## Madagascar SERT 2016

Madagsacar SERT consisted of 3 weeks travelling across the country from the forest in Andasibe, to the north-east coast, the island Masuala. The experience was extremely broad from adjusting to a different culture, communicating in a foreign language, learning and developing scientific skills and being flexible in working hours. The physical strain of some activities required motivation and consistent determination even in harsh weather conditions. The trip was both fascinating and incredibly educational. I had the opportunity to work alongside experts in their field, gaining invaluable knowledge and skills, and the privilege to explore the tropical forests of Madagascar.

The project in Andasibe was based around forest restoration. Much of the forest outside the National Park was part of a restoration project for areas that had been lost. We did an investigation to evaluate successful and unsuccessful restoration areas. To carry out this research we assessed six different areas of vegetation from the year they were planted and whether they were managed. We did a control for each area A-F and used guadrants marked by a GPS to record co-ordinates. Using a compass, we marked North, East, South and West and 10m by 10m strings on sticks to lay out the quadrants. We were a small team consisting of Anita and two guides, to measure and record species of trees, and myself and Dale to record abundance of invasive species and % vegetation from 25cm up to 200cm. There was a fairly strong correlation between fewer native trees, unmanaged areas, less canopy cover and higher abundance of invasive plants. I learnt new skills in assessing vegetation and how to identify a wide variety of invasive species which were all new to me. This improved my ability to carry out repeat recordings of data, and often in difficult terrain.

I felt this project was a brilliant opportunity to be involved in a useful contribution to the restoration project, whilst developing my own skills for the future. I learnt how to construct a simple research method and how to record data effectively consistently. The days were often long and it was difficult to adjust to the extreme temperatures whilst carrying out field work. I learnt that I can find the motivation to persevere, despite discomfort and physical strain, with the goal of completing the data in a limited time period. I think the project is beneficial to the community as in the area as without the jungle there is less attraction to tourists. Tourism is a key income to the town as it provides jobs for many of the locals as guides and the forest itself plays a major

role in climate control and weather management. Therefore, the long term success of the project and its goal of achieving government funding is important to everyone. However, for myself, I feel that conservation is important. Therefore, I am likely to find reasons prioritising conservation and restoration which others may not agree with. Perhaps using the resources of the forest is far more beneficial to many individuals than the restoration of it.

Working in a small group for many hours in the day can be tough. It's important to be patient and work as effectively as possible in order to equally contribute to the task. The heat can be exhausting and often the terrain was difficult to work in which made tensions rise at times. It was important to be understanding of people in a new and sometimes uncomfortable situation. Working with others who speak a little English meant a lot of the communication was in half French. This was something that I had to be aware of when working with new people in a foreign country, as it required more patience and awareness of foreign customs.

In Masuala on the North-East coast we explored both the protected forest of the island and the National Park. Our guide, Olivia, introduced us to the multiple medicinal properties of roots, flowers and plants in the forest. We observed several of the endemic species to the island including the Helmet Vargar and Red Raft lemur. I developed my skills of setting up camera traps and learnt about the structure of vegetation in the varying environments of mangrove, primary and secondary jungle on the island. The history involved much destruction such as the over exploitation on rose wood in 2009. The tree is a native species which grows extremely slowly, taking 200 years to grow a diameter of 40cm. The tree can not spread seeds till 80 years of age which makes the species extremely vulnerable to extinction. Other major observations on the island was the devastating amount of dead coral observed on the beaches. A cyclone which hit the island in 2008 destroyed the majority of the reefs which had a knock on effect to much of the aquatic wildlife. What is left of the reef is disturbed further by the hunting of octopus.

The ecolodge in which we stayed provides fresh bottled water to the local village and built a primary school in the area. This would suggest that the locals would be supportive of tourism in the area as it provides these benefits including jobs, such as guides. This would be a source of income and security for the village. I like to believe that there is a positive effect of my visit to the island and that I am contributing in a positive way. However, there are many

negative aspects of tourism in the area. Not only will too much tourism disturb the wildlife and cause habituation of many species, but the majority of income brought in from tourism does not go directly to the guides and locals on the island, but the National Park itself. This makes me feel slightly uncomfortable as I felt the locals were not reaping the benefits which they are due. With the influx of tourists on the island I felt it could disturb their close community of 140 individuals with little to gain from our presence.

I have no understanding of the views of the locals themselves, however, I learnt from Olivia that in order to claim the land as a National Park, many people living in the forest were asked to leave their home. This was done under false pretence and empty promises made by the Government. Although hydroelectricity from the river provides some electricity for everyone, much promised was never provided. This could cause a lot of resentment to both the Government and tourists themselves, as they sacrificed not only their home but perhaps partly their heritage too. This is then fuelled by the money brought in by tourists, of which, most goes directly back to the Government.

I had some incredible experiences during my time in Madagascar. I developed and learnt a variety of skills working along side experts in their field. This has broadened my knowledge and skills for the future. I have learnt a lot about myself and my ability to remain professional in testing situations. I have gained invaluable knowledge which I could not have obtained elsewhere and had the privilege to experience such a multicultural world.