

Communal Roosting Behaviour of Riparian Water Birds

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Several bird species roost in groups of hundreds or thousands as mixed flocks or a single species. Due to land use patterns leading to clearing of forest cover and urbanization, most of the roosting and nesting habitats have drastically decreased and as a result different species of water birds gather in nearby forest patches. The selected study site is located in the Kandy district within the South East boundaries of the Polgolla reservoir, 10 km from the city of Kandy. The present study was carried out from January to May 2003 to record the species richness, abundance, directions of movement of birds to the study site and environmental parameters such as time of sunset, temperature, light intensity and relative humidity.

Point counts were conducted in two sites daily in the morning to determine the species richness and abundance and direct observations were made in the evening to find out the flight direction of birds. The communal roosting group consisted of eight species of water birds belonging to two families. A total of 955 birds (955 ± 173) were sighted during the study period and the dominant species was *Egretta intermedia* (441 ± 100) throughout the study. The Common Mynah (*Acridotheres tristis*) associated with these water birds frequently. The total number of birds sighted fluctuated with the paddy harvesting season of the surrounding area. Majority of the birds arrived at the roosting site from the east while the mynahs flew in from a north western direction. Twelve tree species were used by these 8 bird species while *Bambusia blumeana* (bamboo) rich vegetation was most preferred by members of the family Ardeidae (Egrets, Herons). The members of the family Phalacrocoracidae (Cormorants) family did not choose any specific canopy tree for roosting. Sunset time was significantly correlated with all roosting parameters: first, mid and last arrival time, and last vocalization time. This study suggests that roosting behaviour of riparian water birds may be influenced by several environmental variables.

Destruction of canopy vegetation provides fewer habitats for roosting birds. Replanting and maintenance of remaining forest patches in the riparian area are important for the conservation of water bird species.