JAMES RENNIE BEQUEST

REPORT ON EXPEDITION

Expedition Title: Operation Wallacea Indonesia 2026 - RA

Travel Dates: 10.06.2026 - 22.07.2026

Location: North Buton and Hoga island, Sulawesi, Indonesia

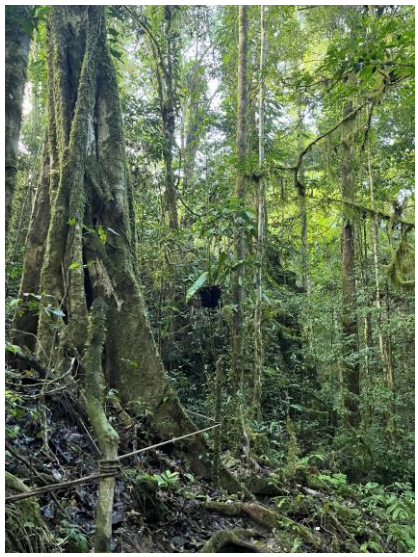
Aims: Gain ecological field experience of biodiversity monitoring in an expedition setting

Photography consent form attached:
(please refer to your award letter)

☐ Yes
☒ No

OUTCOME:




The James Rennie Bequest fund allowed me to join an Operation Wallacea expedition in Indonesia. I spent two weeks in North Buton tropical rainforest and two weeks on Hoga island where I participated in biodiversity monitoring, research and conservation.

Aims:

I partook in this expedition for three main reasons. Firstly, to gain work experience and field research skills in expedition conditions whilst contributing to a real dataset. In doing so, exposing me to a broad range of different taxa and survey methods, in the hopes of finding an area in which to specialise. Secondly, I hoped to witness firsthand, important, unique and abundant ecosystems often mentioned in lectures and documentaries, giving me a reference point as to what biodiversity looks and feels like. Finally, I wished to get out of my comfort zone and interact with young professionals in the industry.

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Achievements:

It was an amazing trip on which I learned loads and met my goals set out above. In the jungle I took part in butterfly, bird and mammal surveys involving pollard transect counts, birdsong identification and signs of tracts and scat. We conducted habitat, bat and herpetofauna surveys. Habitat surveys involved making 20x20m quadrats, subdividing them into 4, counting, identifying and measuring the CBH of larger trees. We counted saplings and seedlings in smaller plots, took vegetation touch pole measurements along the bisecting lines of the quadrat, assessed canopy cover and measured leaf litter height. This data was used to estimate forest health and carbon storage.
Herpetofauna surveys and night river walks really exposed me to the jungle expedition conditions. They involved building bin sized pitfall traps with drift fences in hot humid conditions, battling with root heavy, clay like, sticky and spiky soil. Or staying focused, vigilant and patient to spot and identify organisms while being swarmed by sand flies or tripped up by roots in the dark. This expedition allowed me to be a part of a team surveying biodiversity in remote areas and challenging conditions. Being proactive and alert are key skills needed to overcome the associated communication barriers such as language and being underwater.
The reef surveys involved stereo-video-surveys (SVS), benthic and invertebrate surveys. These were done as a big team going along a 50m transect. All three required a good knowledge of the families and species present on the reef. In as little as a week, I went from not knowing much of the taxa to confidently being able to identify over 100 different families of corals, fish, invertebrates and algae. It gave me the confidence that I am able to get to grips with a new environment and learn the necessary tools needed to perform ecological surveys in a short period of time.

This opportunity has put into perspective how diverse, valuable, but at the same time, threatened these ecosystems are. When walking through the forest we'd regularly come across huge strangler fig trees with their host long gone. Many of the organisms sampled whether amphibians, reptiles, birds or bats were endemic to this specific island. The reef was so abundant and colourful with life, from huge boulder corals to hundreds of different fish, my eyes were constantly being drawn to something different.
However, having travelled a few days to reach each site, and having sampled disturbed, "in restoration" and pristine sites, in both the forest and the reef, it is clear how wide reaching anthropogenic activities are and how they impact these ecosystems. Pollution was everywhere, past and present dynamite fishing was producing patches of rubble where once stood a complex reef. Slightly further away to a nearby village, we could see the effect of nutrient enrichment as the water was greener and communities were more algae and hydrozoan dominated. But what struck me the most was, while returning, I went to a beach in Bali, after having reset my shifting baseline syndrome and been exposed to true abundance and diversity. The reefs were bare and devoid of life.

Whether half way across the planet, or closer to home, this experience has reinvigorated my interest and confidence in pursuing a career in ecology and conservation. I had the chance to interact with many young professionals and ask about their career paths and prospects, helping to shape my post-graduate aspirations. Instead of narrowing my area of interest, it has broadened my scope of possible avenues. Finally, I have developed many social skills, and really enjoyed the cultural exchange with the locals. In fact, interacting with the guides, local scientists and students was perhaps the most rewarding and fun part of the trip. Despite our very different upbringings, lives and languages, I felt welcomed and we were able to work, live and laugh together.