



Investigating environmental variables of Angelshark nursery areas
Blog by Eva Baumgartner, Angel Shark Project MSc Student in 2018

In April, I was offered the amazing opportunity to join the Angel Shark Project (ASP) team to study the ecology and habitat use of Angelsharks (*Squatina squatina*) as part of my Master's thesis at Imperial College London.

As you may know, the Angelshark is a Critically Endangered temperate-water bottom-dwelling shark that has suffered severe population declines, mainly due to demersal fishing practices and habitat degradation. The Canary Islands are the Angelsharks' last stronghold, where they are regularly sighted by both divers and fishermen, thus making this archipelago the ideal location to study this species. In order to effectively protect Angelsharks, it is important to target critical life stages, such as juveniles in nursery areas. The distribution of juvenile sharks and their nursery areas can be affected by multiple abiotic environmental variables and anthropogenic modifications, as well as prey abundance.

To date, there is only one confirmed Angelshark nursery area in the Canary Islands – Las Teresitas in Tenerife. My Master's project focused on identifying other potential Angelshark nursery areas in Tenerife, Gran Canaria and Fuerteventura (Canary Islands), based on juvenile Angelshark sightings from surveys conducted by the ASP team, and from diver sightings. I also collected data on various abiotic and biotic characteristics of the sites, to investigate whether the sediment and water characteristics, human stressors and prey availability of the study sites determine the distribution of Angelshark nursery areas.

The results of this study will ultimately serve to predict the location of other possible nursery areas to inform conservation of Angelsharks in the Canary Islands and across their wider range. It will hopefully help the ASP to hone their future survey efforts and guide management recommendations to better protect these important habitats, with the main aim to safeguard the future of this Critically Endangered species.

