Batrachostomidae

Batrachostomus moniliger Blyth, 1849

E - Frogmouth, S - Madi-muhuna

Family: Caprimulgidae

Caprimulgus indicus Latham, 1790

E - Highland Nightjar, S - Alu Bimbassa

Family: Rallidae

Gallicrex cinerea (Gmelin, 1789)

E - Watercock, S - Kora

Family: Burhinidae

Burhinus oedicnemus (Linnaeus, 1758)

E - Eurasian Thick-knee, S - Eurasia Golukiraluwa

Esacus recurvirostris (Cuvier, 1829)

E - Great Thick-knee, S - Maha Golukiraluwa

Family: Accipitridae

Elanus caeruleus (Desfontaines, 1789)

E - Black-shouldered Kite, S - Uris-kalu Pathannkussa

Hieraetus kienerii (Geoffroy, 1835)

E - Rufous-bellied Eagle, S - Kusarath Rajaliya

Family: Phalacrocoracidae

Phalacrocorax carbo (Linnaeus, 1758)

E - Great Cormorant, S - Maha Diyakawa

Family: Ciconiidae

Ciconia episcopus (Boddaert, 1783)

E - Woolly-necked Stork, S - Padili Manawa

Family: Corvidae

Dicrurus paradiseus (Linnaeus, 1766)

E - Great Racket-tailed Drongo, S - Maha Kawuda

Family: Muscicapidae

Culicicapa ceylonensis (Swainson, 1820)

E - Grey-headed Canary Flycatcher, S - Aluhis Kaha-masimara

Zoothera spiloptera (Blyth, 1847)*

E - Sri Lanka Spot-winged Thrush, S - Sri Lanka Thithpiya Thirasikaya

Family: Sittidae

Sitta frontalis Swainson, 1820

E - Velvet-fronted Nuthatch, S - Villuda Nalal Yatikuriththa

Family: Hirundinidae

Hirundo daurica Linnaeus, 1771

E - Red-rumped Swallow, S - Nithamba rathu Wahilihiniya
Family: Pycnonotidae
<i>Pycnonotus melanicterus</i> (Gmelin, 1789)
E - Black-crested Bulbul, S - Kalu Hisasi Kondaya
<i>Iole indica</i> (Jerdon, 1839)
E - Yellow-browed Bulbul, S - Bamakaha Guluguduwa
Family: Zosteropidae
<i>Zosterops ceylonensis</i> Holdsworth, 1872*
E - Sri Lanka White-eye, S - Sri Lanka Sithasiya
Family: Sylviidae
<i>Acrocephalus stentoreus</i> (Hemprich & Ehrenberg, 1833)
E - Great Reed Warbler, S - Gosa panraviya
<i>Pellorneum fuscocapillum</i> (Blyth, 1849)*
E - Sri Lanka Brown-capped Babbler, S - Sri Lanka Boraga-demalichcha
<i>Pomatorhinus horsfieldii</i> Sykes 1832*
E - Scimitar Babbler, S - Da-demalichcha
<i>Dumetia hyperythra</i> (Franklin, 1831)
E - Tawny-bellied Babbler, S - Kusakaha Landu-demalichcha
Family: Passeridae
<i>Ploceus manyar</i> (Horsfield, 1821)
E - Streaked Weaver, S - Pan Wadukurulla
<i>Ploceus philippinus</i> (Linnaeus, 1766)
E - Baya Weaver, S - Ruk Wadukurulla
CLASS: MAMMALIA
Family: Manidae
<i>Manis crassicaudata</i> Gray, 1827
E - Pangolin, S - Kaballewa
Family: Hipposideridae
<i>Hipposideros lankadiva</i> Kelaart, 1850
E - Great leaf-nosed bat, S - Maha Pathnehe-vavula
Family: Megadermatidae
<i>Megaderma lyra</i> Geoffroy, 1810
E - False vampire bat, S - Boru Ley-vavula
<i>Megaderma spasma</i> (Linnaeus, 1758)
E - Long-eared vampire bat, S - Kandiga Boru Ley-vavula
Family: Cercopithecidae
<i>Semnopithecus priam</i> Blyth, 1844
E - Grey langur, S - Eli-wandura
<i>Macaca sinica</i> (Linnaeus, 1771)*
E - Sri Lanka toque monkey, S - Rilava
Family: Lorisidae
<i>Loris lydekkerianus</i> Cabrera, 1908
E - Sri Lanka grey slender loris, S - Alu Unahapuluwa
Family: Tragulidae
<i>Moschiola kathygre</i> Groves & Meijaard, 2005*
E - Sri Lanka pigmy mouse-deer, S - Sri Lanka Kuru Meminna

ANNEX 5:

INVERTEBRATE FAUNA LISTED UNDER THE NEAR THREATENED (NT) CATEGORY (* ENDÉMIC SPECIES)

CLASS/FAMILY/SPECIES
CLASS: ARACHNIDA
Family: Theraphosidae
<i>Poecilotheria ornata</i>
<i>Poecilotheria subfusca</i>
CLASS: INSECTA (Order Lepidoptera)
Family - Papilionidae
<i>Troides darsius</i> Gray, 1852*
E - Ceylon Birdwing, S - Maha Kurulu Piya Papiliya
<i>Chilasa clytia</i> Linnaeus, 1758
E - Mime, S - Rawana Papilia
<i>Papilio helenus</i> Linnaeus, 1758
E - Red Helen, S - Maha Kela Papilia
<i>Pathysa nomius</i> Esper, 1784
E - Spot Swordtail, S - Thith kaga-waligaya
Family - Pieridae
<i>Appias libythea</i> Fabricius, 1798
E - Striped Albatross, S - Iri Sudana
<i>Appias lyncida</i> Cramer, 1779
E - Chocolate Albatross, S - Dumburuwan Sudana
<i>Colotis amata</i> Fabricius, 1775
E - Small Salmon Arab, S - Punchi Rosa Sudana
<i>Colotis danae</i> Fabricius, 1775
E - Crimson Tip, S - Rathu-thudu Sudda
<i>Colotis etrida</i> Boisduval, 1836
E - Little Orange Tip, S - Heen Sudana
Family - Nymphalidae
<i>Idea iasonia</i> Westwood, 1848
E - Tree Nymph, S - Pawenna
<i>Ideopsis similis</i> Linnaeus, 1764
E - Blue Glassy Tiger, S - Maha Nil-Kotithiya
<i>Tirumala septentrionis</i> Butler, 1865
E - Dark Blue Tiger, S - Anduruwan Nil-Kotithiya
<i>Euploea sylvester</i> Fabricius, 1793
E - Double- banded Crow, S - De-iri Kaka-Kotithiya
<i>Euploea phaenareta</i> Schaller, 1758
E - King Crow, S - Yoda Kaka-Kotithiya
<i>Euploea klugii</i> Moore, 1888

