

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	Leonardo De Carvalho Oliveira
Project title	Can golden headed lion tamarins survive in Cabruca agroforest? Management implications for and endangered species and habitat.
RSG reference	27.12.07
Reporting period	12/02/08 to 20/12/08
Amount of grant	£4870
Your email address	leoecol@umd.edu
Date of this report	06/12/09

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
Characterize cabruca structurally	X			This part is delayed because a graduate student (master) will conduct this analysis as part of her research. She got accepted in the programme this semester and she will start the data collection after her course work
Verify presence / absence of GHLTs in different types of cabruca using playback technique			X	Part of the data came from a previous study which was evaluating the geographical distribution of the species. We conducted surveys on the north part of the species distribution using playbacks and we identified gaps in cabruca areas.
Evaluate Demographic parameters of GHLTs populations in cabruca		X	X	We captured 6 groups of GHLTs and collected demographic parameters of these groups plus other non focal groups. Data are still being collected in the field.
Evaluate ecological parameters of GHLTs populations in cabruca		X	X	We monitored 7 groups of GHLTs 3 of them use just cabruca agroforest and four use a mosaic of habitat (primary and secondary forest and cabruca). Data are still being collected
Evaluate the genetic structure of the populations of GHLTs	X	X		Although hair samples have been collected from the captured groups the analysis have not started because of the lack of a full-time researcher to conduct the analyses. A master student from the State University of Norte Fluminense (UENF) will start the analysis as part of her master degree.

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

Originally, my proposal was supposed to start in January 2008 but problems out of my control caused a delay on my research:

1. Delay on the funding arrival: Some of the financial support requested arrival in March instead of January 2008 and consequently delayed the start of the project.
2. The capture of some groups of GHLTs took more time than expected (3 months in one group).
3. The difference in money exchange course obligated me to rearrange my budget.

4. Lack of funding for genetic analysis.

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

1. Over the period of my study we confirmed that the golden-headed-lion tamarin can survive using exclusively cabruca agroforests.
2. GHLTs' group sizes are similar in cabruca agroforest compared to other habitat types (primary and secondary forest).
3. Diet of GHLTs is concentrated on a very few species of tree compared to other habitat types and bromeliads showed to be essential for the groups that live in cabruca.

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

I have been working in six different farms (two of them are private reserves or RPPNs). Over the period of the study the owners of these farms and their employees have been informed of the occurrence of an endangered species of the tamarins in their farms and the importance of these records for species conservation. The farmers and their employees specially became a kind of "ambassadors" for the conservation of the tamarins. I believe the local community started to create an "environmental awareness" due to their contact with our project. One of the results of this "environmental awareness" is that hunting, a common practice in the region despite it being illegal, decreased in the areas where I worked. Another important result is that on one where farm I worked, the owner asked me to help her to legalize her farm in terms of a legal reserve (by law, 20% of the any farm's area in Atlantic Forest region has to be preserved, but this is barely enforced in the region).

Also my field assistants are investing in their education. One of them will apply for a bachelor degree in Biology at a local university and one (a vet) will apply for a graduate programme in ecology at the same university.

5. Are there any plans to continue this work?

Yes. Although my fieldwork is part of the requirements for my PhD degree my project is considered one of the highest priorities by the International Committee for the Conservation and Management of the Lion Tamarins, a group of specialists responsible for evaluating challenges and suggesting research priorities for the four endangered species of lion tamarins. Understanding the effects of matrix characteristics on species and population dynamics is an important issue in fragmented landscapes, especially in those such as Bahia state where the "matrix" is now more abundant than the original habitat. Moreover, in Bahia the loss of native forest and cabruca habitats is occurring faster than scientists are able to understand these forests. This habitat loss has important implications for the record-levels of biodiversity found in the region. Thus, I intend to construct my academic career and continue my research on the lion tamarins and their relationship with the matrix of habitat, in this region.

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

Most of the results from my research will be submitted for publication in scientific journals. Oral and poster presentations in scientific meetings will also be part of the divulgation of my results. All

farmers and their employees where I have been working have been informed about my achievements and their implications for the tamarins.

I will also participate on local meetings such as “the cocoa dialogue” a regional meeting where we will discuss the economic viability of cocoa plantations vs the biodiversity on this agroforest.

I am also planning to publish my results in scientific divulgation journals to reach the non academic public.

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

The RSG funds were used from March 2008-February 2009. Although this timescale is the same as my original project’s length I am behind on my original schedule due to the problems described 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
1. Vehicle maintenance and fuel	840.00	840.00	0	All money for vehicle maintenance and fuel were used.
2. Survey supplies	1200.00	1200.00	0	All money for vehicle maintenance and fuel were used.
3. Telonics TR4 receiver and case	430.00	430.00	0	The money was used to repair receivers (3) instead to buy a new one.
4. Per diem for assistant	2400.00	2400.00	0	All money to cover expenses of the field assistants was used.
Other expenses				
TOTAL	£4870	£4870		

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

Although my research already give an important contribution for the lion tamarins’ conservation, I believe the goals not accomplished in my project (genetic structure of the populations and cabruca characterization), as well as an increase in the sample size (continuation of the monitoring of the captured groups as well as increase the number of lion tamarins’ groups monitored) will allow me to give a more robust contribution for the species conservation.

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?

My results will start to be presented next semester in two international conferences:

- 2nd World Agroforestry Congress (Nairobi-Kenya)
- American Society of Primatology (San Diego, CA USA)

- The Rufford Small Grant Foundation logo will be used and acknowledged in these conferences.

11. Any other comments?

There is one paper accept to be published in *Animal Conservation* and another one is in preparation to be submitted to the *Journal of Environmental Management*. In both publications the support of the Rufford Small Grant Foundation will be acknowledged.