

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	Doris Rodriguez Guzman
Project title	Tracking the trail of the Peruvian Tern (<i>Sternula lorata</i>) Peru – South America
RSG reference	17026-1
Reporting period	
Amount of grant	£4960
Your email address	sppec.conservation@gmail.com
Date of this report	04/11/2017

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
Monitor of the annual cycles of four adult Peruvian terns				We consider this objective partially achieved because we have registered changes in the breeding cycle during the last 2 years. The complete annual cycle will be known when the geo-locators are retrieved.
Map the distribution of the Peruvian Tern				This objective will be achieved as soon as the data from geo-locators are downloaded.
Identify the specific areas and associated habitats that comprise the species' annual range. Determine group structure during post-breeding dispersal and seasonal movements				Gathered data on foraging and resting areas outside breeding grounds will be evaluated to determine group structure during non-breeding season.
Assess threats on important areas.				From our continuous field trips we have documented that the main threat at the Peruvian tern breeding grounds in Paracas National Reserve is off road crossing, the nesting area is severe disturbed by cars and motorcycles. As soon as we get information from the geo-locators other areas will be evaluated.
Inform local communities across the terns' ranges about the status of the species and the importance of conservation to the local areas.				Children and teachers from three schools at two coastal communities were informed about the species and the importance of marine birds, other communities will be reached during the survey trips.

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

1. When the application was submitted the project consisting in the attachment and use of four newly designed GPS transmitters small enough for the Peruvian tern, those transmitters were offered to us as a donation. However the donors told us that the devices failed during trials in the Caribbean and the donors weren't able to overcome the problem, therefore the donation was never made, we have to redesign the project keeping our objectives but using different technology, after a thorough research we decided to use geo-locators from Migrate Technology, we bought 10 geo-locators to be attached at 10 adults, these devices need to be retrieved to download the storage data.

2. Alterations in the breeding cycle of Peruvian terns in Paracas delayed the attachment of geo-locators. The historical data and our own reports stated that the breeding season ends in April, according to that a trip was made to attach the geo-locators as soon as they arrived in March 2016 (2015-2016 breeding season), but the birds left the breeding area early that year due to the El Nino Southern Oscillation, we must wait to the next breeding season (2016-2017) during this breeding season we start the attachment of the geo-locators, however due to 2016-2017 South America Floods known as "El Nino Costero" that hits particularly strong the coast of Peru the birds left the breeding area in January, even earlier than the previous season therefore we could not finish the attachment of geo-locators we must finish the task at the end of the present year (2017).

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

1. Thanks to the development of this project government entities have been tacking the species into a priority level, the results would serve as a basis for the establishment of the species conservation plan, there are also a commitment to join efforts with the government agencies from the countries that comprise the species distribution range.

2. It has been established that the species has suffered strong alterations in its breeding pattern, the species breeding period have been shortened from the ones of the past years, historical and our own records stated that the species arrived to its breeding grounds in Paracas in October leaving the area in May, with a nesting peak between January and March; the last two breeding seasons started in October but the birds left the area in late January, those two breeding seasons were marked by the presence of the El Niño Southern Oscillation (ENSO) and the 2016-2017 South America Floods.

3. A new capture protocol for the species has been developed, since it is the first time that a Peruvian Tern is captured and tagged in Peru.

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

Hands on experiences and outdoor lessons were given to school children from coastal communities, teachers were involved in the programme. The objective was to increase awareness about the importance of marine birds and the conservation of the beach ecosystems.

5. Are there any plans to continue this work?

Yes, during the next breeding season 2017-2018 more geo-locators will be attached to Peruvian terns at Paracas National Reserve, the results of this project will serve to identified important foraging and resting areas for the species as well as to determine its annual migration path.

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

We plan to publish our findings and methods in scientific journals, and we already have a commitment to share our findings with the government entity in charge of the making of the conservation plan for the species.

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 project was designed to last one year, however the fund was used during the period of 2 years and is still ongoing.

The Rufford grant was used for four field trips (five days long) to Paracas Natural Reserve, food and accommodation for five researchers, 10 geo-locators and three school workshops.

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
Round trip Lima-Paracas for 5 researchers	125	56	69	Round trip to Paracas for two researchers, the other three researchers were already in the field
Food for 5 days per 5 researchers	230	240	-10	Round trip to Paracas for two researchers, the other three researchers were already in the

				field
Accommodation for 5 days per 5 researchers	310	330	-20	Although Paracas is a camp site researchers must cover some services (water, gas, etc.)
6 Round trips for 2 researchers	600	167	433	Three round trips to Paracas for two researchers, three researchers were already in the field. Instead of the survey trips these trips were made to attach the geolocators therefore 5 researchers were needed
Food for 6 trips for 2 researchers	560	720	-160	Food in the field for five researchers for three trips
Accommodation for 6 trips for 2 researchers	725	990	-165	Services for five researchers for three trips
Local transportation for the whole project	280	269	11	Local transportation for 4 trips, transportation cost inside the Paracas Reserve was higher due to work time table (late evening and early morning)
Data download for 1 year for 2 data loggers	1500	1365	135	Cost of 10 geolocators plus interface plus taxes
Spotting scope 1	200	200	-	
External hard disc	75	75	-	
Weather meter	260	-	260	
Printing material	95	50	45	
TOTAL	4960	4462	498	Exchange rate: 1PEN=0.24GBP

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

Our commitment is to map these areas, determine its status and threats and generate a strategic conservation plan for the species in Peru, a binational plan for the species with Chile is feasibly depending on our findings.

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?

A campaign is about to be launched to increase local tourist understanding and awareness about the importance of desert plains for the species and the role of them in the conservation of the species by following marked paths. Rufford Foundation logo will be in the flyers and stickers that will be used.

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

Doris Rodriguez Guzman, Project responsible

Manuel Augusto Olaechea Dominguez, Logistics and organization
Eveling Tavera Fernandez, bird banding specialist
Priscila Pellissier Perez, field researcher
Margarita Hidalgo Villegas, field researcher

12. Any other comments?

This is an ongoing project, we would like to send to you further information when it is obtained.