JAMES RENNIE BEQUEST

REPORT FOR EXPEDITION/PROJECT

Expedition/Project: Biodiversity Monitoring in the Pacaya Samiria National Reserve

Travel Dates: June 15th-July 12th

Location: Pacaya Samiria National Reserve, Peru

Group Member(s): Trishala Chari

Aims:

- Conduct distance based survey transects for primates, large mammals and game birds.
- Conduct boat based point counts for macaws.
- Perform 5km river transect for wading birds.
- Achieve catch per unit effort for understory birds for this year.
- Perform 5km river transects for river dolphins.
- Use catch per unit effort to measure fish populations in response to climate change,
- Habitat surveys for different habitats within the reserve.
- Spotlight surveys for caiman at night to estimate population size and distributions.
- Perform 5km river transects for fishing bats.

OUTCOME:

The objective of the biodiversity monitoring I conducted in the Pacaya Samiria National Reserve was to gain experience in different types of population surveys required for different groups of animals. I was working with the academic organization, Operation Wallacea, to monitor the biodiversity. I spent 4 weeks with Operation Wallacea in Peru and used the James Rennie Bequest for my travel expenses. During my work at the Pacaya Samiria National Reserve, I was stationed in a research boat that remained at the reserve for the course of Operation Wallacea's projects.

The beginning first week consisted of a series of lectures to broaden my understanding of Amazonian wildlife ecology and conservation and gain an understanding of the different habitats in the reserve and their qualities (riverine forest, closed canopy forest, levees, liana forest, palm forest). These lectures also involved an understanding of the groups of species in the reserve such as freshwater fish, amphibians and reptiles, birds, freshwater mammals, large mammals, birds and primates. Finally, these lectures also explained how

the local Cocama people conduct sustainability and the importance of our population surveys to their sustainability. During this first week, I also went on field-based survey in

For the first two weeks of my expedition, I progressed through the different surveys with rotations each day. These rotations helped me learned how to conduct transect surveys, mist net surveys, catch per unit effort surveys and point count surveys. In addition, I gained a general understanding of the behaviour of the different animals that reside within the reserve. Many of these surveys involved reaching other sites around reserve via speed boats. Some of the surveys were conducted along the survey while some were on land in the forests. Over the course of the first two weeks, I was able to notice a change in the water levels as the season was moving from the flooding to dry season and this dramatically effects the populations of species seen along the river, such as wading birds, and indirectly on the land species.

In my last two weeks with Operation Wallacea, I had to option to specialize in a specific group of species and conduct surveys for that group more frequently than the other groups. I specifically worked with understory birds at different sites pertaining to the different habitats. This experience allowed me to achieve a greater insight in understory birds, such as wallcreepers and kingfishers, and their behaviours that change during the day and night. In addition, I helped dissertation students in gathering data for their projects, which were presented at the end of their expeditions.

Operation Wallacea conducts research at the Pacaya Samiria National Reserve to see if there are any effects of flooding on the populations of animals residing along the river and within the forests. Naturally, the flooding season changes to the dry season in June in the reserve. However, due to the El Nino currents this year, the flooding season lasted longer with the dry season only beginning in July. This change in the season patterns affected the change in populations of the species in comparison to last year. Currently, Operation Wallacea is analyzing the data to see that changes that occurred in the populations from this year.

I thank the James Rennie Bequest for their funding, which allowed me to take part in conservation projects in Peru.