

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	Antonio Ruiz Sakamoto
Project title	Movments, recidency and estaptial utilization of the Giant Manta, Manta birostris, in Bahia de Banderas, Mexico
RSG reference	20690-1
Reporting period	2017
Amount of grant	£4046
Your email address	ruizsakamoto@gmail.com
Date of this report	29/11/2017

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
Searching and tagging mantas				We had a day designated to search for the organisms, which was well timed.
Following tagged mantas				We did not thought about losing tracks or malfunctioning tags
Disseminating info with local communities				

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

We planned this project having the objective of tagging and tracking four different organisms for periods of 48 hours. Thinking on this, we optimistically got four tags. We soon discover that we should thought about all the different ways we could lose the signal of the tags. At the end we did managed to get a track of 48 hours, but not four.

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

1. We did managed to track a manta for 48 hours being the first time ever a track of this species is done. During this track, we saw different activities that suggest us that giant mantas use the whole bay as their habitat.

2. We were able to detect when is the most vulnerable time during the day for mantas due to their behaviour and the human activities, finding the critical hours when boats should be extra careful to avoid collisions.

3. We manage to include local fishermen and touristic boats owners to directly support the idea of protecting the mantas by local education and consciousness talks.



Figure 1. Tracking team, students and fishermen working together.

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

When we began our efforts in Bahia de Banderas, the first idea we brought to the community was that giant mantas are a species that lives along their shores, and that they were part of the ecosystems that they use, and feed on. We explained that these animals are very important ecologically and economically if used correctly. This seeded the interest of some of them, and we rely on their help during the whole project, by using their boats and their time as captains.

At the end, they were totally convinced that there was an opportunity of growth in the research, conservation and tourism related to giant mantas.

5. Are there any plans to continue this work?

In the research plans we would like to keep tagging animals in order to discover new things about the use that the mantas give to the bay. Although, probably the most important thing is to keep working in the mind of the local communities in order to ensure that even when researchers are not in the zone the consciousness and care of the marine ecosystems keep growing.



Figure 2. The local community of Yelapa learning what a giant manta is.

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

We need to focus in education activities for the locals, talks, and divulgation of our findings, we want to keep working in more research activities, involving locals as volunteers, and students.



Left: Figure 3. High school student helping in plankton gathering. Right: Figure 4. Local high school student meeting a giant manta.

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

Most of the resources from the grant were used during the spring, when we had our field activities.

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
Vemco tags	3072	3072	0	This was already calculated
Panga gasoline	718	900	-182	Gas prices went up
transportation	254	240	14	
	4044	4212	-168	

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

We aim to begin to publish some of our results by thesis and journal papers; also, we need to seek for more financial resources in order to continue our activities on field.

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?

The project was shown in an Oral presentation in September during the academic week at the university in La Paz, and in Belize during the Rufford small grants conference.

We also mentioned the Rufford foundation help in a three radio podcast participation during the year.



Left: Figure 5. Radio pod-cast about giant mantas in Bahia de Banderas. Right: Figure 6. Oral exposition in Belize RSG conferences.

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

University advisors: They guide me in the academic process of developing and writing the project to conclude with a master's degree thesis.

Dr. Carlos Sanchez Ortiz (Universidad Autónoma de Baja California Sur)

Dr. Gerardo González Barba (Universidad Autónoma de Baja California Sur)

Dr. James Ketchum Mejia (Pelagios-Kakunja A.C)

Field advisors: Experts on the field of ecology and giant manta conservations, which help me during the developing of ideas, methods and to manage the activities on field.

PhD. candidate Josh Stewart (Manta Trust/ Scripps Research institute)

PhD. Robert Tubin (Pacific Manta Research group)

Field team

Organizers: They organize and get us closer to locals in Bahia de Banderas as they live near by, they contact any person we need to deal with. They also are in charge of our scuba, snorkeling and research tools in Bahia de Banderas.

Iliana Fonseca Ponce (Proyecto Manta)

Aldo Zavala Jiménez (Universidad de Guadalajara/Proyecto Manta)

Trackers: They are the part of the team that goes to the ocean with me, tag and then track giant manta rays, some times for over 15 hours shifts.

Santiago Dominguez Sanchez (Universidad Autónoma de Baja California Sur)

Tomas Jarillo Puebla (Universidad Autónoma de Baja California Sur)

Abel Trejo (Pelagios-Kakunja)

Marta Palas (Pelagios-Kakunja)

Captains: They are our boat captains, but they don't only manage the boat, they have learned how to approach to the mantas without disturbing them and they feel clearly identified as part of the project.

Javier Lorenzo Rodriguez (Proyecto Manta/ Yelapa fishermen)

Jonathan Lorenzo Ledezma (Proyecto Manta/ Yelapa touristic operator)

Rodolfo Lorenzo Ledezma (Proyecto Manta/ Yelapa fishermen)

Everardo Rodríguez Cruz (Proyecto Manta/ Yelapa fishermen)

Nelson Lorenzo Lorenzo (Proyecto Manta/ Highschool student)

12. Any other comments?

I can only thank all the help and patience that Rufford Foundation has shown to us. Without your help we wouldn't have the first 48 hours giant manta ray (*Mobula birostris*) track ever, and so many other discoveries and progress! We will keep working hard in pro of our marine ecosystems and the society.