

The Rufford Small Grants Foundation

Final Report

Congratulations on the completion of your project that was supported by The Rufford Small Grants 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	Luis Fonseca López
Project title	Ecology of female Eastern Pacific green turtle (<i>Chelonia mydas agassizzi</i>) and their nests at Naranjo Beach, Santa Rosa National Park, Costa Rica
RSG reference	12412-2
Reporting period	December 2012 – December 2013
Amount of grant	£6000
Your email address	luisfonsecalopez@gmail.com
Date of this report	January 6th 2013

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
Continue monitoring of nesting female green turtle in Naranjo Beach.			X	During the last year we tagged 51 female green turtles. We found a turtle that had been previously marked in Playa Name of Jesus, located 30 km north of Naranjo Beach.
Determine the nest success and the condition of embryonic development of eggs that do not hatch in nests of green turtles.			X	Exhumations of 117 green turtle nests were performed; they had a hatching rate of 82%, being higher than previously.
Study the predation of nests and hatchlings, as well as the destruction of nests due to tideland breaches and beach erosion.			X	Unlike the previous year, raccoons are again preying a significant number of clutches. In total 31 nests predated this mammal, therefore, have begun placing metal cases to protect nests.
Studying sea turtle predation by jaguars in Naranjo Beach.			X	Jaguars killed 10 female green turtles. This number is lower than last year documented.
Develop, along with the park administration, an environmental educational program for the tourists, students, volunteers and park rangers of the Santa Rosa National Park.			X	Given the presence of project staff on the beach, tourists are not a problem for turtles, because they know not to go to the beach at night. In addition, during the evening's tourists involved in the release of hatchlings, this helps to create awareness among people about the importance of preserving these reptiles.

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

The major obstacle presented during the project was the high predation of nests by raccoons. However, we solved this by placing wire baskets on the surface of the clutches.

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

Being part of a regional network of monitoring green turtles in the North Pacific of Costa Rica: the draft monitoring sea turtles in Naranjo Beach has pioneered in the North Pacific to monitor green turtle. Now there are four beaches (Nancite, Cabuyal, Isla San Jose, Coloradas) where this species is monitored, and taking tissue samples to genetically characterise this population. It has also formed a

network to share data between different projects. Is planned for 2014 creating an online database, where information of nesting females is available to each of the projects.

Leatherback Sea Turtle Monitoring: due to monitoring green turtle, we also were able to monitor the leatherback turtle, which is listed as critically endangered by IUCN in the Eastern Pacific. As a result of our work, Naranjo Beach has been classified as a secondary nesting beach for this species, and it is expected that by 2014 can be funded by the project: Save Leatherbacks East Pacific: A ten-year action plan to recover leatherback turtles in the East Pacific (www.savepacificleatherbacks.org).

Jaguar preying on sea turtles: this part of the project is of great importance, since we are including a natural mortality factor of the green turtle, where there is little information. Also, this phase of the project is being replicated in Nancite and Coloradas beaches in this type of predation also occur.

Importance of Naranjo Beach as a nesting site for sea turtles: before the start of the monitoring project, this beach was recognised only for its scenic beauty and surfing. However, our work preserves the importance of the site not only for sea turtles, but for a large group of species such as the jaguar using the beach as a feeding area.

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

Not applicable.

5. Are there any plans to continue this work?

The idea is to continue the monitoring programme indefinitely. However, finding funds to co-finance the project has not been successful. As an alternative for 2014 is training two university students to do an internship programme for 4 months. This will prevent the payment of wages during this period.

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

In May 2013, a research seminar was held in the Guanacaste Conservation Area, where the main results of the project were. This seminar was attended by scientists from different areas and officials of the Ministry of Environment and Energy of Costa Rica. Moreover, in May the scopes of the project were presented during the workshop entitled: Save Leatherbacks East Pacific: A 10-year action plan to recover leatherback turtles in the East Pacific. This workshop was conducted by Bryan Wallace of The Oceanic Society.

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

Funding from RSGF was divided into two periods of the project. Half the fund was used during the second half of the 2012-13 season (December to March), while the remaining funds were used to start the 2013-14 season (September - December).

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
Research assistant	3903	3903	0	
Food and cooking fuel	1470	1470	0	
Trap camera	159	159	0	
Supplies	310	310	0	
Gasoline	158	158	0	
Total	6000	6000	0	

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

We believe that the publication in a scientific journal on nesting sea turtles in Playa Naranjo may be beneficial when submitting funding proposals, as this can stress the importance of the beach for nesting sea turtles. In addition, it is negotiating with the Administration Guanacaste Conservation Area for rangers featured on the beach, directly involved as project assistant's turtle monitoring sea turtle. This will provide labour during the time when the project has funding problems.

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

RSGF logo has always been placed on the first slide of the presentations that have been made in seminars and workshops.