### JAMES RENNIE BEQUEST

### **REPORT ON EXPEDITION/PROJECT/CONFERENCE**

Expedition/Project/ Conference Title:	Operation Wallacea Madagascar South 2012
Travel Dates:	6 <sup>th</sup> July – 6 <sup>th</sup> August
Location:	Mandrare Valley, Madagascar
Group member(s):	Alice Dickson
Aims:	To learn scientific surveys skills in the field and to gain insight and knowledge about the local wildlife, conservation and culture

#### OUTCOME (not less than 300 words):-

I would like to take this opportunity to thank the James Rennie bequest committee for their granting the bursary that allowed me to take part in Operation Wallaceas' expedition to Madagascar last summer (July 2012). Operation Wallacea carry out multiple research programmes in 11 countries around the world also including Indonesia, Guyana and Mexico.

This expedition focuses on maintaining the current protection of the Mandrare valley spiny forest as well as collecting further data to analyse the effectiveness of current efforts and providing evidence for the requirement for the WWF to further extend the protected zones. We arrived in camp on the evening of July 7<sup>th</sup> after an hour walk from the nearest village where we had been greeted by the people of the village who appreciate the importance of our presence there, they care greatly about their surrounding and our camp gives them another opportunity for employment and an alternate to their current way of life which frequently leads to the degradation of the surrounding area through cattle farming and clearing of land for agriculture (slash and burn).



The welcome

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On the first morning of our expedition we were taken on a hike around the camp surrounding forest by the Ombiasy (witch doctor/spiritual healer) of the local area. He explained about their belief in the Kocolam (spirit) of the forest and how he had asked his permission for our presence in the forest for our protection. He also showed us how the people pray to spirit using a specific plant and that they belief that Kocolam is responsible for all good or bad things that can happen as well as the warning he can give about possible dangers, for example they believe that when It thunders the Kocolam is warning the cattle farmers that locals who steal zebus' (their livestock) are likely to attack soon.

For a week and a half after we arrived we were given lectures about the wildlife, biodiversity and culture of the surrounding area. We were then spilt into groups of about 5 or 6 and rotated around each study group to aid their data collections each for 3 days.

Bird rotation: The bird group started their days at 6:30am this is because the birds would only be active when it was still cool, we did four 300meter transects of 1hour using the timed species count method at two different times of the day. This method involves walking a transect for a specific length of time (1hour in this case) and taking note of all species seen or heard in that time frame as well as where they may be seen for example aerial, canopy or terrestrial.

Vegetation rotation: In order for the WWF to extend the protection zone around the Mandrare valley they needed evidence that the forest was not already invaded by non-native species and so we had to walk straight though the forest for 1km and note any invasive species seen, as well as this we also did surveys of plants species for 50meters measuring every tree within 1 meter of the 50meter transect. This information was used by the bird and lemur teams to distinguish differences in the habitats of the species they were studying.

Herpetology rotation: There were two herpetology rotations; one which used ethograms to study the lizard behaviour and the other in which we dug pitfall traps and walked transect lines – noting any species that we could find, as well as recording all information about the first individual of each species we found.

Lemur rotation: The lemur rotation also comprised of two separate study methods, the first was PCQ (Point centre quarter) in which we identified trees that lemurs used for more than a 5 minute period, for eating, sleeping or socialising. We then measured these trees and the trees (that were >25cm in diameter) that were in each compose point (north-east, south-east, etc.).This is to establish if there is any specific tree/trees that the lemur prefers and which tree(s) this may be. The second rotation allowed us to follow an individual lemur for a full day and note every time that lemur eats, what it eats and what kind of tree it eats from, we also noted when the lemur urinated or defecated. As this was done there was also dissertation student who were doing 5 minute ethogram studies of the lemurs behaviour.

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'Kely'(which means small) one of our focal animals

Thank you again for your bursary which allowed me to take part in this expedition, I had a fantastic time.