

Final Evaluation Report

Your Details	
Full Name	Ibrahem Ben Amer
Project Title	The Tunisian Dolphin Project (TDP), application for funding to 2019 -2020 seasons
Application ID	27926-1
Grant Amount	£5,000
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Date of this Report	28 October 2021

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 monitoring the Bottlenose Dolphin population in Northern Tunisia to accurately estimate the population abundance, detect any changes in its status through trends of increase or decrease of "marked" individuals.				<p>1600 km of active effort, 102 hours of monitoring, 43 sightings of bottlenose dolphin pods.</p> <p>142 individuals counted (129 adults + 13 calves), seven new "marked" individuals added to the TDP existing catalogue.</p> <p>Population abundance estimated using open-population (Jolly-Seber) model 137 (95% CI: 78 to 208) (<i>preliminary results</i>).</p>
Continue monitoring any threats, impacts of human activities in the area (e.g., Fisheries, pollution. Etc.)				<p>Fisheries were not as active during 2019 to 2021 due to restrictions imposed due to the pandemic. This would have reduced pressure on the population, but no clear conclusion can be attained from the available data.</p> <p>Pollution hotspots were recorded but impacts on the population are still not clear.</p>
Integration of information into national and regional conservation framework				<p>Part of the data and results will be integrated in the <u>Intercet</u> regional initiative.</p> <p>Agreement was reached to submit the project's data and results to <u>NetCOBAMS</u> and to be integrated in the <u>Mediterranean Biodiversity Platform</u> by SPA/RAC.</p> <p>Results of the project has been presented in both international events (e.g., the World Marine Mammals Conference, Barcelona, December 2019) and nationally in the ATUTAX (Tunisian NGO) Conference on Biodiversity (May 2019).</p>

2. Please explain any unforeseen difficulties that arose during the project and how these were tackled.

Most of the difficulties that were encountered by the project are due to the Covid-19 pandemic that struck the country starting April 2020, the project was deeply impacted in several aspects as following:

Difficulty 1: Several 2–3 month periods of confinement were imposed and prevented us conducting fieldwork. This was the case from May to September 2020, April to mid-June 2021 and September to November 2021. These periods happen to also coincide with favourable sea condition periods necessary to conduct the survey.

Solution(s): (1). Fieldwork was concentrated between curfew periods combined with carrying out dual field missions in different sub-regions on the same day. (2). A 6-month extension was requested from Rufford to compensate for the lost time, and it was approved by the foundation.

Difficulty 2: Prices of renting boats for fieldwork has increased during the project period. This is partly due to the increase in fuel prices imposed by the government at the beginning of 2020, the fluctuation of the economical/geo-political situation in the country and, most importantly, the fishers needing to compensate for the lost time during the curfew periods.

Solution(s): (1). The team had to conduct 17 field trips instead of the original 18 planned in the proposal. The £261 dedicated to the last trip was used to cover the difference in price during the period study. Fieldwork effort was increased in few trips to even the budget.

Difficulty 3: Reluctance of the fishers to take onboard the observers. Since most of the fishers are of the senior generation, they were more reluctant to take in the fieldwork team in fear of infection by Covid-19.

Solution(s): The increase in the price of trips, along with some public relation with the fishers solved the issue.

Difficulty 4: Administrative delays in obtaining sailing permits, getting the sailing approvals for the survey team, banking delays in getting the funds in time (issue with the National Tunisian Bank).

Solution(s): The project, and the partner NGO (Nature-Link) had to designate personnel who were tasked to solve these issues. They were paid by the remaining co-funding of the project and not via the Rufford budget.

3. Briefly describe the three most important outcomes of your project.

- a. *“The Bay of Bizerte as an important feeding ground for bottlenose dolphin”:*
With more data accumulating thanks to the funding from Rufford, there is now more anecdotal results suggesting that the bay is an important feeding ground for bottlenose dolphin. This will help in re-promoting the bay as an “Important Marine Mammal Area” (IMMA) since it was not approved in the last run due to insufficient data.

- b. The abundance estimate of the population is now more accurate and has changed from 116 in our last analysis to 137 (95% CI: 78 to 208) individuals present in northern Tunisia with more confirmation on certain individuals being resident all year in certain bays/gulfs of the northern coast.
- c. Expanded our study area to cover the entire Tunisian northern coast reaching areas which were not survived before (close to the Algerian borders) and which the species presence there was unknown. Our project is now the only long-term monitoring initiative on cetaceans in the south Mediterranean coast that is providing regular annual data on the species for the benefit of all the regional conservation effort (e.g., estimating the basin-wide abundance of the species, and drafting action plans for conservation).

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

The most involved group of the local community in our project is fisheries. From three different harbours along the northern Tunisian coast, fishers were hired to conduct the fieldwork and awareness discussions was engaged with them (mostly casual in a during the survey or in their dedicated cafes) to increase their awareness and involvement in the project. In several cases, newly marked individuals (and newborn calves) were named after the fisher's family members (especially children) and were announced within the community. This approach was adapted to try and create a bond of respect and value between the dolphins and the fishers and increase the awareness of the fishers about the value of the dolphins now almost as dear as family members.

The TDP was also involved in few local events like the "Week of the Sea", the "WWF Blue Panda campaign" and others in which either presentations or stands were presented to advertise the project and its goals.

