A study to identify Waterfowl and Wader species, determining the Nesting sites and Biodiversity of Hashilan wetland (using GIS)

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Abstract

Present study is done to identify Waterfowl and Wader species, determining variety and their nesting sites in the Hashilan wetland during 18 visits with time interval of 5 days at once from May till June 2011. Since knowledge of birds' nesting sites in wildlife sciences is very important and birds' species for breeding are dependent on the particular conditions, the importance of recognition of nesting habitat will be doubled. Waterbirds are also of the most important creatures that have other aesthetic, recreational, economic, social values. Hashilan wetland is one of the most important and complex wetland in the western part of Iran. Many species of birds in this zone have overwintering and breeding or native to theregion. In this regard, 21 nests belonging to 5 species of breeding birds including *Ciconia ciconia*, *Anas platyrhynchos*, *porzana parva*, *Tachybaptus ruficollis*, *Gallinula chloropus* were identified. The highest frequency among these birds belongs to *Rallidae* family with 53.40 percent and the highest number of species belonging to the same family with 2 species. Maximum diversity index calculated by Shannon - Wiener (H'=1.014), Margalef species richness (R=0.446), Simpson dominance (λ=0.176) and the biological level (Es=0.922) belongs to the wader breeding birds with 3 species. According to the study it seems that the eastern region of Hashilan wetland has the suitable conditions for nesting of waterbirds.

Key Words: Waterfowls, Waders, Breeding Birds, Nesting Sites, Hashilan Wetland.