## **REPORT ON EXPEDITION**

Expedition Title:	Operation Wallacea - Honduras
Travel Dates:	12 <sup>th</sup> June – 11 <sup>th</sup> July 2012
Location:	Cusuco National Park and Utila, Honduras
Group member(s):	Calum Morrison
Aims:	To gain practical skills in the field and to assist with biodiversity
	monitoring in terrestrial and marine habitats

After three years of lectures, I was keen to put what I had learned into practice in the field. So, this summer I decided to head to Honduras for four weeks with a company called Operation Wallacea. After some fundraising, which included running a half-marathon, and a contribution from the James Rennie Bequest, I set off for Honduras in June.

Operation Wallacea operates biological and conservation management research programmes in remote locations throughout ten different countries. Since being founded in 1995, Operation Wallacea has facilitated with the discovery of 30 'new' vertebrate species, the re-discovery of 4 'extinct' species and has helped to secure over £2 million of funding for the study sites. The Honduras project was set up in 2006 with terrestrial and marine research programmes. The aim of the terrestrial programme is to collect socio-economic and biodiversity data to assess the effectiveness of the management strategy of Cusuco National Park. The aim of the marine programme is to collect long-term ecological data on the mangrove, reef fish and coral communities on Utila (a populated island where tourism is the main industry), and compare this with similar data collected from the nearby Cayos Cochinos Islands (a group of small islands, which together comprise a Marine Protected Area and have limited access to tourists).

After transiting through Miami, I arrived in San Pedro Sula, Honduras. I had done some research into Honduras before coming out and what I had discovered was not exactly inviting. San Pedro Sula is known as the AIDS capital of Central America. Also, according to statistics, Honduras is the deadliest country in the world with 83 murders per 100,000 inhabitants, and San Pedro Sula was the most violent city on Earth with 159 murders per 100,000 residents in 2011. This has been blamed on the booming and ever expanding drug industry, of which San Pedro Sula acts as a strategic distribution point as drugs make their way north to the USA. Honduras is also one of the poorest countries in the Western Hemisphere and over 59% of the population remains below the poverty line.



Early the next morning we piled into old yellow American school busses and were driven out of San Pedro Sula to the town of Cofradia. This was as far as the large busses could take us, so we got into the back of pick-up trucks, which drove us the last hour and-ahalf up the windy mountain track into Cusuco National Park itself.

We were based in Base Camp for the first week. Base Camp is on the east side of the park and is the most permanent camp, with flushing toilets, wooden huts

"Welcome to Cusuco National Park" reads the sign at Base Camp

which housed a DNA/research lab and a lecture theatre and tents to sleep in. It was a lot more luxurious than I was expecting, seeing as we were in the middle of the forest! Over the next three days we had a series of lectures as part of a tropical forest ecology course, where we learned about the biodiversity of the park and different techniques to monitor the flora and fauna. In the evenings a member of staff gave a talk on their area of expertise, all of which were very interesting and informative.

The next three days were spent away from Base Camp on a jungle training course. For this we slept in hammocks and learned basic survival skills such as how to find food or water, how to build a shelter and how to navigate your way to safety if you became lost. It was very interesting, but was also quite demanding. For example, on the first day we reached our campsite at about 12:30pm and set about building a fire to cook lunch on. What we didn't realise was how difficult it was to light a fire in the middle of a tropical forest! It rained practically every night after dark, and because the canopy cover was so dense, the sun barely penetrated the forest floor, so nothing dried properly and everything was constantly damp. After drying leafs in our pockets and finding semi-dry logs, and with a lot of help from John (the jungle training leader), we finally managed to get a fire going – at 5 o'clock! So we just made dinner instead of lunch! Shortly after finishing dinner it started to rain at 5:30 so we all congregated at the centre of camp where a large tarpaulin had been set up and the guides had made a fire.

The next morning when we woke up it was still raining, although thankfully I had managed to stay relatively dry. It continued to rain for most of the morning and finally stopped at 11:30 – so it had been raining for 18 straight hours! On our way to the second camp we went for a little excursion into the 'dwarf forest' (or 'bosque enano' in Spanish), and the second highest point in the park at 2,100m. As the name suggests, the vegetation was shorter than usual, and, had the weather not been so misty and cloudy, we would have had a spectacular view of the surrounding hills.

We also came across a small palm viper (*Bothriechis marchi*) sheltering in a bromeliad as we walked through a thick bamboo section of forest. We had been warned about them in a lecture a few evenings before and were told that there were only 6 recorded bites by this snake – 3 people died, 1 person lost his arm, 1 person lost his leg, and the final person survived with no long-term injuries as his was a 'dry bite' (when the snake bites you but doesn't inject any venom into you). Needless to say, we steered well clear of it! After dinner, which the guides had cooked for us (I guess they felt sorry for us after our pathetic fire-making skills from the previous day), we had marshmallows and roasted panito (which translates to 'little bread') on the fire.

We made it back to Base Camp the next morning and had the afternoon off to 'study' for a test on the lectures we had had, and also to choose what we would be doing for the next week. I decided to go to Guanales, which is one of the satellite camps and is more remote than Base Camp, so I was told you have a better possibility of seeing wildlife.

After spending the night in Base Camp, we had a 2 hour hike downhill to Guanales. We set up our hammocks, had a tour of the camp and spent the rest of the afternoon playing cards and relaxing by the fire. Guanales was not as luxurious as Base Camp – we slept in hammocks (which I actually preferred) instead of tents, flushing toilets were replaced with a trench and the shower was a waterfall!! However I preferred this to Base Camp, as it was more of a unique and realistic experience of jungle living. And showering under a waterfall was an amazing experience.



