

Final Evaluation Report

Your Details	
Full Name	Aylin Akkaya
Project Title	Using Scientific Knowledge to Strengthen Management and Conservation Strategies for Cetaceans within the Turkish Mediterranean Sea
Application ID	33006-D
Date of this Report	10.04.2022

1. Indicate the level of achievement of the project's original objectives and include any relevant comments on factors affecting this.

Objective	Not achieved	Partially achieved	Fully achieved	Comments
Continue the dedicated long term seasonal survey efforts which are known to be the main pillar of any conservation effort that targets long lived species. Setting a good example for the similar projects in Turkey, which has already started in the Aegean Sea through the support of DMAD.				We have succeeded in having a spatial-temporal survey effort, with a completion of four seasons (yet with two winter surveys). We had managed to secure additional funding for this objective which resulted in us being at sea more than we had proposed. Instead of 7 days and 21 transects, we could complete 21 days and 50 transects which led to a detailed data collection. The surveys revealed the regular presence of cetaceans in the locations where they weren't known before.
Updating the population statuses of small delphinids, sperm whales, beaked whales and sharing this information with the IUCN Red List.				The gained knowledge has been shared on national and international platforms. Bilingual DMAD-2021 Annual Report summarises the baseline information of the species and is distributed to the local and regional management bodies. Further, sighting and photoidentification information of each species were shared with Mediterranean based networks as in TursioMed and InterMed and MAVA Mediterranean Species Knowledge Mapping. The results were also shared with ACCOBAMS.
Examining and updating the boundaries of critical habitats to ensure for an accurate and precise conservation approach.				Combining the previous data, critical habitats were mapped and distributed to ACCOBAMS, MAVA Mediterranean Species Knowledge Mapping and presented in two international conferences.
Producing the first results of acoustic patterns of deep diving species from the Eastern				Preliminary analysis on the acoustic pattern of sperm whales and delphinid species have been completed and aim to be submitted

<p>Mediterranean Sea and understanding the dimension of noise pollution on the species acoustic patterns.</p>				<p>to the peer-reviewed journal <i>Frontiers of Marine Science</i>.</p>
<p>Understanding the dimension of human pressure per species through assessing the impact of shipping lanes, coastal and offshore marine traffic, and fishery practices. Particular attention will be paid to the magnitude and impact of increasing numbers of seismic and sonar activities in the survey waters.</p>				<p>The overlap of area usage of marine traffic and cetaceans was investigated and submitted to a peer-reviewed journal, receiving a minor change from the publication. Despite the COVID pandemic, fisheries were visited seasonally to discuss if they had any interaction with cetaceans and to keep the existing mutually respectful relationship. We had received numerous sightings of cetaceans through this relationship from the fishers.</p> <p>The seismic guide on “It’s too loud” has been prepared and distributed to the related decision makers to form the first step on the importance of mitigation in the presence of loud and impulsive noise.</p> <p>Further, overlapping areas were mapped and it is ready for publication.</p>
<p>Creating the first “Species Conservation Action Plan” through a multidisciplinary approach of various institutes. The Action Plan will include an in-depth description of biology and ecology of species and its benefit to nature as well as to mankind. It will specifically provide quantitative knowledge for each existing MPA in the Turkish Mediterranean waters and will recommend conservation and management strategies that should be applied.</p>				<p>Species Conservation Action Plan is drafted. DMAD has also joined the meetings of “Species Conservation Action Plans” where the stakeholders and decision makers were met in Ankara. However, we have realised that the SCAP has to be drafted and agreed by all the stakeholders if we want it to be accepted and be used in the field, rather than DMAD has written it solely.</p> <p>Therefore, our next goal will be specifically directed to this gap.</p>

2. Describe the three most important outcomes of your project.

a). Eastern Mediterranean Sea is known as one of the least known regions of the entire Mediterranean, regarding its cetacean distribution. The lack of research effort in this region resulted with the assumption that cetaceans were less likely to be present in the area. However, our continuous dedicated effort revealed the regular presence of not only coastal but also deep-diving species in the area. Currently, the gathered data enhanced our understanding of cetaceans and the threats they are facing.

b). Before our dedicated research and conservation efforts, there was no single women cetacean researcher in the field. Currently, there are six women researchers working in the field of cetaceans under DMAD in Turkey. Additionally, early career researchers and students were encouraged to stay in the field of marine biology by the continuous workshops where most of them start running similar projects in Turkey after the training and guidance they receive from DMAD.

c). DMAD built up respectful and positive relationships with local NGOs and decisionmakers specifically within this last year. This relationship helps us to work on similar projects together and examine the current situation on a multi-taxa level.

