
Girton Travel Report – Ismay Keane

In the summer of 2018 I went to Bali for a month to volunteer for a Marine Conservation Organisation called North Bali Reef Conservation, in Tianyar, which is in the north of Bali. The intention was to foster and act upon my interest in Marine Conservation as an extension of founding the Cambridge University Marine Conservation Society in January of 2018. Although I am not a scientist or zoologist of any sort, since I study Classics, I wanted to explore ways in which I could make a practical and visible difference to an ecosystem in Bali which has been significantly damaged by the effects boat traffic and unsustainable fishing. The travel award certainly helped me to feel more comfortable paying for this volunteering experience as well as exploring the wonderful island of Bali over the course of the four weeks I was there.

I arrived in Bali after approximately 30 minutes of sleep over the course of 24 hours, was picked up at the airport and taken to the town of Ubud, known as the cultural centre of Bali. I spent a weekend in Ubud while I got over the jet lag and explored the town, visiting the markets and sampling my first Indonesian food. I met others who were volunteering in the same place as me at Yayasan Widya Sari, a teaching volunteering organisation that organises English lessons for kids of all ages after school.

With some new found friends we headed up to the north, over some questionable roads, and arrived just in time for lunch where I was immediately catapulted into hands on volunteering. The overall project of the organisation is to help rebuild the reef that has been destroyed over around a 50m stretch just off the beach in Tianyar. They do this through actively building hundreds of artificial reef structures out of concrete and calcium carbonate every week. My first task was to help build something called a 'rota buaya', which means crocodile skin, after its scaly appearance.

We were encouraged to create our own style and designs into the concrete, with the only proviso being to ensure there were caves and holes into which the fish could shelter, as there would be in a natural reef.

I made many beautiful masterpieces over the course of my three weeks there including a snake, a fish town, and my beautiful yet disturbing Wallace and Gromit style mouse. Which I'm sure the fish will love.



In addition to the rota buaya, we also built larger structures called 'fish domes' which were constructed using metal poles and mesh covered in multiple layers of concrete and with various holes and foliage cut into and attached to it. These are the stars of the artificial reef

as they provide the shelter from predators that the fish need in order to congregate in large quantities.

The process was tiring and involved sitting inside the metal frame attaching the mesh from the inside. See below for me in the fish dome with a puppy and my trusty crocs.

The process was tiring and very dusty but immensely enjoyable. The deployment of the structures was similarly difficult as they are very heavy! What was most fun however, was the diving that I did as part of the project. When deploying all the structures are taken to a point together and dropped in the ocean; it is then the job of the volunteers with the local dive instructor Dharma to go underwater, take off our fins, and pick up each structure in order to move it into the correct place. It was a surreal experience and felt a bit strange to be in the water yet walking on the sand and doing manual labour! I also got the opportunity to go on some fun dives to the town of Amed where I saw a huge puffer fish, as well as in Nusa Penida, an island off the coast where I saw manta rays! Over the course of my time there it was inspiring to see just how much a difference the artificial reefs have made to the number and diversity of fish in the area. In an area where there once was nothing, neither fish nor coral, there are now hundreds of fish and dozens of different species populating the artificial reefs. It is also great to see the natural plant life growing on the structures and hopefully in the coming years, with some help from the volunteers transplanting coral onto the concrete, there will be large amounts of coral growing on the structures!



Among other activities such as beach cleans and teaching the kids in the school about marine conservation, one really enjoyable one that the volunteering programme operates is turtle conservation. The locals bring the eggs buried by the turtles to the site and the volunteers re-bury them in a safe and protected spot. We even built a turtle highway so that the hatchlings would be able to get to the sea quicker! I got to see two lots of turtles hatch while I was there and actively help them towards the sea, whilst keeping the curious dogs away. We managed to guide every single one safely into the sea and hopefully helped maintain an endangered species.



Something that, for me, made the experience very special was the relationship between the programme and the locals. Fisherman from the village come every day to help the volunteers build the fish domes and the rota buayas (and do most of the heavy lifting). It very much

reinforced the idea for me that the whole community comes together to play a huge role in protecting their local wildlife and help out, and it was great to build relationships with them in turn. I was invited to help steer one of the fishing boats when we deployed the structures and also went with some friends to (very vehemently) support one of the guys Ketut when he had his first paid performance in a bar.

During my three weeks there we had the weekends off in order to travel and see more of the island. The first weekend we went to the three beautiful Nusa islands, where we explored on scooters and saw some amazing scenery.



In the second weekend we went to the town of Lovina and explored the surrounding attractions, which included various stunning temples and insane waterfalls where you could swim in pools created by the torrent of water.

Then, after the third week, my time at the programme was complete and I travelled down to the south to spend my final week in Bali exploring the more tourist-heavy areas of the island.

During my time in Bali I made some amazing friends who I will definitely visit in their home countries when I have the chance, saw some incredibly sights, but most importantly helped in whatever small way I could to improve the biodiversity and health of the reefs in the north of Bali. It may only be a small stretch of land but considering the state that corals around the world are in, any benefit is important. It was an unforgettable and amazing experience and I certainly can thank Girton for putting my mind at ease with the travel grant I was given.