

JAMES RENNIE BEQUEST

REPORT ON EXPEDITION / PROJECT / CONFERENCE

**Expedition/Project/
Conference Title:** Operation Wallacea-Hoga base Indoensia, Marine expedition 1

Travel Dates: 22/07/18-07/08/18

Location: Hoga island, Wakatobi Marine Park, Indonesia

Group member(s): Toby Linley-Adams

Aims: Learn to dive, practice surveying coral reef health, receive
Regular lectures on coral reef ecology and research at the base.

OUTCOME (not less than 300 words):-

My time on Hoga was absolutely fantastic. Hoga is an island situated in the middle of Wakatobi Marine Park in the Coral Triangle, a region where coral reef biodiversity is higher than that of the Great Barrier Reef. The base at Hoga is Operation Wallacea's highest publishing site in terms of papers in scientific journals such as Nature, and I and the other volunteers had the pleasure of learning about the monitoring projects that run year after year at Hoga, and many studies run by dissertation students. For example, I met a visiting academic who was running a pilot investigation into using 3D imaging to map the benthic surface of the reef. In the future, these images would hopefully be used to produce clay-based moulds of healthy reefs which would be placed in vulnerable areas to encourage coral regeneration. Those of us who were not already dive qualified completed our PADI Open Water diving qualification during the first week. The instructors were brilliant, and the setting was second to none. We were taught basic skills in ascending, descending, mask and regulator removal underwater, and buoyancy exercises galore. This certified us to dive with the divemasters and dissertation students in the second week. A little way out from the reef, there was also a rope-based structure that the base was using as a coral nursery, growing early coral propagates which could then be studied in the wet lab on the island or reinstalled into damaged parts of the reef. During the second week, those of us who were not on dissertation projects were taught a Reef Survey Technique course. We received daily lectures on coral reef taxonomy and socio-economic issues surrounding these such ecosystems. We also received fish, coral and macro-invertebrate ID classes, and engaged in our own surveys at various sites along the reef shelf. This involved the laying and following of an underwater transect, no easy feat in a current and with no easy way to talk to our fellow divers. However, we were constantly rewarded with sightings of some of the World's most amazing marine wildlife. Amongst others, we regularly spotted rays, barracuda, bumphead parrotfish, clownfish, lionfish, pufferfish and even a green turtle, asleep on a plate coral and oblivious to our presence. Overall, I had the time of my life, I met some amazing like-minded people from across the World and gained a far better understanding of coral reef ecology. Thanks to the Bequest committee for supporting me.