

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 | Ahmed Mohamed Shawky Mohamed El-Sadek Daoud |
| Project title | Assessment of the status and distribution of Dugong dugon in Wadi El-Gemal National Park, Southern Red Sea, Egypt |
| RSG reference | 17553-1 |
| Reporting period | December 2015 – November 2016 |
| Amount of grant | £4,989 |
| Your email address | Ahmedshawky_7@hotmail.com |
| Date of this report | 9/11/2016 |

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 |
|--|--------------|--------------------|----------------|--|
| To gain an indication of the current population status of the dugong in Wadi El Gemal National Park through questionnaires. | | | √ | A total of 73 interviews were conducted across Wadi El Gemal Village (n= 36), Abo Ghoson Village (n= 11), Qulaan Village (n= 5), Hamata Village (n= 16) and Lahmy Village (n=5). Information on the dugong distribution, abundance, mortality (in particular, estimates of gill net mortalities) and many other data were collected. |
| To locate the Dugong sighting data on a GIS Map for the National Park. | | | √ | GIS map was performed with 423 sighting records within Wadi El Gemal National Park boundary. |
| To prepare a catalogue for the different identified dugong individuals with their morphological characteristics and their frequencies among different sites. | | | √ | A total of five individuals were identified in the catalogue (three males, one female and one calf). Re-sighting and movements among different sites were recorded for each dugong. |
| To apply the IUCN species regional, geographical and ecological status criteria. | √ | | | During our study, we confirmed that there are dugongs in different areas outside WGNP (north and south). So, to achieve this object, it more information was needed for the dugong in all areas. Further studies are suggested in these areas along the Egyptian Red Sea coast. |
| To raise public awareness of conservation issues associated with the dugong and its habitat. | √ | | | T-shirts, posters, and stickers were printed to achieve this purpose. Public awareness was conducted to all people that we met during our project. |
| To determine the areas | √ | | | By detecting the seagrass area with |

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| under threat as well as suggesting suitable solutions. | | | | dugong sighting and fishing ground. |
| To come up with an action plan for in situ conservation of this species made within WGNP. | | √ | | Two reports were conducted to WGNP manager related to dugong conservation. One report related to Wadi El Gemal Island to not allow any further tourism activities in this site. Second report was conducted to a current site in front of Shams Alam Beach that have windsurfing activities, which have most sightings of dugong. Further management plan for dugong within WGNP will be suggested. |
| Raise awareness of decision makers, staff, rangers and local communities to better understand the conservation status of the target species and act in support of plant conservation efforts. | | | √ | First workshop to four Wadi El Gemal rangers and 12 others was conducted (i.e., 10 university students from Suez Canal University and Port Said University, Faculty of Science, Marine Science Department, in addition to one photographer and one videographer), including six girls. Second workshop was conducted to eight diving and snorkeler guides. Public awareness was conducted in the field to the local communities (males, females and children), boat captains and diving centres. Also, a presentation was conducted in the Ministry of Environment during World Environmental Day 2016 Celebration in front of the design makers about the conservation status of the dugong. |

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

- Using the cars and boat of WGNP was limited, so I rent others for short periods due to the limited budget. This is the reason why I identified only five dugong individuals, but the data gathered from the questionnaire survey confirmed that more dugongs are occurred in the WGNP area. So, further more survey is highly recommended to identify more dugongs.
- I couldn't conduct the workshop for the fishermen because I couldn't collect all of them in one time due to their fishing activities. I solved this problem by performing the awareness during field work and questionnaire survey.
- Dugong sighting was so difficult due to know the visiting time for each site and the short period on surface (i.e. 2 seconds). I solve this problem by doing our survey 1 hour before and 1 hour after the high tide (i.e., many references concluded that the feeding time for the dugong at shallow area is in the high tide). Also, I kept four volunteers on boat for surface observation and ask everyone to observe one direction, so all four covered 360 degrees. We stayed in the location not less than 6 minutes, where if the dugong present it will appear at surface, but if not so we change our location and repeat the surface observation.
- The dugong didn't stay more time in most of these sites and disappeared in the open water. I solved this problem by keeping two divers underwater and others swimmers at surface for underwater observation, so they can follow the dugong in the area.
- Most of the time I didn't have assistants to cover many sites, so I couldn't identify more dugong individuals.

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

- 1) More information were recorded about dugong status, ggeographical distribution, abundance, population characteristics, habitat, ecology, threats, conservation actions and research needed. A lot of results came from the data of the questionnaire survey. All this information is known for the first time in the Egyptian Red Sea Coast.
- 2) Photo ID approved as a suitable tool to identify the different dugong individuals and study their movements among sites. Due to the clear visibility of the Red Sea, so the performing of this technique underwater is highly recommended.
- 3) Public awareness and education is one of the most outcomes of the project. Before performing the project, no-one know any information about the dugong. Everyone we met him (fisherman, dive guide, snorkel guide, boat captain, skipper, ranger, design maker....etc.) got a lot of information was not

known before. The idea of Egyptian Dugong Team (EDT) is one of the most critical successes. The team was trained very well and shared in the field work for 4 days and collected very useful data. Also, the EDT participated in two events in Egypt, the first is World Wild Life Day and the second is Marine Life Day. The EDT got high profile in Egypt now and I suggest in next project to increase the number of the team members to increase the awareness, education and monitoring of the dugong in Red Sea, Egypt.

