ABSTRACT

Horton Plains National Park is generally regarded as one of Sri Lanka's finest nature reserves. The Park's value is further enhanced by its hydrological importance and biological diversity.The vegetation of the Horton Plains is believed to be maintained at their proper levels by grazing animals such as sambar deer (*Cervus unicolor unicolor*) . The population density of sambar in this national park , their feeding preference and other behavioural types are as yet unknown. The basis of all wildlife management in a park is an understanding of the population density and dynamics of the animals in the park.

During this study an attempt was made to provide a brief description of the sambar deer in the Horton Plains National Park. The topics addressed may prove to be significant when preparing management plans.

An attempt was made to ascertain the numerical abundance of Sambar from visual counts and faecal pellet counts.Visual count estimate was 1369 $\pm$ 156. Faecal count estimate was found to be 1583$\pm$183. Deer were excluded from certain areas by fencing, and the growth rates of the vegetation from inside and outside of the plots were compared to deduce the growth retardation/consumption levels by Sambar and also the possible changes in the habitat which might result from the animals being excluded. Removal of the productivity by grazing was compared with a mechanical cutting treatment. Daily intake by sambar was 6.25g/m^2 and the efficiency of utilization of the grassland by herbivores was 94%. Efficiency of utilization of the grassland by mechanical cutting was found to be 19.8%

Diet composition (Dicotyledon :Monocotyledon) was investigated by the identification of plant epidermis in faeces. The ratio of dicot :monocot was found to be 7:93. The importance of understanding the feeding preference

of Sambar deer and the application of such knowledge in their management has also been emphasized.

An attempt was also made to determine most of the behavioural patterns of Sambar in terms of relative frequencies.