E - Brown King Crow, S - Raja Kaka-Kotithiya	
<i>Ariadne merione</i> Cramer, 1777	
E - Common Castor, S - Podu Pathan-Sariya	
<i>Byblia ilithyia</i> Drury, 1773	
E - Joker, S - Kawataya	
<i>Cupha erymanthis</i> Drury, 1773	
E - Rustic, S - Raththiya	
<i>Vindula erota</i> Fabricius, 1793	
E - Cruiser Yoda, S - Thambiliya	
<i>Cirrochroa thais</i> , Fabricius, 1787	
E - Tamil Yeoman, S - Kela Raththiya	
<i>Cethosia nietneri</i> Felder, 1867	
E - Ceylon Lace Wing, S - Lanka Seda-Piyapatha	
<i>Argynnis hyperbius</i> Linnaeus, 1763	
E - Indian Fritillary, S - Indiyanu Alankarikya	
<i>Vanessa indica</i> Herbst, 1794	
E - Indian Red Admiral, S - Rathu seneviya	
<i>Vanessa cardui</i> Linnaeus, 1761	
E - Painted Lady, S - Vichitra Alankarikya	
<i>Kaniska canace</i> Linnaeus, 1763	
E - Blue Admiral, S - Nil Seneviya	
<i>Pantoporia hordonia</i> Stoll, 1790	
E - Common Lasker, S - Kaha Selaruwa	
<i>Moduza procris</i> Cramer, 1777	
E - Commander, S - Maha Selaruwa	
<i>Parthenos sylvia</i> Cramer, 1775	
E - Clipper, S - Yoda Kela Selaruwa	
<i>Rohana parisatis</i> Westwood, 1850	
E - Black Prince, S - Kalu Kumaraya	
<i>Polyura athamas</i> Drury, 1770	
E - Nawab, S - Kaha Kumaraya	
<i>Charaxes psaphon</i> , Westwood, 1848	
E - Tawny Rajah, S - Maha kumaraya	
<i>Charaxes solon</i> Fabricius, 1793	
E - Black Rajah, S - Kalu Raja-Kumaraya	
<i>Libythea myrrha</i> Godart, 1819	
E - Club Beak, S - Dandu Dumburu-thuduwa	
<i>Lethe rohria</i> Fabricius, 1787	
E - Common Tree Brown, S - Podu Gas-dumburuwa	
Family - Lycaenidae	
<i>Arhopala pseudocentaurus</i> Doubleday, 1847	
E - Centaur Oakblue, S - Surya Gas-Nilaya	
Surendra vivarna Horsfield, 1829	
E - Common Acacia, S - Blue Podu Gas-Nilaya	
<i>Amblypodia anita</i> Hewitson, 1862	
E - Purple Leafblue, S - Dam Gas-Nilaya	
<i>Spindasis ictis</i> Hewitson, 1862	

E - Ceylon Silverline, S - Lanka Ridee-nilaya
Jamides lacteata de Niceville, 1895
E - Milky Cerulean, S - Sudu Seru-nilaya
Jamides alecto Felder, 1860
E - Metallic Cerulean, S - Dilisena Seru-nilaya
Tarucus callinara Butler, 1886
E - Butler's Spotted Pierrot, S - Thith Mal-nilaya
<i>Actyolepis puspa</i> Toxopeus
E - Common Hedge Blue, S - Mal Panduru-nilaya
Neopithicops zalmora Butler
E - Quaker, S - Maha thith Dumburu-nilaya
<i>Hasora taminatus</i> Hub.
E - White banded Awl
<i>Sarangesa dasahara</i> Moore
E - Common Small Flat
<i>Baracus vittatus</i> Felder
E - Hedge Hopper
<i>Borbo cinnara</i> Wallace
E - Wallace's Swift
<i>Choaspes benjaminii</i> Guerin-Meneville
E - Indian Awl king
<i>Gangara thyrsis</i> Herrich-Schaeffer
E - Giant Red eye
<i>Coladenia indranii</i> Moore
E - Tricolour Pied Flat
<i>Hyarotis adrastus</i> Moore
E - Tree Flitter
<i>Notocrypta paralysos</i> Evans
E - Common Banded Demon
<i>Potanthus pallida</i> Evans
E - Indian Dart

CLASS: CRUSTACEA (Order Decapoda)**Family: Parathelphusidae**

Ceylonthelphusa kandambyi Bahir, 1999

Ceylonthelphusa venusta (Ng, 1995)

Mahatha adonis Ng & Tay, 2001

Oziothelphusa ceylonensis (Fernando, 1960)

Oziothelphusa hippocastanum (Muller, 1887)

Oziothelphusa stricta Ng & Tay, 2001

Perbrinckia integra Ng, 1995

Perbrinckia nana (Bahir, 1999)

PHYLUM: MOLLUSCA**Family: Euconulidae**

*Eurychlamys regulata** (Benson 1860)

Family: Ariophantidae

*Cryptozona ceraria** (Benson 1853)

*Cryptozona chenui** (Pfeiffer 1847)

*Euplecta partita** (Pfeiffer 1854)

Euplecta semidecussata (Pfeiffer 1853)

