

## 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](mailto:jane@rufford.org).

Thank you for your help.

**Josh Cole, Grants Director**

Grant Recipient Details	
<b>Your name</b>	Stephanie Rousso
<b>Project title</b>	Building Capacity for a Community-Based Marine Turtle Tourism Conservation Model Southern Pacific Cape Region of Baja California Sur
<b>RSG reference</b>	13686-1
<b>Reporting period</b>	June 2013 – June 2014
<b>Amount of grant</b>	£2928
<b>Your email address</b>	Stephanie@ProFaunaBaja.org
<b>Date of this report</b>	10 June 2014

**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
Workshops			100%	Originally proposed six 2-day workshops, but we completed four 3-day workshops due to student exam schedules. This change to our original proposal was approved by Jane at the beginning.
Conservation Tourism Model		50%		This year was engaging universities and partners to create the model. We collected data and began analysis, but we still need community input and peer review to fully achieve the model, which will happen in the next few years.
Beach profiles		70%		Weather conditions, limited staff, and an above average nesting season prevented a 100% completion of beach profiles and we also realised that we need to modify our methodology based on the dynamic terrain and weather conditions and difficulty in remote access areas. After discussing with partners and colleagues, we feel that monitoring beach width is much more feasible, the community can participate in monitoring after a short training session, and is effective to monitor change.
Nest distribution			100%	We exceeded this objective. We documented 80% more nests than we originally anticipated. Therefore, our baseline data set is much more complete than we proposed.
Student data analysis			100%	We exceeded this objective. Two students began their undergraduate thesis based on 5-year data sets, so we will have two additional datasets to work with in subsequent years to monitor changes and make scientific recommendations for safeguarding nesting beaches.
Data applicability			100%	Students are currently working on a management plan through independent study programme. Also, we used GIS data to locate and arrest a known poacher in the area and use the data as evidence in a legal lawsuit.
Sharing of Results			100%	This objective was not originally proposed, but during the project life, we learned about

				<p>an opportunity to present our research at the 34<sup>th</sup> Annual International Sea Turtle Symposium. We applied for an oral presentation, but instead received two poster presentation slots. The first considered the community involvement and the second, the research data. While we know Rufford does not cover conference travel, we were able to find private funding because of our credibility from our funds with Rufford.</p>
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**2. Please explain any unforeseen difficulties that arose during the project and how these were tackled (if relevant).**

Using the Abney level to monitor beach morphology changes was a significant obstacle. One because of the small pinpoint hole required to sight the horizon. With strong winds that are characteristic of the beach area, it was not feasible to use this method. Also the Abney level method is time consuming and requires two people. Due to the above average nesting season, we could not feasibly allocate staff or volunteer time due to the loss of time needed to protect nests.

To resolve this issue, we began measuring beach width without considering elevation. This method using a 5 m rope can be performed rapidly and with just one person. We continue to monitor width without elevation data. This method still provides a quantitative understanding of the morphology of the beach and we can easily correlate hotspots of nesting by indexing 5 m sections of beach width.

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

1. Student involvement. We had 12 university students visit and learn about sea turtle nesting and beach morphology monitoring. Two of the students decided to complete their undergraduate thesis using the past 5 years of data which included the data collected from this project funded by Rufford. A course curriculum was developed based on student participation and learning objectives that was presented and accepted by the local university. They are determining how best to incorporate this curriculum into the marine and coastal biology undergraduate program. We also had 24 high school students come out for five weekend workshops to help in nest monitoring and beach width monitoring.

2. Tourism participation. We hosted seven overnight tourism activities which resulted in the donation of 12 nest adoptions, a GoPro camera, and a set of kitchen pots and pans for the camp kitchen. Over \$600 was donated in cash from the tourists. They each learned about Rufford funding opportunity and the research that was able to begin from the funding.

3. Data Analysis. This project instigated an incredible, positive relationship with the local university that was not previously established. This new partnership has opened doors for advanced data analysis and peer-review. For example, I received advanced training in ArcGIS and had access to advanced statistical features. I was able to analyse the distance of each nest we recorded with our GPS (purchased as a result of this grant). This simple dataset is crucial as a tool to present to federal

government as scientific, quantitative evidence of the importance of coastal dunes and a force to propose federal protection for coastal dunes to safeguard nesting beaches for endangered marine turtles throughout Mexico, not just within our study area.

