

Territoriality of *Copsychus malabaricus* in Western Part of the Mihintale Sanctuary, Sri Lanka**Dilhari W.M.M. and Wickramasinghe S.***

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Abstract

The White-rumped Shama (*Copsychus malabaricus*) (WRS) is a small passerine bird which has a melodious song and solitary behaviour that holds a territory all year round. Research on territorial behaviour of WRS is scarce in Sri Lanka. Present study was carried out from May to August in 2013 at western border of the Mihintale sanctuary to investigate the territorial behaviour of WRS. The behavioural studies were done by using the focal sampling method. A dummy of WRS and play back calls were used to check the aggressive behaviour and territory variations of the bird. Territorial mapping was done using standard method described by Bibby et al (1993). Breeding success was measured by number of eggs in each nest and number of chicks emerged from relevant nest. The frequently used trees for nest building were measured by frequency of visiting time of each tree species. Individuals of WRS were marked with coloured plastic rings prior to the study. Three territories were selected from fragmented and non-fragmented forest patches to continue the study. During the non-breeding period size of territory is approximately 26,255.6 m² while during the breeding period their territory size varies to 20,777.51 m² – 33,296.03 m². The size of the territory depends on the degree of habitat disturbances. The results revealed that the successful breeding was observed in non-fragmented forest patch than the fragmented forest patch. Calling (43%) and moving (43%) behaviours were high in male and female respectively during the non-breeding period. During the breeding period lifting tail was prominent in male while preening was prominent in female. Every 13 seconds male produced calls both breeding and non-breeding periods. During the site selecting period both have high percentage (male -50% and female -54%) of moving while during the nest guarding period, male showed high tail lifting and calling behaviours. The perching height varies with the site selecting behaviour. Average perching height of male and female ranging from 2.348 m (± 1.2) to 3.41 m (± 1.87) and 1.25 m (± 0.75) to 2.63 m (± 0.89) respectively. Perching height is significantly different ($p < 0.05$) during the breeding and non-breeding periods. *Drypetes sepiara* and *Pterospermum canescens* were frequently used trees for the nest building. They selected 49-150cm height from the ground level for nest construction and the nest length is 9.85 cm, 7.7 cm width and thickness is 2.7 cm. Parts of *Ficus* aerial roots, dried leaves, sticks and grasses used as for nest building materials. Average clutch size was 2 ± 1 and length of egg was 2.14 cm-2.35 cm and width was 1.18-1.6 cm ($\rho = -0.990$).

Keywords: White-rumped Shama, Territoriality, Behaviour, Mihintale Sanctuary