

The Rufford Foundation

Final Report

Congratulations on the completion of your project that was supported by The Rufford 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	Mariana Pereyra
Project title	Conservation of a biodiversity reservoir of Espinal forest: a big forest fragment immersed in a green soybean desert.
RSG reference	20780-1
Reporting period	January 2017- January 2018
Amount of grant	£ 5000
Your email address	mpereyra@imbiv.unc.edu.ar
Date of this report	07/02/2018

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 record the mammal species that inhabits an exceptional area of Espinal forest.				Finally, we performed the sampling only with camera traps (and avoided looking for footprints and scats) because they were in the field by more than 1 month and revealed interesting and enough data. We also asked mammal specialists to advise on the performed sampling. Also, two mammal specialists helped us to locate the camera traps in the field.
To work on educational issues with the local community in order to enhance the value of the conservation of this forest relict.				<p>We have performed educational talks in the school. Also, we did a science fair with different activities and games related to the importance of native forest conservation. We designed a game on which seeds of native species have to go across different ecological and climate challenges until they germinate.</p> <p>Also we bought books from native species of this region and made up in the school a scientific library. The greenhouse was constructed and we bought the materials to install the automatic watering system but it has not been installed yet because classes ended (summer holidays between December 2017 and February 2018). This will be installed on February 2018.</p> <p>Also, in February 2018 we will make a book to be distributed in the school, which will include childrens' drawings of the mammal species sampled in the remnant forest.</p>

<p>To propose the creation of a Reserve.</p>		<p>We started presenting the documents for the procedure that allows the owner of the land to obtain money as a benefit for conserving the remnant forest (an initiative depending on a national law that regulates forests). This is a very important step to obtain the property documents of the land. Also, we are in touch with a lawyer that is providing advice in the necessary legal procedures to create the reserve.</p>
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2. Please explain any unforeseen difficulties that arose during the project and how these were tackled (if relevant).

It is important to mention that sometimes in development countries matters related to political issues are not always as expected. While we were working in the field we detected illegal deforestation performed to construct a canal to drain the water. We discovered that the canal was being done by some field owners and with illegal support of the Provincial Government. This remnant forest is categorised as “red” by law, a category that protects forests with a high conservation value, and cannot be deforested. Once we discovered the machines in the field we made a complaint and the construction of the canal was stopped. Also, we appeal to some local media to report what was happening. Below you can find some press articles:

<https://latinta.com.ar/2017/10/alerta-desmonte-norte-cordoba/>

<http://www.elfederal.com.ar/cordoba-construyen-un-canal-talando-bosque-nativo/>

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

1. A complete inventory list of mammal species of the remnant forest. Surprisingly, we found a diverse number of species that continue inhabiting the forest despite the poor context of the patch. This is very useful due to the ecological implications, for instance, the ecological services provided by mammal species. Furthermore, as we explained before we added the mammal list obtained to the lists of the other species (plants, birds, and insects) we already had in order to make up a complete species list for the reserve.
2. The interaction gained with the local people and the activities undertaken at the school. We interacted a lot with teachers and students and they expressed that the greenhouse and the activities performed were very helpful for the students.
3. Towards the creation of the reserve. Although it is half completed, in the next months we are going to do our best to accomplish it. It would be very

important to our province to gain a reserve with such an exceptional biodiversity, considering that it corresponds to a relictual phytogeographic region from Argentina (Espinal).

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

The project has contributed to the community in several ways. Firstly, we helped with the documents to the family who are the historical owners of the land where the forest fragments are located; they have very few resources and low educational levels and they did not know how to organise them. Secondly, our project contributed a lot in the school because it is a very small one and it is located far away from big urban areas, so the activities and proposals from university or from research centres are limited. It is very important for children of this kind of villages to have the opportunity to establish this kind of interaction.

5. Are there any plans to continue this work?

Yes, we plan to continue working there, not only with educational issues but also until we reach the construction of the reserve.

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

We are planning different strategies to share our results. One is for Tinoco's community where we are planning to make a book with childrens' drawings and also leaflets with all the biodiversity of the remnant fragments. At the same time we are planning to make a report for an important newspaper from Córdoba, Argentina. The objective of this is to show the high value of conservation of this big fragment, and extend the importance to other similar relicts around the province.

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

We used the RSG in a period of 12 months; but we are going to continue using it for the next months. As explained before sometimes political and bureaucratic issues does not work out as expected.

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
Camera Traps (54 £ each x 8;P18 7 Megapixel	432	0	+432	During the field work we interacted with mammal

Compact;with Batteries and SD Card)				specialists. So, we borrowed from them the necessary camera traps.
GPS device (50 £ each x 2)	100	250	-150	We bought two GPS (brand Garmin Etrex 10).
Digital camera	400	0	+400	We used a personal digital camera.
Fuel (300 l, 0.91 £ per litre)	273	350	-77	We performed more trips than the expected, and the cost of fuel rose significantly.
Vehicle rental (20 days)	600	0	+600	We used our personal vehicles.
Wire mesh	91	110	-19	
Half shade cloth	35	52	-17	
Wood posts	75	107	-32	
Nylon	0	35	-35	We bought this item to protect the floor inside the greenhouse.
Seedling production (including greenhouse maintenance and watering)	400	0	+400	Some of these items are detailed below.
Smart valve watering controller, sprinklers and electric pump	0	215	-215	We had not initially budgeted this, but we realized that we need it to manage for the water use.
Water tank	0	90	-90	We bought this item to avoid using the water supply of the school.
Plastic pipes	0	20	-20	We bought this item to connect the tank whit the watering system.
Materials for bench construction	0	125	-125	For the greenhouse, we constructed wood tables to facilitate seedling production.
T-shirts	0	143	-143	We bought some t-shirts for us and some volunteers.
Paper and office supplies	67	80	-13	
Color printings - Posters (20 posters, 15 £ each)	300	300	0	
Color printings. Leaflets (400 leaflets, 1 £ each)	400	450	-50	
Donation biodiversity books (school)	200	250	-50	
Binoculars (4 per £ 100 each; for educational issues)	400	415	-15	
Lawyer assessment	196	360	-164	
Presentations of scientific	100	0	+100	We have not communicated the

meetings				results of our project yet. But we are planning to present them in a scientific congress.
Food (per 20 days for 5 people)	500	500	0	
Leather Half Chaps (per 6 pairs; 38 £ each pair)	228	228	0	
Contingency (5%)	239.40	340	-100.6	
Totals	5037	4420	+617	

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

- Continue working with native species seedling production in the greenhouse at school.
- Continue sharing the experience with students, teachers, local community, NGO activists, and municipal leaders in order to promote conservation of forests.
- Perform educational materials about the mammal species sampled and also with the importance of conserving all the biodiversity.
- The construction of the reserve.

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

Yes, it is possible to see in previously sent photographs that the Rufford logo appears in the game board made, the t-shirts and in the posters performed for the science fair. Also it is going to appear in the book that we are going to make with children drawings.

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

Ernesto Verga, Pablo Huais and **Gabriel Grilli** have actively collaborated in all the objectives.

Leticia Sanchez Hümöller has collaborated with the educational activities.

Leonardo Galetto, Florencia Ferreira and **Carolina Torres** contributed with project writing and design.

12. Any other comments?

The Rufford Small Grant was a wonderful opportunity to perform activities related to research and at the same time to contact with community members and their queries and concerns, the latter being an activity that largely differs with the "academic world". There not exist many grants that promote this kind of positive interactions. Lot of thanks for the opportunity!