Identification of Fish-Eating birds Community Structure at Khure Mousa in autumn and winter 2014/2015

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Abstract
The fish-eating birds are on the top of food chain in wetlands ecosystems, and are bio- indicators. For this reason, identifying of fish-eating birds population structure, species diversity, alpha, beta and gama diversity carried out using binocular10×40 Zais and Telescope15×60, by direct observing and total count method since October 2014 to March 2015. Khure Mousa located next to Bandar Emam harbor. In this study, 26 species of fish-eating birds with a population of 11924 individuals and belonged to five families have been determined. Fish-eating birds' community in Khure Mousa included Ardeidae 19.61%, Phalacrocoracidae 7.73%, Laridae 58.76%, Sternidae 13.76% and *Pelecanus crispus* (globally threatened species) 0.37%. The highest Simpson, Shanonn-Wevear, Margalef and Berger-Parker indices were 0.8603, 2.104, 1.293 and 0.4356, respectively in January 2015, and the lowest were 0.7323, 1.509, 0.8989 and 0.2354, respectively in October 2014. The highest population was in January 2015 (3764 individuals) and the lowest was in October in 2014. There was a significant difference between fish-eating birds population during six month. The wading fish-eating birds observed at the coast of Khure Mousa, diving in depth part of water and surface feeders on shallow parts of Kure Mousa creek. Most similarity of fish-eating birds was seen in December 2014 and January 2015 and the most Euclidean Coefficient observed in October 2014 and January 2015. Difference at fish-eating bird's population and species diversity showed that the Kure Mousa is wintering habit at for fish-eating birds and these birds enter to the habitat at December and after wintering they leave the region on March.

Keywords: Fish-eating birds, Community Structure, Similarity coefficient, Euclidean coefficient, Khure Mousa