# SCIENCE AND RESEARCH

# 'THE EXTENSION OF THE RANGE OF THE GREY SLENDER LORIS (Loris lydekkerianus) TO THE SOUTH-EAST OF SRI LANKA

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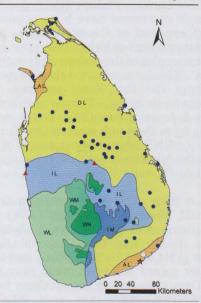
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## INTRODUCTION

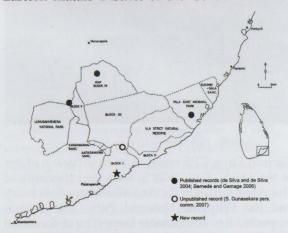
The genus Loris (Primate: Prosimii: Lorisidae) is represented in Sri Lanka by two distinct species (Loris tardigradus Linnaeus, 1758 and Loris lydekkerianus Cabrera, 1908). Even though the taxonomic status of the species is still being researched, Loris lydekkerianus is known to be the more widespread in Sri Lanka. Two endemic sub species of Loris lydekkerianus have so far been described from the island, viz. L. l. grandis Hill



Map 1. Distribution of Grey slender loris, *Loris lydekkerianus*, in Sri Lanka with the new record: circles – previous records of *L. l. nordicus* (shaded – published, clear – unpublished); squares – records of *L. l. grandis*; triangles – intermediate forms; star mark – the new record (adopted from Perera, 2008). Bioregions: WL = Wet Lowlands, IL = Intermediate Lowlands, DL = Dry Lowlands, AL = Arid Lowlands, WM = Wet Midlands, IM = Intermediate Midlands, WH = Wet Highlands (adopted from Ministry of Forestry and Environment 1999).

& Phillips, 1932 (Highland Slender Loris) and *L. l. nordicus* Hill, 1933 (Northern Grey Slender Loris) (Groves 2001; Nekaris & Jayewardene

2004; Weerakoon & Goonetilleke 2006; Bernede & Gamage 2006; Gamage et al. 2006). *L. l. nordicus* is distributed in the lowland dry zone of north and east Sri Lanka, including the Jaffna peninsula (Hill, 1953), while *L. l. grandis* is found in the hills in the Eastern Matale District of the Central Province



**Map 2.** Extension of the range of *Loris lydekkerianus* within the Ruhunu Protected Area Complex

at altitudes between 330m and 1, 050m (Hill and Phillips, 1932). Both taxa have been assessed as endangered (IUCN 2007). This paper provides a description of a new record, extending the range of distribution of *L. lydekkerianus* towards the south-eastern coastal belt of the island.

#### THE NEW RECORD

The authors of this paper, a team of field ecologists of the Sri Lanka office of IUCN – The World Conservation Union, conducting a marine turtlenesting habitat assessment along the coastline of Ruhunu (Yala) National Park (RNP), observed a bright orange reflection of eyes from a bush just by the side of the main access road through the Block 1 of RNP, while driving towards the coastline. The observation was made on October 8, 2004 at around 20:00 hrs, about 3 Km from the park entrance, on the landward side of the access road. The exact location was recorded through a



Plate 1. A young *Loris lydekkerianus nordicus*, Wilpattu National Park. Photograph by M. S. J. Perera.

Garmin Etrex GPS receiver at an accuracy of 9m as N 6°18′11″, E 81°26′28″. With the experience of observing lorises in the Anawilundawa Sanctuary and the Wilpattu National Park, the authors suspected it to be a Slender Loris (The observation was first made with the naked eye and later with the aid of an  $8\times40$  Binocular (Nickon 'action') at a distance of about 30m from the animal.) The dazzling reflection from Slender Loris's eyes are easily distinguishable from other animals, even from a vehicle, and can be seen from about 300m away (Singh et al. 2000; Nekaris 2001).