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

- Local community (Bedouin) were involved in a parts of the project activities like questionnaire survey, where each one of a local community we met help us to meet another peoples or the head of the fishermen in watch village. Also, we visited different villages and met their peoples. Some local peoples guided us to a special sites that recorded the dugong always.
- Conservation and environmental awareness to locals took place within this work especially to dive and snorkel guide, fishermen, boat captains and children.
- The local communities (fishermen and boat captains) became more aware of the dugongs and their threats. In general, they all became more educated of the conservations needs and most of the times they contacted me directly when sighting any record for the dugong in the area.
- Further education will strongly require local participation in conservation efforts and dugong monitoring.

5. Are there any plans to continue this work?

Yes, actually I am planning to submit a proposal of the second funding from Rufford to continue the work in Marsa Alam Area, where the tourism activities are very developed. From our project, we gain more information about the distribution of the dugong along the Egyptian Red Sea Coast. At the end of our project, I visited only one site in Marsa Alam (i.e. Marsa Mubarak) and recorded the tourism impacts on the dugong (see the update report of September 2016). In the next project we suggest to study the different behavioural activities of the dugong, human impacts on the presence of the dugong in their natural habitats and using the Photo ID to identify more individual and know if these individuals moves to Wadi El Gemal National Park or not. A special awareness need to perform to the tourists whom coming for dugong watching in Marsa Alam Area.

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

I created a page on Facebook "The Egyptian Dugong" to raise the public awareness with others. I prepared a standard presentation in Arabic and English editions to introduce it in an educational seminars (i.e., diving centres, resorts, schools, universities, training programmes etc.). Also, I created a page on my web site about the dugong project to share our results with all peoples. I received several requests from a scientific peoples studying the dugong from India, Australia, and Egypt needs photos for the dugong and I send it to them to support their work. Also, I plan to write more than one manuscript from our results and submit it for publication in journals.

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

The actual period RSG was used was from December 2016 to September 2016. This time is suitable for the field work decided to perform a special objects to cover it in details in a limited area. The project period can be extended when increase the study area along the Egyptian Red Sea Coast or when studying an object seasonally.

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.

| Item | Budgeted Amount | Actual Amount | Difference | Comments |
|---|-----------------|---------------|------------|---|
| GARMIN GPSMAP 64s | 257 | 257 | 0 | |
| Digital camera (Go Pro Hero 4 Black Edition) | 404 | 404 | 0 | |
| Laptop: HP ProBook 450 G2 Notebook | 552 | 552 | 0 | |
| Field survey expenses (transport, boat trips, gasoline for WGNP boats and cars) | 2250 | 1226 | +1024 | The boats and cars of WGNP was limited and not allowed all the time and cost only 550 . I rent other cars and payed for boat trips. This disturbed my plan for a short time, but I found no way to rent. |

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|--|-------------|-------------|----------|--|
| Three Workshop for Dive Centers, Rangers and fishermen in Marsa Alam and WGNP area, South Red Sea. | 750 | 500 | +250 | The third workshop was planned to the local community, but it didn't organized because we can't collect the fishermen in the same time due to their fishing activity in the sea. We did the public awareness to them in the field during our questionnaire survey. |
| Educational material (t-shirts, brochures, posters, designer and banners) | 476 | 850 | -374 | The educational materials get an excellent results with the people whom request it every time we do the awareness. Due to this work is new in Egypt, so I re-print 250 t-shirts and 100 posters. |
| Accommodation and transportation for Marine Science Department students | 300 | 1200 | -900 | We trained 12 persons (10 students from university and 2 photographers). |
| Total | 4989 | 4989 | 0 | |

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

- Study the ecology and behaviour of dugong in the other regions along the Egyptian Red Sea Coast. We can start next step with Marsa Alam region, which have a lot of tourism activities mainly focused on dugong watching. These activities can affect not only on the presence of dugong but also on its behaviour.
- Training more peoples to increase the number of the Egyptian Dugong Team (EDT).
- Focused on Photo ID technique to get more detail about the number of dugong individuals present in Red Sea, Egypt.

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

- I didn't use the Rufford Foundation logo in any materials produced in relation to this project.
- The logo was published in my personal web site in the dugong project page.
- RSGF received a publicity in WGNP.

11. Any other comments?

- I will publish scientific papers from our project and will acknowledge Rufford Small Grant Foundation (RSGF) for financial support.
- This is the first and only project specific on dugong conservation in a specific in Red Sea, Egypt. So further projects are strongly recommended to continue the dugong research and monitoring along the Egyptian Red Sea Coast.
- I suggest anyone want to start studying the dugong conservation in any region for the first time, to use our guidelines that conducted in this project.
- I'd like thank The Rufford Small Grants Foundation and all the staff for its generous and support in this project, which get a great sound in Egypt. Special thanks to Jane Raymond for kinds contact along the project period. Also, many thanks for Rufford website staff for publishing my project activities and the project update reports.