

An Adventure to Impress Indiana Jones

By Zac Gordon-Smith Year 13

Our main aim for the Indonesia trip was to complete surveys to assist scientists based in the Wallacea region (in South-East Sulawesi) with conservation work. This is a key part of trying to protect the region, which is one of the most diverse areas on the planet, due to it being home to the famous Wallace Line, which cuts between Borneo and Sulawesi. It was first drawn by Alfred Russel Wallace in 1859 and remains a major interest to conservationists and ecologists due to unique species that are only found in Sulawesi. We would be helping the scientists in two locations: First in the rainforest on the Island of Buton before moving on to a second on a much smaller Island, called Hoga, where we would be looking at marine life.

After a long journey we finally arrived in Buton and the view was amazing. This was our first opportunity to really see Indonesia, and it was fantastic! The jungle seemed to roll on forever, and we passed through many villages as we drove.

The hike that took us to our camp the following day involved 7 river crossings and the path was slippery in places, and very muddy. The camp was big, and split into two halves, one half was for the local Indonesian villagers who were our cooks and guides, all of whom were incredibly friendly. They also gave everyone an introduction to life in the jungle, by showing us some skills to help you survive the jungle and made us rings and bracelets as a reminder of our time in Buton.

Throughout the week we completed a variety of fauna surveys. Most required us to hike along a transect, which is a line 1.2km long along a specific 'route' in the jungle. Along this transect we would be tasked with stopping every 200m to try and locate the specific fauna that we had been tasked with finding for that survey. Each survey was slightly different from the other, but all interesting and had different aspects and challenges.

We also completed bat surveys during the week. This was also fun because after a bat is caught, they are processed, by which they have their body and wingspan measured, along with plenty of other measurements, and then they are photographed.

These surveys were important because it helps to identify how a species population is progressing, one year to the next. This in turn gives a good idea of the population density and allows scientists to understand population success. This is important because some species in Indonesia only occur in that country, such as the Anoa and the Sulawesi Warty Pig, which are also critically endangered species, and are heading for extinction. They can also sometimes result in the discovery of a brand new species, as in the case of one of the recent bat surveys.

Each group also completed a habitat survey. By collecting the data from the ground, we are assured that our data is correct, and from this NASA can compare their own data to it, to see how accurate their laser is, and from there fine tune their instruments, and test again.

The second reason for collecting this data was to create Carbon-Stock estimates for the surrounding region (North Buton). This was calculated by the lead scientist on the site, Steph, who created an equation which worked out the carbon in a tree, based on its width, and using a standard number for biomass stored in trees, and could then

create an average for north Buton. This data can then be sold to companies and countries, as a carbon stock, to reduce their carbon output for that month. This is known as the Red+ scheme.

After this amazing week of hiking and finding different types of fauna, it was time to head to the marine site. The journey took us back to the village, and then heading to a port in North Buton. It was back into cars for us, and then about a couple of hours journey to port. Here we would be catching a ferry that would be taking us to another part of Buton. It was a big passenger ferry with 3 passenger decks. We were allowed on the top deck, and had cabins there, which was very nice, and meant that we could spend time out on the deck, then retire to our cabins once it got dark.

The next morning, we were up early to catch a boat to the Island of Hoga. When we got close, we could see that the island was beautiful, like a place from books, and it was amazing. Next to our huts we could see a small beach, and then the sea stretching off into the distance. It was a breath-taking view, especially with the sun setting.

Here we were to do scuba diving, or snorkelling. The dive training we did that week would earn us the open-water PADI Dive certificate. This was our first opportunity to really explore the coral, and it was an amazing experience. The sea life underwater was fascinating and I got to see an assortment of aquatic animals, from clown fish, to a turtle, to an eagle ray, it was spectacular.

The island was also a home to a wide range of wildlife, and we saw some of it frequently on our trips between the main part of the camp and our huts. The largest animal we saw was the Monitor Lizard, which would wander across the paths we walked. We were also invited on to a night survey half way through the week, which was cool and searching at the edge of the coast was a very interesting environment.

Throughout the week we also attended coral reef ecology lectures where we learnt about aquatic adaptations, and how to identify fish. At the end of the week we were told to research a topic on aquatic life, and dangers to them, and then present this to the rest of the group. This was particularly engaging, because it opened our eyes to why we need to conserve aquatic life, and how threats can be reduced. An example is shark-finning, which is now illegal, but is still widely done, and has resulted into a decrease of population in shark populations.

When the second week was over, it was time for us to head home. These weeks had been amazing and had introduced me to a beautiful and incredible place filled with curiosity and adventure, and I can't wait to explore more of the world.