

D-23: Comparison of diurnal time expenditure of Purple Coot (*Porphyrio porphyrio*) in selected habitats during different weather conditions

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A study of the diurnal time expenditure of the Purple Coot (*Porphyrio porphyrio*) was carried out during the period of March to May 1995, in 3 selected habitats (Kurunegala-Tittawella tank, Bellanwila-Attidiya marsh and Sri Jayewardenapura marsh).

Behavioural studies were done using one zero and focal animal sampling techniques. Data was analysed for significance using Minitab. The observations revealed that diurnal time was mostly used for 5 major behavioural acts: feeding, resting, locomotion, bathing and cleaning.

Weather related variations in behavioural time expenditure for different time of the day was not seen at Sri Jayewardenepura and Attidiya, but at Kurunegala. Diurnal behavioural variations differ very much at each site. At Attidiya resting was very high in mid day. Feeding and other behaviours fluctuated daily. At Sri Jayewardenepura resting and cleaning were very high during the mid day period. The time expenditure for bathing was found throughout the day during sunny days at Sri Jayewardenepura. At Kurunegala, cleaning and bathing were very high during mid day period. Other behaviours fluctuated more or less similarly as in the other habitats.

Within site comparisons, showed there was a significant difference in Kurunegala habitat and Attidiya habitat for the large number of major behaviours at both weather conditions. These significant differences were seen most during mid day and morning period. Purple Coot as most of the birds, showed higher time budget for foraging in both morning and evening under both weather conditions. Feeding occupied a large part of the day, but the distribution of time spent on this activity varied daily, depending on factors like temperature, wind speed, and priority given to other types of activity.