

## Final Project Evaluation Report

---

We ask all grant recipients to complete a project evaluation that helps us to gauge the success of your project. This must be sent in **MS Word and not PDF 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 – remember that negative experiences are just as valuable as positive ones if they help others to learn from them.

Complete the form in English and be as concise as you can. Note that the information may be edited before posting on our website.

Please email this report to [jane@rufford.org](mailto:jane@rufford.org).

---

| Your Details        |  |
|---------------------|--|
| Full Name           | Leandro Do Nascimento  |
| Project Title       | Soundscapes and Interspecific Animal Communication in the Amazon |
| Application ID      | 24612-1  |
| Grant Amount        | £4853  |
| Email Address       | le_nasc@hotmail.com  |
| Date of this Report | 2018.07.19   |

**1. 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  |
|--|--------------|--------------------|----------------|---|
| Passive acoustic monitoring of riverine habitats |              |                    |                | The data collection was successful and now we are working to publish our findings until my graduation next year.  |
| Broadcast experiment with primates               |              |                    |                | I presented my first findings at the 55 <sup>th</sup> Annual Meeting of Tropical Biology and Conservation. Now we will be working to publish the results. |

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

The main initial difficulty arose from locating the studied subjects in the field and running a lab setting experiment in the natural environment. However, after few adjustments everything went as originally planned.

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

- a) Acoustic data collection revealed that howler monkeys are more active during the nocturnal period than the diurnal period.
- b) Thousands of hours of soundscape recordings across all habitats in the park created the first database of its kind for this region. This data can be used to model species occupancy of birds, primates, and to monitor the impacts of future development in Roraima.
- c) Over 15,000 Brazilian real returned directly to the local communities that aided with this project. Four local citizens were trained to guide visitors and researchers what constitute an important source of income for the communities surrounding the park where job opportunities are scarce.

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

I hired people living in the local communities to help with the fieldwork activities. They could learn from me how to assist with scientific research and guiding activities. I did apply questionnaires to test if they were absorbing well the knowledge I was sharing and provided them with material to study and learn on their own as well.

During my last week in the park, I did co-organise an event for over 50 members of the local community. They spent a full day in the park learning about the research being conducted there and how they are benefiting and could benefit even more in the future from the park both directly and indirectly. Children were exposed to interactive workshops to raise conservation awareness while adults were giving talks and the opportunity to interact with researchers and the park superintendent. In the same day, a photo exhibition of the different ecosystems of the park authored by me was in display for the public. This became a permanent photo exhibition in the park since the photos were donated.

One of my field assistants currently is using his payments to rebuild his old house and his knowledge and experience acquired during this project allowed him to be hired by the park in a one year minimum contract.

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

Yes. I hope in the future to continue this project through a post-doctoral fellowship and partnerships with regional institutions and local communities.

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

The results will be shared to the scientific community through a series of publications. Findings were shared with the local community through the event described above. We make sure that all leaderships were present during the event so they can spread the information with other members of the communities as well.

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

We used the Rufford Foundation grant during the 3 months of fieldwork activities in Roraima, Brazil and few months before the expedition to buy the equipment.

**8. Budget: 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. It is important that you retain the management accounts and all paid invoices relating to the project for at least 2 years as these may be required for inspection at our discretion.**

| Item                   | Budgeted Amount | Actual Amount | Difference | Comments |
|------------------------|-----------------|---------------|------------|----------|
| *Portable Speaker      | 32              | 32            | 0          |          |
| *Player                | 33              | 33            | 0          |          |
| *Microphone windscreen | 5               | 5             | 0          |          |
| *Air ticket, SLC - SP  | 878             | 878           | 0          |          |

|                                      |             |             |            |   |
|--------------------------------------|-------------|-------------|------------|---|
| *Air ticket, SP - MA                 | 296         | 296         | 0          |   |
| >Shuttle, MA - RR                    | 68          | 68          | 0          |   |
| >Shuttle, SLC - LO                   | 50          | 50          | 0          |   |
| >Field Assistants                    | 3000        | 2256        | -744       | One of the field assistants helped for a shorter period of time than originally planned   |
| >Soundscape audio-visual performance | 200         | 400         | +200       | The event I planned was bigger than I originally envisioned and accommodated more people.   |
| <b>Total</b>                         | <b>4560</b> | <b>4016</b> | <b>544</b> | The total amount granted was 4853, but this was based on an old budget I sent. The total amount I have to return Rufford based on the most recent budget approved is 839 or \$1100 us dollars since the grant was paid in us dollars. |

\*Values converted from US dollars at 1 USD = 0.76 GBP

>Values converted from Brazilian Real at 1 BRL = 0.31 USD

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

- To continue monitoring the riverine habitats to create a baseline priori dam establishment in the river and possibly use the data to foster support to move this dam elsewhere.
- To continue to conducted broadcast experiments with howlers to unveil the functions of their calls, especially female loud calls and soft calls of males.

**10. Did you use The Rufford Foundation logo in any materials produced in relation to this project? Did the Foundation receive any publicity during the course of your work?**

We used the Rufford Foundation logo in talks in Brazil and Malaysia. The logo was also used for banners in Brazil and is currently in display in the park. The Rufford Foundation received publicity during the course of our work and people asked me questions about the organization and how to apply for a grant.

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

**Dr. Karen Beard** - is my PhD advisor at Utah State University. She is well known for her research in the field of conservation biology. She has broad knowledge of research and conservation in tropical habitats with previous work done in the Atlantic Rainforest in Brazil, Hawaii Island, Africa, and Puerto Rico.

**Dr. Xiaoujun Ki** - is a computer scientist and member of my dissertation committee, and will aid us in applying cutting-edge pattern recognition techniques to the ecology field to improve species automatic detection through sounds.

**Dr. Thomas Edwards** - also member of my dissertation committee, is well known for his ecological quantitative work, random forest and other machine learning algorithms applications, which are essential tools to analyse the large amount of data generated through passive acoustic monitoring on this current study.

