

# Bombs to Batoids

## Who was the awardee?

- Sharklab-Malta

## What came out of the project?

- The ocean floor around Filfla was surveyed for skates and rays on the 35th anniversary of the legislation that made the area a nature reserve.
- Over 90 citizen scientist divers participated in 10 survey dives where they systematically surveyed the ocean floor. The surveys were guided by qualified scientists and the citizen scientists learned about elasmobranch species and about scientific survey methods.
- The results were compared to similar surveys made in Filfla Nature Reserve 35 years ago. Even though in the more recent surveys, a larger number of skates and rays was recorded, there were fewer different species spotted, indicating a decrease in species richness.
- A mating attempt between two rays was filmed for the first time in Malta.

## What did they do?

- A team of volunteers coordinated this project with the aim of repeating similar surveys done around Filfla between 2013 and 2015.
- Firstly, Sharklab got the permit from the Environment and Resources Authority (ERA) to carry out the dives, since as a protected site, this area is not open for recreational diving.
- The diving surveys were planned according to scientific literature available and on experience from previous dives in the area.
- Sharklab recruited divers that were willing to be citizen scientists for the project. Since the area that needed to be surveyed is quite extensive, many dives over several days with multiple dives per day were required. Recruitment, however, was not a problem because there was an overwhelming response from SCUBA divers willing to make these survey dives. The divers were trained on survey methods and species identification so that they were good to go.

- The data collected was presented in a seminar where volunteers, ERA representatives and the general public learned about the rich fauna around Filfla.
- The results were also distributed in a short booklet and a longer, more technical report will be available soon.

## Challenges and triumphs

- Getting the ERA permit was a longer process than expected
- The logistics were difficult, the organisers had to contend with adverse weather, boat engine failure, and last-minute issues that prevented some divers from participating. Nevertheless, the divers covered all the area around Filfla and recorded the species, location, depth, size and sex (when possible) of 164 individual skates and rays.
- The most rewarding part of this project was showing divers and the rest of the public how rich the marine fauna in Malta has the potential to be. The citizen scientist divers noted a significant difference between what they are used to seeing in other non-protected marine areas and the Filfla Nature Reserve. Some with a long diving history, also noted a difference between what they saw in Filfla in 2023 and what they had seen years ago:

*Twenty years ago, the marine life here seemed sparse. This dive is a revelation – the underwater world is thriving! – A citizen scientist diver*

## What next?

- Sharklab-Malta has plans to continue to monitor and observe the area while also extend the range studied by doing longer and deeper dives in the marine protected area around Filfla
- Sharklab-Malta will publish a technical report with the detailed scientific results of the surveys

## Legacy and resources

- Bombs to Batoids booklet
- [Sharklab-Malta website](#)
- [Sharklab-Malta Facebook page](#)