Population of Leopard (*Panthera pardus kotiya*) and its Food habits at the Horton Plains National Park

The leopard (*Panthera pardus kotiya*) population in the Horton Plains National Park was estimated using the spot light line transect method.The transects were run during a period of three years from 1997-2000. The estimated average leopard population in the park was 14.2 ± 5.2.

The food habits of the leopard was studied by means of hair and other animal remains of the prey (pieces of mandibles with incisors and cheek teeth of rodents, nails of primates, hooves of ungulates etc) detected in their scat. Identification of hair samples was done by comparison with prepared reference slides using hair samples obtained from the Zoological Gardens , Dehiwala and also available keys. The scat was collected along five transects (existing foot paths), once each month along Kirigalpotta road, Ohiya short cut, Thotupolakanda road, Baker's fall road and Diyagama road. Altogether 215 scat samples were collected during the period from 1997-2000.

The results revealed that the major prey item in the leopard scat was hair belonging to sambar deer (*Cervus unicolor unicolor*) (77.3%). Of this, 39% comprised of juvenile or baby sambar hair. The other prey included species such as *Lepus nigricolis*-5.9%, *Mus* species-6.29%, *Rattus* species-3.1%, *Trachypithecus vetulus*-2.1%, *Ratufa macroura*-3.4%, *Sus scrofa*-1.2% and *Loris tardigradus*-0.62%.

This study recorded for the first time, evidence of *Loris tardigradus* in the leopard diet from the hill country of Sri Lanka. The present study also points to the sambar (*Cervus unicolor unicolor*) being a major food item of the hill country leopard as indicated in previous studies. Although previous studies have recorded the purple faced leaf monkey (*Trachypithecus vetulus*) to be a major prey of the hill country leopard, the present study indicates that it is not a common prey of this leopard.

The results of this study reveals that the leopard (*Panthera pardus kotiya*), which is a key stone species of the Horton Plains National Park, has an overwhelming influence on the community structure of this national Park.