SACON Technical Report- PR 252

Comparative Ecology and Behaviour of Grey Slender Loris (Loris lydekkerianus lydekkerianus) in different habitat types in Dindugal-Madurai landscape, Tamil Nadu

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Submitted to Science and Engineering Research Board, Govt. of India



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Executive Summary

The study was conducted on the Grey Slender Loris in the Dindigul-Madurai landscape in Tamil Nadu, India. The Grey Slender Loris is a small primate species that is widely distributed in India and Sri Lanka. However, its population is declining due to habitat loss. The study focuses on four sites in the landscape and examines the occupancy, habitat use, and call repertoire of the species.

The occupancy in the forest area is almost 100% while although lorises occupy the agricultural fields the occupancy is 76%. The presence of vegetation cover and hedges positively influenced the loris occupancy. On the other hand, lorises showed minimal occupancy in grids with coconut plantations and paddy lands. The study also revealed that the home ranges of Slender Lorises overlap to some extent. The home ranges of females were smaller than males, and there were variations in the overlap between the home ranges of different individuals. The persistence of lorises in agricultural fields and human-dominated landscapes shows the importance of such landscapes in the conservation of lorises, although that is a suboptimal habitat for the lorises.

The study on acoustics was conducted from January 2021 to January 2023 in Pannamalai RF and Malapatti. Digital audio recorders with a frequency response range of 40Hz to 20Kz were used. Raven Pro 1.6 software was utilized to measure and extract the calls, while Kaleidoscope Pro 5.6.3 software was used for cluster analysis to group similar acoustic recordings. The study states that ten different types of calls were recorded from slender lorises. Call characteristics, such as frequency range, duration, and syllable structure, were measured. The study found differences in both frequency and duration of calls between different habitats. Passive acoustic monitoring recorded a total of 1326 clusters of slender loris calls. The mean duration of the calls recorded was 3.65 seconds, with a range of 1 to 6 seconds. A study conducted in Sri Lanka identified six characteristic calls of slender lorises. Here are ten unique call types, suggesting the possibility of more variations. Further detailed analysis of these will through more of an understanding of their communication pattern.

