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1
Species diversity and Abundance of Birds along Boat Touring Routes for Ecotourism in Tha Ka Sub-district, Amphawa District, Samutsongkram Province, Thailand

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1. Introduction - Tha Ka Floating market is famous tourist places of Tha Ka sub-district, Amphawa district, Samutsongkram province, Thailand. There are row boats for tourist to watching nature and lifestyle in the canal. The objectives of this research were 1) to study species diversity, feeding behavior and status of birds in the research area, 2) to analyze the abundance and the similarity of birds in the research.

2. Experimental – Three boat touring routes were surveyed; Route 1 (Tha Ka floating market – homestay), Route 2 (Tha Ka floating market – traditional sugar kiln), and Route 3 (traditional sugar kiln – resort). The survey was conducted in the morning from 7 am to 11am and in the afternoon from 3 pm to 6 pm. One survey was made each month from April 2017 – March 2018. Record the species of birds and their behaviors sighted directly and from their calls by using line transect method. Classify the species of birds, feeding behavior and status of birds. Analyze the abundance and the similarity of birds.

3. Results and Discussion - The result of this research found that 15 orders, 37 families, and 74 species of birds were found in three-route-survey. The maximum bird species of 35 in order Passeriformes were found. The maximum bird species of 65 were found in route 3. According to bird feeding behavior, the maximum insectivorous bird species of 25, 26 and 31 were found in 3 routes accordingly. According to status of birds, 52 resident birds, 9 migratory birds, 13 resident and migratory birds were found in 3 routes. According to bird abundance, 21 bird species were in level 5 of bird abundance such as Javan Pond Heron (Ardeola speciosa), Collared Kingfisher (Todiramphus chloris) and so on. It was 28.28 % of all bird species. According to bird similarity index, the similarity index between trail 1 and trail 3 was 0.814. Bird abundance of level 5 (abundance) had increased in 3 boat routes because the community along the canal gave their hands to keep the canals clean. Local gardeners did their Integrated and organic fruit gardening. The community also organized eco-touring activity by using Thai paddle-boat. So the birds are as indicators of natural balance of local ecosystem.

4. Conclusions - It was found that there were 15 orders, 37 families and 74 species of birds. The highest number of bird species in 3 routes was 49 species in December and 47 species in November accordingly because of migratory season of migratory birds in the research area. According to bird abundance of birds, 21 bird species were in level 5, 7 bird species in level 4, 20 bird species in level 3, 9 bird species in level 2 and 17 bird species in level 1. According to bird feeding behavior, the maximum insectivorous bird species of 35 were found in route 3. According to status of birds, 52 resident birds, 9 migratory birds, 13 resident and migratory birds were found in 3 routes. According to bird similarity index, the similarity index between trail 1 and trail 3 was 0.814.

5. References


**Scientific CV (optional)**

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