

## The Rufford Small Grants 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. 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](mailto:jane@rufford.org).

Thank you for your help.

**Josh Cole, Grants Director**

| Grant Recipient Details    |  |
|----------------------------|--|
| <b>Your name</b>           | Tommy Arruda Nobre de Melo                                       |
| <b>Project title</b>       | Hatchery for marine turtles on the Santa Luzia island            |
| <b>RSG reference</b>       | 9494-1   |
| <b>Reporting period</b>    | June 2011 – November 2011  |
| <b>Amount of grant</b>     | £5953  |
| <b>Your email address</b>  | <a href="mailto:tommymelo@hotmail.com">tommymelo@hotmail.com</a> |
| <b>Date of this report</b> | 6 <sup>th</sup> January 2012                                     |

**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   |
|---|--------------|--------------------|----------------|--|
| - Provide security for sea turtle eggs during incubation and birth. | X            |                    |                | This objective would be achieved if we had implemented the system of hatcheries for the translation of those eggs but following the council of IUCN's expertise, think is better than this first year would serve to make a thorough assessment on the ground profile on the beaches of posture and the dangers there found. This way we avoid any negative impact of our activities even to the natural predators of turtles (the crabs).   |
| - Create a database on nesting sea turtles of Santa Luzia.          |              |                    | X              | This goal was far exceeded taking into account that in addition to have mapped all nesting turtles, even retired data on the variation of temperature in the nests that will be compared with the sex of the offspring and used to assess the impacts of Global Warming in the sex-ratio of juveniles. We also carried out a detailed assessment of the profile of the beaches of posture with the help of expertise of the IUCN, which will allow for next year (2012) have a clear and accurate information about the nests to be translocate to the hatcheries. |

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

We had problems because our boat was scheduled to arrive in Portugal in early June, because bureaucratic delays, eventually came only in late September. We had to work only with local boats to transport volunteers, water and food, which increases this item. Because of this we could not get the one hundred volunteers who wanted to stay and we had only thirty of them.

We had problems with communication because it had the support of a telecommunications company that gave us a satellite Internet system (We were working on a desert island 12 km from the nearest island), but the system was inoperable (technical problems of the company itself). Therefore we could not update the data with you or with the Environment General Directorate of Cape Verde. They assured us that in 2012 will have a functional system.

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

1- It was a campaign of work that was highly publicised by the media (television and radio), and therefore exceeded the expected level of awareness. In addition we have moved 36 volunteers (three for every two weeks) who actively participated in all the hard field work (we had to go walk about 8 miles per day in the sand).

2 - We were able to map more than 250 nests which give us a preferential distribution of turtles allowing us to develop more effective conservation measures in what is the largest nature reserve in the country.

3 - Awaken the interest of international expertise that we trained in new methodologies for data collection in order to succeed in the near future to have an overview of the ecosystem reserve. Being able to clearly assess threats and provide timely responses in order to mitigate them or even suppress them is certainly one of the biggest gains for the environment of Cape Verde.

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

During our stay in the desert island (almost 6 months), we were daily with the fishermen who frequent the island and develop a routine of making a small informal meeting in the evening (for tea) and developed during these meetings many issues related to various aspects of the environment. In our view, these conversations were the most fruitful level of awareness, that all the workshops already held in our country. They learned, and we also learned.

People who participated as volunteers in the camp had a connection to the environment than ever before and began to look at nature with much more respect. In addition, technical knowledge acquired in the future may be helpful to them at work as ecotourism guides in the business of turtle watching.

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

Surely, with the data we acquired this year, we can take on much more effectively the implementation plans of hatcheries since we already know the real needs of the local ecosystem, the profile of the beaches and still get to develop new strategies to reduce the impact of global warming in this turtle population.

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

The data that we get will go into the database of the IUCN, and also in TAOLA Network (a national network for entering data on nesting turtles). The data are also being shared with the University of Cape Verde, since they are our faithful partners.

