

Assessment of Human-Leopard Conflict in Selected Tea Plantation Ecosystems in Hill Country of Sri Lanka

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Human-leopard conflict is a rising issue in the upcountry of Sri Lanka, especially where tea fields are the dominant ecosystem. The Sri Lankan Leopard (*Panthera pardus kotiya*) is an endangered species, and most conflicts result in human-caused deaths of leopards. Hence the objective of this research was to assess the human-leopard conflict in selected tea estates in the upcountry wet zone. The study was conducted from January 2016 to February 2019 focusing on 15 estates. Data were collected through questionnaires and personal interviews from 225 respondents, and were processed to generate information on trends and patterns of the conflict. A regression analysis was performed to check the relationship between attack frequency and distance to the nearest forest. The results indicate a rise in the conflict. Most attacks were on dogs. Attacks on humans were recorded from Panmoor, and Rosita estates. These were sudden attacks, with no particular time. There was no significant correlation between distance to the nearest forest and the attack frequency ($p > 0.05$). Majority of leopard deaths were due to snares targeted at wild boar (*Sus scrofa*). Incorrect identification of leopard by estate community leads to illegal killing of fishing cats (*Prionailurus viverrinus*), another endangered species. Dogs act as an attractant for leopards. Negative attitudes of locals (84% of respondents) towards leopard conservation was observed due to fear and lack of awareness on their role in the ecosystems. It is recommended that locals avoid bringing their dogs into the forest. Disturbances to leopards outside their habitats must be avoided as much as possible to alleviate attacks on humans. Habitat destruction and interference reduce the natural prey of leopards. Therefore, avoiding deforestation and planting new trees may help in reducing conflict rates in the long run. Awareness programs for plantation community may help in conserving not only leopards but also fishing cats.

Keywords: Human-leopard conflict, Leopard, Fishing cat, Panmoor, Rosita