Summer 2013 brought me more ‘firsts’ than any other summer – first trip to the Caribbean, first dives without needing a wetsuit, first taste of plantain...but most importantly – my first ever encounter with SHARKS.

The experience began with one week on Grand Cayman, to collect equipment and food supplies, and meet everyone who worked at the Cayman Islands Department of Environment. Although this week was a necessity, I was itching to get to Little Cayman and begin the research project. A few days later, we had landed on Little Cayman via a 10 seater twin prop plane (not for the faint hearted!). We unpacked and began preparations for building the survey tools (such as baited remote underwater video systems (BRUVS)).
Before any surveying of the Island could take place we had to participate in training sessions with our supervisor, Dr. Mauvis Gore (Marine Conservation International) who taught us the essentials in shark handling, survey protocols and species ID (including sexing and aging sharks) for the scientific long lining, BRUVS and scuba distance sampling techniques that we would be utilising throughout the 2 month project.

On the first day of conducting long lining we were joined by another member of the DoE – Jeremy Olynik; who had experience working both with Mauvis and with shark long lining. Given all of the potential dangers – stressed sharks, hooks, monofilament lines, heavy anchors, bait knives, etc. – the days were far more physically and mentally demanding than we had imagined. We knew we had to be completely focused on all of the tasks at hand from the moment the boat left the dock.

If a shark was found on the long line after the set 90 minute deployment, it was lead to the starboard side of the vessel and secured using a tail rope and leader line; ready for assessment. This entailed measuring the individual from the tip of the snout to various points on the body; sexing and ageing the shark; attaching a passive dorsal tag and/or active acoustic telemetry tag under the skin (avoiding the peritoneum). Surgery was performed on the shark once it had been turned over and was in tonic immobility.

BRUVS deployment involved in-water personnel orientating the unit to sit on sand (to aid stability), gain the best field of view (onto an area of coral reef) and avoid damaging any marine habitat and wildlife during unit descent.

Distance sampling was conducted in 18 locations around the Island with each transect lasting 25 minutes along a set bearing. Whilst this was perhaps the least successful of the 3 methods for encountering and/or identifying sharks, it was particularly useful for grouper abundance and diversity surveys.
Data analysis whilst on placement, was primarily focused upon watching all of the BRUVS footage, identifying species and individuals. Equipment maintenance – such as gangion and BRUVS repair – was also a constant requirement, due to the intensive nature of the survey schedule.

We were fortunate enough to be asked to give a presentation to underprivileged Caymanian teenagers focusing on the importance of shark and grouper species for the health of reef ecosystems and as such Island tourism itself. Furthermore, we participated in a lionfish cull along the northeastern side of the Island. During the cull, over 40 lionfish were caught – alarmingly, the majority of which were over 30cm in length.

We also learnt the correct techniques for de-spining, skinning, and filleting these invasive fish.

All in all, this placement has equipped me with both practical skills and theoretical knowledge and understanding, necessary for any future research project. I have learnt the importance of working under tight time constraints, within budgets, and in sometimes uncomfortable conditions – all whilst maintaining an amiable character and good team spirit.

With a new fascination in elasmobranchs, I hope to pursue future research in this field, combining my love of practical based field work with community outreach and information dissemination.