

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	Bianca Ingberman
Project title	Assessment of the status and identification of priority areas for the conservation of the Endangered Southern-Muriqui in southern Brazil.
RSG reference	11601-1
Reporting period	July 2012 – June 2014
Amount of grant	£6000
Your email address	bibugio@yahoo.com.br
Date of this report	8 th July 2014

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
1 - Estimate the current occupancy probability of the southern murrelet in Paraná State.	X			We still could not accomplish this objective for two main reasons: some of our "sampling sites" were still not surveyed; and, all the interviews we did resulted in reports of absence of the animals.
2 - Assessment the conservation status of southern murrelet in Paraná State.		X		Throughout the work, new evidence from the historical distribution of the Southern-Murrelet in the Paraná State was found. Based on several interviews, we concluded that this monkey historically did not occur in the APA (Área de Proteção Ambiental-Environmental Protection Area) de Guaraqueçaba region. This observation suggests that the occurrence of the Southern-Murrelet is even worse, because APA Guaraqueçaba, an entire forested and preserved region, had to be excluded, reducing murrelet's area of probable occurrence in Paraná State to a landscape mainly fragmented.
3 - Identify the environmental variables that best explain the presence of the species.		X		For the same reasons of the objective 1, we could not fully accomplish this objective. However, we have observed that anthropic pressure (deforestation and hunting) is a major influence that could explain the presence of the species in the fragmented forested areas.
4 - Indicate the priority areas for conservation of this species in the study area.		X		To date, we were able to indicate one priority region (Ribeira Watershed) for conservation purposes. It was a very important assumption, because this region is fragmented and it still suffers anthropogenic pressure.

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

Several unforeseen difficulties arose during the fieldwork. Access to some sampling sites were harder than expected. There are few which access is only by boat and others only by 4WD car. Some became completely isolated due to problems caused by the intense rain. Besides, once reached the

place some respondents were not at home. All these unforeseen difficulties led to a doubled field effort since we had to return to the sampling site to do the interviews and to faraway places, where can be reached only by boat, took even more time to be sampled (e. g. another entire day). On some occasions, due to the intensity of rainfall, fieldwork had to be cancelled and we needed to wait for dry days which also delayed the work. Yet there were serious local problems like flooding and fallen bridges that made some of them completely isolated. For those places it takes months to repair the damage and access to be made by local authorities. In February 2014, with the ending of IPeC's other project which acquired a 4WD pickup, this car was available for use by this project which has facilitated access to some sampling sites.

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

The project outcome brings very important information to the conservation planning of the southern muriqui in Paraná State and to the understanding of the species geographic distribution in its southern limit.

After Aguirre's Monographs (1971), it was suspected that the distribution of the muriqui extended into the state of Paraná. It was confirmed in the year 2002 with the encounter of a population in a small fragment (> 500 ha; Koehler *et al.*, 2002). From then on, according to literature its distribution in Paraná State was the APA (Área de Proteção Ambiental- Environmental Protection Area) de Guaraqueçaba and Ribeira Watershed regions (Figure 1), which is this project study area. From interviews, it was observed that historically the muriqui did not occur in APA de Guaraqueçaba, a large forested and protected area, which increases the concern regarding the species conservation in Paraná State.

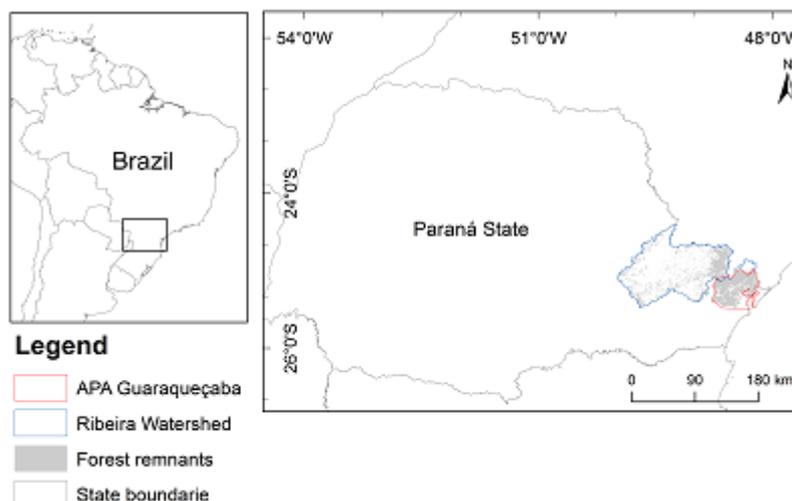


Figure 1: Geographic distribution area of southern muriqui in Paraná State according to literature.