3. Explain any unforeseen difficulties that arose during the project and how these were tackled.

- During the winter surveys, there were days with sea state being less than favourable which resulted with many days on land, especially during the Winter 2022 survey effort.
- Due to the COVID19 pandemic, measures were strict which pushed us to be isolated in a hotel and get tested before the surveys which put additional pressure on the survey budget.
- The economy of Turkey was unstable throughout the survey which resulted with increased cost of food on board, transportation and the fuel expenses, the rent of the boat.
- One of the main goals of the project was to create a "Species Conservation Action Plan". The goal was also prioritised by the research team; therefore we had organised several meeting with Ministries, Municipalities and Coast Guards, however we realised that we have to follow a different approach as writing the SCAP alone was not the best strategy and it has to be written with the contribution of each stakeholders from the bottom to the top to make sure it actually applies in the field. Therefore, our next goal will be directed at increasing our advocacy skills and organising stakeholder meetings.

4. Describe the involvement of local communities and how they have benefited from the project.

- 100 students and early career researchers have joined our workshops. Later on, 50 students who joined our workshops also joined our research boat to gain practical skills.
- Fishers within the coast of Eastern Mediterranean Sea of Turkey were visited during the surveys where they were informed about the current project. They have displayed project posters in the fishery cooperatives as well as their sightings reported to DMAD which revealed sightings of fin whales, sperm whales and Risso's dolphins.
- DMAD has partnered with Setur Marina which is known as the biggest marina chain of Turkey where they have displayed our brochures, stickers and posters which reach the sailors. Several sailors later on reached us to report their sightings and to offer their boat as a platform for survey.
- DMAD has organised an art gallery to increase the knowledge of the general public which reached 200 participants.
- Current project was released in main media channels of Turkey which reached to the general public and increased their awareness of the cetaceans of Turkey and the threats they are facing.

5. Are there any plans to continue this work?

Cetaceans are long lived animals therefore any research directed to the cetacean species have to hold long-term dedicated research effort with a local team. Since 2015, DMAD has been actively running research efforts in the area, yet 7 years of research effort does not reveal the whole picture. To understand the species and the threats they are facing, we need decades of research. Therefore, DMAD aims to be active in the area, running dedicated research efforts with a team of local researchers (prioritising women) for the conservation of these key species within the Eastern Mediterranean Sea.

We also aim to increase our advocacy skills with an inclusion of a lawyer on nature protection to the DMAD team to make sure that drafted SCAP is applied in the field.

6. How do you plan to share the results of your work with others?

- DMAD has already sent two articles to a peer-reviewed journal in 2022.
- DMAD has shared its sighting and photo-identification catalogue with international platforms as in TursioMed, InterMed and OBIS-SeaMap.
- DMAD has shared the identified critical habitats with MAVA and ACCOBAMS

- The collected data is open to the students and early career researchers to do their master projects.
- The project results will be continuously shared with written and social media.

7. Looking ahead, what do you feel are the important next steps?

Throughout the support of Rufford Small Grant since the beginning of our project, we had successfully run dedicated research efforts with advanced research techniques with a team of local researchers where most of the researchers gained the skills, they needed during the workshops that DMAD has provided. Therefore, we have solid steps to accomplish two important goals: filling the existing knowledge gaps and enhancing the local research capacities (prioritising women). Although these two steps are critical for any conservation strategies, we are lacking the advocacy skills to pursue the decision makers on the necessary steps of mitigation measures that need to be taken. Therefore, we would advocate more on the necessary conservation and mitigation strategies within the upcoming years.

8. Did you use The Rufford Foundation logo in any materials produced in relation to this project? Did the Foundation receive any publicity during the course of your work?

The Rufford Foundation logo was used during the two conferences, art gallery, marina and fishers' cooperative posters and also acknowledged on the submitted publications.

9. Provide a full list of all the members of your team and their role in the project.

Aylin Akkaya had led the entire project and its outcomes.

Derya Ozciger Senalp was responsible in the Istanbul Office to organise the public outreach activities, to update the coast guards and related municipalities and ministries throughout the survey to make sure that surveys run smoothly and also to translate the reports into Turkish. She was also responsible on the advocacy of the marine protection to the related governmental bodies.

Emine Erdoğan was responsible to inform the related NGOs and to actively participates to related projects run by the other NGOs.

Yagmur Atalan has participated to the surveys and was responsible for organising the students for the workshops.

Kerim Akkaya was responsible on the financial aspects of the project.

Onur Gönülal was responsible to keep the connection between the ministries and coast guards as well as to obtain necessary permissions.

Tim Awbery and Patrick Lyne were external experts on GIS mapping and acoustic data collections.

Jonathan Gordon and Bayram Ozturk were our mentors to run the survey effectively.

10. Any other comments?

The Rufford Foundation was the first Founder who encouraged DMAD to take the first step. Marine environment is highly known as male dominated and I, as the only Turkish women cetacean researcher at the time, was immensely happy for the trust and excited for the challenge with a goal of success for the marine protection of the data deficient regions of the Mediterranean Sea. We have slowly grown our resources and team of dedicated local researchers who are not only working in the Eastern Mediterranean Sea of Turkey but also in the Turkish Strait System, Aegean Sea and even in the South Adriatic Sea. None of this was possible if the Rufford Foundation doubted our intentions. Therefore, I would like to specifically thank the Rufford Foundation for their trust and providing DMAD this opportunity.