

## ABSTRACT

A preliminary study of behavior, diurnal activity and territoriality of black robin (*Saxicoloides fulicata leucoptera*) was carried out at the university premises, Buttala, within the intermediate zone of Sri Lanka, during the period of July through October 2000, within the dry season.

*Ad-libitum*, focal-animal and instantaneous behavior sampling methods were used for the study of behavior and diurnal activity. Population studies were carried out using the total count sampling method. Birds captured using mist nets and color tagged using plastic rings, were mapped and territories were demarcated using distinct cluster registrations.

This study recorded a total of 64 behaviors, which were categorized in to 14 categories. Generally black robin spent much of its time budget on locomotion. Activity of black robin was low in midday than that of morning and evening. The peak activity was recorded around 17:30 hrs and, the activity had an inverse relationship with the environmental temperature. A direct relationship between the relative humidity and the activity of black robin were also observed.

It was evident that there was no significant difference between the activity of male and female of black robins.

A population of  $29.2 \pm 4.76$  birds was recorded at a population density of  $1.667$  individuals per hectare. Almost all birds occupy a territory, which had an average size of  $1.18 \pm 0.34$  ha with an activity center of  $22.573\%$  of the total area in average. Territories were distributed in open or sparse woodlands and grass or scrubland. The key feature of distribution of the black robin was concluded as the density of the undergrowth and human influence and maintenance of the habitat.

The number of black robins occupy a territory varied between two and six, and there was no correlation between the territory size and the number occupied. The territories overlapped at their boundaries with an overlapping area of  $8.964\%$  of the total area in average.

A checklist of 68 birds species were recorded from the study area, which can be concluded as a remarkable site for bird studies, and requires a careful conservation and management.