

JAMES RENNIE BEQUEST

REPORT ON EXPEDITION/PROJECT/CONFERENCE

Expedition/Project/Conference Title: Association of Tropical Biology Conference

Travel Dates: 19-22 July 2012

Location: Bonito, Brazil

Group member(s): Lucy Rowland

Aims:

- 1) Present my research findings at a large international meeting
- 2) Attend oral presentations on the effects of climate change on the carbon balance and biodiversity of tropical ecosystems
- 3) Talk to peers and fellow researchers and discuss research ideas

OUTCOME (not less than 300 words):-

The association of tropical biology conference is the largest annual meeting of tropical biologists. There was substantial diversity in the topics of the oral presentations at this conference ranging from scales of microbiology to global environmental modelling. The conference was located in Bonito, Brazil, one of the countries ecologically diverse regions. Despite this remote location the conference attracted over 12000 attendees; over half of the attendees were Brazilian, bringing a distinct focus to the current research on tropical areas of Latin America.

The timing of the conference was such that it took place at the same time as the international conference on climate change in Rio de Janeiro. The focus of the conference was there shifted towards how climate change is impacting the biodiversity and ecological function of global tropical regions and what we as researchers can do to prevent further ecological damage.

The conference was structured such that the days started and ended with hour long oral presentations from the key note speakers. These talks were an excellent opportunity to hear from some of the most eminent scientists in the field of tropical biology. Two of the most compelling talks included one of the historical assemblages of island and mainland lizard species in the Caribbean by Jonathan Losos, Harvard

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University, the second was on herbivory as a selective pressure and the impacts of the diversity of tropical plant species by Rodolfo Dirzo from the University of Mexico.

My presentation titled ' The response of tropical dead wood respiration to seasonal drought in a neo-tropical forest' was given in the session on measuring and predicting the impact of drought across tropical forests in Africa and South America. My talk focuses on how seasonal drought caused a decrease in the flux of carbon from decaying dead wood in tropical forests and the implications this moisture sensitivity could have on predicting future responses of this source of heterotrophic respiration to climate change. The talk was well received and given in a room of ~100 people. The talk attracted the attention of Jeff Chambers, one of the first tropical biologists to study the importance of carbon fluxes from decaying wood on the carbon balance of tropical ecosystems. The opportunity to discuss my work with Jeff following my presentation led to the offer of collaboration to jointly publish a paper on the joint implications of our results for interpreting the climate sensitivity of tropical dead wood.

I owe great thanks to the James Rennie Bequest for contributing towards the cost of attending this exciting conference, and allowing me to have the opportunity to discuss my work with leading scientists in my field, as well as the opportunity to be inspired by the research of others.