

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	Sebastián Andrés Torrella
Project title	Fragmentation and conservation of the Forest of Three Quebrachos in the Central Subhumid Chaco Region
RSG reference	74.06.09
Reporting period	Dec 2009 – Jun 2011
Amount of grant	£5542
Your email address	<u>Sebasat02@yahoo.com.ar</u>
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
To evaluate possible interactions between fragmentation and tree diversity in forest patches.			X	
To quantify and describe the shrubs and trees diversity in the windbreaks.			X	
To compare the composition of shrubs and trees communities between windbreaks and other forest patches			X	
To disseminate project progress and results of the project		X		This objective was carried forward but will become more dissemination of results from here on (see item 6).
To propose management strategies for forest conservation		X		While some recommendations were made in this regard, we have seen that this requires further elaboration interacting with local producers. Time does not have attained to achieve this objective fully.

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

Personal problems (just born son was seriously ill), prevented me from travelling between November 2010 and March 2011. So, the schedule of project's activities was delayed, and we still need to finish with statistical analysis of the data.

Not always was possible to assemble teams for field trips over 5 days. So, we made more trips than foreseen, but of shorter duration each.

We made a complex sampling design, based on the structure of the landscape and not just in patches. This is important for a study of fragmentation and is rarely taken into account. We also include in the sample the seedlings of tree species. But to complete the field work with the planned sampling effort, we consider only the trees and not shrubs in forest patches. We include shrubs in windbreaks, and we compare these data with prior information we have about shrubs in other forest patches.

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

1. Regeneration and tree diversity in small forest fragments (0.9 – 5 ha) is similar to larger fragments. This is important to rescue the conservation value of these small fragments. That should be considered in any management strategy at landscape scale.
2. Exotic plant species was detected in windbreaks but not in forest patches. This indicates that the windbreaks are more vulnerable to biological invasions, probably due to its spatial configuration. This is an important result for landscape management and based the proposal to encourage lower edge-density spatial configuration to the remaining forest from now on.
3. This is the first study on fragmentation effects over tree community in central sub-humid Chaco Region. We are providing basic scientific information about one of the most threatened ecosystems in the region. This information will be essential to advance in conservation policies for this environment.

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

The local producer's association "APRACH" provided logistic support, hostelling and contact with landowners. Rural people from the region were directly involved in the project because 100% of the windbreaks and forest patches analysed are within privately-owned lands. We explained the aims of the project in all cases and most of time the landowners were very interested and were willing to actively cooperate with our activities in their properties. Additionally, we discussed the objectives and partial results of the project with students, teachers and local population at two local schools in the area. Among the conservation strategies that may arise for these forests, a possible component is economic compensation by the state to the owners of the land. If realised this would certainly be a great benefit to them.

5. Are there any plans to continue this work?

Yes, by one side we are planning a new stage of our work focused on the forest management plan's elaboration. This will require intensive interaction with local stakeholders to create a realistic management plan and applicable. The goal is that they receive a reward of national funds to conserve these forests. The results of the present project will serve as baseline for that.

By other side, we plan to continue our studies on the effects of fragmentation on the vegetation in particular examining the edge effect.

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

I plan to provide information to local population, producers, forestry technicians and decision makers through a booklet that we are editing and workshops. According to that, we are sending to print a booklet with information about the three quebracho forest, its degree of threat, some results of the project and raising the need to generate new conservation strategies.

Partial results of the project were presented in "IV Reunion Binacional de Ecologia Argentino Chilena", in Buenos Aires, August 2010; and in "III Jornadas Argentinas de Ecologia de Paisajes" in Bariloche, May 2011.

Based on the results obtained, I will prepare scientific articles to be submitted to journals specialised in forest ecology and conservation. Thus, the results will be available to the international scientific community.

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

In December 2010 we worked in the sampling design and site selection, we did the fieldwork from January 2010 to March 2011. Fieldwork took longer than expected due to personal problems preventing me from travelling between November 2010 and March 2011.

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.

I finally receive the grant the 16th November 2010, which were \$34,665.13 Argentinean pesos (with all the bank discounts and commissions). The local exchange rate used was approximately **1£ = \$6.28** (at the moment when I receive the budget).

Item	Budgeted Amount	Actual Amount	Difference	Comments
Bus Transfer	869	1200	-331	Due to organisational reasons, had to organise the field work in more trips of shorter duration each.
Vehicle rental	1656	1568	88	Agreement with local farmer allowed us to save on this item.
Fuel	248	239	9	
Food	1440	1250	190	
GPS	215	220	-5	
Digital Camera	95	97	-2	
Fieldwork tools	155	138	17	
Congress presentations	270	400	-130	For one of the congress we had more travel costs than expected
Dissemination material	330	400	-70	We are working on developing a more extensive material than originally planned
Contingency	264	30	234	Bank commission
Total	5542	5542	0	

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

- Edit and distribute the booklet that we are working on.
- With all the data that we made; the next step is to identify conservation strategies for the “forest of three quebrachos”.
- Make a workshop with local producers, going to another stage in the work.

- Publish the results of the project in national and/or international scientific journals.

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?

Yes, I use the logo in an oral communication in the scientific meeting: “Reunion Binacional de Ecologia Argentino - Chilena”; and in “III Jornadas Argentinas de Ecologia de Paisajes” in Bariloche, May 2011.

The logo is present in the booklet that we are editing

11. Any other comments?

I am very grateful for the support and confidence of RSG to our project because it was very useful for our research.

Since a lot of information was obtained during the course of this study, only the main results are briefly discussed in this report. I plan to elaborate a more detailed final report with a greater development of the procedures used and results obtained.