

### 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	Pedro Henrique Cipresso Pereira						
Project title	Zoning, Conservation and Research of a Threatened Coral Reef Complex in the Northeastern Brazil						
RSG reference	Project ID: 24228-D						
Reporting period	Feb 2018 – Feb 2019						
Amount of grant	£ 9940						
Your email address	pedrohcp2@yahoo.com.br						
Date of this report	15/03/2019						



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
Zoning design of the reef area				
Monthly underwater visual census				
Empower community members				
Oversee and monitor the area				We have encountered some difficulties in order to oversee the reef areas. However, a stronger partnership with local managers helped us to outcome this issue.
Disseminate environmental education materials				

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

Zoning was difficult to perform in some communities. Selection of "no take" zones was a quite complex task. However, with a strong dialogue and collaboration with local community members we end up taking suggestions from locals regarding the best locations to implement the no-take zones. By selecting area with low conflicts with fishermen we avoided this problem and therefore reduced our issues on "no-take" selection sites.

Diving on deeper reefs was also a difficult task performed by our project. Logistic, team effort and coast were very high and challenging in deeper waters and was a difficult task to overcome. However, with support from local divers and other academic colleges we were able to locate the deeper reefs and collect scientific data on these areas. See video - <u>https://www.youtube.com/watch?v=F-4HNPaC3JI</u>

Lastly, oversee and monitor the area by our NGO was a challenge to perform. We are now stabling a more robotic cooperation term with local managers in order to facility this contracts process for local community member been able to act as "field agents" or "reef rangers".

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

While the zoning is the most challenging issue of the project it is also the most rewarding activity from our initiative. This project will allow not only ecological



benefits for the reef area but also social outputs for all the local stakeholders. Reef zoning is one of the most effective conservation measures on reef ecosystems already proving efficiency in Australia and many Pacific Islands. As previously mentioned, zoning implementation encompass visiting areas (only for tourism), fishing areas (only for registered local fishermen) and no-take areas. Therefore, all the collected information such coral/fish diversity and abundance, reef complexity, preferred touristic areas, preferred fishing areas, etc. will allow us to select the sites for each activity, in consultation with local stakeholders. In this context, the production of zoning maps is one of the most important achievements of our project.

Another important outcome was the monthly underwater visual census and dives on site coral reef areas. Our project has "rediscovered" a very important complex of deeper reefs in the MPA (around 30 m of depth). These deeper reefs seem to be working as a refuge for fish and coral populations and we are now testing the deep refuge hypothesis using Brazilian reefs as a model. Our project has produced a video highlighting the importance of these reefs with Rufford Foundation support (https://www.youtube.com/watch?v=iOlw91p48eo&t=1s) and have a published manuscript titled: "Effects of depth on reef fish communities: insights of a "deep refuge hypothesis" from Brazilian reefs" the first one in Brazilian waters so far discussion this topic. Link - https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0203072

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

The most important correlation of our project with local community members was related to the zoning process. Local fishermen are at the moment realizing that fishing is dramatically recoded in our project location. Therefore, our argument that a zoning establishment is necessary has been accepted by the majority of the local communities. That said, our involvement with local communities is now stronger than ever and that have provided us great assistance during selection of zoning sites.

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

Yes, for sure. Zoning has been proposed and now it is with the Brazilian Government for validation. After zoning, implantation efforts must be conducted on surveillance of the areas as well as monitoring of no-take areas to better understand reef recovery and zoning influence on reef biodiversity. An initial database was established on different zones inside the MPA and now it vital to monitor environmental responses after zoning. We plan to apply for a completion grant by the end of this year in order to support our NGO activities focused on surveillance of the zoned areas and also ecological monitoring.

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

Our social media is updated weekly



(http://www.facebook.com/projetoconservacaorecifal) with all the information and new facts form the project. Moreover, the project website (also periodically updated) has just been released with a huge amount of information on coral reefs in general (www.conservacaorecifal.com). Furthermore, the material called "Conscious conduct on reef ecosystems" created by the Brazilian Government is being used in an approach to tourist will be available in full on the project site including downloadable expanding the disclosure of the material. In preparation is manuscript are also been prepared. Species Identification PVC sheets have also been created with RSG logo.



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

Our RSG project was performed from February 2018 to February 2019. All activities outlined in the application for funding were completed within the timescales specified. Efficient communication between all the project members contributed to the correct execution of all the aims. The project coordinator is always in contact with the community and has great power of organization and report execution. Thus, monthly meeting was performed for a greater control of the project in terms of enforcement and financial aspects.



# 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
Zoning Implementation materials = 100 buoys	350	0	-350	Material was acquired by partnership with local businessmen
Zoning Implementation materials = 15 small signalling boards for the zoning area	300	0	-300	Material was acquired by partnership with local businessmen
Zoning Implementation materials = 08 big zoning boards for the anchoring area	690	690		
Monthly underwater visual census = Local boat driver daily bases including boat fuel	2,200	2,500	+300	More dives where performed with the additional financial resources
Monthly underwater visual census = Food and accommodation	1,000	1,350	+350	More dives where performed with the additional financial resources
Empower community members sessions - Ground transport for locals (truck hire all the sections)	1,250	1,250		
Empower community members sessions - Basic material for classes	700	700		
Oversee and monitor the area to avoid impacts - community members transport and food	2,800	2,800		
Oversee and monitor the area to avoid impacts - basic materials for monitoring process	400	400		
Disseminate environmental education material - events preparation	250	250		
TOTAL	9,940	9,940		



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

As previously stated on question number 5, after zoning now we need to focus effort on surveying and ecological monitoring of the zoned areas in order to understand biodiversity responses. We plan to apply for a completion grant by the end of this year in order to support our NGO activities focused on surveillance of the zoned areas and also ecological monitoring.

# 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 have been using Rufford logo on several produced material such as flyers, banners, videos, t-shirts, etc. Additionally, all the social media publications from our project used the Rufford logo. All the publicity with the logo was sent for the project and more of them are still in preparation. We can highlight some of the most important occasions that the Rufford Foundation was used:

- T-shirts (100), stamps (500), project flyers (1000), project banners (15), and pens (100) used during the whole project and also distributed for local community and tourists.
- Presentations for the local community and tourists and also meetings with local manager agencies and major.
- Website of the project just created -www.conservacaorecifal.com and Social Network of the project with weekly updates http://www.facebook.com/projetoconservacaorecifal.
- Acknowledgments from RF on scientific papers and also magazine articles.

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

Our team is basically composed from our NGO (Reef Conservation Project) staff and volunteers.

**Pedro Pereira** – Project Coordenador and NGO Director. Active in all project aspects such as administrative tasks, field work, empowerment sections and reporting/publications writing.

**Gislaine Lima** – Field work and local NGO coordinator. Responsible for all the field work logistic and data collection during dives.

Antonio Vitor – Staff from our NGO. Responsible for administrative tasks, social media and data analyses.

**Walter Dennis** – Diver, responsible for our maps and modelling activities. Also, responsible for data analyses for project execution.

Claudio Henrique – Diver and responsible for data collection during field work.



Lucas Noronha – Our NGO intern. Support with all general project activities and administrative tasks.

#### 12. Any other comments?

We would like to thank Rufford Foundation for the support, and we hope to continue with this partnership that has been extremely important for Brazilian coral reefs conservation. We intend now to submit a completion grant by the end of this year.