Ecosystem services and human-wetland-bird interactions in Trinidad and Tobago

BACKGROUND

Trinidad and Tobago (TT) retain some of the largest remaining wetlands in the Caribbean and are a key link in a major bird migration route. Wetlands and the birds they support provide critical ecosystem services to local human populations. However, these habitats are highly threatened. Through social surveys, it is my goal to determine how people in Trinidad and Tobago interact with and value wetlands and the birds that live in them. Ultimately, I plan to link these results with bird and habitat protection.

METHODS

Social surveys were conducted in the fall of 2017. Questions included basic demographic information, wetland visitation, willingness to pay, a series of questions about the subjective importance and understanding of ecosystem services and several free-answer questions. The survey was distributed in paper, iPad, and online format to individuals, tour groups, hotel patrons, and community groups and organizations.

FUTURE DIRECTIONS

Data collection is ongoing. When survey collection is complete, I plan to:
1. Evaluate the human-wetland-bird network for patterns in use and subjective value of wetlands and wetland birds
2. Conduct vulnerability analyses of human-wetland-bird networks to identify vulnerable and important wetlands

PRELIMINARY RESULTS

In the past 12 months, how often and which wetlands did you visit?

TRENDS

- Caroni and Nariva Swamps, the two largest in Trinidad, are the most visited wetlands
- Of those that responded with reasons for wetland priority, two-thirds identified ecosystem services as the main factors of their importance
- Persons who self-identified as being very familiar with wildlife protection laws were also those that disagreed the most with their efficacy
- The majority of respondents would provide funds for wetland conservation & restoration; however, when framed as a fee, people were less likely to agree to pay higher amounts

This research was supported by the Tufts Institute of the Environment, Water Diplomacy IGERT (NSF 0966093), and the Blake-Nuttal Fund. The Tufts University Institutional Review Board (IRB) approved this study and The University of the West Indies, St. Augustine IRB waived approval.