

JAMES RENNIE BEQUEST

REPORT ON EXPEDITION/PROJECT/CONFERENCE

**Expedition/Project/
Conference Title:** Operation Wallacea Hoga Expedition

Travel Dates: 16/6/2015-14/7/2016

Location: Hoga Island, Wakatobi National Park, Sulawesi, Indonesia

Group member(s): Sam Ebdon

Aims: Gain experience in tropical marine biology, survey techniques and
Working on a remote expedition.

OUTCOME (not less than 300 words):-

To raise the money for my expedition I used a combination of grant applications, and savings/money management. I was awarded the Alfred Russell Wallace grant as well as the James Rennie Bequest which I put towards my flights. I saved money from my student loan and bursaries over the course of about two years, and by carefully managing my money on a day by day basis and cutting out unessential costs I managed to save a lot of money I would have otherwise spent on trivial things. I think meticulous money management was key to me finding enough to fund my expedition.

Hoga is a small island in the Wakatobi National Park, a small chain of islands found on the south east coast of the Indonesian region Sulawesi. In the heart of the coral triangle, a region known for the world highest marine biodiversity, Hoga provides an excellent opportunity to study tropical marine biology and ecology. Nearby are a variety of sites varying from overfished and damaged to vast and beautiful reefs teeming with wildlife.

On Hoga you stay in a two bed wooden hut on the south west of the island in a settlement occupied by Operation Wallacea. You live just like the locals in modest rooms and basic conditions. By carefully recycling, reusing and living sustainably Operation Wallacea manage to carry out their work on the island without impacting the local environment.

At the beginning of my stay on Hoga I took part in a Reef Survey Techniques course. These techniques provided me with the basic knowledge and toolkit of skills to survey and study the coral reefs and mangroves. I was taught a variety of transect methods, including how to identify benthic species (covering the sea floor) and fish and record them on these transects. I also learned how to take a variety of physical measurements including rugosity (a measure of how rugged the reef landscape is) and how to use a Secchi disk to measure water transparency (an indicator of how much sediment or small material is suspended in the water column). I am currently a Biology student, but with a passion for Marine Biology this skillset allowed me to confidently work underwater and the knowledge of reefs acquired will hopefully jumpstart me in to postgraduate education and work concerning tropical marine environments.

In my second week I worked as part of the reef monitoring team. Every year scientists on Hoga routinely survey a variety of sites at different points of the reef to acquire data for fish abundance, species composition, benthic abundance and composition and reef rugosity and water transparency. This data is collected and compiled into a report to give to Indonesian authorities for the use of implementing environmental management schemes. It was incredibly rewarding to work as part of the reef survey team. It really pushed my skills as a scientist and a scuba diver, working to the limits of every dive to both

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gather all the required data while still paying attention to survey effort and keeping an eye for detail. This also provided me with the opportunity to get direct experience working with scientists collecting and processing data for real world applications, and giving me a real insight in to work I am passionate about learning about and interested in pursuing in my future.

I spent my third week in the Research Assistant pool. Students on Hoga were collecting data for undergraduate and dissertations and their Master's projects. I was able to assist a variety of projects providing me with a broad range of skills to practice as well as experience with different kinds of data and aspects of the reef to work with. I managed to experience identifying and filming fish behaviour, abundance and diversity of small marine molluscs, setting up survey transects and comparing and contrasting different environments. This provided me with a range of context for my future studies and thoughts towards my own dissertation which I will be conducting next year. It also increased the breadth of my scientific skillset while diving.

In my last week in the national park I had the opportunity to take part in a community awareness and experience program. We had the opportunity to learn about the local's livelihoods, fishing practices, histories, beliefs and day to day lives. It was incredibly eye opening, especially visiting Sampela, the village in the sea.

Overall Operation Wallacea was an incredibly rewarding experience, I learned so many skills, met so many incredible people in the field and managed to get first-hand experience in a field I am passionate about. Hopefully my experience from Hoga will jump start me into scientific research and I will continue to contribute to our growing pool of knowledge and conservation efforts.