

Sharks Don't Shoot Back - Ex Jurassic Shark - Cocos Island

by Sgt Thomas Gad, UKLF CSG

I have been diving since I was 12 years old and amassed thousands of dives all over the world, training hundreds of divers both military and civilian. I have also had the privilege of coordinating many sub aqua diving expeditions as well as being actively involved in many others. We in the Corps are lucky to recognise that AT develops leadership, teamwork, courage, co-operation, and retention.

It takes about two years of hard work and planning to bring together an exercise such as *Jurassic Shark*, and Army Major Andy Reid did to great success. He had invited me on the *Jurassic Shark* expedition, which was to be undertaken in Cocos Islands in the Pacific Ocean. The objectives of this expedition were to dive within reach of hammerhead sharks and tag them with an electronic sensor in order to monitor the shark's migration movements. As if diving with sharks is not exciting enough, the thought of being able to provide factual data to the Shark Institute was great enough for me to agree to be part of the team.

At the time I was serving at HMS *Raleigh*, enabling me to get the green light to put the expedition dates into my diary. However, things changed when I was drafted, rather swiftly, to UKLF CSG and a three-month trip to Norway quickly ensued as well as Op *Herrick* and many Optag exercises to undertake prior to deploying to Afghanistan. It was an immensely busy time and I was beginning to have doubts about being able to attend the expedition. By what appears to be a miracle, the dates for the expedition fell in between the two main Optag exercises and after discussing this great opportunity with my OC, Ops Officer Maj Jules Wilson, he agreed to let me go, for which I am extremely grateful.

The dive team consisting of myself, Army, Navy, and RAF members met up at London Heathrow for an epic three day journey to the Cocos Island via the US and Costa Rica. The Cocos Island National park is a UNESCO World Heritage site and is situated approximately 300 miles west of Costa Rica. In the past it has been used as a pirate's haven where large sums of treasure are rumoured to still be buried. It also offers sheltered bays, lush mountainous vegetation, and plenty of fresh water due to the daily amount of rain that falls. The island in recent years has become famous for the filming of *Jurassic Park* but to the local divers it is also known as Shark Island for its masses of sharks that swim in its surrounding waters.

Sharks are in dramatic decline around the world, so the scientific aim of this exped was to establish those areas of the shark's habitat that most need protection. Sharks are known to enter a trance-like state while being cleaned by smaller fish at certain underwater areas called 'cleaning stations', and this enabled us to dive close enough to tag the sharks through their dorsal fin using a spear gun. These tags send signals to underwater receivers and therefore are able to track the movements of the tagged sharks. This research helps to determine the migratory routes of sharks, both alone and in groups. Hammerhead sharks form in schools during the day,

sometimes in groups of more than 100; however, at night they operate as lone hunters.

The fieldwork expedition side was carried out under the direction of the Shark Research Institute, which works to correct misconceptions about sharks and to stop the slaughter of 100 million annually, and is approved and supported by the Royal Geographical Society.

Exercise *Jurassic Shark* was not your normal diving exped. The initial personal contribution was expensive, the weather was very wet and sea conditions quite rough with strong currents that meant all divers had to be experienced. To add to this, all the divers had to prepare themselves for diving uncaged among large schools of sharks, so calmness was paramount!

I and three of the team used re-breathers to dive rather than the usual open circuit kit. This enabled us go get closer to the sharks as a re-breather does not omit water bubbles and this was vital to the success of the scientific aim of the exped.

Our first dive was a shallow shake-down dive after a long sea journey from the main land. However, there were no sightings of any Hammerhead sharks, but we did spot a white tip reef sharks approximately one metre long. Our second dive was scheduled for the night and we were briefed that there would be many sharks about; this did not prepare us for what we saw. We dived straight into a shark feeding frenzy and as soon as our underwater torch beams highlighted a fish, over a hundred sharks would go wild to get at it. This was a dive not for the fainthearted and we all experienced huge excitement for what was to come further on into the exped.

Unfortunately, the following day held only disappointment, we were all apprehensive about using our spear guns and to add hindrance to the operation, the swell and current were pushing us all over the place even at a depth of 30m. We were

getting thrown around like rag dolls and onto the rocks. It felt like being in a washing machine, whilst trying to hold on to the rocks, cock a spear gun and get a good shot at a shark's dorsal fin. Needless to say, no sharks were tagged.

The third day started to bring results as I tagged my first 2m female Hammerhead at a range of about 1.5m and soon after the team started producing very good results. The only danger encountered was when I tagged a shark and unlike the rest, it did not swim away. It looked at me, with anger in its eyes and swam straight towards me and I had to fend him off with the unarmed spear gun. This was the most aggressive a shark was towards us during the entire exped. In all, we tagged 12 sharks (Royal accounting for six) and we were able to track their movements from the boat, which was a fantastic result.

For me, this trip was a once in a lifetime experience, and provided results for a very successful scientific project.

In November 2007, the Exercise *Jurassic Shark* Team were nominated by HRH Prince Philip and invited to Buckingham Palace to receive a Duke of Edinburgh's Prize for the British Sub-Aqua Club Highly Commended Certificate. This was a fitting end to a highly successful expedition.



Top: The Scalloped Hammerhead Shark
Sgt Thomas tests a re-breather on his pre-dive checks