

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. The Final Report must be sent in **word format** and not PDF format or any other 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. 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. Please note that the information may be edited for clarity. 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	Gabriela Verónica García
Project title	Diversity and composition of small mammal assemblages in the Atlantic Forest (Misiones, Argentina)
RSG reference	17.05.09
Reporting period	November 2009 – March 2011
Amount of grant	£5960
Your email address	veronaleodream@hotmail.com
Date of this report	June 2011

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
Description of the small mammal assemblage structure		Partially		This objective is partially achieved because I have not finish the field work yet. It will be completed during this year (2011).
Quantify the seasonal change in abundance of the species of the small mammal assemblages along the study period		Partially		This objective is partially achieved because I have not finish the field work yet. It will be completed during this year (2011).
Analyse the effect of the native forest replacement by pine monocultures over the small mammal assemblages		Partially		This objective is partially achieved because I have not finish the field work yet. It will be completed during this year (2011).

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

The main changes in the project were related to the sampling design. Originally, I had proposed to work comparing three kinds of habitats, the primary native forest, secondary native forest and older pine plantations. Because of the spatial location of the older pine plantations that were available with respect to the primary and secondary native forest, I chose to compare the two more contrasting habitats, the native forest versus pine plantations. To control the environmental variability I used a sampling design in blocks, increasing the number of replica for each habitat type.

Initial difficulties were related to logistics, given the distance among sampling sites and their accessibility. These were surpassing during the first phase involving the choice of the sites and installation of pitfall traps. However, the distance among blocks made it difficult to sample more than one block at a time, since surveying each one required a full day of field work in most cases. Another difficulty was the field identification of the specimens, given the possible presence of cryptic species and the similarity even among some genera. Besides, there is little information about the presence of some species (in some cases, a few records of more than two decades ago) and during the last years new species have been described based on old records. For example, *Abrawayaomys chebezi* has been recently described based on only one specimen collected in 1988. To overcome this difficulty I decided to do first a removal sampling in all the study area collecting the captured specimens to conform a reference collection that allow me to improve the species identification during the later capture-recapture sampling. Anyway, during the capture-recapture surveys I have taken, and will take, tissue samples from the ear, hair and photographs as a record of the captured individuals, to ensure the subsequent identification of individuals that are difficult to identify.

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

A- Even though my results are still preliminary I have already detected an important difference in richness between the pine plantations and the native forest. The richness in pine plantations is lower than in the native forest and in general, only two species, *Oligoryzomys nigripes* and *Akodon montesis*, are recorded in this environment.

B- The species abundance is lower in pine plantations than in the native forest. In two extreme occasions I even did not capture any individual in the sampling sites at pine plantations.

C- I recorded, for the first time, the presence of *Brucepattersonius* sp. at the National Park Iguazú. As I mentioned above, the genus this species belongs to has been recently described and there are only a few records for the province. Something interesting about this genus is that still nobody knows how many species are there in the province. The specimens collected during this study will contribute to clarify this issue.

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

Two provincial park rangers from Misiones province participated as field and research assistants in this project. They have been trained in the identification of the native species of small mammals and have learned about the ecology and the importance of the conservation of this group so badly know in the province.

5. Are there any plans to continue this work?

Yes, I have plans to continue with this work, studying how other kinds of land uses affect the small mammal diversity of the native forest. I am interested to further study other aspects of the effect of pine plantations on mammal biodiversity, including in the study the effect of different stand age classes. Also, I will continue studying the ecology of the different species in the native forest, trying to understand the detailed relationships of each species to microenvironments.

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

The information will be available to others by means of research papers to be published in peer-reviewed journals. The results will also be presented at national and international conferences. The mammalian research group at CeIBA, leaded by my advisor Dr. Mario Di Bitetti and to which I belong, has frequent contact with the state officers responsible for the conservation policies in Misiones, with local NGOs and with forest companies in the study area, to which they provide information and management guidelines. This group will also provide me access to the local mass media (newspapers, radio stations) to which I will bring news and information on the results of my research.

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 approximately 18 months. This grant meant a big contribution to my project and together with other funds, it became possible to me to complete the first year of field work.

During the current year I will be completing the last two surveys to finish the field work of my project.

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
Small Sherman traps	£1000	£600	-£400	The difference was due to the traps were bought in Argentina
Large Sherman traps	£1170	£700	-£470	The difference was due to the traps were bought in Argentina
Pitfall traps	£1335	£910	-£425	I needed less pitfall traps so I bought less
Digital camera	£180	0	-£180	I preferred to use an old digital camera to buy instead a GPS
Subsistence (food and per diem expenses for assistants)	£500	£700	+£200	
Field station fees	£963	£800	-£163	
Insurance	£66.72	£315	+£248.28	I needed to hire the insurances for all of the year, because I went to the field very often with volunteers.
In-country travel and fuel	£744	£940	+£196	The price of the gasoline increased throughout the year
GPS	0	£335	+£335	I needed a GPS with good signal under forest cover
Vehicle maintenance	0	£660	+£660	The vehicle used had to be repaired several times, mostly because of the state of the trails.
Total	£5960	£5960		

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

In relation to this project the important next steps is to finish the field work this winter and next summer. This year I will be presenting partial results at a national conference and during the next year I will be writing the results of the whole project as part of my doctoral thesis. I am planning to finish a draft manuscript of this thesis by December 2012.

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?

I haven't had the opportunity yet to use the RSGF logo. Up to this moment I have focus my effort in the field work. However, as I mentioned above, this year I will be participating in a national conference where I hope to have the chance to present partial results and I will acknowledge the support received from RSGF.