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Herons (Pelecaniformes: Ardeidae) associated with an artificial water body in Xalapa, Mexico.

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INTRODUCTION & AIM

Artificial water bodies located within urban areas play a crucial role in biodiversity conservation, as they act as remnants of the original ecosystems and provide alternative habitats for aquatic birds.

Example of artificial water body located in Veracruz, Mexico.

METHOD

This study was conducted in an artificial lake located within the city of Xalapa, Mexico, known as “Lago USBI”. Data collection was carried out using the fixed-radius point count method, recording all aquatic bird individuals observed within a 20-meter radius for 10-minute intervals.

Panoramic view of the artificial water boy known as "Lago USBI“.

Bird identification was performed using specialized field guides, and weekly observations were conducted from February to April 2024. The relative abundance of each species was calculated, and its conservation status was classified according to the categories of the IUCN Red List.

RESULTS & DISCUSSION

A total of five heron species (Ardeidae) were identified, all categorized as “Least Concern” by the IUCN. The recorded species and their respective relative abundance values were as follows: *Butorides virescens* (78%), *Ardea alba* (11%), *Egretta thula* (5%), *Ardea herodias* (4%), and *Nyctanassa violacea* (2%).

Green heron (*Butorides viriscens*) the most abundant heron found during this study.

Although the lake “Lago USBI” is an artificial habitat, it hosts 31% of the heron species reported for Mexico. Despite all being listed as “Least Concern,” these species warrant attention in environmental conservation studies, as they are often ecologically associated with other key species, thus providing indirect protection.

CONCLUSION

-Lago USBI harbors 31% of Mexico’s heron species, underscoring its value as urban wildlife habitat.

-*Butorides virescens* was the dominant species, indicating a high degree of adaptation to artificial environments.

-Artificial urban water bodies function as important alternative hábitats and provide valuable opportunities for urban ecological research.

FUTURE WORK / REFERENCES

The findings of this study highlight the ecological importance of artificial water bodies as alternative habitats for species in urban environments. Consequently, this research underscores the potential of such habitats as valuable sites for future studies on urban ecology and heron community dynamics.

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