Family: Streptaxidae

*Indoartemon layardianus** (Benson 1853)

Family: Acavidae

*Acavus haemastoma*** (Linnaeus 1758)

Family: Cyclophoridae

*Cyclophorus ceylanicus** (Pfeiffer 1849)

*Cyclophorus menkeanus** (Philippi 1848)

*Theobaldius bairdi** (Pfeiffer 1854)

Pterocyclus cumingi (Pfeiffer 1851)

ANNEX 6:

VERTEBRATE FAUNA LISTED UNDER THE DATA DEFICIENT (DD) CATEGORY (* ENDEMIC SPECIES)

CLASS/FAMILY/SPECIES
Class: Actinopterigii (Freshwater Fish)
Family: Cyprinidae
<i>Amblypharyngodon grandisquamnis</i> Jordan & Starks, 1917*
<i>Chela laubuca</i> (Hamilton, 1822)
E - Blue laubuca, S - Kara edaya
<i>Danio aequipinnatus</i> (McClelland, 1839)
<i>Garra phillipsi</i> (Deraniyagala, 1933)
E - Phillip's garra, S - Dumbara gal pandiya
<i>Puntius amphibius</i> (Valenciennes, 1842)
E - Scarlet banded barb, S - Mada ipilla
Family- Bagridae
<i>Mystus cavasius</i> (Hamilton-Buchanan, 1822)
E - Gangetic mystus
<i>Mystus keletius</i> (Valenciennes, 1839)
E - Yellow catfish, S - Path ankutta
Family – Gobiidae
<i>Oligolepis acutipennis</i> (Valenciennes, 1837)
E - Sharptail goby
<i>Stenogobius malabaricus</i> (Day, 1865)
Family- Oryziidae
<i>Oryzias melastigma</i> (McClelland, 1839)
E - Blue eye, S - Hande titteya
CLASS: AMPHIBIA
Family: Ranidae
<i>Hoplobatrachus tigerinus</i> (Daudin, 1802)
E - Indian bull frog, S - Indiya diya madiya
<i>Philautus regius</i> Manamendra-Arachchi & Pethiyagoda, 2005 *
E - Polonnaruwa shrub frog, S - Rajarata panduru madiya
<i>Philautus semiruber</i> (Annandale, 1913)*
E - Annandale's shrub frog, S - Annadelge panduru madiya
CLASS: REPTILIA
Family: Gekkonidae
<i>Cosymbotus platyrurus</i> (Schneider, 1792).
E - Frilltail Gecko, S - Nagutavakrali huna
<i>Cyrtodactylus collegalensis</i> (Beddome, 1870).
E - Collegal rockgecko, S - Collegalge vakaniya huna
<i>Hemidactylus scabriceps</i> (Annandale, 1906)
E - Scaly gecko, S - Korapotu huna

<i>Cnemaspis alwisi</i> Wickramasinhe and Munindradasa 2007*
E - Alwis's day gecko, S - Alwisge diva huna
<i>Cnemaspis scalpensis</i> (Ferguson, 1877)*
E - Ferguson's day gecko, S - Fergusonge divasari huna
<i>Cnemaspis kandiana</i> (Kelaart, 1853 "1852")*
E - Kandyan day gecko, S - Kandukara divasari huna
<i>Cnemaspis gemunu</i> Bauer, de Silva, Greenbaum and Jackman 2007*
E - Gemunu's day gecko
<i>Cnemaspis kumarasinghei</i> Wickramasinghe and Munindradasa 2007*
E - Kumarasinghe's day gecko, S - Kumarasinhage diva huna
<i>Cnemaspis retigalensis</i> Wickramasinghe and Munindradasa 2007*
E - Retigala day gecko, S - Retigala diva huna
Family: Scincidae
<i>Lankascincus munindradasai</i> Wickramasinghe et.al*
E - Munindradasa's Lanka skink, S - Munindradasage lakhekanala
<i>Lankascincus sripadensis</i> Wickramasinghe et.al*
E - Sripada forest skink, S - Sripakandu duburu hekanala
<i>Lygosoma singha</i> (Taylor, 1950)*
E - Taylor's skink, S - Taylorge hiraluhikanala
<i>Nessia deraniyagalai</i> Taylor, 1950*
E - Deraniyagala's snakeskink, S - Deraniyagalage sarpahiraluwa
<i>Sphenomorphus dorsicatenatus</i> Deraniyagala, 1953*
E - Catenated litter skink, S - Damval singitihikanala
<i>Sphenomorphus dussumieri</i> (Duméril & Bibron, 1839)*
E - Dussumier's litter skink, S - Salkabahita singitihikanala
<i>Sphenomorphus megalops</i> (Annandale, 1906)*
E - Annandale's litter skink, S - Annandalege singitihikanala
Family: Lacertidae
<i>Ophisops minor</i> (Deraniyagala, 1971)
E - Lesser snake eye lizard, S - Kuda sarpakshi katussa
Family - Colubridae
<i>Argyrogena fasciolata</i> (Shaw, 1802)
E - Banded racer, S - Wal gerandiya
<i>Aspidura copei</i> Günther, 1864
E - Cope's roughside, S - Kalumedilla
<i>Boiga beddomei</i> (Wall, 1909).
E - Beddoms cat snake, S - Kaha mapila
<i>Dendrelaphis oliveri</i> (Taylor, 1950).
E - Oliver's bronze back, S - Oliverge haldanda
<i>Dryocalamus gracilis</i> (Günther, 1864).
E - The scarce bridal, S - Megata radanakaya
<i>Haplocercus ceylonensis</i> Günther, 1858
E - The black spine snake/ Mould snake, S - Kurunkarawala
Family - Typhlopidae
<i>Ramphotyphlops braminus</i> (Daudin, 1803)
E - Common blind snake, S - Dumutu kanaulla
<i>Typhlops ceylonicus</i> Smith, 1943
E - Smith's blind snake, S - Smithge kanaulla

