Preparing people to lead extraordinary lives

**Abstract**
Over the course of 6 days in the Madre de Dios Region in Peru, research was conducted on the various native birds. 111 species were identified using sight and sound. Species included Hoatzins, White-throated Toucans, Scarlet Macaws, Gilded Barbets, Festive Coquettes, Band-tailed Manakins, and many more. This detailed inventory of species was uploaded into The Cornell Laboratory's ebird database. The diversity that was documented in the neotropics contributes to the important field of citizen science which can offer invaluable aid to future research.

**Introduction**

The primary purpose of this research was to build a detailed inventory of birds by genus and species, thereby contributing to citizen science. Citizen science is the voluntary involvement of the public in scientific research. Citizen scientists can help design experiments, collect data, analyze results, and solve problems (1). Our research focused on data collection. This data was made available to scientists using “ebird,” which is a web-based tool for recording bird observations and is a link to hundreds of thousands of citizen-scientist birdwatchers who use it every day (2).

The base of our operations was the Inkaterra Field Station located roughly 17 km down the Madre de Dios from the city of Puerto Maldonado and maintained by the Inkaterra Association. Excursions from the station were conducted daily and included visits to their Palmetum, botanical garden, and canopy walkway among others. Species were recorded at every opportunity.

**Methods and Research Design**

Our inventory of bird species in the region was collected through visual and auditory means. When possible, photographic documentation was gathered and recordings of bird calls were taken. Sightings and calls which we were unable to explicitly link to a genus or species were omitted. The ebird database was also utilized to aid in our identifications. Once identified, bird species were recorded in both ebird checklists and in personal notebooks.

**Results**

The results of our observations are summarized in complete checklists of every genus and/or species we were able to identify, along with the general location of the observation, the number of observers, and the date and time of observations. The locations include the Inkaterra Guides Field Station along with all excursion sites mentioned in this introduction, the Isla de Monos, Carachamayoc farms, Taricaya Ecoreserve, and Lago Sandoval. These checklists can be found on the ebird database under the usernames jmolaro and eferguson2.

**Discussion/Conclusion**

This investigation plays a small but vital role in citizen bird science. By documenting every species that we came across and were able to identify, we provided neotropical ornithologists with valuable data to conduct their own research in the future. Our work is realized alongside hundreds of thousands of other citizen scientists allowing researchers to analyze the data we collect to determine how birds are being affected by habitat loss, pollution, disease, climate change, and other environmental changes by tracking bird migration, nesting success, and changes in population numbers over time. (3)

Citations:

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Who saw that Hoatzin?!

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