

The Rufford Foundation Final Report

Congratulations on the completion of your project that was supported by The Rufford Foundation.

We ask all grant recipients to complete a Final Report Form that helps us to gauge the success of our grant giving. The Final Report must be sent in **word format** and not PDF format or any other format. We understand that projects often do not follow the predicted course but knowledge of your experiences is valuable to us and others who may be undertaking similar work. Please be as honest as you can in answering the questions – remember that negative experiences are just as valuable as positive ones if they help others to learn from them.

Please complete the form in English and be as clear and concise as you can. Please note that the information may be edited for clarity. We will ask for further information if required. If you have any other materials produced by the project, particularly a few relevant photographs, please send these to us separately.

Please submit your final report to jane@rufford.org.

Thank you for your help.

Josh Cole, Grants Director

Grant Recipient Details			
Your name	Mohammed Ibrahim Abudaya		
Project title	Assessment of the Gaza Fishery of the Giant Devil Ray (Mobula mobular) in the wider context of its protection status in the Mediterranean		
RSG reference	20086-2		
Reporting period	1 July 2016-1 July 2017		
Amount of grant	£5000		
Your email address	dr.m.abudaya@hotmail.com		
Date of this report	15 July 2017		



1. Please 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
1- Collect data on mobulid rays and other elasmobranchs from fish landing sites in Gaza.				
2- Estimate the scale and sustainability of the Gaza mobulid fishery.				
3- Collect information on the gill plate trade and the economic value of mobulids for the local economy.				
4- Collect data on shark fish landing sites in Gaza.				
5- Conduct comprehensive awareness raising campaigns and education programs targeting consumers, fishermen and fish dealers.				

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

Project on mobulid rays has never before been conducted in this region and technical knowledge and experience of the surveys, identification and data collection on mobulid ray is not available at the local level. However, the technical training provided as part of this project by the advisors, also several Skype discussions and the experience obtained from the work conducted as part of the first small grant have addressed this matter.

The fishermen's community in Gaza is conservative and interacting with them was not easy. However, we have established strong relationships with many fishermen overcome this difficulty.

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

- All Mobula mobular and elasmobranch landings including sharks were recorded from the five major landings sites, along with data on their dimensions, weight (when possible), sex, and sexual maturity. Therefore, there is now a 2-year database on all landed elasmobranch species. This will be used to determine which species are in need of further conservation/protection efforts.
- As part of the monitoring programme, outreach programmes were initiated to educate fishers, consumers and processors and the media about the status of this species and its conservation needs, which directly fits into research



- Goal, raising awareness and environmental education among all stakeholders.
- We now know the gill plate trade exists intermittently but not a concern at present.

4. Briefly describe the involvement of local communities and how they have benefitted from the project (if relevant).

Marine conservation awareness and environmental education was raised among all stakeholders.

There is an observed change in awareness levels of some fishers and cooperation regarding the need for conserving *Mobula mobular* (although not all unfortunately);

Before the project, nobody (fishers, general public) knew about the devil ray's endangered status, and nobody seems to care about their fate. Now several fishers after being educated on their current status and current general state of Mediterranean elasmobranchs are quite passionate about wanting to protect them. We hope this passion spreads as people have to be taught what needs protection and why before they can care.

Many fishers communicated they were happy to have this new information and will use it when making decisions in the future. In 2017, some Mobula mobular landings were deterred due to the awareness of some fishers and their decision to forgo the opportunity to fish them.

The monitoring of catches and especially the learning that most specimens were sexually matured when caught is the most important information so far to come out of this data. Since Gaza now is believed to be a mating ground (and possibly the only one for this species), we are hoping this data along with a push from media will generate much interest on a global level and hence, facilitate gaining national protection at the national level.

5. Are there any plans to continue this work?

Yes, while we learned a lot of interesting things so far from the data, to get to our required goal of answering the important questions on this species and helping get national protection, this project would really benefit from an extension to that we can continue to ensure that the 'Work Projects' are completed.