The animal was at a height of about four meters in the middle stratum of the vegetation, at the edge of a dry evergreen forest patch adjoining a grassland-scrubland mosaic. According to De Silva & De Silva (2004, p. 62-63) "the most abundant and most widely distributed tree species in the forests of Block I of RNP are *Drypetes sepiaria*, *Aglaia elaeagnoidea*, *Limonia acidissima* and *Bauhinia tomentosa*. *Drypetes sepiaria* is the main canopy species and grows up to about six meters. *Manilkara hexandra* is the main emergent species and grows up to 7 - 10 meters. The undergrowth usually contains shrubs such as *Cassia auriculata*, *Carmona retusa*, *Dichrotachys cinerea*, *Carissa spinarum* and *Catunaregam spinosa*."

The flashlight disturbed the animal, hence its natural behaviour could not be observed, but it was quite fast in moving along moderate to small branches and hanging from one to catch the other, before it disappeared into the canopy. The specimen could not be sexed or identified to the sub-species level during this short period of observation. We were not able to spot any other lorises from the surrounding area, even after searching with the flashlight for some time.

## DISCUSSION

The specimen was identified as *L. lydekkerianus* and distinguished from *L. tardigradus* on the basis of comparatively large body size and the pale brownish grey body colour and the thin coat of fur. Even though it could not be identified to the level of sub species, it is most likely to be a *L. l. nordicus*, according to the known bio-geographic distribution of the taxa.

According to early literature *L. l. nordicus* is distributed in the lowland dry zone of north and east of Sri Lanka. Phillips (1935, p. 37) states, "Although specimens have been obtained from the northern part of the island only, there are persistent rumours of lorises being present in the Dry Zone jungles of the eastern and south-eastern districts". He also mentioned that the race occurs throughout the Dry Zone, but not common anywhere in its range. During a recent survey Nekaris & Jayewardene (2004) could not record the loris from the south-eastern Dry Zone of the country, *i.e.* RNP, or in peripheral areas of the park such as the Nimalawa Sanctuary, Kataragama or the Buttala-Pelwatta-Wellawaya area.

Based on their surveys of lorises in Sri Lanka since 2002, Bernede & Gamage (2006) mapped the southern-most presence of *L. lydekkerianus nordicus* in the Gal Oya National Park, the Kumana (Yala East) National Park, and the RNP. The latter record has been made from the area called Demodara along the northern boundary of the RNP (Gamage pers. com. 2006), about 40km inland from the south-eastern coastline. De Silva & De Silva (2004) recorded *L. lydekkerianus* (suspected to be *nordicus*) from Block IV of the RNP, more than 20km inland from the coast. Both of the above records are from the dry jungles of the RNP, not expanding the range of Loris as far south as the semi-arid coastal belt.

Till the present record, no lorises have ever been recorded from Block I of the RNP with its semi-arid climatic conditions, with more than 65% of its land area covered with tropical thorn forest and nearly 35% covered with patches of dry evergreen forest (De Silva & De Silva 2004). An



**Plate 2.** The dazzling reflection from the Slender Loris eyes, from a scrubland in Wilpattu National Park, Sri Lanka. Photograph by M. S. J. Perera.

unpublished record exists of a Slender Loris been photographed at Thalgasmankada, within Block I of the RNP in the early 1970s (S. Gunasekara pers. comm. 2007), the picture being published on the cover of the 'Loris' Journal in 1973. That record was made more than 5km inland from the southeastern coast, and amongst the riverine vegetation of the 'Menik Ganga'.

The present observation extends the range of *L. lydekkerianus* to the arid zone in Block I of the RNP, to less than 1km inland from the south-eastern coast of the island. This also suggests that the actual range of the species could be larger than hitherto known. It confirms that even though they are not abundant as in the northern parts of the island, *L. lyddekerianus* is still present in southern Sri Lanka, stressing the need for further studies on the range, abundance and biogeography of this lesser known species.

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