

Alec Christie Research project with DMAD, Turkey

From June-July 2015 I spent 6 weeks volunteering with a Turkish NGO called <u>DMAD</u>. The project was based in Antalya (Southern Turkey) where researchers aimed to collect data, completely new to science, on the abundance and distribution, population structure and interactions with boats of cetaceans in this unstudied part of the Mediterranean. Hopefully, with sufficient evidence from this five year study, the researchers will be able to press for the conservation and protection of certain habitats in this area as part of a Marine Protected Area.



I stayed with seven other volunteers from all over the world – from Sweden to Australia – in a small apartment in the suburbs of Antalya. With temperatures rising to 42°C on some days with 65% humidity, this was quite a shock coming from North Yorkshire in England. To collect the data we conducted surveys on land and at sea, so in a typical week we would go out on the boat once (hiring a local fisherman to take us along a GPS trackline) and conduct two land surveys from different stations on the cliffs near the centre of Antalya. Surveys were either in the early morning (starting about 5:30) or afternoon (around 15:00) for five hours, or up to 10 hours in the case of the boat surveys.

On the land, we used theodolite to get fixed points and speeds for dolphins and the boat traffic in the area. At any one time, the team was divided up into: a theodolite operator, a person on the computer program Logger, a couple of people spotting, someone recording on data sheets and a photographer.





My first land survey was better than I could have dreamed before coming. First we saw a green turtle (*Chelonia mydas*), then a loggerhead (*Carreta carreta*) and also a small shark and ray appeared. To top off the day, we then saw a critically endangered Mediterranean monk seal suddenly appear below the cliffs. For the next few months, we saw many turtles, a huge armada of rays in the early morning and thankfully quite a few groups of dolphins at various points around Antalya Bay – all of them bottlenoses (*Tursiops truncatus*).

After missing my opportunity to capture a monk seal on camera on my first survey, I had to wait until my very last survey before we saw it again, emerging from a dive with an octopus dangling from its jaws. Now the project is considering monk seals in its plans for protecting the waters around Antalya which was a fascinating development to be a part of.

Moving to the boat surveys, each volunteer was assigned a task – either working on the computer, using binoculars as a spotter, on duty as a photographer for photo-ID or on data sheets. Since I had brought my 150-600mm Tamron lens I was put into the photo-ID role. As this was my first time conducting any research on a boat, I was thankful that I did not get badly sea-sick and even got some decent pictures – some that were



able to confirm cetacean identity from nearly 2km off. The other volunteers seemed to think I had a knack for this kind of surveying after I spotted most of the dolphins we saw before anyone else, nick-naming me 'eagle eyes' – although I am sure it was just beginner's luck. Over several boat trips we spotted many bottlenose dolphins, a blue shark and even a rarer species of dolphin – due to data privacy I cannot say what species but do look out for a publication on this soon from the researcher Aylin Akkaya.



My whole volunteering experience was only made possible because I received a Royal Society of Biology Travel Grant, since the large costs involved in travelling to, and living in, Turkey would have otherwise had a major impact on my ability to fund my university studies. Moreover, with this grant I was also able to learn to dive up to PADI Advanced Open Water level which will allow me to dive on the Great Barrier Reef when I study abroad at James Cook University next year as part of my degree. I am extremely grateful to the society for its generosity and for enabling me to take part in what has been such a fantastic, invaluable piece of research experience. If you are struggling with the high costs of volunteering to gain experience in the biosciences then do apply – it is a brilliant opportunity that you cannot afford to let pass you by.