The 2-year data collected on all elasmobranch catches needs to be analysed, written and scientifically published to make the scientific community aware of the detailed elasmobranchs of Gaza; From 1), we will understand what other endangered species are visiting Palestinian waters (i.e., hammerhead sharks, angel sharks, etc.), and with the help of some media, we hope to help change national fishing laws to get these species along with Mobula mobular listed under national protection. The data from the Gaza Mobula mobular fishery and the elasmobranch catches for this will be made available for another Mediterranean-wide project



funded by Cost Action Oceans Past Platform to assess large megafauna in the Mediterranean. They have asked us to contribute and help to write a joint paper.

The project manager will work to establish a working group of government fisheries managers, professional conservationists, chondrichthyan researchers and taxonomists. The group's mission is to promote the long-term conservation of the Gaza's chondrichthyan fishes (sharks, skates, rays, and chimaeras), effective management of their fisheries and habitats, and where necessary, recovery of their populations.

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

Two scientific papers still have to be prepared, one on all elasmobranch catches for the past 2 years and the other on the devil ray migration, growth and 2017 catches.

The results and findings will be presented at the 2017 European Elasmobranch Association Conference in October.

The data from the Gaza Mobula mobular fishery and the elasmobranch catches for this will be made available for another Mediterranean-wide project funded by Cost Action Oceans Past Platform, to assess large mega fauna in the Mediterranean. They have asked us to contribute and help to write a joint paper.

Social media such as Facebook and Twitter will be used to provide field updates and summaries of findings for the general public.

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

1 July 2016 till 1 July 2017.

8. Budget: Please 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. 1.00~GBP=4.6551~ILS

Item	Budgeted Amount	Actual Amount	Difference	Comments
Refreshments for (fishermen, fish dealers etc.) - Awareness Sessions	235	230	5	
Preparing Leaflets and brochures	180	180	0	
Rental fees of LCD projector and flipchart	120	120	0	
Meeting room rental fees to provide technical training, awareness program and meetings with all stakeholders	140	130	10	



Boat rental fees for offshore monitoring and oversight	315	300	15	
Export DNA samples to UK Laboratory for analysis	150	150	0	
Mobile phone to maintain contact with fishermen and dealers	180	190	-10	
Transport to Fish Landing Sites	3,240	3240	0	
Cryo-boxes for 2.0 ml tubes	80	80	0	
2.0 ml Tubes (x1000) with o-ring screw caps	140	140	0	
Lab-grade Ethanol	160	150	10	
Scalpel blades and handles	50	50	0	
TOTAL	4990	4960	30	

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

The 2-year data collected on all elasmobranch catches needs to be analysed, written and scientifically published to make the scientific community aware of the detailed elasmobranches of Gaza.

Establish a working group of government fisheries managers, professional conservationists, chondrichthyan researchers and taxonomists. The group's mission is to promote the long-term conservation of the Gaza's chondrichthyan fishes (sharks, skates, rays, and chimaeras), effective management of their fisheries and habitats, and where necessary, recovery of their populations.

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

No.

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

Name	Role
Hatem Himad	Field worker-Landing site data collection
Loaa Ayish	Field worker-Landing site data collection
Ahmed Kamal	Field worker-Landing site data collection
Abed Harrah	Data analysis and awareness sessions assistant
Ahmed Ibrahim	Field worker and Data entry

12. Any other comments?

I have enjoyed working with Rufford and its teams and I consider myself one of the luckiest people in our world had this opportunity.



As of my personal experience with Rufford and its team, I can state that Rufford became one of the major players in the fight to save the world's oceans and land and the wealth of marine and terrestrial life they contain. In addition, through its generous contributions of financial support have to facilitated and supported marine research and conservation projects around the world, several extraordinary discoveries along the way, and a wealth of knowledge gained and shared, with both scientists and the wider public, about the charismatic marine creatures concerned, and their role in the oceans.

I can strongly admit that Rufford has successfully and effectively achieved its objectives and goals originally established, as well as their expected effects and impact. The manner, approach, follow-up, reaction and assistance of the Rufford team and in particular the Trust Administrator are enormously fantastic. The team is very open and polite and I believe the team is efficiently utilizing the available resources and strongly encourage the passion and commitment of individual project leaders.