<i>Typhlops lankaensis</i> Taylor, 1947.
E - Lanka blind snake, S - Lak kanaulla
<i>Typhlops leucomelas</i> Boulenger, 1890
E - Pied typhlops, S - Dewarna kanaulla
<i>Typhlops malcolmi</i> Taylor, 1947.
E - Malcolm's blind snake, S - Malcomge kanaulla
<i>Typhlops mirus</i> Jan in: Jan and Sordelli, 1860
E - Jan's blind snake, S - Heen kanaulla
<i>Typhlops porrectus</i> Stoliczka, 1871
E - Stoliczka's blind snake, S - Stoliczkge kanaulla
<i>Typhlops tenebrarum</i> Taylor, 1947
E - Taylor's blind snake, S - Taylorge Kanaulla
<i>Typhlops veddae</i> Taylor, 1947
E - Vedda's blind snake, S - Veddahage Kanaulla
<i>Typhlops violaceus</i> Taylor, 1947
E - Violet blind snake, S - Dan kanaulla
Family - Uropeltidae
<i>Platyplectrurus madurensis</i> Beddome 1877
<i>Pseudotyphlops philippinus</i> Schlegel, 1839
E - Large shield tail, S - Maha bimulla
<i>Rhinophis blythii</i> Kelaart, 1853
E - Blyth's earth snake, S - Gomara thudulla
<i>Rhinophis dorsimaculatus</i> Deraniyagala, 1941
E - Orange shield tail, S - Thambapani walga ebaya
<i>Rhinophis drummondhayi</i> Wall, 1921
E - Drummond-Hay's earth snake, S - Thapothudulla
<i>Rhinophis homolepis</i> Hemprich, 1820
E - Kelaarts earth snake, S - Depaththudulla
<i>Rhinophis oxyrynchus</i> (Schneider, 1801)
E - Schneider's earth snake, S - Ulthudulla
<i>Rhinophis philippinus</i> (Cuvier, 1829).
E - Cuvier's earth snake, S - Cuvierge walga ebaya
<i>Rhinophis porrectus</i> Wall, 1921
E - Willey's earth snake, S - Dighthudulla
<i>Rhinophis punctatus</i> Müller, 1832
E - Muller's earth snake, S - Ticthudulla
<i>Rhinophis tricoloratus</i> Deraniyagala, 1975.
E - Deraniyagala's shield tail, S - Deraniyagalage walga ebaya
<i>Uropeltis melanogaster</i> (Gray, 1858).
E - Black shield tail, S - Kaluwakatulla
<i>Uropeltis phillipsi</i> (Nicholls, 1929).
E - Phillips's shield tail, S - Iriwakatulla
<i>Uropeltis ruhunae</i> Deraniyagala, 1954

CLASS: AVES**Family: Anatidae**

Sarkidiornis melanotos (Pennant, 1769)

E - Comb duck, S - Kabalithhiya

Family: Meropidae

Merops philippinus Linnaeus, 1766

E - Blue-tailed Bee-eater, S - Nilpenda Binguharaya

Family: Laridae

Sterna hirundo Linnaeus, 1758

E - Common Tern, S - Podu Muhudulihiniya

Sterna anaethetus Scopoli, 1786

E - Bridled Tern, S - Kadiyalam Muhudulihiniya

Family: Accipitridae

Milvus migrans (Bonddaert, 1783)

E - Black Kite, S - Bora Parakussa

Family: Falconidae

Falco tinnunculus Linnaeus, 1758

E - Common Kestrel, S - Podu Kurulugoya

Family: Corvidae

Aegithina nigrolutea (Marshall, 1876)

E - Marshall's Iora, S - Marchallge Iorawa

CLASS: MAMMALIA**Family: Soricidae**

Suncus etruscus (Savi, 1822)

E - Pigmy shrew, S - Podi Hik-miya

Family: Emballonuridae

Taphozous longimanus Hardwicke, 1825

E - Long-armed sheath-tailed bat, S - Dikba Kepulum-vavula

Saccoleimus saccolaimus (Temminck, 1838)

E - Pouch-bearing sheath-tailed bat, S - Maha Kepulum-vavula

Family: Molossidae

Tadarida aegyptiaca (Geoffroy, 1818)

E - Continental wrinkled-lip bat, S - Mahadive Rallithol-vavula

Family: Vespertilionidae

Hesperoptenus tickelli (Blyth, 1851)

E - Tickle's bat, S - Awara-vavula

Falsistrellus affinis (Dobson, 1871)

E - Chocolate bat, S - Bora Koseta-vavula

Scotophilus kuhlii Leach, 1821

E - Lesser yellow bat, S - Heen Kaha-vavula

ANNEX 7:

INVERTEBRATE FAUNA LISTED UNDER THE DATA DEFICIENT (DD) CATEGORY (* ENDEMIC SPECIES)

