

Expedition: Tropical Biology Association field course

Travel dates: 5/8/14- 5/9/14

Location: Amani Nature Reserve, Eastern Usambara Mountains, Tanzania

Aim: To study tropical biology in a rain forest environment and too carry out a small research project

In August I had the opportunity to attend the Tropical Biology Association course in Amani. Over the course of four weeks I was able, not only to learn tropical conservation in an inspiring setting, but also to study and live amongst likeminded individuals and trained experts.

The first half of the course was focused on learning about the Amani Nature Reserve; its history, current conservation projects in place and the community which lives there. We also studied various aspects of the rainforest through field workshops. These included, but were not limited to, herptofauna, invasive plants and bird ringing. Through these workshops I was able to determine which sampling methods were the best to use in different situations, for example what type of transect and the size of transect when investigating the spread of an invasive species in the forest or whether pitfall traps or audio surveying was more suitable when determining the number of frogs in a single area.

Alongside these workshops there were several day excursions to the local area. One to see the damaging effect that gold mining had had on the nature reserve and how local conservationists are working hard to restore the sites to their natural state. And another to see the first functioning forest corridor in the reserve, connecting two large forest fragments together.

The second half of the course focused on group projects, this required us to think of a question or a problem we could address in a short amount of time, design a study which would answer this question and then write a complete report and present our findings. My project partner and I decided to address the pollination ecology of an invasive species. An area of study which is lacking in the Amani region, many plants are undescribed in terms of their pollination ecology. Within this area we also asked if the pollination ecology and physical aspects of the plant differed between different altitudes.

Our main findings were differences both in the species composition of visitors to the plant and in the flower size and nectar volumes between different altitudes. Through this project I was able to design and carry out a scientific study ensuring I was answering the posed question with this design. Before this course I had never looked at pollination ecology or the skills involved in this area. Therefore learning how to measure nectar volume and sucrose concentration are new skills I have acquired, along with identifying the different visitors to the plant.

Throughout the course, in the evenings, the teaching staff, along with guest speaker, would give talks on a range of conservation topics focusing both on issues within Tanzania and the nature reserve and also on global issues. Although these talks would vary greatly in their topics, the main theme running through them was the fact that we, as scientists and conservationists, need to engage in a discussion with the public. Even if we know the gravity of climate change, this means little if we do not communicate this information in a public friendly way. Moreover it is vital we communicate in ways that would interest and engage political and business leaders as these are the individuals who decide the future of the natural world.

By undertaking the TBA course it has reaffirmed my previous belief that my future career lies in practical conservation and education. I agree with most of the teaching staff and fellow course participants in that it is vital to engage with local communities and the public when considering conservation of an area. I was able to witness this idea being put into practice in Amani. We visited several conservation projects which were successful due to the fact they had engaged the local community, the most successful of these being the Handei RED forest.

Overall I feel incredibly lucky to have been accepted on this course and to have spent a month alongside other conservationists. As previously stated it has reaffirmed my belief that I can and will have a long career in conservation. However I think that this field course would have been unattainable without the financial support of the Davies expedition fund and I thank them for this opportunity.

Natalie Coen