

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	Leandro Macchi
Project title	Balancing biodiversity, carbon stocks and food production in the Argentinean Chaco
RSG reference	15404-1
Reporting period	1.12.2014/30.11.2015
Amount of grant	£5000
Your email address	leandromacchi@gmail.com
Date of this report	10.12.2015

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
Spatialisation of yields patterns		X		I compiled yield data from three different projects. And work in a net return model for crops and cattle production.
Spatialisation of carbon patterns		X		The map is ready for forest; I'm working in carbon stocks inside silvopastures. Field data has been collected and tree cover map almost ready to combine them and make the complete map.
Spatialisation of carbon patterns		X		Done for presence/absence data, working in abundance data also.
Land cover map			X	
Tree cover			X	
Trade off analysis		X		Once the maps are finish the optimization process start. I have participated in training courses of related software during this year.
Scenarios		X		We have done one workshop and planning one next year with stakeholders to define scenarios.

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

As expected time is the most difficult variable to control, the project is going good in terms of objectives and units. The three main components (biodiversity, yields, carbon) have progressed substantially. Data collection has been finalised. Now I'm in the intermediate stage of modelling this field data into maps so I finally get into the stage of running the trade-off optimisation software.

During the last year I was able to be involved in the development of an international project involving partners of three institutions in Argentina and the Geography Department of Humboldt University (Berlin). We have worked in a workshop to define mixed goals. Also some results of this project have been recently presented in Neotropical Congress of Ecosystems Services (<http://www.geap.com.ar/cisen4/>) and in the International Congress of Conservation Biology (<http://www.iccb-eccb2015.org/>).

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

- To create a big data base and maps of yields-biodiversity-carbon stocks for the Chaco.
- Organise a workshop with scientists involved in research projects in the Chaco to combine objectives and define a joint agenda.
- Spatially assess the trade-offs between these components and provide spatial solutions that minimise the trade-offs under different scenarios.

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

Local communities including stakeholders, ONGs and governmental agencies are involved in the project directly by participating in workshop and surveys planned for the coming year to define: how they value and consider biodiversity carbon yields. This will allow setting the scenarios planning in a realistic manner, involving local person in the decisions process that will set the targets and costs in the optimisations analysis

5. Are there any plans to continue this work?

The work is planned to continue at least for the coming 2 years, where I intend to finish this proposal objectives. Also I have been granted a permanent investigator position in Argentina where all the ideas related to the Chaco are the main focus of my research.

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

Journal publications is the first way share this results. It will give credibility to all the analysis and will allow opening products freely to any person interested in using the maps or the datasets. I consider that the spatial solutions aimed in this project can greatly feed the national governmental zonation process of the region, which is re-evaluated every 5 years. Also the results of this studies will be published in Spanish in a divulgation media.

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

The grant was used during 2015 as was stated in the proposal. I help cover expenses of GIS technician, field data and, one GPS and parts of the viatics for internship in Humboldt Institute.

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
Internship Deutschland	1643	1740	-97	During the internship I participated in an international conference having more expenses that expected (http://www.iccb-eccb2015.org/)
Field trip	1680	1450	230	
Technical assistant	1500	1500	0	
GPS Garmin etrex 20 Handheld	125	104	21	
Total	4948	4794	154	

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

I think that entering into the optimisation stage of the projects and presenting these maps to the stakeholders, government's agencies and NGOs next year through workshops will be a crucial and exciting part of the project.

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

The RSGF logo was used in all the conference presentations (oral and poster) in both Argentina and France.

11. Any other comments?

I'm really grateful to Rufford foundation for supporting this intermediate stage of my career. It really help me to push the results and objectives from my PhD to a new stage, I been able to get involved in a net of investigators all focussed in the Chaco problematic from different perspectives. And also help me to get a position as investigator in Argentina.