CLASS/FAMILY/SPECIES
CLASS: ARACHNIDA
Family: Theraphosidae
<i>Chilobrachys nitelinus*</i> Karsch, 1891
<i>Plesiophrictus tenuipes*</i> Pocock, 1899
CLASS: INSECTA (Order Lepidoptera)
Family: Pieridae
<i>Eurema laeta</i> Boisduval, 1836
E - Spotless Grass Yellow, S - Thithnathi Kahakolaya
<i>Junonia hirta</i> Fabricius, 1793
E - Yellow Pansy, S - Kaha Alankarikya
Family: Lycaenidae
<i>Arhopala ormistoni*</i> Riley, 1920
E - Ormiston's Oakblue, S - Lanka Gas-Nilaya
<i>Arhopala bazaloides</i> Hewitson, 1878
E - Tamil Oakblue, S - Anduru Gas-Nilaya
<i>Horaga onyx</i> Moore, 1857
E - Blue Onyx Podu, S - Visithuru-Neelaya
<i>Horaga albimaculata</i> Wood-Mason & de Niceville, 1881
E - Brown Onyx, S - Dumburu Visithuru-Neelaya
<i>Spindasis schistacea</i> Moore, 1881
E - Plumbeous Silverline, S - Kela Ridee-nilaya
<i>Spindasis lunulifera</i> Moore, 1979
E - Scarce Shot Silverline, S - Punchi Ridee-nilaya
<i>Spindasis nubilus</i> Moore, 1883*
E - Clouded Silverline, S - Anduruwan Ridee-nilaya
<i>Rapala iarbus</i> Fabricius, 1787
E - Indian Red Flash, S - Rathu Kiranaya
<i>Rapala varuna</i> Horsfield, 1829
E - Indigo Flash, S - Dam Kiranaya
<i>Nacaduba sinhala</i> Ormiston, 1924*
E - Pale Ceylon 6-Lineblue, S - Lanka Haya-iriya
<i>Nacaduba ollyetti</i> Corbet, 1947*
E - Woodhouse's 4-Lineblue, S - Kala Hathara-iriya
<i>Nacaduba berenice</i> Herrich-Schaeffer, 1869
E - Rounded 6-Lineblue, S - Raum Haya-iriya
<i>Nacaduba calauria</i> Felder, 1860
E - Dark Ceylon 6-Lineblue, S - Anduruwan Haya-iriya
<i>Nacaduba pactolus</i> Felder, 1860
E - Large 4-Lineblue, S - Maha hathara-iriya

<i>Nacaduba hermus</i> Felder, 1860	
E - Pale 4-lineblue, S - Anduru hathara-iriya	
<i>Nacaduba kurava</i> Moore, 1857	
E - Transparent 6-Lineblue, S - Sudu Haya-iriya	
<i>Nacaduba beroe</i> Felder, 1865	
E - Opaque 6-Lineblue, S - Kela Haya-iriya	
<i>Petrelaea dana</i> de Niceville, 1883	
E - Dingy Lineblue, S - Punchi Nil-iriya	
<i>Prosotas dubiosa</i> Semper, 1879	
E - Tailless Lineblue, S - Pandanathi Nil-iriya	
<i>Ionolyce helicon</i> Felder, 1860	
E - Pointed Lineblue, S - UI Nil-iriya	
<i>Catochrysops panormus</i> Felder, 1860	
E - Silver Forget-me-not, S - Redee Mal-nilaya	
<i>Actyolepis lilacea</i> Toxopeus	
E - Hampson's Hedge Blue, S - Sudu Panduru-nilaya	
<i>Celastrina lavendularis</i> Moore	
E - Plain Hedge Blue, S - Maha Panduru-nilaya	
<i>Udara akasa</i> Fruhstorfer	
E - White Hedge Blue, S - Ahas Udara-neelaya	
Family - Hesperiidae	
<i>Gangara lebadea</i> Moore	
E - Banded Redeye	
<i>Halpe egena</i> * Felder	
E - Rare Ace	
<i>Cattoris philippina</i> Moore	
E - Philippine Swift	
PHYLUM: MOLLUSCA	
Family - Pupilloidea	
<i>Microstele muscerda</i> (Benson 1853)	
<i>Pupoides coenopictus</i> Hutton 1834	
Family - Vertiginiclae	
<i>Gastrocopta (Gastrocopta) mimula</i> (Benson 1853)*	
<i>Nesopupa (Indopupa) cinghalensis</i> (Gude 1914)*	
<i>Pupisoma miccylla</i> (Benson 1860)*	
Family - Pyramidulidae	
<i>Pyramidula halyi</i> (Jousseaume 1894)*	
Family - Bulimininae	
<i>Mirus panos</i> (Benson 1853)*	
<i>Mirus proletaria</i> (Pfeiffer 1855)*	
Family - Cerastuinae	
Rachis punctatus (Anton 1839)	
<i>Rhachistia adumhratus</i> (Pfeiffer 1855)*	
<i>Rhachistia pulcher</i> (Gray 1825)	
Family - Endodontidae	
<i>Philalanka circumsculpta</i> Sykes 1897*	
<i>Philalanka depressa</i> (Preston 1909)*	

<i>Philalanka edithae</i> (Preston 1909)*
<i>Philalanka lamcabensis</i> Jousseaume 1894*
<i>Philalanka liratula</i> (Pfeiffer 1860)*
<i>Philalanka mononema</i> (Benson 1853)*
<i>Philalanka secessa</i> Godwin-Austen 1898*
<i>Philalanka sinhila</i> (Godwin-Austen 1897)*
<i>Philalanka thwaitesi</i> (Pfeiffer 1854)*
<i>Philalanka trifilosa</i> (Pfeiffer 1854)*
Family - Charopidae
<i>Ruthvenia biciliata</i> (Pfeiffer 1855)*
<i>Ruthvenia caliginosa</i> (Sykes 1898)*
<i>Ruthvenia clathratula</i> (Pfeiffer 1850)*
<i>Thysanota eumita</i> Sykes 1898*
<i>Thysanota hispida</i> Sykes 1898*
Family - Clausiliidae
<i>Phaedusa ceylanica</i> (Benson 1863)*
Family - Gastrodontidae
<i>Zonitoides arboreus</i> (Say 1816)
Family - Euconulidae
<i>Eurychlamys layardi</i> (Benson manuscript name)*
<i>Eurychltiniys winifredae</i> (Preston 1909)
Family - Helicarionidae
<i>Kaliella barrakporensis</i> (Pfeiffer 1853)
<i>Kaliella colletti</i> Sykes 1899*
<i>Kaliella delectabilis</i> Sykes 1898*
<i>Kaliella leithiana</i> Godwin-Austen 1883*
<i>Kaliella salicensis</i> Godwin-Austen 1897*
<i>Sivella galerus</i> (Benson 1856)*
<i>Sivella hyptiucyclos</i> (Benson 1863)*
Family - Ariophantidae
<i>Cryptozona juliana</i> (Gray 1834)*
<i>Cryptozona novella</i> (Pfeiffer 1855)*
<i>Cryptozona semirugata</i> (Beck 1837)
<i>Euplecta acuducta</i> (Benson 1850)
<i>Euplecta albnonata</i> (Dohm 1858)
<i>Euplecta concavospir</i> (Pfeiffer 1854)*
<i>Euplecta emiliana</i> (Pfeiffer 1853)*
<i>Euplecta laevis</i> Blanford 1901*
<i>Euplecta lankaensis</i> Preston 1909*
<i>Euplecta neglecta</i> (Pfeiffer 1854)*
<i>Euplecta phidias</i> (Hanley & Theobald 1876)*
<i>Euplecta rosamonda</i> (Benson 1860)
<i>Euplecta subopaca</i> (Pfeiffer 1854)*
<i>Euplecta trimeni</i> (Jousseaume 1894)*
<i>Euplecta turritella</i> (Adams 1869)
<i>Euplecta verrucula</i> (Pfeiffer 1855)*
<i>Ratnadvipia edgariana</i> (Benson 1853)*
<i>Mariaella dussumieri</i> Gray 1855

