JAMES RENNIE BEQUEST

REPORT ON EXPEDITION / PROJECT / CONFERENCE

Conference Title:	Operation Wallacea Madagascar 2025 (two weeks terrestrial and two weeks marine)
Travel Dates:	17/06/2025-19/07/2025
Location:	Mariarano, Mahamavo Forest, Madagascar and Nosy Be, Madagascar
Group member(s):	Erin Fulton
Aims:	To learn and apply ecological survey skills and to contribute to real world conservation
	To gain an SSI Open Water Diver Qualification and learn about how marine research and conservation is carried out.
Photography consent form attached: ☐ Yes (please refer to your award letter) ☐ No	

OUTCOME (a minimum of 500 words):-

Travelling to Madagascar was a once in a lifetime experience. Spending a month in Madagascar allowed me to fully appreciate its stunning natural landscapes, beautiful wildlife and the kindness and culture of the Malagasay people.

Terrestrial

The first two weeks of my expedition were spent in the Mahamavo forest region of Madagascar around two villages: Mariarano and Matsedroy. Whilst at these two research camps I was able to become fully involved in the conservation of this unique and special region. I had the opportunity to work alongside many very knowledgeable scientists and researchers across various ecological specialties such as herpetofauna, lemurs, birds, invertebrates and botany.

Throughout the first week we had a series of lectures introducing us to the natural history of Madagascar, how Madagascar has changed and is changing, conservation within Madagascar, the social history of Madagascar and the culture of the Malagasay people. These lectures allowed me to appreciate both how important the conservation/ education work of Operation Wallacea is and how difficult it is to implement effective conservation measures that benefit both ecosystems and the people within/ around them. Alongside these lectures we were involved in surveys and research in each specialty. For both the lemur and herpetofauna surveys this involved walking along predetermined transects, identifying species and recording this data. On these lemur surveys I saw many endemic species such as the beautiful endangered *Propithecus coquereli*, as well as *Microcebus rufus*, *Microcebus murinus* and *Eulemur fulvus*. I learnt so much about the different behaviours of these species as well as how to identify them, by sight and by their calls. I also learnt how to ID different geckos, chameleons and snakes during the herpetofauna surveys as well as learning about their likely locations based on behaviours.

I also spent many mornings learning about the unique birds of Madagascar. This involved setting up mist nets early in the morning which would catch any birds that flew into them.

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Once birds were caught, they were untangled from the net, ringed, weighed, measurements taken (wingspan, tail length, bill length and crest (on certain species)) before myself and other research assistants got to release them. My knowledge of birds and different species has increased significantly and by the end of the two weeks I could confidently ID most birds that we caught or observed. Working with the birds was one of the highlights of my trip as it was the first time I had been able to work hands on with birds and not just observe from a distance. This experience has inspired me to research opportunities to learn bird ringing back in the UK.

I also spent time catching and identifying both butterflies and spiders. Most notably I got to see the highly endemic Ghost spider, a species of wolf spider which is only found on one white sandy beach in the Mahamavo forest and was discovered by Operation Wallacea scientists in 2017.

Marine

Operation Wallacea's marine research in Madagascar is carried out in Nosy Be, a popular tourist island in the Northwest of Madagascar. During my first week in Nosy Be I completed the SSI Open Water Diver course which will hopefully be a useful qualification for future opportunities and potential careers. Throughout this first week and into the second week I attended two lectures a day covering dive theory, marine ecosystems, coral ecology, coral ID, fish ID and marine conservation issues and possible solutions. I learnt so much during these lectures and found the coral ID and fish ID lectures particularly interesting as I could directly apply this knowledge in future dives and could see my knowledge of species improve significantly over the two weeks I was there.

My second week of diving was spent learning different marine survey techniques such as setting up underwater transects, benthic quadrats, video transects (using an underwater GoPro), Coral Watch, and fish ID. As myself and my dive group were still learning these techniques our data was not contributed to any research. However, I now feel confident in using these techniques should any future opportunities allow me to carry out marine surveys. Throughout these two weeks I was lucky enough to see many marine species of fish, turtles and corals. Some of the species that stood out to me were *Chelonia mydas*, *Eretmochelys imbricata*, *Hippocampus borboniensis*, *Taeniura lymma*, and *Zanclus cornutus*. I was also extremely lucky to see dolphins in the wild. This was the first time I have ever seen any of these species in the wild and the amazing diversity I saw has really inspired me to investigate future careers working within marine conservation.

Furthermore, my time in Madagascar allowed me to develop other skills such as photography and wildlife illustration whilst making lifelong connections with people from around the world. I learnt so much about Malagasay culture, conservation practices both within Madagascar and around the world and had the opportunity to work with some of the most unique animal in the world. I hope the friends, and connections I've made throughout this adventure alongside the skills, experiences and knowledge I've gained will help me to succeed in any future opportunities.