JAMES RENNIE BEQUEST

REPORT ON EXPEDITION/PROJECT/CONFERENCE

Expedition/Project/Conference Title: Operation Wallacea Peru Expedition 2010 .....

Travel Dates: 19/06/10 to 20/07/10.....

Location: Pacaya-Samiria Nature Reserve, Loreto, Peru.....

Group Member(s): Ryan Winspear .....

Aims: Aid in biodiversity assessment with a view to conservation in the Peruvian Amazon .....

OUTCOME (not less than 300 words):-

Staying on a boat upon the Amazon for 1 month, I carried out transects, mist-nettings, point counts, camera-trappings and other more specific types of biodiversity assessment on a daily basis. I would generally be involved in 2-4 of the following activities every day:

- Mammal/Bird terrestrial transects: generally 3-5km carefully walking set transect paths, recording sighted species' group size, activity, proximity to the transect to later calculate a density estimate
- Macaw point counts: 7 points along roughly 1km. Any of the 5 extant macaw species were recorded for group size and distance from the point, for 15 mins per point.
- Dolphin/River Turtle transect: A small boat was taken 5 km upstream of the residential boat and left to float back down steadily. All Dolphin/River turtle species observed were recorded for group size, activity, proximity to boat to later calculate a density estimate.
-Fish stock assessment: Nets were placed by local skilled fishermen, while researchers used poles and lines. Catch per unit effort (1 person per hour) over a 3 hour period was the unit used. Location was randomly selected from suitable fishing sites.
-Caiman transect: Generally a 10km stretch of river was searched by boat for caimans. Species (of 3 extant) was recorded, and when capture was possible, caimans were weighed, measured and had stomach samples collected for niche separation studies.
-Amphibian boat transect: Same technique as Caiman transect, only without stomach sample collection.
-Amphibian terrestrial transect: Same technique as the Mammal/Bird terrestrial transect, only with key measurements also taken for amphibians captured (all were captured with few exceptions).
-Mist netting: 8 mist nets were set up in locations that varied temporally (impossible to repeatedly relocate in short times) for three periods during the day for 2 hours each. All species captured were quickly removed, identified, measured for beak length, tail length, wing length, rostrum length, body length and weighed before release.

This voluntary expedition was very valuable to me as a student of Evolutionary Biology. Visiting the most biodiverse region in the world has provided me with a real insight into how evolution can lead to exploitation of seemingly limitless niches within a small area. It also gave me an appreciation for the hard work necessary for conservation research. Having said this and also that I very much enjoyed the trip, it also lead to a suprising resolution. This resolution being that I will probably avoid involvement in such research again. At least not in a capacity that does not have a

strong genetic component. This is because I and others (non-conservation biologists always) observed that many of the research techniques were very unscientific, specifically vulnerable to researcher bias. The fish stock estimation, for example, made no sense at all. People's ability to fish with pole and line varied enormously just between students, and then taking into account that our fishing effort was supposed to be a proxy for that of a skilled local, the unit of 'catch per unit effort' is just ridiculous. I took this up with the lead researcher and owner of the boats and equipment we used when he 'invited' criticism. His response was one of flippancy and shameless side-stepping. Needless to say in future I will be far more sceptical of the methods and subsequent findings of such research, and this, I think, will prove just as valuable to me as the more positive things I learned on the project.