<i>Macrochlamys mdica</i> Godwin-Austen 1883
<i>Macrochlamys kandiensis</i> Godwin-Austen 1883*
<i>Macrochlamys perfucata</i> (Benson 1853)*
<i>Macrochlamys tratanensis</i> (Jousseaume 1894)*
<i>Macrachlamys umbrina</i> (Pfeiffer 1859)*
<i>Macrachlamys vilipensa</i> (Benson 1853)
<i>Microcystina bintennensis</i> Godwin-Auten 1899*
<i>Microcystina lita</i> Sykes 1898*
Family - Glessulidae
<i>Glessula capillacea</i> (Pfeiffer 1855)
<i>Glessula ceylanica</i> (Pfeiffer 1845)*
<i>Glessula collettae</i> Sykes 1898*
<i>Glessula deshayesi</i> (Pfeiffer 1853)
<i>Glessula fulgens</i> (Pfeiffer 1858)*
<i>Glessula inornata</i> (Pfeiffer 1853)*
<i>Glessula lankana</i> Pilsbry 1908*
<i>Glessula layardi</i> Pilsbry 1908*
<i>Glessula nitens</i> (Gray 1825)*
<i>Glessula pachycheila</i> (Benson 1853)*
<i>Glessula pullens</i> Beddome 1906*
<i>Glessula panaethu</i> (Benson 1860)*
<i>Glessula pwahilis</i> (Benson 1856)*
<i>Glessula prestoni</i> Ciude 1914*
<i>Glessula punctogallana</i> (Pfeiffer 1852)*
<i>Glessula pusilla</i> Beddome 1906
<i>Glessula reynelli</i> Gude 1914*
<i>Glessula sattaraensis</i> (Hanley & Theobald 1874)
<i>Glessula serena</i> (Benson 1860)*
<i>Glessula simony</i> (Jousseaume 1894)*
<i>Glessula sinhila</i> Preston 1909*
Family - Subulinidae
<i>Subulina octona</i> (Bruguiere 1789)
<i>Allopeas layardi</i> (Benson 1863)*
<i>Allopeas marine</i> (Jousseaume 1894)*
<i>Allopeas prestoni</i> (Sykes 1898)*
<i>Allopeas pussilus</i> (Adams 1867)*
<i>Allopeas sykesi</i> (Pilsbry 1906)*
<i>Paropeas achatinaceum</i> (Pfeiffer 1846)
<i>Zootecus insularis</i> (Ehrenberg 1831)
Family - Streptaxidae
<i>Indoartemon cingalensis</i> (Benson 1853)*
<i>Indoartemon gracilis</i> (Collet 1898)*
<i>Perrottetia peroteti</i> (Petit de la Saussaye 1841)
<i>Perrottetia ravanae</i> Blanford 1899*
<i>Gulella bicolor</i> (Hutton 1834)
<i>Sinoennea planguncula</i> (Benson 1863)

Family - Acavidae

Acavus superbus (Pfeiffer 1850)*

Oligospira skinneri (Reeve 1854)*

Family - Corillidae

Corilla fryae Gude 1896*

Corilla giidei Gude 1896*

Corilla humberti Sykes 1897*

Corilla lesleyae (Brot 1864)*

Corilla odontophora Barnacle 1959*

Family - Camaenidae

Beddomea ceylanicus (Pfeiffer 1846)*

Beddomea intermedius (Pfeiffer 1855)*

Trachia fallaciosa (Ferussac 1821)

Trachia vittata (Muller 1774)

Landouria radleyi (Jousseaume 1894)*

Family - Bradybaenidae

Bradybaena similaris (Femssac 1822)

Succinea ceylanica Pfeiffer 1855

Family - Cyclophoridae

Cyclophorus alabastrinis (Pfeiffer 1855)*

Cyclophorus involvulus (Muller 1774)