5. Are there any plans to continue this work?

Yes, the TDP's strategy and vision is to adapt a long-term monitoring protocol since this is the appropriate scientific method to detect any changes or impacts on the populations of marine megafauna species in a certain area. We are hoping to continue our work for the next run (2022 – 2023) with the valued assistance and funding from the Rufford Foundation.

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

Regionally, we are partners with ACCOBAMS and SPA/RAC, two of the main key conservation organisations in the region. Our data, will be/is submitted to both of their public-opened databases NetCOBAMS and Mediterranean Biodiversity Platform. We are also part of the Intercet project conducted by the Genova Aquarium which involved 60+ organisations on cetaceans' conservation in the Mediterranean (the TDP is the only project from the south Mediterranean coast).

Internationally, the TDP has already presented some of its results in the Fourth World Marine Mammal Conference (WMMC4) in Barcelona in December 2019 (in the pre-conference workshop) and will continue doing so in the upcoming events such as the European Cetacean Society Conference (ECS) and others.

The results of the project will also be published on series of papers as part of my PhD thesis.

7. Timescale: Over what period was the grant used? How does this compare to the anticipated or actual length of the project?

The budget was used on three years period (2019-2021) instead of the initial 2 years (2019-2020) suggested in the proposal. This is mainly due to the delays associated with CoVID-19.

8. Budget: Provide a breakdown of budgeted versus actual expenditure and the reasons for any differences. All figures should be in £ sterling, indicating the local exchange rate used. It is important that you retain the management accounts and all paid invoices relating to the project for at least 2 years as these may be required for inspection at our discretion.

Item	Budgeted Amount (£)	Actual Amount (£)	Difference (£)	Comments
Filed trip 1 - 06-Jul-19	277	261	-16	Price was based on an agreement from the previous surveys with certain fishers. The extra accumulated amount was spouse to pay for an extra field trip at the end of the project.
Filed trip 2 - 23-Jul-19	277	261	-16	
Filed trip 3 - 10-Aug-19	277	261	-16	
Filed trip 4 - 31-Aug-19	277	261	-16	
Filed trip 5 - 29-Sep-19	278	261	-16	
Filed trip 6 - 13-Oct-19	278	261	-16	
Filed trip 7 - 26-Oct-19	278	261	-16	
Filed trip 8 - 24-Nov-19	278	261	-16	
Filed trip 9 - 19-Apr-20	278	302	+24	Small increase due to increase in fuel price + other consumables and services
Filed trip 10 - 27-Apr-20	278	302	+24	
Filed trip 11 - 28-Aug-20	278	330	+52	Substantial increase in cost of each fieldtrip due to economical difficulties in Tunisia associated with the lockdown of CoVID-19.
Filed trip 12 - 31-Aug-20	278	330	+52	
Filed trip 13 - 22-Oct-20	278	330	+52	
Filed trip 14 - 22-Jun-21	278	330	+52	
Filed trip 15 - 08-Jul-21	278	330	+52	
Filed trip 16 - 18-Aug-21	278	330	+52	

Filed trip 17 - 29-Aug-21	278	330	+52	
Filed trip 17 – was not conducted	278		-278	Was cancelled to compensate the increase in prices of the different services.
Banking Fees		50		Banking fees were not considered in the original proposal and was covered from the co-fund of the project.
Totals	5000	5052	+52	

*Calculations were made in the proposal based on an exchange rate of £1=3.86TND. This rate was obtained via the Central Bank of Tunisia website on 19th February 2019 and may vary with time.

** The actual budget calculations were made based on an exchange rate of £1=3.63TND. This rate was obtained as an **average** from the Central Bank of Tunisia website during October 2019 (the month which the transfer was made from Rufford to Nature-Link).

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

- Locate funds for the next run of the project (2022 – 2023).
- Expand the project southward to cover other parts in order to have a national-wide programme of monitoring.
- Publish the results from the project in peer-reviewed journals.
- Start trials on testing non-invasive tissue biopsy sampling methods to collect genetic materials which will help more in the population dynamics studies.
- Test trails on responsible whale watching activities in association with ACCOBAMS and using their regional guidelines.
- Integrate all data from the project into the regional and national conservation framework for cetaceans.

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

Acknowledgement and logo were addressed on every presentation of the project since 2019. This includes the presentations made during the WMMC4, the ATUTAX Conference on Biodiversity and the WWF Blue Panda event.

11. Please provide a full list of all the members of your team and briefly what was their role in the project.

Dr. Mehdi Aissi holds a PhD in cetaceans' ecology (https://www.researchgate.net/profile/Mehdi_Aissi). He participated in the fieldwork as an accredited MMO, a scientific adviser to the project, and assisted in liaising with certain Tunisia authorities to obtain permits.

Prof. Graham Pierce, University of Vigo (Spain) as the main supervisor of the PhD. more can be found about his resume on the following link (<http://www.cesam.ua.pt/index.php?tabela=pessoaldetail&menu=198&user=793>).

Mr. Morad Tility: Local fisher and logistics organiser in northern Tunisia.

12. Any other comments?

The TDP and its team are deeply grateful to the Rufford Foundation for their financial support which was vital to the success of the project during 2019-2021. We hope that we do not lose the interest of the foundation as we are hoping that the foundation considers us for the second stage of funding which will be vital to our project.