

Research Article

An assessment on dietary patterns of Sri Lanka Leopard (*Panthera pardus kotiya*) in the Eastern Range of the Sinharaja World Heritage Site

Supun Deshaprema^{1,2*}, Madura De Silva¹ and Sisira Darshana¹

¹ *Wildlife Conservation Society – Galle, Biodiversity Research & Education Center, Hyare Reservoir,
Hyare, Galle, Sri Lanka*

² *Sri Lanka Foreign Service, Ministry of Foreign Affairs, Republic Building, Sir Baron Jayathilake
Mawatha, Colombo 01, Sri Lanka*

**Corresponding Author's E-mail: kmsdeshaprema@gmail.com*

(Received: January 04, 2023; Revised: May 28, 2023; Accepted: May 28, 2023)

ABSTRACT

Sri Lanka leopard is considered as the sole apex predator of the terrestrial ecosystems in Sri Lanka which is confined to some scattered forest ecosystems in both dry and wet zones, and has ranked as an Endangered (EN) species. Since the leopard population in the wet zone has not yet been largely acknowledged scientifically, a study was conducted to reveal the dietary pattern of leopard population of the Eastern Range of Sinharaja World Heritage Site. Throughout this five years study, 396 leopard scat samples were collected, washed and remaining bone particles were analyzed to identify its prey species. Samples were categorized in to two categories based on the direct ariel length from the forest boundary to identify any difference in the dietary patterns. The analysis revealed that, 35.85% of the scat samples consisted the bone particles of sambar, proving that the leopards in the Eastern Sinharaja range prefers sambar as its prey. Additionally, a considerable percentage of the scat samples consisted bone particles of dogs, highlighting a triggering factor to a 'human – leopard conflict'. Further, the direct and indirect evidences collected in the study proved that the leopards prefer forest margins, grasslands or marshy areas than the dense forest.

Key words: Scat analysis, Prey species, Conservation, Human – leopard conflict

