

## **Alex Nicol-Harper – Costa Rica, Summer 2015**

In June 2015, I graduated from Zoology with hopes to pursue a career in wildlife conservation; a month later I left for 6 weeks in Costa Rica. Before starting a volunteer placement, I spent a fortnight travelling in order to familiarise myself with this new country and culture – and to acclimatise to the climate! During August I volunteered at Reserva Playa Tortuga, a private nature reserve on the Pacific coast. The reserve is staffed by a director, a resident scientist, an education officer and a volunteer coordinator, so extra hands are always useful. I helped out with turtle patrols, bird and caiman monitoring programmes, mammal camera trapping, butterfly garden maintenance and educational outreach workshops. Volunteers qualified to SCUBA dive could also contribute to research into coral reefs.

Volunteers are particularly useful on the turtle patrols, because at least two people are needed when a turtle is found, and each night there are three (three-hour) shifts and only three hired citizen scientists to cover them. Turtle eggs laid on the reserve beach are collected and transported to an artificial nest to protect them – primarily from egg collectors, but also from dogs, vehicles driving on the beach etc. We helped with this to allow the professionals to tag the turtle (if it was a new individual). It was an amazing experience to witness a turtle laying eggs on the same beach on which she – and countless previous generations – hatched. This wonder (and concomitant environmental awareness?) is hopefully engendered in the local people, who get to release some batches of hatchlings each year.

Since I am particularly interested in birds, I bought a guide before leaving, and tried to identify the species I saw whilst travelling – so by the time I arrived at RPT, I was familiar with the different groups and could apply this knowledge in the field. The resident scientist goes birdwatching twice a week, in order to create an inventory of the species present on the reserve. In addition, any interesting behaviours are recorded to provide valuable data for scientific analysis.

Caiman monitoring came less naturally to me: wading through rivers and swamps in the pitch black, using torches to search for caimans' characteristic eyeshine. The numbers of individuals present are recorded, and if (small enough) caimans are captured, their measurements are taken down too. Once we found a 2m-long crocodile lying on the bed of the river we were walking through! It was a mucky, nerve-wracking job; an experience which I appreciated for the novelty, but one which I would not be overeager to repeat once a week – so 'caiman conservationist' is crossed off my list of potential jobs...which is useful when I'm still uncertain exactly what I do want to do!

Camera trapping – placing motion-activated cameras along known animal trails – is an extremely useful tool for monitoring elusive mammals. As well as setting up and collecting cameras, I went through the photos and videos, determining whether they actually showed animals, and categorising them by species. This was a time-consuming task, but it was great to see (if only on screen) pumas, ocelots and peccaries!

The butterfly garden is run as part of the outreach programme, educating school pupils about insect life cycles and evolution. It requires daily work, tending to caterpillars and feeding butterflies, plus less regular gardening and DIY. The education officer also goes out to schools to run workshops on environmental issues; I helped out in a series investigating water quality. It was great to see the local children engaging with their environment – and with us, allowing me to put the Spanish I had picked up into practice!

This trip not only took me to a new country, with a variety of tropical ecosystems, but allowed me to understand conservation within the context of a different culture. It was an extremely valuable, as well as hugely enjoyable, experience, and one for which I thank Pembroke, since it was made possible by a generous grant from the college travel fund. I will use the skills I learnt and insights I gained in a Masters in Conservation Science starting October 2015.