A REASSESSMENT OF THE AVIFAUNAL DIVERSITY IN DE LA SALLE UNIVERSITY-DASMARINAS

An Undergraduate Research
presented to
Faculty of the Biological Sciences Department
College of Science
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> Lee, Seong Gwang Tapia, Paul Adrian G.

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1.0 INTRODUCTION

1.1. BACKGROUND OF THE STUDY

The avifauna of the Philippines has an exceptionally high level of endemism (64%), with about 180 endemic species, but is amongst the most endangered in the world because of continuing deforestation and capture of some species for trade or food. Bird Life International has increased the number of resident species classified as Threatened or Near-threatened from 69 (Dickinson et al., 1991) to 116; this includes two species (Negros Fruit-Dove and Isabela Oriole) which have not been seen for over 30 years and others, e.g. the Negros Bleeding-heart, facing imminent extinction. Against that, several species have been rediscovered after a long absence (e.g., Writhed-billed Hornbill, Black Shama, and Cebu Flowerpecker), the Panay Striped-Babbler found in 1990, and two potential new species await identification (a woodcock on Mindanao and an owl on Mindoro) (Hornbuckle, 1994). Birds are one of the most studied species in the field of science but in the case of De La Salle University-Dasmarinas, only a few people like Nicandro A. Icarangal and Juan Luis C. Singson (2003) initiated and took a step in studying the avifaunal status of the campus. In their study they documented an exceptional number of species that are either resident or migrant in DLSU-D.

De La Salle University-Dasmarinas is well-known for its green campus and is regarded as one of the most beautiful La Salle campuses in the Philippines. The university does not only take part in preparing students to be globally competitive but also making them environmentally aware, to the situations that we are facing today and will be facing in the future. Because of developments in this part of Cavite which resulted mostly in habitat degradation, wildlife in the area is left with limited options for a functional habitat. Fortunately, the greens of the campus offer the best alternative or substitute making it very vital for the avifaunal population not only for the resident birds in the campus but also for the town of Dasmariñas.

Many improvements are being undertaken especially regarding facilities and buildings. These improvements may positively or negatively affect the bird habitats in the area that is why this study also aims to know whether the improvements done help increase or decrease the avifaunal diversity in the institution.

1.2 Objectives of the study

This study aimed to compare and differentiate the previous avifauna survey done within the campus. The study focuses on determining the following:

- 1. Determine the current avifaunal diversity of DLSU-D
- 2. Determine the similarity from the past thesis.

1.3 Scope and Limitation

The survey is a reassessment of the avifaunal diversity of DLSU-D and covered selected areas of DLSU-D campus. This survey focused in determining whether various advancements help or diminish the number of species of birds in DLSU-D. The study also focused on observation method to lessen the occurrence of disturbance to the birds. No live specimen was obtained to further preserve the species count. A dichotomous key was generated only to the new species for the documentation. *Passer montanus* which was included in the previous study was not recorded due to its high frequency.

1.4 SIGNIFICANCE OF THE STUDY

Avifauna are important to human beings, they propagate in maintaining balance to the population of insects and rodents. Because birds are high in the food chain they help manage the insect and pest counts especially in the campus of DLSU-D.

The study generated an updated avifaunal population of DLSU-D since 2003. The rich avifauna in DLSU-D has been overlooked not until the study in avifauna was made in the year 2003. But time had passed and changes occurred, many renovations have taken place within the campus not to mention the fast development of new buildings. Because of this, changes may have also occurred in the avifaunal diversity in DLSU-D that is why this study intended to gather information and facts about the current state of the avifauna of DLSU-D. The study will help the whole La Sallian community to further appreciate and nourish one of the campus' treasures, its diverse avifauna. Future researchers may also use this study as reference if they want to pursue future updates and also zoologists, biologists, ornithologists and the like may use this study as guide to the diverse avifauna present in DLSU-D.

1.5 DEFINITION OF TERMS

Avifauna. the birds of a De La Salle University-Dasmarinas.

Ecosystem. a system formed by the interaction of a community of organisms within DLSU-D.

Diversity. The number and variety of species present in De La Salle University-Dasmarinas and their spatial distribution.

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Endangered. Any species which is in danger of extinction throughout all or a

significant portion of its range. A species whose numbers are so small that the

species is at risk of extinction. Where the population of a species is dangerously

low, so much that their gene pool diversity is adversely affected while there is a

risk of the species being wiped out altogether, usually a consequence from human

gain.

Endemic. belonging exclusively in DLSU-D.

Shannon-Wiener index (D). This measurement takes into account species'

richness and proportion of each species within the DLSU-D community.

Species. A class of individuals having some common characteristics or qualities,

distinct sort or kind present in DLSU-D.

Species Richness (S). The total number of different organisms present in DLSU-

D. It does not take into account the proportion and distribution of each species

within the DLSU-D community.