

## THREATS TO THE SRI LANKAN LEOPARD: AN ANALYSIS OF MORTALITY DATA

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The Sri Lankan Leopard (*Panthera pardus kotiya*), an apex predator endemic to Sri Lanka, is under increasing threat from anthropogenic activities, particularly near human settlements. As a vulnerable species, the need to understand the patterns and causes of leopard deaths is vital for its conservation. Relevant data gathered from several secondary data sources including records of Department of Wildlife Conservation (DWC) regional offices, published official news articles, wildlife specialists' records. Each incident was then cross referred to exclude duplicates and include all the available data for a single incident from different sources. Finally, this study analyzed 100 recorded leopard deaths from 2001 to 2023 to investigate the spatial distribution, habitat conditions, and key causes of mortality, aiming to provide insights for targeted conservation efforts. The analysis revealed that 83% of leopard deaths occurred in the central hills, making this region the most vulnerable habitat for leopards in Sri Lanka. Of these deaths, 53% were associated with tea estates, where leopard encounters with humans are more frequent. Furthermore, 73% of the recorded deaths took place in unprotected areas, highlighting the increased risks faced by leopards outside designated conservation zones. Only 24% of deaths occurred in protected regions, including biosphere reserves, national parks, conservation forests, and sanctuaries. Human-induced mortality was identified as the primary cause, accounting for 75% of the total deaths. Snaring (77%) emerged as the most common method, followed by poisoning (8%), shooting (6.6%), electrocution, beating, and road kills (2.6% each). The central province experienced a particularly high concentration of snaring incidents, with 93% (N=58) of snaring deaths occurring in this region. Natural causes contributed to only 5% of the overall deaths. The findings suggest that while many human-induced deaths were accidental, arising from efforts to hunt other animals for bushmeat, a portion of the killings was deliberate, driven by demand for leopard meat, canines, claws, and skins, and fueled by local myths. These results underscore the urgent need for community education on sustainable coexistence with leopards and reducing reliance on bushmeat. Strengthening legal frameworks, improving enforcement mechanisms, and establishing rescue and conservation facilities are essential for protecting the Sri Lankan Leopard, particularly in unprotected habitats near human settlements in the central hills.

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