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

The RSG was used as intended in the project, assisting in the logistics and implementation of activities in the marine reserve. We can also add that we aid (not in terms of money) IUCN in terms of training of our technical staff in new techniques of data mining and scientific materials still quite

expensive as is the case of thermometers used to measure the temperature variation inside the nests.

**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.**

**1€ = 0,824£**

| Item                           | Budgeted Amount | Actual Amount | Difference  | Comments   |
|--------------------------------|-----------------|---------------|-------------|--|
| 1-alimentation                 | 3810            | 1204          | 2606        | For us to be less people (we had 100 volunteers and ended up having only 36) we end up spending less money on food (although we spent more time on the island than originally planned). But this money had to be directed to other spending as you may notice is just ahead. |
| 2 - miscellaneous              | 456             | 146           | 310         | Because we have not implemented the hatcheries, we spend less on material than was originally anticipated.   |
| 3 – Boat rent                  | 952             | -1081         | 2033        | Because we cannot be relied on our own boat to assist in the activities, we spend much more money in the rental of boat (fishing boat) to the predictably.   |
| 4 – allowance for working team | 735             | -154          | 889         | The stay on the island lasted longer than planned (probably one of the effects of global warming, the turtles spent more time in nesting season) and so we had to pay a little more than expected.   |
| <b>Total</b>                   | <b>5953</b>     | <b>115</b>    | <b>5838</b> | We cannot forget the bank as you can see in the document of transfer, get some money for the expenses of business. But we still remain with some, around 90£.  |

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

For us, the future is conditioned by the data acquired this year and that enables us to delineate a well-conceived planning hatcheries in addition to other measures (e.g. make a massive cleaning a beach, because the chains have many networks and garbage from the Atlantic, but that presented itself as a popular beach for the turtles). Continue to collect more data so that we are able to intervene in the best way to preserve our environment. Continue using volunteers and local communities to feel part of the conservation movement.

**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?**

By working directly on the desert island does not elaborate any printed material, only a list of registration for the volunteer that was posted in several institutions of higher education. The name "Rufford" was always present in all communications in both television and radio as well as all those who came into contact with the project. The Biosphere has been working with international partners for a long time and it is our practices with plenty of emphasis highlight our sponsors.

**11. Any other comments?**

We would like to acknowledge the support and confidence shown to us and say that this was very well spent. In the future we would like to be able to continue to count on your collaboration, we are aware that at the forefront of preserving the environment of our country. We would like to honor us with your presence during the next campaign work in the marine reserve (not just work with turtles, but also with birds, geckos, sharks, coral and plant life).

# Our Camp



Meetings with fishermen every day at the end of the day



# Turtle tracks



# Turtle tracks



**Check daily for new nests. (our team went all the beaches everyday)**



## Nests were marked after identification



## Top of identifying the profile of the beaches with the help of a technician IUCN



# Francisca beach



## Example of the dunar system vegetation.



# Camp beach



## Example of natural barrier



## Distance of the sea



## Crab numbers of each beach



# Ghost crab, the largest natural nests predator



# Ghost crab



# Rubbish on the beach



# Thermometer tag put in nest with help from IUCN



## Example of thermometer tag



**Start open the nests to help the small turtles  
pass the crabs barrier, and see the success of  
reproduction**



# Counting turtles



# Small turtles



# Small turtles



# Hope



# On the way to the future



# Counting egg shells to know the breeding success



## Counting of unhatched eggs



# Eggs not hatched due to nest flooding by tides



# The end of more one day



# Our sea



# Santa Luzia Island and the beaches we work in



# Some results

| Beaches (Km)       | Nº tracks | Nº Nests | observations                                |
|--------------------|-----------|----------|---|
| Palmo Tostão (3,5) | 152       | 40       | nests badly damaged by flooding             |
| Francisca (4,6)    | 438       | 143      | many nests predated by crabs                |
| Achados (2,1)      | 483       | 99       | many tracks but little nests due to rubbish |