Aulopoma grande (Pfeiffer 1855)*

Aulopoma helicinum (Chemnitz 1786)*

Aulopoma itieri (Guerin 1847)*

Aulopoma sphaeroideum Dohrn 1857*

Cyathopoma (Cyathopoma) album Beddome 1875

Cyathopoma (Cyathopoma) artatum Sykes 1897*

Cyathopoma (Jerdonia) ceylanicum Beddome 1875*

Cyathopoma (Jerdonia) colletti Sykes 1898*

Cyathopoma (Jerdonia) conoideum Sykes 1898*

Cyathopoma (Jerdonia) innocens Sykes 1899*

Cyathopoma (Cyathopoma) leptomita Sykes 1898*

Cyathopoma (Cyathopoma) mariae Jousseaume 1894*

Cyathopoma (Jerdonia) ogdenianum Preston 1909*

Cyathopoma (Jerdonia) perconoideum Preston 1909*

Cyathopoma (Cyathopoma) prestoni Sykes 1897*

Cyathopoma (Jerdonia) serendibense Preston 1903*

Cyathopoma (Jerdonia) turbinatum Sykes 1897*

Cyathopoma (Jerdonia) uvaense Preston 1909*

Japonia binoyae (Sykes 1899)*

Japonia occulta Sykes 1899*

Leptopoma apicatum Benson 1856*

Leptopoma elatum Pfeiffer 1852*

Leptopoma semiclausum (Pfeiffer 1855)*

Leptopomoides conulus (Pfeiffer 1855)*

Leptopomoides flammeus (Pfeiffer 1855)*

Leptopomoides halophilus (Benson 1851)*

Leptopomoides orophilus (Benson 1853)*

<i>Leptopomoides taprobanensis</i> (Preston 1909)*
<i>Micraulax coeloconus</i> (Benson 1851)
<i>Scabrina brounae</i> (Sykes 1898)*
<i>Scabrina liratula</i> (Preston 1909)*
<i>Theobaldius cadiscus</i> (Benson 1860)*
<i>Theobaldius cratera</i> (Benson 1856)*
<i>Theobaldius cytopoma</i> (Benson 1860)*
<i>Theobaldius liliputianus</i> (Preston 1909)*
<i>Theobaldius loxostoma</i> (Pfeiffer 1854)*
<i>Theobaldius parapsis</i> (Benson 1853)*
<i>Theobaldius thwaitesi</i> (Pfeiffer 1855)*
<i>Pterocyclus bifrons</i> Pfeiffer 1855*
<i>Pterocyclus bilabialis</i> Sowerby 1835
<i>Pterocyclus cingalensis</i> Benson 1853*
<i>Pterocyclus troscheli</i> Benson 1851*
Family - Diplomatidae
<i>Nicida catathymia</i> (Sykes 1898)*
<i>Nicida ceylamca</i> (Beddome 1875)*
<i>Nicida delectabilis</i> (Preston 1905)*
<i>Nicida lankaensis</i> (Preston 1905)*
<i>Nicida pedronis</i> (Beddome 1875)*
<i>Nicida prestomi</i> (Sykes 1897)*
Family - Pupinidae
<i>Tortulosa aurea</i> (Pfeiffer 1855)*
<i>Tortulosa austeniana</i> (Benson 1853)*
<i>Tortulosa barnaclei</i> Tomlin 1928*
<i>Tortulosa blanfordi</i> (Dohrn 1862)*
<i>Tortulosa colletti</i> (Sykes 1898)*
<i>Tortulosa congener</i> (Fulton 1903)*
<i>Tortulosa connectens</i> (Fulton 1903)*
<i>Tortulosa cumingi</i> (Pfeiffer 1857)*
<i>Tortulosa duplicate</i> (Pfeiffer 1855)*
<i>Tortulosa eurytrema</i> (Pfeiffer 1852)*
<i>Tortulosa greeni</i> (Sykes 1899)*
<i>Tortulosa hartleyi</i> Tomlin 1928*
<i>Tortulosa layardi</i> (Pfeiffer 1851)*
<i>Tortulosa leucocheilus</i> (Adams & Sowerby 1866)*
<i>Tortulosa metneri</i> (Nevill 1871)*
<i>Tortulosa prestoni</i> (Sykes 1905)*
<i>Tortulosa rugosa</i> (Fulton 1904)*
<i>Tortulosa smithi</i> (Sykes 1905)*
<i>Tortulosa sykesi</i> (Fulton 1904)*
<i>Tortulosa templemani</i> (Pfeiffer 1852)*
<i>Tortulosa thwaitesi</i> (Pfeiffer 1852)*
Family - Truncatellidae
<i>Truncatella ceylanica</i> Pfeiffer 1856*

ANNEX 8:

SPECIES OF FLORA LISTED UNDER THE 'NEAR THREATENED' (NT) CATEGORY (*ENDEMIC SPECIES)

Family-Acanthaceae
<i>Dicliptera neesii</i> (Trimen) Cramer*
<i>Justicia hookeriana</i> (Nees) T. Anders.*
<i>Pseuderanthemum latifolium</i> (Vahl) Hansen
<i>Strobilanthes diandra</i> (Nees) Alston*
Family-Annonaceae
<i>Alphonsea sclerocarpa</i> Thw.
<i>Desmos elegans</i> (Thw.) Safford*
<i>Mitrephora heyneana</i> (Hook. f. & Thoms.) Thw.
<i>Xylopia nigricans</i> Hook. f. & Thoms.*
Family-Araceae
<i>Pothos hookeri</i> Schott*
Family-Dipterocarpaceae
<i>Dipterocarpus hispidus</i> Thw.*
<i>Dipterocarpus insignis</i> Thw.*
<i>Doona macrophylla</i> Thw.*
<i>Doona venulosa</i> Thw.*
<i>Hopea discolor</i> Thw.*
<i>Shorea oblongifolia</i> Thw.*
Family-Ebenaceae
<i>Diospyros montana</i> Roxb.
<i>Diospyros sylvatica</i> Roxb.
Family-Euphorbiaceae
<i>Agrostistachys coriacea</i> Alston*
<i>Blachia umbellata</i> (Willd.) Baill.
<i>Chaetocarpus castanocarpus</i> (Roxb.) Thw.
<i>Chaetocarpus coriaceus</i> Thw.*
<i>Euphorbia rothiana</i> Spreng.
<i>Euphorbia trigona</i> Haw.
<i>Fahrenheitia minor</i> (Thw.) Airy Shaw*
<i>Fahrenheitia zeylanica</i> (Thw.) Airy Shaw
<i>Givotia moluccana</i> (L.) Sreem.
<i>Homalanthus populifolius</i> Graham
<i>Mallotus fuscescens</i> (Thw.) Muell. Arg.*
<i>Mallotus repandus</i> (Willd.) Muell. Arg.
<i>Mallotus resinosus</i> (Blanco) Merr.

Suregada angustifolia (Muell. Arg.) Airy Shaw

Tragia hispida Willd.

Family-Melastomataceae

Sonerila silvatica Lundin*

Family-Memecylaceae

Memecylon royenii Blume*

Memecylon sylvaticum Thw.*

Memecylon varians Thw.*

Family-Orchidaceae

Acampe rigida (Buch.-Ham. ex J.E.Smith) P.F. Hunt

Angraecum zeylanicum Lindley*

Calanthe triplicatis (Willemet) Ames.

