

Final Evaluation Report

Your Details	
Full Name	Austin N. Montero-Quintana
Project Title	Ecotourism Impacts on Whale Shark's (<i>Rhincodon typus</i>) Conservation: Behavioral Effects and Economic Contribution at Three Communities of Mexico.
Application ID	25926-1
Grant Amount	£5000
Email Address	Austin_Montero@hotmail.com
Date of this Report	01-011-2019

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
Estimation of the economic contribution of our three study sites.				We found that the whale shark tourism industry generates a high economic contribution. However, is not proportional to the current investment in whale shark research and conservation.
To explore the relation between whale shark behaviour and tourist satisfaction.				Contrary to what we expected, tourist satisfaction is positively related to service factors but not to the whale shark behaviour.
To estimate economic losses due to the reduction of tourist satisfaction.				We found not economic losses due to a reduction in tourist satisfaction. On the contrary, we expect future growth in the whale shark industry.
To explore the relation between tourist’s attributes with whale shark behaviours.				We found a strong relation between whale shark tolerances to swimmers when they had previous knowledge of the conduct code to swim with the animal.
To explore what factors of the whale shark biology (size, sex, group size) are related to the probability of its disturbance in a human-shark interaction.				We found no apparent stress responses for whale sharks when a boat with tourist approaches (see Montero-Quintana et al. 2018. https://doi.org/10.1017/S0030605318000017). However, we filmed only four different observations with a drone due to an anomalous reduction of the presence of whale sharks in the study site. We need to expand our sample size to make a robust interpretation.

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

First, we did not expect a grant reduction due to administrative charges (such as bank transfer, organisation fees, accountant fees, and taxes). This problem arose once we received notification that the Rufford Foundation could send money only to institutions. We investigate Mexican institutions (universities and NGOs) and select one based on administrative positions and the ease of using the money for the special needs of our project. Because of this, we reduced project expenses that were not vital to its development.

The second difficulty was that the sharks departed a few weeks earlier than other years when we made the behavioural observations. This reduced our sample; hence, these observations will remain pending.

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

First, we measured the economic contribution of the three most important tourism sites with whale sharks in Mexico.

Second, we discovered a low probability of whale sharks stress responses when a swimmer knows the conduct code.

Third, we predict that the whale shark industry will continue to grow in the future. Our study evidence the urge to implement environmental education strategies for tourists and tourist-agencies to reduce whale shark's disturbance.

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

We are confident that communities will benefit from our project thanks to the proposals we generated to improve whale shark tourist activity and preserve the species in their area in the long term.

5. Are there any plans to continue this work?

We will continue with some proposals for the Mexican Government. First, a regulation that makes companies see the whale shark as a business partner and requires that a part of the economic contribution should be used for conservation and research of the species and its habitat. Second, large whale shark tour companies must require biologists within their staff. In addition, if we obtain adequate funds, we will continue to study the behaviour of the whale shark and implement tourism management strategies.

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

We are working on articles for publication in scientific journals and we wrote a chapter for a book with part of our results that will be published online by the Mexican National Council for Science and Technology (CONACyT by its acronym in Spanish). This chapter is on the accepted status. Austin Nestor Montero-Quintana, Carlos Fidencio Ocampo-Valdez, Abraham Vázquez-Haiquin, Marcela Osorio-Beristain. Manejo del turismo con tiburón ballena en México. Capítulo de Libro ACEPTADO. En N. Mercado, E. Del-Val, J. Simonetti y I. MacGreggor-Fors (eds.). Manejo y Conservación de Fauna en Ambientes Antropizados. Editado por la Red Temática: Biología, Manejo y Conservación de Fauna Nativa en Ambientes Antropizados / CONACYT.0

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

Originally, we planned to use it in a period of 2 years; however, we ended using it in 3 years.

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
Air transport (Rounded)	£946	£946		
Buses	£135	£135		
Minibuses	£75	£61	-£15	We spend less.
Food	£1292	£1001	-£291	We spend less.
Accommodation	£ 408	£ 492	-£85	We spend more.
Paper-based surveys	£ 77	£ 77		
Pens	£15	£15		
T-shirts for the team	£69	£69		
Web Page for online surveys	£269		-£269	The expense was not realized.
Bracelets	£123	£46	-£77	
Stickers	£77	£77		
Necklaces	£38		-£39	The expense was not realized.
Whale shark figures	£58		£58	The expense was not realized.
Marine transport	£926	£77	-£846	
Gopro camera	£288	£285	-£4	
Gopro extension	£19		-£19	The expense was not realized.
Gopro accessories	£58	£58		
GPS	£115		-£115	The expense was not realized.
Thermometer	£12	£7	-£5	
Fees (Transference, institution charges)		£1654	+£1654	When budgeting expenses we did not know that transfer fees, taxes and handling fees by the NGO would be discounted from the grant. For this reason, we had this large expense that was deducted from the original budget.
Total	£5000	£5000		

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

As we found, the whale shark presence in Mexico produces a large economic contribution. However, companies and individuals that gain economic benefits from the whale shark industry are interested in its exploitation but not on its conservation. For this reason, the legal regulation of self-financing is necessary. We are confident that a mechanism for self-financing research and conservation of the species is achievable. This will be the most important next step towards an autonomous conservation system for this species.

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?

Yes, we included the logo on our team's shirts and were used on all boat trips for behavioural observations.

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

Austin N. Montero-Quintana successfully completed his master's degree with honors with the project entitled: Effect of the behavior of the whale shark (*Rhincodon typus*) in the whale shark industry: economic contribution and tourist satisfaction in three Protected Natural Areas of Mexico.

Carlos F. Ocampo-Valdés, successfully completed his master's degree with honors, with the project, entitled: "Reality and expectations of the whale shark ecological tourism in Mexico"

Ph.D. Marcela Osorio-Beristain: directed both master's projects.

12. Any other comments?

We suggest that the Rufford Foundation notify future Mexican applicants to consider the charges that institutions will make for money management. If possible, before the applicant makes his request, since this will help to know in advance any adjustments the applicants would have to do.

In addition, we are very grateful to the Rufford Foundation, because their support was a major factor that encouraged us to achieve our goals and successfully finish our project.













