

### 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	Juan Felipe Gómez
Project title	Strategies for Dune Restoration in the Biosphere Reserve and
	Ramsar Site, Isla Salamanca National Park, Colombia
RSG reference	13938-1
Reporting period	October 2013-October 2014
Amount of grant	£5500
Your email address	gome7540@mylaurier.ca
Date of this report	November 10th, 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	Partially	Fully	Comments
	achieved	achieved	achieved	
To provide an updated database to the park managers			V	In a meeting held at the central office of National Parks in Bogotá, Colombia, a database was given to the National Park's GIS department.
To implement a working methodology to assess changes in the beach dune system			V	Personnel of the National Parks' regional office joined the field campaigns, so they get a first-hand experience for assessing dune beach changes. It is still necessary to follow up the implementation of this methodology as an ongoing project.
To provide a geomorphology map as a starting point to assess future changes in the shore.			V	The geomorphology map is an important outcome of this work; this map shows the current landforms and helps to understanding the shore evolution. The map, together with all the files used for its construction, was given to the Colombian National Parks' GIS office.
To define best management practices to mitigate dune beach erosion within the park			V	This project establish affordable and practical strategies to face current dune and beach erosion affecting the park.
To establish strategies for dune preservation and restoration		V		This objective was partially achieved, because we found that the erosion rates taking place along the park are so high that restore the dunes, especially on erosion hotspots, is not possible.
Production of poster and booklet to distribute among park's visitors.		V		The poster was published and we expect to publish the booklet by the first semester of 2015.

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

Initial plans to camp within the study site to save money and time were not possible, because personnel from the park warned us that it was not safe. To tackle this issue, we worked on a daily basis leaving the study site after 4:30 p.m. Therefore, it was necessary to extend the number of days in the field. Finally, two field trips were done instead of one.



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

- The pioneer plants that contribute to trapping sand for beaches and dunes along the park were identified over vegetation transects. Planting and promoting the establishment of these species is key to trap sand and therefore, mitigate coastal erosion.
- Potential sites to develop pilot projects combining sand fences and planting vegetation were defined; the material to construct the dunes fences was bought in order to install the fences during the next windy season which goes from December to March.
- An updated database containing landforms and information regarding costal evolution over time was created and given to the GIS office of National Parks.

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

We employed local people as field assistants from a town located nearby the park. The field assistants benefit from the project by learning technical aspects about coastal evolution and monitoring.

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

Yes, since coastal retreat is an ongoing process in the area, implementing the outcomes and recommendations of this work are a priority. Thus, the park personnel in Isla Salamanca is committed to implementing the management practices recommended by this project.

At the moment, coastal structures are being installed to protect the road that cross the park; mitigation methods as the proposed in this work are a meaningful alternative to engineering structures.

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

So far, I have presented this work's outcomes in two conferences as well as to personnel from Invemar and National Parks. Additional publications in academic journals and socialisation activities with local communities are planned for 2015.

### 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 was used between December 2013 and May 2014 for fieldwork. The project still needs to develop further the socialization component.

# 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.

ltem	Budgeted	Actual	Difference	Comments
	Amount	Amount		
Aerial Photographs	£600	£600	0	
Images	£1000	0	1000	After applying to the Rufford grant, I got support from the Geoeye



				Foundation who provided satellite images for the project.
Domestic transport	£500	£800	-300	Not camping in the study site increased the transport fees.
Material for sampling and field work	£200	£200	0	
Food	£400	£500	-100	Having two field trips instead of one, increased the groceries fees.
Boat fuel	£400	£650	-250	We required more trips that initially planned to the study site's westernmost extreme, where going by boat is necessary.
Booklets and poster	£1200	£1200	0	Booklets to be published early 2015.
Kayak	£700	0	700	In agreement with the park director, she considered that it was more useful to invest this amount in sand fences and plant nurseries.
Accommodation	£300	£700	-400	Not camping in the study site increased the accommodation fees.
Sand fences/Nurseries	0	£600	-600	Sand fences are in the park and they will be installed during the coming windy season.
Workshops	€200	€250	-50	This remaining amount will be used up in workshops socializing and discussing the outcomes of this project with local communities in Ciénaga and Tasajera.
Total	£5500	£5500	0	

At the moment of the submission to RSGF, One pound sterling equalled **2817** Colombian pesos. Although there were slight oscillations in the exchange rate along the project, the local exchange used was £1=2817 Colombian pesos.

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

Even though the park is in the middle of two large cities (Barranquilla and Santa Marta), and that the highway connecting these cities crossed the park, many inhabitants of the area are not aware of the park existence and the environmental services provided by the park. Therefore, generating awareness between surrounding communities regarding the park's importance is a step to follow. Moreover, it is still necessary implementing and monitoring the outcomes provided by this project to the park authorities. In that sense, I will be following the accomplishment of this work outcomes with the support of both, the park personnel and Invemar.

From an academic perspective, we discovered some of the reasons for the high erosion rates taking place in Isla Salamanca, but it is still necessary to have a sediment budget assessment for the coastal area in order to fully understand the causes for the rapid changes occurring there.



# 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?

As mentioned previously, I presented the project in two conferences held in Colombia (Bogotá) and Canada (Vancouver); there, the Rufford logo was used.

#### 11. Any other comments?

In addition to the thesis publication, I expect to publish this project's results in a scientific journal.

Without the RSG, this work would not have been possible. Thank you for the support.