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

As mentioned above, I think the most benefit from the local community was provided to the local university and high school students. These students have never had an opportunity to see a female sea turtle laying eggs or learn about conservation efforts through scientific research projects. These students not only participated directly in our research which was funded by Rufford, but also they met six different biologists working or volunteering at the field station in genetics, habitat conservation, population dynamics, and climate change. Biologists, which includes the principal investigator spanned four different countries.

**5. Are there any plans to continue this work?**

Yes, most certainly and we already have begun for the next season. We want to continue to collect data on nesting distribution and continue monitoring the dune-beach system for morphology changes. Through this research, we were able to gain an excellent dataset showing statistically significant results that will be used to propose protection for the coastal dunes in Mexico, or at least along the Pacific Coast of the Baja California Sur peninsula.

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

We plan to share our work through the creation of a Model for Conservation Tourism. Work has already begun on this model, but data from more monitoring years is required. This year provided us with a working baseline data from which to compare changes and identify patterns to more securely make our proposal to the government to protect the coastal dunes in order to safeguard marine turtle beach habitat.

As mentioned above, we also shared our research at the International Sea Turtle Symposium in New Orleans, in April 2014 with over 500 attendees. In late 2014, we plan to host a free presentation for the local community to learn about research and conservation efforts for marine turtles in the region.

Also, as reported in one of our monthly updates, the university students prepared scientific posters in Spanish and presented them at a Science and Technology Expo in the state capitol. Over 1000 attendees were present and reviewed the work over the 3-day Expo.

**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 grant funding was used fairly quickly, within the first 5 months. The funding was proposed and geared for field-based activities which took place during the peak nesting season, July - November. We did not plan well for the time and funding required for data analysis, which we learned how to improve our use of funding separately for field activities and data analysis. However, we were able

to acquire additional funding through tourism activities and private funding sources because of our credibility of being grant recipients through Rufford.

**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
Abney Level	39	0	+39	This was donated prior to receipt of Rufford funding and was reported to Jane.
GPS	650	424	+226	We were able to purchase a GPS at a lower cost on promotion and were also loaned an additional GPS.
Two Way radios	55	55	0	
Camping Tents	195	195	0	Instead of multiple tents, we purchased one large tent to withstand strong hurricane winds.
ATV use	1290	1750	-460	Additional ATV use was required due to the above average nesting activity.
4x4 Field vehicle maintenance	1820	2100	-280	Our initial donated vehicle was towed because of inactivity since it was parked on a public street. The cost to release it from the pound was more than the value, so we used the funding from Rufford and sale for parts of the old vehicle to purchase another used vehicle but required more maintenance and registration fees.
Research Per diem	312	312	0	
Aerial Image downloads	169	50	+119	We overestimated the cost for aerial downloads for the GPS because there was a discount service with the purchase of the GPS unit.
Maintenance fees	312	295	+17	We did not have as many student attend as planned.
Training manual	26	26	0	
<b>Total</b>	<b>4868</b>	<b>5207</b>	<b>-339</b>	

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

Continue monitoring for changes and identify patterns in nesting activity and beach morphology. Continue with the creation of the Model for Conservation Tourism. The initial response is positively overwhelming from the community, but still more data and information is needed to present sound scientific reasoning. Lastly, involvement of local students is crucial and has the most impact for the community.

We also want to develop a beach-dune community monitoring program and more outreach events based on our research findings.

**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?**

Yes, at the International Sea Turtle Symposium, we included the logo with Jane's permission on two posters. The university Whitney Conservation Fund, which as we understand is related to Rufford.

**11. Any other comments?**

We sincerely appreciate the opportunity for funding. We learned that we can do a lot of research and outreach with a small amount of funding. One key point is the partnership that we made between the community, two tourism operators, and especially the university. We were able to grow exponentially in ways that we could not have grown and the opportunity to present at an international symposium was extraordinary. We would not have been able to present our research at the symposium had it not been funded by Rufford. You gave us, well, me a start, and although I am on a large learning curve, I extended myself in ways I never knew were possible and gained many new friendships, partnerships and feedback.