



The Rufford 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. 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. 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	Yulima González Díaz
Project title	Conservation of the geographically restricted Cuban cichlid <i>Nandopsis ramsdeni</i> (Joturo) and linked habitats from the National Park Alejandro de Humboldt, Cuba
RSG reference	18175-1
Reporting period	September 2015-September 2016
Amount of grant	£ 5000
Your email address	yulima@ecologia.cu
Date of this report	September 29 th , 2016

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
Gathering ecological information on the geographically restricted Cuban cichlid <i>Nandopsis ramsdeni</i> (Joturo)			X	Population parameters and ecological variables were assessed for the species in a year. We worked in seven work stations located in three rivers at the National Park Alejandro de Humboldt
Identifying priority habitats for the conservation of this species			X	Important areas for reproduction of <i>Nandopsis ramsdeni</i> were identified during the project
Implementing training actions in local communities for the conservation of the target species and linked habitats at the National Park Alejandro de Humboldt			X	Meetings, interviews and talks were executed with local people and conservation personnel from the National Park Alejandro de Humboldt

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

We did not face up major difficulties during the project. However, we had some issues to accomplish sampling during winter (from November to February) because it was an unusual wet season for most eastern part of the Cuban archipelago. Some field trips were rescheduled during that time.

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

In this project we studied a threatened species for which features of its natural history are practically unknown. Fortunately, we were able to obtain crucial results for future conservation works involving the target species. Here is a short list of the most important outcomes of this project:

1. We registered important ecological parameters in natural habitats for *Nandopsis ramsdeni* as well as seasonal shifts of these parameters during a year. This is crucial information to understand why the species occurs only in certain ecosystems and drawn conservation strategies.
2. We identified priority habitats for the conservation of *Nandopsis ramsdeni*. We essentially searched for reproductive sites (core areas) in which conservation tasks should be focusing in the immediate future.
3. We established an important network with conservation specialists in the area as well as community groups which is essential for future works. In addition, we developed some training activities and talks in order to attract attention about the conservation problems and threats for the target species in the area.

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

Local communities were involved with project's activities from the beginning to the end. Local people support us with local transportation means (mainly handicraft canoes) to reach sampling sites. They were motivated to learn what they could do to protect remaining populations of Joturos because conservation of this fish species represents both food for their families and preservation of a prized cultural value that come from their ancestors.

5. Are there any plans to continue this work?

This work constitutes the first step for further population analyses. We are expecting to carry out a genetic analysis to determine population structures and genetic diversity. These data are crucial for designing successful management strategies.

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

We are writing a scientific manuscript (it is in the final revision phase) for publishing in a local journal. In addition, we are preparing two instructive material to spread the main findings we done in this project. Those materials will be given to the conservation staff in the National Park Alejandro de Humboldt for later free distribution among local communities.

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

The financial support was used during a year as planned in the project proposal.

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
Water Multitest Parameters (pH, Conductivity, TDS)	90	90		
Dissolved Oxygen Meter	145	145		
1 Monofilament Gill Net	125	125		
4 Baitwell Nets	72	72		
3 Replacing Nets	16	61	-45	It was necessary to buy additional replacing nets (adult fish have an spinous dorsal fin that causes damage to the nets)
Insect Repellent (5 bottles)	40	40		
Diving Boots (2 pairs)	54	54		
Hiking Boots (2 pairs)	140	210	-70	We bought another pair because a

				local worker who assisted us during the field work needed it.
3 Petzl Headlamps	210	210		
2 Backpacks	67	67		
2 Tents	120	60	+60	We just needed one tent because the National Park supported us with other three tents.
2 Vari-Case Dissecting Kits	18	18		
Diesel	500	400	+100	We received some support from the administration of the National Park. Surplus funds were used for buying additional field work items and travel costs.
Ticket Travel Costs	900	940	-40	
Food	600	600		
1 Video Beam Projector Led	200	200		
1 Laptop Computer	400	400		
1 Ink Printer and Cartridges	200	200		
Costs for educative materials publishing	800	800		
Office materials	300	300		
TOTAL	4997	4992		

*Local exchange rated used was 1 £ sterling = 1.41 CUC

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

This work gathered important data to fill the information gap about some basic characteristics of the natural history of *Nandopsis ramsdeni*. Because this was a pilot study, which achieved specific goals (aimed to collect ecological information and to start training actions in local communities for the conservation of the target species), our team work is conscious that further analyses are needed in the efforts to preserve this geographically restricted species. We propose two important actions as urgent next steps:



1. To accomplish a genetic population analysis in order to clarify relationships among different populations of *Nandopsis ramsdeni* in the National Park Alejandro de Humboldt.
2. Conservation authorities should implement a monitoring plan of fish populations in the areas that were identified as key for the conservation in this project.

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?

Yes we did. The RSGF logo was used in all the presentations we done as educational activities. In addition, the RSGF was properly acknowledge in the publication derived from this project that will be published ending 2016.

11. Any other comments?

It was an important study with a significant value in the conservation of a local endemic species. Our team is very grateful to The Rufford Foundation for the support to conduct this project as well as local people that help us all the time, especially conservation staff from the National Park Alejandro de Humboldt. It would be great if further studies could be accomplished in the near future for monitoring of fish populations in a broader timescale.