My hammock in Guanales



One of the hunting platforms we came across

In order to gain as much experience in data collection and survey techniques as possible, I decided to go out with a different survey team each day. I went out with the large mammal team one day and we walked along transects looking for any sign of animal tracks, dung or partially eaten fruit. The guide, whose father used to be a hunter, was very good and could tell when tracks were left and what animal left them or how old the fruit/dung was. We found evidence of lots of Red Brocket Deer, Coati and even an Ocelot track! As we were the first group to walk along the transects since Operation Wallacea finished in Honduras last season, we found an old campsite and 3 hunting towers (basically 3 poles tied together with string and a wooden platform on top where the hunters would sit in the middle of the night and shine a light on any passing animals to stun them before shooting them). Hunting is illegal in the Park so we dismantled the platforms.

I also went out with the invertebrate team to collect orchid bees and to set up pit-fall traps to collect dung beetles. Whilst setting up these traps we came across a venomous Mexican Jumping Pitviper

(Atropoides nummifer), or Timbo as it is known locally. I went mist netting at 5am with the bird team and out until 1am with the bat team. I also spent a whole day with the carbon team, where we set up plots and took measurements of trees in order to estimate how much carbon they contained. This research is very important as the data will be used to apply for REDD (Reduction in Emissions of greenhouse gasses from Deforestation in Developing countries) funding for the Park, which could provide a source of much needed income for the local communities, and at the same time, protect the forest from deforestation for coffee plantations or cattle grazing.



A very well camouflaged Timbo

After spending 5 nights in Guanales I headed back to Base Camp where I was finally able to dry my clothes (as there was no canopy cover blocking the sunlight). I also tried my hand at a game of football with the locals, who were actually quite good. The following day I took part in the canopy access course, where we



Me messing around on the canopy access course and hanging upside-down 40m above the forest floor

climbed 40m up a tree using ropes. It was an amazing experience at the top, and you could actually feel the tree swaying as we climbed up it!

We left Base Camp early the next morning in pick-up trucks and stopped off in Cofradia to collect some students who had spent the week there doing Howler Monkey surveys. We actually got to go to the reserve in nearby Manacal where the monkeys were protected from poachers so it was one of the few places in the region where Howler Monkeys still existed in large numbers. After this brief stop we piled into the yellow school busses again and headed to San Pedro Sula where we picked up the new recruits and

headed on to La Ceiba by mini-bus. After an hour-long ferry ride we finally arrived on the island of Utila.

Utila was completely different to the forest. For starters, meat was on the menu! But it is primarily a tourist destination for SCUBA diving, so it was fairly well developed with lots of bars, restaurants and souvenir shops. English was also widely spoken, which obviously made it much easier to communicate, but I was slightly disappointed as it meant I couldn't practice my Spanish as much as I had done with the local guides in the forest.

The first week in Utila was spent by watching a series of videos followed by a test and then an actual SCUBA dive where we put what we had learned from the videos into practice. We were supposed to do four 'confined water' dives in the saltwater pool at the dive school, but it was very warm, green and so murky you couldn't see more that 3 feet in front of you. So after our first dive in the pool our instructor decided to take us out into the open water. This meant that on only our second dive, we were diving in an 'open water' environment - our instructor jokingly tried to play it down a bit by saying that he deliberately chose a sandy patch which was surrounded by coral reefs, so in essence it was a 'confined open water' dive! It was quite nerve-wracking at first, but it was much easier to practice the skills when you could actually see what you were doing! After 5 days we got through all

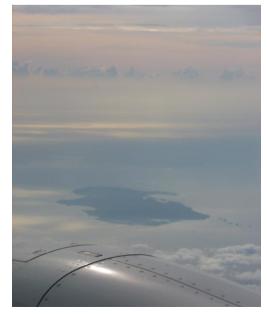


My group SCUBA diving in Utila. I am bottom right. Photo credit: Greg Berlin

of the required training, passed the exam and were all certified as PADI Open Water divers.

We had Tuesdays off, so on Monday night everybody went into town for a meal and a few drinks. It was also a special night as a few of the dive masters had just qualified as instructors, so as a sort of ritual they had to do the 'snorkel test', which involved drinking a large amount of disgusting-looking green drink mix through a snorkel. It was great fun and a good way to mix with the locals and other dive students as well as the instructors.

The next week we took the Caribbean Reef Ecology course where we attended a morning lecture and dive, followed by an afternoon lecture and dive. It was very interesting as we learned all about the different species of coral and all of the invertebrates and fish that call it home. It was also nice to be able to put a name to, and to be able to relate to the things we had been seeing on our dives the previous week. The reefs around Utila also form the southern tip of the Mesoamerican Barrier Reef System, which



stretches for over 1,000km from the Yucatan Peninsula. It forms the largest coral reef system in the Western Hemisphere and the second largest barrier reef in the world.

The end of this week signalled the end of my time in Honduras, and after a long journey back to San Pedro Sula I said goodbye to the friends I had made as we all headed home our separate ways.

I thoroughly enjoyed my four weeks in Honduras and feel that I benefited greatly by being able to put the skills and knowledge I had learned in lectures into practice. It was an amazing experience and definitely confirmed my passion for conservation and the environment, and I am very grateful for the assistance I received from the James Rennie Bequest, which helped to make all this possible.

A view of Utila taken on the plane ride home