

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	Marc W. Ward
Project title	Punta Pargos Marine Turtle Conservation Project 2018-19
RSG reference	25417-D
Reporting period	July 2018-June 2019
Amount of grant	£10,000
Your email address	staff@seaturtlesforever.org
Date of this report	October 1, 2019

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 project fundraising, staff recruitment and training, volunteer recruitment, website and media updates, field purchases, and project planning and management.				We were able to obtain additional funds through a small grant and private donations including donations from our research expeditions (patrol tours) to support the entire anti-poaching patrol season (October-mid-May) and the new educational materials. We recruited and trained five volunteers during the patrol season who completed field purchases, media updates, and provided assistance for research expedition and patrols. We were also able to recruit a volunteer (PhD student) for data analysis. The STF Board is continuing to work on project management, grant searches, and fundraising for the 2019-20 season.
Provide four education programs at local elementary schools prior to "summer" vacation.				Due to a national teachers' strike, we were not able to present our new classroom education programmes in September or October 2018 before school vacation started (until February 2019). We secured some additional funding to expand to eight school presentations, and enhance the materials (e.g., construct a Turtle man costume for the instructor to use in the patrol area). However, appropriate personnel were not available to conduct the programmes within the grant period.
Contract local residents (including former poachers) for night-time beach patrols.				Former patrollers (including a former poacher) were recruited.

<p>Conduct training, and pair experienced patrollers with any new recruits and volunteers.</p>			<p>Formal training for patrollers was not needed. Patrol volunteers were paired with experienced patrollers.</p>
<p>Conduct nightly patrols on 10 km of beaches. Patrollers identify nesting species, collect measurements of nesting turtles and tracks, and record any existing flipper tags or apply new tags. Location of nesting activity is recorded with Global-Positioning System (GPS) radios. This helps us find hatching nests and identify nesting areas important for government protection. Eggs are collected and counted. Weights and measurements are taken from 10 clean (not sandy) eggs from each clutch, if available. A new egg chamber is excavated nearby, and moved eggs are placed in bottom. During or after hatchling emergence, patrollers excavate nests to collect data on hatching success, and measure and weigh 10 hatchlings (if possible) before ocean migration.</p>			<p>We completed all field activities during the October 2018-May 2019 nesting season. This included tagging 14 new turtles, and re-sighting seven previously tagged turtles. We were able to protect 4,675 eggs from being stolen by poachers, resulting in an estimated 4,378 sea turtle hatchlings entering the ocean which otherwise would have not.</p>
<p>Community beach clean-ups will be advertised and coordinated during the nesting season to draw attention to the importance of a clean nesting environment for these endangered sea turtles.</p>			<p>We co-sponsored one large beach clean-up in the patrol area and supported other regular efforts to keep the turtle nesting area free of trash and marine plastic debris.</p>
<p>Data analyses and related statistical analyses are completed. Data is stored annually on a custom Excel</p>			<p>We were able to recruit a data-savvy volunteer (PhD student) to set up a new computerised data sheet and write a unique programme to</p>

database, and compiled to synthesize and compare with past years' data.			compile and analyse our data.
Report writing and publication. Results are shared with government officials, conservation groups, and scientists to help understand these populations, document core nesting areas, and spur conservation action. Updates and results are posted on the STF Facebook and website www.seaturtlesforever.org . Collaboration on scientific publications will be continued.			We communicated and reported interim findings with colleagues in local government and research positions (e.g., national park biologists, federal permit office), as well as through our Facebook updates to our followers. We also completed our final federal permit report. We collaborated on a scientific paper documenting some effects of climate-impacted ocean currents (El Nino) on nesting sea turtles: <i>Santidrián Tomillo, P., Fonseca, L.G., Ward, M., Tankersley, N., Robinson, N., Orrego, C.M., Paladino, F.V. and Saba, V. On the effect of extreme El Niño events on long-lived sea turtles. Climate Change (in rev.).</i>

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

- a. Our former data manager (volunteer) resigned, but we were able to find a capable volunteer in time to compile our field data during the patrol season.
- b. The national teacher's strike delayed our educational programme schedule, which we were not able to fully implement within the grant period.
- c. Poaching pressure increased this season along with a low-nesting effort due to changing ocean conditions. Community support greatly alleviated the impacts of this pressure, intercepting and alleviating some poaching.
- d. Turtle nesting activity showed a slight recovery from the El Nino-impact years (the last three seasons), especially late in the season. We hope that recovery continues for this vulnerable population of Eastern Pacific green sea turtles (the unprotected Pargos area is the fifth largest nesting area in Pacific Costa Rica).

