



Multivariate Analysis of Water Quality Parameters in the Seasonal Wetland Ecosystem

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Abstract: Diversity and distribution of aquatic plants, water birds and their relationship of water parameters were investigated from seasonal wetlands of Ramanathapuram district, Tamilnadu, India. Three sampling stations such as Tamaraikulam, Manankudi and Pudhumadam were selected to present study. Fifteen aquatic macro floras representing 12 families, 7 classes and 9 orders were recorded. Out of these, 7 were submerged, 6 rooted floating weeds, and only one species of floating weed and rooted macrophytes. Twenty nine species of water birds with representing 13 families and 7 orders were recorded from two different habitats such as aquatic habitat and shrubby habits. *Anhinga melanogaster*, *Threskiornis melanocephalus* and *Mycteria leucocephala* are near threatened species. *Myriophyllum spicatum* L., *Hydrilla verticillata*, *Nymphaea nouchali* Burm.f., *Ceratophyllum demersum* L., *Lemna minor* L., *Marsilea quadrifolia* L., *Patamogeton nodosus* poix, and *Najas minor* are under IUCN categories especially least concern and IUCN population trend also recorded and a variety of plants and aquatic birds are also reported from this ecosystem.

Keywords: Seasonal wetland, Water quality, Aquatic flora, Water birds, IUCN Threatened species
