

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	Lenin Riquelme Quintero
Project title	Implementation of the Manatee Conservation Plan in San San Pondsak Wildlife Sanctuary, Panama.
RSG reference	9611-B
Reporting period	February 2012 – June 2013
Amount of grant	£10,000
Your email address	fundacionconavi@yahoo.com
Date of this report	June 25th 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
An in-depth study to identify the type and number of plants that manatees feed on and their nutritional value to protect critical plant species			X	Methods consisted of: a) direct observation in feeding grounds, b) analysis of the digestive tract of two dead manatees by taking samples from the stomach, small and large intestine and the caecum, c) analysis of floating faeces collected in the wild, and d) information provided by local dwellers living on the edges of manatee habitat in San San Pondsak. The information collected is being submitted to Panama's National Environmental Authority. See an extract of results below.
Develop guidelines for manatee watching by ecotourism operators and service providers			X	In cooperation with the US Geological Survey's Sirenia project, guidelines were developed, including information on protection laws, instructions for boating, diving and snorkelling around manatees, "do's and don'ts", recommended observation points and areas to be avoided. The guidelines have been submitted to the National Environmental Authority (ANAM) and a decree resolution has been requested for these guidelines to become legally binding.
Collaborate with a community organisation to improve and/or relocate manatee observation platforms.		X		We have managed to improve one observation platform and made some interior improvements to the San San Pondsak Environmental Education Center.

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

The main difficulty found so far has been obtaining a construction permit from the National Environmental Authority (ANAM) to build two observation platforms. Instead ANAM requested support to rehabilitate and improve an observation platform and improve the San San Pondsak Environmental Education Center, as both structures as used by visitors and locals.

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

- a. Study on manatee diet: This information is being released to the National Environmental Authority and also to the Chiquita Banana Company so that protection is provided to critical plant species and the areas where manatees feed.
- b. Guidelines for manatee watching in the wild and associated activities: The guidelines are already available to the public, through local environmental organisations AAMVECONA and ecotourism operators.
- c. Improvement and/or relocation of observation platforms: One observation platform has been improved while the San San Pondsak Environmental Education Center was refurbished.

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

AAMVECONA, a local conservationist organisation participated in field research and infrastructural improvements. Some of its members provided guidance in the field and were key on identifying manatee feeding habits and feeding areas. A long-term working relationship was established between AAMVECONA and Chiquita Brands International, the large banana production company in the San San area, and the German supermarket chain REWE. This alliance also incorporates local organization CORBANA and NGO Amigos del Manatí, both from neighbouring Costa Rica, and the German Cooperation Agency (GTZ). This alliance has been involved in: a) biodiversity conservation and monitoring of key species, particularly the Antillean manatee (*Trichechus manatus manatus*) and the Leatherback turtle (*Dermochelys coriacea*), b) fostering environmental education, c) generating opportunities for income generation through handcrafts and ecotourism and d) institutional strengthening and cooperation.

5. Are there any plans to continue this work?

As the alliance with Chiquita Brands International, REWE and AAMVECONA lasted until the end of 2012, I want to continue working with local communities on the several activities developed over the years particularly because AAMVECONA and its members have become beneficiaries of conservation as income generation from ecotourism has been having a positive impact among local dwellers. Also, Chiquita Brands International has donated 150 hectares of land to AAMVECONA; they abut manatee channels. AAMVECONA will require support to reforest this area with native species and to bring in waterborne plant species that manatees feed on. We want to establish a second observation platform there since a long-awaited building permit from ANAM would not be a requirement.

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

We are preparing a peer-review article on manatee diet in San San Pondsak. Training for local dwellers and educational touring with visitors and local dwellers are ongoing activities. Project results and activities are being incorporated into Fundación CONAVI's website that is currently being improved.

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 RSG funds were granted in September 2011 and scheduled to be used over a 12-month period. We were able to conduct, within the scheduled project lifespan, both the manatee diet study and draft and print the guidelines for manatee watching in the wild. However the building of manatee observation infrastructure took much more time than expected. On the one hand, we had long negotiations with the National Environment Authority (ANAM), both at headquarters and at the regional levels, to secure a building permit within the protected area. ANAM authorised a major improvement in an already existing and run-down manatee observation platform and the refurbishing of the San San Pondsak Environmental Education Center.

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
Field Assistant	1316	1316	---	
Changuinola roundtrip airflight	609	609	---	
Boat transportation to field sites	1160	1160	---	
Mileage for land transportation	144	544	-400	This item was intended for trips around the San San area. However, we also had to make road trips to Panama City for meetings with ANAM and overland trips to Costa Rica for meeting with COBANA and NGO Amigos del Manatí.
Design of observation decks, pedestrian bridges and boardwalks	1200	800	-400	A design was made of the observation deck for one site. No pedestrian walks and boardwalks were included in the design, following ANAM's suggestions.
Construction of three manatee observation decks	1500	1500	---	RSG funds covered for the total repair of one observation deck.
Manatee Diet Study - Research Permit	54	54	---	
Lodging in Changuinola City, communities and hamlets	960	650	310	AAMVECONA members often and generously provided accomodation

				for team members in their own houses for free.
Food and sundries for expedition team in field activities	320	630	-310	Higher expenses had to be incurred to offer food to increasing number of participants in training and field activities.
Rent of facilities for conservation planning/training	600	400	200	While some of the meeting took place at facilities in Changuinola. We also took advantage of a cheaper and more convenient facility: the San San Pondsak Environmental Education Center.
Copies of manatee observation guidelines	500	500	---	
Two-page manatee observation brochure	500	500	---	
Laboratory materials & Sample analysis	737	937	-200	Analysis of samples, particularly that of carcasses and faeces was higher than expected, because of shipping costs, to a lab in Panama City.
Medical insurance for 2 field staff	300	300	---	
Photocopies	100	100	---	
Project banner	0	0	---	Covered entirely with matching funds.
Production of press releases	0	0	---	Covered entirely with matching funds.
Total	10000	10000		Note: Local exchange rate 1 USD= 0.60 GBP or 1

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

- a. Construction of a second manatee observation platform.
- b. Placing of new signage in sensitive areas of the San San Pondsak Nature Sanctuary.
- c. Training of AAMVECONA members and interested community dwellers in nature related ecotourism ventures, including supporting them in establishing homestay facilities.
- d. Foster the creation of a protected area steering committee, including ANAM, AAMVECONA, local authorities, Chiquita Brands International, as well as other relevant organisations in Costa Rica such as COBANA and NGO Amigos del Manatí.
- e. Seek ANAM's designation of some plants species that manatees eat as protected plant species within San San Pondsak.

- f. Encourage a second phase for the Chiquita Brands International – REWE – AAMVECONA alliance.

**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?**

The information brochure on guidelines for manatee watching does bear The Rufford Foundation logo. During field activities, particularly community meetings and training The Rufford Foundation's support was highlighted as the main source of continued project implementation since 2005. This point is quite significant since, when a first RSG grant was approved, there were neither ongoing studies nor conservation efforts going on in the San San Pondsak.

11. Any other comments?

I would like to thank The Rufford Foundation for its sustained generous support to Antillean manatee conservation in Panama. Photos and a scientific report will be sent shortly.