ABSTRACT

The present study has been done to report the diversity of bird fauna inhabiting Sheikhupura, Punjab, Pakistan. In total 35 species, 24 families and 11 orders of birds were observed. In urban habitat only, 30 species, 10 orders and 22 families of birds were recorded (952 individuals were seen in urban habitats, 907 in semi-urban habitats) while 1859 individuals were observed overall. Among 11 orders, Passerine was most abundant by having 15 (48%) species, followed by Columbidae and sturnidae with each having 3 (8%), the least number of bird species is present in order Charadriiforme, and Gruiformes that is 1 (3%) species. Biodiversity monitoring was based on habitat, migratory status and population trend and feeding habits of the birds. Based on habitat, 17 (49%) terrestrial and 18 (51%) semi-aquatic habitat species were identified. According to IUCN category 1 (3%) near threatened and 34 (97%) least concern species were present. According to population trend 18 (51%) were stable, 9 (26%) were decreasing and 8 (23%) of avian species were increasing in their numbers. On the basis of migratory status 29 (83%) species were residents, 2 (6%) were winter visitor and 4 (11%) were summer visitors. Feeding guild is dominated by omnivores 12 (34%), followed by insectivores 7 (20%), fruigivores 5 (14%), pisciformes 4 (11%), carnivore 3 (09%), granivore 3 (09%) and nectarivores 1 (3%) birds. Based on current study, Shannon Weiner index value is 3.21, Simpson diversity index value is 0.94, species evenness value is 0.90, Margalef index value is 4.51, Menhnick index value is 0.81 and census index value is 13. Shannon Weiner Index of semi-urban and urban habitat is 3.26 and 3.02 respectively. Simpson Diversity Index of semi-urban and urban habitat is 0.95 and 0.93 respectively. Margalef index value of semi-urban and urban habitat is 4.99 and 4.22 respectively. Menhnick index value of semi-urban and urban habitat is 1.16 and 0.97 respectively. Census Index of semi-urban and urban habitat is 10 and 21 respectively. This shows a higher density but lower diversity in urban habitat/Company Bagh as compared to semi-urban habitat/ Hiran Minar. Major threats to birds are filling of ponds, introduction of invasive species of plants, anthropogenic activities, and hunting and catching of wild bird for sports and cage bird selling. There is a dire need to halt major threats to birds.