Final Evaluation Report

Your Details	
Full Name	Basma Mohamed
Project Title	The Role of Constructed and Natural Reed beds in Preserving Ecosystem and Biodiversity in Lake Manzala, Egypt
Application ID	24440-1
Grant Amount	£4,999
Email Address	basmasheta@du.edu.eg
Date of this Report	18/3/2019

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
To identify natural and constructed reed beds across Lake Manzala for survey, comparison and monitoring, focusing on birds and the reed stem-dwelling community of invertebrates and aquatic macroinvertebrates as indicator species.				Achieved! We did extensive work identifying the reed beds area, doing both bird survey and monitoring and collecting aquatic invertebrates (mainly aquatic insect). However, deeper search is still needed to develop more precise map for reed beds distribution in Lake Manzala.
To create and share an accurate baseline of reed bed biodiversity and functionality for conservation planning and future monitoring.				We assessed the role of reed beds in promoting bird biodiversity in autumn and winter seasons (migration season). More work is still needed like bird monitoring in breeding season and to define the role of reed beds in breeding and hosting breeding colonies. Also, more work is needed for the role of reed bed in water cleaning to complete all the picture.
To share best practice in wetland conservation and monitoring. Educate local community through outreach.				Preparing open symposium for all stakeholder to discuss the results.
To establish a nationally replicable, standardized, long-term monitoring program to examine seasonal and yearly trends of aquatic birds using the wetland.				Now we define a fixed route and train rangers from Manzala lake protectorate. Hopefully we aim to do it at least seasonally to create an accurate database survey.
To assess all waterbird species visiting or resident at Lake Manzala, to calculate abundance, population density, and size structure of each species' population.				This was achieved correctly but only for fall and winter migration and *these data will be published soon*. Still needed: more work for spring and summer seasons and identification of breeding hotspots.

To Increase trainees' knowledge of bird migration and bird identification in Egypt				Three rangers have been trained on waterbird census techniques, Water bird identification and photographing in the field.

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

N/A

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

- Definition of main four habitats as follow (natural reed beds, constructed reed beds, mixed habitats of both reed types and open water areas).
- Biodiversity of bird and aquatic insects across the main identified habitats.
- Tracking rarely seen birds in north Egypt that we have little information about them like Senegal coucal, big colonies of night herons.

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

The local community represented mainly by fishermen who guided us inside the lake and helped in water and insect collection. We shared all knowledge on reed beds and their importance.

5. Are there any plans to continue this work?

Yes, this work just covered the first goal and we hope to continue our work to cover the spring and summer too and assess all changes in reed bed community. Besides, doing more analysis to identify role of reed beds in water quality improvement and how this promote the biodiversity.

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

Results of this work will be published in an international journal.

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

The grant was used over 7 months from August 2018 till February 2019. This period was the same proposed in the project.

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
20 trips @ £150 including boat rent, fuel, transportation, etc.	3,000	3,000		
Canon EF 100-400mm f/4.5-5.6L IS II USM Lens	1,999	1,999		
TOTAL	**4,999**	**4,999**		

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

We are now doing the statistical analysis and preparing a manuscript for publishing. Also, we are planning to apply for the 2nd Rufford small grant to complete this work.

10. 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?

We used the logo on the lens we bought and used it in field. We will cite Rufford Foundation as a funding body in the publication.

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

Basma M. Sheta, PhD (Principal Investigator).
The group leader, did the survey and bird identification. Do statistical analysis, data interpretation and will publish the result.

Eman Sertasi, PhD, Damietta University.
She is invertebrate specialist and field expert. She collected aquatic insect samples and identified them.

Amir Shalouf, postgraduate student, St. Kathriene protectorate, Egyptian Environmental Affairs Agency (EEAA).
He is my master student. He did with me the point count survey after receiving the required training.

Undergraduate students from Dept. of Zoology, University of Damietta.
They trained in field work and samples collections

12. Any other comments?

We are so grateful to Rufford Foundation for supporting this work, which could not be done without this small grant.