

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 | Angélica Cristina Gouveia Nunes |
| Project title | Tourism with Amazon river dolphins (<i>Inia geoffrensis</i>): Behavioural |
| | changes and acoustic characteristics of aggregations in Negro River |
| RSG reference | 14745-1 |
| Reporting period | April 2014- March 1015 |
| Amount of grant | £5,028 |
| Your email address | angelica.cgn@gmail.com |
| Date of this report | 25/05/2015 |



1. Please indicate the level of achievement of the project's original objectives and include any relevant comments on factors affecting this.

| | Not | Partially | Fully | | | |
|--------------------------|----------|-----------|----------|--|--|--|
| Objective | achieved | achieved | achieved | Comments | | |
| Understand how | | Χ | | Results showed that botos are very | | |
| ecotourism affect | | | | responsive to food reinforcement, | | |
| botos' behaviour | | | | increasing aggressive behaviours during interaction with humans. After | | |
| | | | | interaction sessions, I observed | | |
| | | | | changes in surfacing and respiration. | | |
| | | | | Social interactions and foraging | | |
| | | | | diminish as interaction increases. | | |
| Evaluate if recreational | Χ | | | A sufficient number of observations for | | |
| stimuli (rubber balls, | | | | this stimulus were not reached, making | | |
| for example) reduces | | | | statistical inferences impossible. But | | |
| stress on aggregations | | | | with few observations (n=25), it was | | |
| | | | | possible to observe that when | | |
| | | | | interaction occurs without offering | | |
| | | | | food, the dolphins do not react | | |
| | | | | aggressively. | | |
| Characterise the | | Х | | Botos are social animals and use | | |
| acoustic repertoire of | | | | several types of phonations in different | | |
| those groups and know | | | | behavioural contexts. | | |
| what kinds of sounds | | | | During interaction with humans, they | | |
| are displayed during | | | | tend to phonate more than in other | | |
| aggressive exhibits | | | | contexts, such as milling and foraging, | | |
| | | | | suggesting that social interactions can | | |
| | | | | be mediated by acoustic signals. | | |

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

The collection and analysis of data took longer than expected due to problems in receiving the grant. The bank only released the payment after almost 2 months.

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

This project is the first to describe short-term disruptions in the normal activities of botos in three different sites. With the collected data, we are now able to explain behaviour reactions of botos to human interactions and the use of food reinforcement, giving scientific background to the management of touristic activities. The sound data can be used to investigate ecology and behaviour of botos through passive acoustic monitoring.



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

During field work, I could stablish a relationship with the three local communities, especially with the owners of the establishments that offer in-water interactions with botos. I offered them a talk where I could show examples of sustainable interactions with dolphins from other countries and aspects of Amazon river dolphins biology.

5. Are there any plans to continue this work?

Yes, we still have questions to answer about behaviour and ecology of botos and its relation with ecotourism on the lower Negro river region. Our next steps are to investigate how the animals use and are distributed in that area. I want to investigate habitat use and daily activity around feeding sites.

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

The results will be published in two different scientific journals.

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

The grant was used for 7 months to pay for field expenses (lodging, meals, etc.) and to purchase necessary equipment used for data collection and analysis.

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 | Actual | Difference | Comments |
|---------------------------------------|----------|----------|------------|---------------------------------|
| | Amount | Amount | | |
| Meals | £250 | £396.70 | 146.7 | 1 BRL = 3.51£ |
| Lodging | £785 | £455.80 | -329.2 | At site #3 I was hosted in a |
| | | | | friend's house |
| Field assistant | £1870 | £1900.00 | 30 | |
| Land transportation | £187 | £577.00 | 390 | |
| Boat Fuel (for travel to study sites) | £624 | £580.00 | -44 | |
| Boat Driver Compensation (for | £437 | £497.00 | 60 | |
| travel to study sites) | | | | |
| Software licence for acoustical | £16 | £16.00 | 0 | The first budget refers to |
| analysis | | | | student licence, I bought |
| | | | | permanent licence |
| Water-resistant field Notebooks | £32 | £70.00 | 38 | Shipment costs weren't included |
| | | | | in the first budget |
| 2 TB Hard Drive+ case | £81 | £176.00 | 95 | Shipment costs weren't included |
| | | | | in the first budget |
| Go Pro Camera (2) and accessories | £595 | £614.00 | 19 | Shipment costs weren't included |
| (memory card, charger, handlebar) | | | | in the first budget |
| Miscellaneous | £156 | 0 | -156 | |
| TOTAL | 5033 | 5348.5 | 249.5 | |



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

For the implementation of new management options, the next steps should aim to stablish a dialogue between the owners of the establishments, tourist agencies, boat guides and environmental agencies. These actors need to set a deal in order to organise the tourism with botos.

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?

No.

11. Any other comments?

I want to inform that after receiving RSG, I was also granted by PADI foundation. The grant received from this institution was used to buy equipments (DSLR camera, hydrophone and recorder).

I would like to thank the RSGF team for the support and congratulate all of you for your good work.