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

- The previously tagged turtles included one tagged in 2008, one tagged in 2010, two tagged in 2011, two tagged in 2018, and one from another project in Panama. Tracking the same turtles over the years provides insights into the little-known reproductive history of the Eastern Pacific green sea turtle.
- Two of the tagged turtles sighted were tagged from other projects. One was tagged in 2018 about 20 miles to the north. The other was tagged in Panama, probably during the inter-nesting years. Both turtles provide exciting

information about little-known fluidity of nesting sites for the Eastern Pacific Green sea turtle.

- Getting beach-front conservation commitments from two major landowners in the patrol area to facilitate “turtle-friendly” development (e.g., no beach lighting, habitat preservation, litter control, etc.).

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

- Local tour and ecotourism businesses have benefitted from publicity about the conservation of nesting sea turtles in this area, increasing their client base.
- Residents and organisations supporting clean beaches have benefitted from the involvement of our volunteers in various beach clean-up efforts.
- One local conservation group has initiated a partnership with our organisation to expand their environmental education efforts with youth in the community.
- See (2c) above.

5. Are there any plans to continue this work?

Yes, if we find sufficient funds. Right now, we only have enough funding for half the 2019-20 patrol season (October-May).

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

We maintain close communication with the national park biologists (10-20 miles north of our project) to share data and issues.

We maintain an active Facebook page to informally share our results, and also participate in a Pargos, Costa Rica community Facebook page.

We are continuing to collaborate on scientific publications with The Leatherback Trust and biologists with the Parque Nacional Marino de las Baulas (including SWOT status report to IUCN on sea turtles in Costa Rica).

We also meet informally with the municipality environmental chief and local landowners to conserve the officially undesignated/unprotected turtle nesting beaches.

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

This Rufford grant provided funding during our 2018-19 patrol season (mostly October 2018 through May 2019). This is an on-going conservation project focused on anti-poaching patrols, until the community totally embraces a conservation ethic for these threatened nesting populations.

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
(Combined) Patroller payments	7437	8153	+716	Reallocated funds were used for an extended spring patrol season due to nesting activity increase.
Local educators	169		-169	Work not conducted until September 2019 due to teachers' strikes and educator's schedule
Data entry	922		-922	Completed by Volunteers
Airfare				Donated
Office/housing rent				Paid by donations
4WD Patrol vehicle	1235	1642	+407	Rental
Gasoline		92	+92	Reallocated funds
Field supplies				Paid by donations
Patrol shirts				Paid by donations
Educational materials	227	100	-127	Includes copies, coloured pencils, Turtle man costume
Field office expenses				Paid by donations
Website fees				Paid by donations
Bank fee for grant	10	13	+3	More than expected
Bank transfers fees to pay patrollers				Paid by donations
TOTAL	£10000	£10000		

NOTES TO BUDGET

Exchange rate used:

US \$1 = £ 0.801345

£1 = US \$ 1.247902

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

Finding continuing and sustainable funding for this important conservation project. We have been soliciting business sponsorships (e.g., tour/rental guest fee donations and/or % sales donations) and hope to expand that, as well as continue to solicit private donations and additional grants. We also need to find a qualified volunteer data manager.

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?

Yes, we featured the Rufford logo on our Facebook page several times during the grant period, as well as in PowerPoint fundraising presentations.

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

Marc W. Ward, STF Executive Director, and Punta Pargos project manager (volunteer)

Nancy Tankersley, M.S., Lead biologist and site manager (volunteer)

Todd Lippold, M.S., project volunteer and field management liaison (volunteer)

Molly McDermott, M.S., data design and analysis (volunteer)

William Zuniga, Lead Patroller

Yerson Zuniga, patroller

Carlos Arroyo, patroller

Wilver Ordonez, patroller

Lourdes Aguilar, owner, Lula's Tours, Research Expeditions tour liaison

12. Any other comments?

We greatly appreciate the Rufford Foundation's support for four anti-poaching patrol seasons in Punta Pargos, Costa Rica.