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**A POPULATION STUDY OF ELEPHANTS IN THE KATAGAMUWA
SANCTUARY, KATARAGAMA**

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A Population Study of Elephants in the Katagamuwa Sanctuary, Kataragama

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Abstract

The structure and the behaviour of the elephant population frequenting the Katagamuwa Sanctuary, which has an area of 10.04 km², were studied during the period February 2006 February 2007.

During the study period, 78 elephants belonging to different categories visited the sanctuary, some more often than the others. There were 24 solitary adult males and 4 groups containing 54 individuals with adult females, sub adults, juveniles, calves and five adult males. Two solitary adult males were sometimes found within groups. The adult tusked males formed 17.4% of the adult males. The male:female sex ratio of adult was 1:0.96 favoring males. The proportion of calves was 19.2 calves for 100 adult females.

Solitary individuals formed 34.6% of the total number of individuals observed. The highest number of 19 solitary males was recorded in the tank in March 2006. The largest group observed contained 14 individuals. The average group size was 2.79. If solitary individuals are omitted, then the average group size was 9.33.

The activity pattern of the solitary individuals shown that, in general, both solitary individuals and groups visit the tank in the evenings. Although males were occasionally observed throughout the day time, the herds gather at the tank area after 1630 hrs. The elephants were observed at the tank up to 1930 hrs and beyond. Most of the solitary males leave the tank in the evening, but the herds of elephants were observed to remain there throughout the night for their feeding.

Groups were observed only in February to July and September. During the dry season, no groups visited the Katagamuwa tank. The number of males visited the tank decreased gradually after April, while the number of herds increased from February to May and decreased rapidly by July.

The absence of groups during the rainy season of 2006/2007 was probably because domestic buffaloes brought to tank area during this period and these buffaloes trampled the vegetation in the tank and wallowed in shallow water making water muddy. This shows how man in his activities could even indirectly interfere and change the behavioural pattern of elephants.