

Yodsaphol Wonglertwit 2011: Effect of Land Use on Bird Diversity in West Area of Tha Chin River Mouth, Samut Sakhon Province. Master of Science (Forest Resource and Environmental Administration), Major Field: Forest Resource and Environmental Administration, Interdisciplinary Graduate Program. Thesis Advisor: Assistant Professor Vijak Chimchome, Ph.D. 83 pages.

The study of bird diversity in west area of Tha Chin River Mouth, Samut Sakhon Province was conducted from January - December 2010. The objectives of the study were to obtain the species diversity, abundance and the current population status in the study site and to compare species distribution among different land uses.

The results showed that 92 species of birds were found in the study site, 35 species of birds are resident and 45 species of birds are migratory species. Two species of birds are breeding visitor and 10 species of birds are both resident and migratory species. The highest number of species of birds *i.e.*, 60 species were recorded in November 2010. The relative abundance was analyzed and showed that uncommon species was in the highest number, followed by common and very common species, respectively. The Diversity Index of habitat type A, a representative of the habitats for birds in the mangrove forest and tidal mudflat in the conservation or nearby the conservation zone, was the highest value (3.08). The comparison of Similarity Index (SI) between two different habitats indicated that habitat type A and habitat type B which represents the habitat of birds in the area of saltpan, were similar at 78.08%. The SI seemed to show the same trends of bird ordination using non-metric multi-dimensional scale (NMS). Birds in habitat type A and type B contained similar prominent bird species *i.e.*, group of water birds and waders. Whereas habitat type C representing man-made land use with high human activities had prominent bird species including a group of water birds and birds that are commonly found in the urban areas.

The results can be applied to evaluate the habitat as a bird important area as well as the area planning for managing mangrove forest, wildlife and other resources in the future.

---

Student's signature

---

Thesis advisor's signature