Cheirostylis parvifolia Lindl.

Crepidium purpureum (Lindl.) Szlach.

Dendrobium panduratum Lindl.

Diploprora championi Hook. f.

Eulophia epidendraea (Koenig ex Retz.) Fisch.

Gastrochilus acaulis (Lindley) Kuntze

Habenaria acuminata (Thw.) Trimen

Habenaria plantaginea Lindl.

Habenaria viridiflora Spreng.

Liparis viridiflora Lindl.

Octarrhena parvula Thw.

Peristylus brevilibus Thw.*

Peristylus cubitalis (L.) Kraenzlin

Phalaenopsis deliciosa Rchb.f.

Podochilus malabaricum Wight

Podochilus saxatile Lindl.*

Pomatocalpa maculosum (Lindley) J. J. Sm.*

Robiquetia rosea (Lindl.) Garay*

Robiquetia virescens (Gard. ex Lindl.) Jayaweera*

Thrixspermum pugionifolium (Hook.f.) Schlechter*

Family-Phyllanthaceae

Antidesma bunius (L.)Spreng.

Antidesma pyrifolium Muell. Arg.*

Bridelia moonii Thw.*

Cleistanthus ferrugineus (Thw.) Muell. Arg.*

Glochidion coriaceum Thw.*

Glochidion pycnocarpum (Muell. Arg.) Beddome*

Phyllanthus debilis Klein ex Willd.

Phyllanthus gardnerianus (Wight) Baillon

Family-Rubiaceae

Ophiorrhiza rugosa Wall.

Schizostigma hirsutum Arn.

ANNEX 9:

SPECIES OF FLORA LISTED UNDER THE ‘DATA DEFICIENT’ (DD) CATEGORY (*ENDEMIC SPECIES)

Family-Acanthaceae
<i>Barleria nutans</i> Nees*
<i>Barleria lanceata</i> (Forssk.) C. Chr.
<i>Gymnostachyum thwaitesii</i> T. Anders.*
<i>Hygrophila helodes</i> Heine
<i>Justicia capitata</i> (T. Anders. ex Hook. f.) Cramer*
<i>Lepidagathis ceylanica</i> Nees*
<i>Phaulopsis imbricata</i> (Forssk.) Sweet
<i>Rungia apiculata</i> Beddome
<i>Staurogyne zeylanica</i> (Nees) Kuntze
Family-Amaranthaceae
<i>Centrostachys aquatica</i> (R. Br.) Wall. ex Moq.
Family-Araceae
<i>Lagenandra erosa</i> de Wit*
Family-Asclepiadaceae
<i>Ceropogia parviflora</i> Trim.*
<i>Dischidia nummularia</i> R. Br.
<i>Marsdenia tenacissima</i> (Roxb.) Moon
Family-Asteraceae
<i>Anaphalis fruticosa</i> Hook.f.*
Family-Burmanniaceae
<i>Thismia gardneriana</i> Hook.f. ex Thw.*
Family-Caryophyllaceae
<i>Stellaria pauciflora</i> Zoll. & Mor.
Family-Convolvulaceae
<i>Argyreia choisyana</i> Wight ex Clarke
Family-Cyperaceae
<i>Cyperus articulatus</i> L.
<i>Scleria pilosa</i> Boeckeler*
Family-Ebenaceae
<i>Diospyros opaca</i> Clarke*
Family-Euphorbiaceae
<i>Acalypha ciliata</i> Forssk.
<i>Acalypha supera</i> Forssk.
<i>Chrozophora plicata</i> (Vahl) A. Juss ex Spreng.
<i>Euphorbia cristata</i> Heyne ex Roth

<i>Mallotus distans</i> Muell. Arg.
<i>Micrococca mercurialis</i> (L.) Benth.
Family-Fabaceae
<i>Caesalpinia digyna</i> Rottl.
E - Tari pods
<i>Cassia italica</i> (Mill.) Spreng.
E - Italian Senna
<i>Crotalaria berteroana</i> DC.
<i>Crotalaria montana</i> Roth
<i>Indigofera trifoliata</i> L.
<i>Strongylodon siderospermus</i> Cordemoy
Family-Malvaceae
<i>Dicelostyles axillaris</i> (Thw.) Benth.*
Family-Orchidaceae
<i>Anoectochilus elatus</i> Lindl.
<i>Cyclopogon obliqua</i> (J.J.Sm.) Szlach.
<i>Cyrtosia javanica</i> Blume
<i>Geodorum recurvum</i> (Roxb.) Alston.
<i>Peristylus densus</i> (Lindl.) Santapau & Kapadia.
<i>Peristylus plantagineus</i> (Lindl.) Lindl.
<i>Pteroceras viridiflorum</i> (Thw.) Holttum
Family-Orobanchaceae
<i>Aeginetia indica</i> L.
<i>Christisonia thwaitesii</i> Trimen*
Family-Phyllanthaceae
<i>Flueggea virosa</i> (Roxb. ex Willd.) Voigt
<i>Margaritaria cyanospermus</i> (Gaertn.) Airy Shaw*
Family-Rosaceae
<i>Sanguisorba indicum</i> (Gardn.) Tirv.*
Family-Rubiaceae
<i>Fergusonia tetracocca</i> (Thw.) Baill.
<i>Ixora thwaitesii</i> Hook.f.
<i>Neanotis tubulosa</i> (G.Don)Mabb.
<i>Prismatomeris tetrandra</i> (Roxb.) Schumann
<i>Pseudaidia speciosa</i> (Beddome) Tirv.
<i>Psychotria meeboldii</i> Deb & M. G. Gangop.*
Family-Surianaceae
<i>Suriana maritima</i> L.
Family-Triuridaceae
<i>Hyalisma janthina</i> Champ.
Family-Urticaceae
<i>Lecanthus peduncularis</i> (Wall. ex Royle) Wedd.



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