Second outcome is the evidence of new muriqui populations in Paraná State. Throughout interviews, a new population was reported in an area not described yet. It is in the same region of the known population about 10 km away. Due to difficulties reported above it was not possible to directly survey the area to register its occurrence there.

The third outcome is the factors that best explain the presence of the species in this region. It was expected that environmental variables could explain muriqui occurrence. However it is related to its

historical distribution and the remnant population to human disturbance (like encroachment and historical hunting).

Those outcomes provides a new direction to the effective conservation planning efforts of the southern murrelet in Paraná State by focusing in its real historical distribution area and in the fragments where the specie can really be present.

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

Not relevant

5. Are there any plans to continue this work?

Due the unforeseen difficulties already described above the field work hasn't been already finished. In January 2013 a 2-year complementary grant was awarded (c. 6 months after than expected) and in February 2014 a 4WD pickup was available for this project. Those two factors allowed the continuity of the project and access to the isolated sampling sites. Despite that main objectives were partially achieved we already have many outcomes, however some require further details. I believe that new populations could be found in Ribeira Watershed and the northern border of APA de Guaraqueçaba should be better explored. Then, the fieldwork will continue until the end of this year and the products (as the technical report to the governmental agencies with a map of priority areas) will be done after it, at the beginning of 2015.

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

The outcome that contributes to the limits of southern murrelet historical distribution – the non occurrence in APA de Guaraqueçaba – is being discussed in a scientific article submitted to the American Journal of Primatology.

All the outcomes were presented last year and will be presented again this year in a symposium of the Ecology and Conservation Post-Graduation Course where students and teachers of the programme will be as well as all UFPR undergraduate or graduate interested.

The southern murrelet status analyses on a regional scale (Paraná State) will be addressed in my PhD thesis and a scientific manuscript will be written. Also, after the fieldwork and data analyses, a technical report containing current status of the southern murrelet on the south edge of its distribution with recommendations for its conservation in the state of Paraná will be sent to the regional and national government environmental agencies (IAP – Paraná's environmental institution and CPB - the Center for Brazilian Primate Protection).

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

From July 2012 until March 2014.

The RSGF Grant was fundamental to this project. Without it the project would have began in January 2013 or even not happen at all, because I believe that RSGF was important as a counterpart at the Boticário Group Foundation grant.

It was very important to start the project in 2012 to finish it on time due to the unforeseen difficulties we found. Because of the earlier start we were able to find solutions to the difficulties and tackled the problems.

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	1848	0		
lodge	2200	0		
GPS	403	0		
feed	1549	0		
TOTAL	6000	0		

Exchange rate: R\$2.7 (two Brazilian real and seventy cents) = £1.00 (one pound Sterling).

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

First it is important to finish this project and share the results as planned. In second place, it is to confirm the species occurrence "in loco" through direct observation at the areas indicated by interviews and start a process to make it a protect area.

At the same time it is important start new research projects with those remnant Southern mურიკი populations and contribute to the Action Plans goals achievement.

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?

The RSGF has been receiving publicity at IPeC's website as a Project funder since the grant was awarded. You can see it at : <http://ipecpesquisas.org.br/pesquisas-e-publicacoes/pesquisas/ecologia-e-conservacao-pesquisas/fatores-ecologicos-de-influencia-na-distribuicao-geografica-do-muriqi-brachyteles-e-bases-para-formulacao-de-uma-estrategia-de-conservacao-para-o-sul-do-brasil/> (link specific from the project) and at <http://ipecpesquisas.org.br/financiadores/> (link of actual projects funders).

11. Any other comments?

As described above we had several unforeseen problems and difficulties at the fieldwork of this project. These delayed the final outcomes which will be ready in the beginning of 2015. I commit myself to send RSGF all expected products from this project as well as thanking for the grant.