

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. 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	Eduardo Resende Secchi
Project title	Identifying priority areas for the conservation of bottlenose dolphins (<i>Tursiops truncatus</i>) inhabiting the Patos Lagoon estuary, southern Brazil.
RSG reference	
Reporting period	September 2006 – August 2007
Amount of grant	£ 4876.53
Your email address	edu.secchi@furg.br
Date of this report	19 March 2008

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
Determine distribution patterns of the dolphins along the study period			X	
Identify habitat characteristics that might influence the distribution of the dolphins			X	
Determine distribution and intensity of the artisanal gillnetting occurring in the Patos Lagoon estuary and adjacent coastal waters			X	
Identify areas and seasons of higher potential overlap between fishing and dolphin distribution along the year			X	

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

Because of the environmental conditions the number of surveys was lower than planned. Analyses were performed accordingly.

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

- Fishing activities and dolphins overlap in distribution especially inside the estuary in areas close to the mouth;
- In coastal areas dolphins concentrate within the first km from shore and are rarely seen beyond this distance. Dolphin encounter rates decrease with distance from the estuary whereas fishing nets are set up to 2.5km from shore and mostly up to 5km from the jetties.
- Based on dolphins concentration sites, we have identified potential areas for banning gillnet fishing operations in case the number of dolphins annually killed due to interactions with fisheries is proved to be unsustainable. These areas are inside the estuary, close to the mouth and on coastal areas up to 1km from the coastline. This protected area should not affect much the artisanal fisheries as more than 50% of the areas normally used by them will remain available.

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

5. Are there any plans to continue this work?

Yes, this project is part of a long-term study started in 2005 which aims at estimating population parameters (such as: abundance, mortality, crude birth rates, calving interval), individuals association patterns, habitat use and home-range.

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

The results of this project will be used to elaborate a tentative guideline to orientate the Brazilian Agency for Environment (IBAMA) in designing local conservation plans. The identification of

preferential areas for dolphin and the distribution patterns of fisheries might help IBAMA to design a marine protected area based on scientific data.

However, if needed to implement area closure for gillnet fisheries, our proposed design has to be well explained and broadly discussed with the local fishery community and other stakeholders.

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

We used RSG over 15 months. It was probably because the lower number of field trips made during the first year than expected (as mentioned above).

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
Fuel	£ 3225.6	£ 2150.7	£ 1074.9	Because of the environmental conditions and the change of our sampling methodology we made less field surveys
Motor oil	£ 76.80	£ 76.8	£ 0	
Batteries	£ 12.84	£ 10.6	£ 2.24	
Food	£ 384	£ 263.16	£ 120.84	
Boat pilot	£ 672	£ 476.02	£ 195.9	
Boat maintenance	£ 200	£ 200.0	£ 0	
Water sampler field kit	£ 264.89	£ 0	£ 264.89	Idea Wild donated this equipment to our project
Depth and temperature recorder	£ 40.4	£ 0	£ 40.4	Idea Wild donated this equipment to our project
Mac Book Pro	£ 0	£ 1699.0	£ - 1699.0	We have asked Rufford permission to buy this computer to analyse the project data.
TOTAL	£ 4876.53	£ 4876.3	£ 0.25	

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

We strongly believe that the continuation of this habitat use project might bring crucial insights about critical areas in a finer scale. For example, males and females as well as adults and juveniles might use their habitat differently. If so, patterns of habitat partitioning can help to design more refined conservation areas. It is well known that mature females have higher reproductive value in large vertebrate populations. Therefore, in case this project is continued, our main objectives are to identify areas of higher use by adult females and to determine their home-range. These can be achieved through the use of non-invasive photo-identification techniques and a careful survey design.

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 used the RSGF logo in the following international and national conferences where we presented some of the results from this project:

- Oral presentation in “Primera Reunión Internacional sobre el Estudio de Mamíferos Acuáticos SOMEMMA-SOLAMAC (*First International Meeting on Aquatic Mammal Studies of the Mexican and Latin American Societies*)”, Mérida, México, October 2006.
- Poster presentation in “XX Semana Nacional de Oceanografía (*National Oceanography Week*)”, Rio Grande, Brasil, October 2007
- Short course “Cetaceans: Study Methodologies” in “XX Semana Nacional de Oceanografía (*National Oceanography Week*)”, Rio Grande, Brasil, October 2007. 8 hours.
- Poster presentation in “17th Biennial Conference on the Biology of Marine Mammals”, Cape Town, South Africa, November 2007.

We also made talks for all secondary school students in one of the two schools of the local fishing community during the second semester of 2006 and to the local community during a conservation day in January 2007.

11. Any other comments?

We are very thankful to RSG program as it allowed us to fulfil part of our long-term objectives for the conservation of the small resident population of bottlenose dolphins from the Patos Lagoon estuary.