

## The Rufford Small Grants Foundation

### Final Report

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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](mailto:jane@rufford.org).

Thank you for your help.

**Josh Cole, Grants Director**

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Grant Recipient Details	
<b>Your name</b>	Sebastián Augusto Ballari
<b>Project title</b>	Impact of the European wild boar ( <i>Sus scrofa</i> ) on the biodiversity of the humid chaco, Argentina.
<b>RSG reference</b>	11.07.09
<b>Reporting period</b>	December 2010
<b>Amount of grant</b>	£4832
<b>Your email address</b>	<a href="mailto:sebastianballari@yahoo.com.ar">sebastianballari@yahoo.com.ar</a>
<b>Date of this report</b>	18.02.11

**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
Contribute to the knowledge of the ecology of wild boar within a protected area			X	We learnt about wild boar biology in El Palmar National Park in terms of distribution, food habits and abundance throughout the year. The wild boar selected not significantly different environments - yatay palm, palm forests, grasslands and crops. We identified a few very important food items for the boar, such as maize, palm fruits yatay and pigeons.
Predation on natural and artificial rhea nests by wild boar		X		We assessed predation on artificial nests of rhea. However, so far, no natural nests could be found within the park. The wild boar was one of the rhea egg predators, along with foxes and armadillos.
Predation on seedlings of yatay palm by wild boar			X	Seedling predation of yatay palm was assessed using an alternative methodology than the one proposed but was equally effective. So far, no increased predation meaningful results yatay palm seedlings.
Describe and quantify the negative effects of wild boar on local biodiversity			X	So far, there is limited evidence of direct negative impacts on the species considered in the study. However, we believe it is of vital importance to continue the investigation of the negative impacts on ground nesting birds and yatay palm as well as to include impacts on soil communities (e.g., invertebrates, roots bulbs, etc.).
Provide information to improve the management and control guidelines of wild boar and contribute to a better management of the native ones		X		We obtained important distribution and abundance information for the management of wild boar. However, we believe it is important to continue studies on the biology of the wild boar and the interaction with native species in El Palmar National Park in order to delineate appropriate management guidelines.
Indicate key elements to define the zoning of the activities of the Control Plan of Exotic Mammals, to avoid potential damage to native fauna and flora.			X	According to the results being obtained in this study is beginning to lay out the zoning of the Plan of Exotic Mammal Control El Palmar National Park.

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

During the project some minor issues arose that prevented the achievement of the objectives as expected. Mainly there were difficulties when touring the area; the topographical features reduced the possibilities of locating natural rhea nests. Additionally, nests are rare and inconspicuous, therefore we couldn't to assess nest predation.

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

We believe that the most significant results of our work are:

- We obtained new information on biology, distribution and abundance of European wild boar in the El Palmar National Park:
  - ⇒ The wild boar is uniformly distributed in the area, both in areas of grassland, forests and crops yatay palm (outside NP).
  - ⇒ The wild boar used that are important food resources for native species such as palm yatay fruits to the rhea.
  - ⇒ Pigeons are an important food source for wild boar in certain periods of the year.
  - ⇒ The wild boar is one of the predatory clutches of rhea in the national park.
- It is identifying the annual diet of wild boar to the region, which is new information for our country.
- Indications such as the nest predation and resources competition are signs of negative impacts generated wild boar on native species under study.
- The data from this research are contributing to the restructuring of the Control Plan of Exotic Mammal at El Palmar National Park.

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

Local communities were actively involved in this research. Hunters from surrounding communities, under the coordination of the National Parks Administration, participated in the Control Plan contributing with data on the studied species and proving suggestions to improve the Control Plan. Additionally, we organised workshops for the employees of the National Park and park ranges, explaining the objectives, activities and results of this project. The attendees were mainly native to the area. Therefore, these workshops are vital to disseminate our research results to the local community.

**5. Are there any plans to continue this work?**

Yes. The work continues today, and we plan to continue sampling for the next 2 years. We firmly believe that the information obtain from this research will be useful for the management of European wild boar in protected areas of our country, to avoid or minimise the impacts on native species of conservation importance.

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

All information resulting from this work is shared with the National Park Administration for use in protected areas of our country where the wild boar generates negative impacts on native species. Similarly, the results are shared with researchers from the University of Tennessee with those two

publications are being developed under the impact of European wild boar in Argentina and the world. The information obtained in this work is available to any student and researcher who need it. During this year we will organise workshops to update the progress of the project in El Palmar National Park, also in the coming months will distribute a brochure for tourists to give information about the wild boar, their methods of control and their impacts on native biodiversity within the national park. Are developing and plan to publish at least two articles in international journals of conservation for the dissemination our results.

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

The RSG was used from November 2009 to November 2010. The funding covered the cost of the first year of fieldwork, being of vital importance for the fulfilment of the objectives. The research, however, will last for at least two years until late 2012.

**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
Field assistant	707,96	707,96	0	
Bus tickets	707,96	715,60	- 7,64	
Fuel	707,96	699,68	+ 8,28	
Maintenance during the fieldwork	619,46	590, 95	+ 28,51	
Hardware store elements (tools, wire)	353,98	350,66	+ 3,32	
Extras (batteries, photocopies, ink cartridges, paper)	353,98	348,60	+ 5,38	
Fungible material	265,48	159,18	+ 106,30	
Cost of scientific publications and material for extension purposes (bruchures, flyers)	353,98	353,98	0	
Laser Rangefinder	353,98	349,99	+ 3,99	
Binoculars	176,99	164,99	+ 12,00	
Digital Camera	176,99	209,60	- 32,61	
Pendrive	53,09	53,09	0	
Bank Taxes		46,30	- 46,30	Discount fee payment order
<b>Total</b>	<b>4831,81</b>	<b>4750,58</b>	<b>+ 81,23</b>	

*\* Based on exchange 1 £ (pound) = \$ 6 (argentine pesos) average exchange between 11/2009 and 11/2010.*

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

This research will continue for at least 2 more years, until late 2012. Next steps include: more intensive studies of the species under study (wild boar, ground nesting birds and yatay palm), incorporate new sampling methods in order to obtain new results and collaborate with the management plan for exotic mammals in order to minimize impacts on native species and applications. We also plan to publish the results of this work in international journals of conservation and management as well as, in local

magazines. Furthermore, we are designing a brochure with information on the biology and impact of wild boar on native species for the general public. We will continue to organise workshops for local communities in the El Palmar National Park, in order to inform the problem on wild boars. Finally, we plan to invite other researchers to participate with the research on wild boar at the National Park, aiming to cover other topics related to wild boar and their impacts on native biodiversity.

**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?**

RSGF logo was included in a brochure to be printed and distributed in the coming months to the visitors of the El Palmar National Park. This brochure reports the biology of the European wild boar, its negative interaction with the native biodiversity and the importance controlling its populations in the National Park. During the IX Congress of Wildlife Management for the Amazon and Latin America (May 10 to 15, Santa Cruz de la Sierra, Bolivia) the RSGF logo was included on a poster presented, entitled "Management of European wild boar (*Sus scrofa*) in a protected area". The logo was also included in the PowerPoint presentations used at the workshops to the national park employees, park rangers and local communities. We are currently preparing two scientific publications in conjunction with researchers at the University of Tennessee (USA) and the National Parks Administration (Argentina), where we will acknowledge the RSGF financial support as an essential element for the realization of this work. RSGF logo is included in all workshops held in El Palmar National Park.

**11. Any other comments?**

I firmly believe that RSGF support was vital for conducting this research; without it, I could not have completed all the objectives. I consider that the support of the RSGF is very important enabling the development of research of great importance for global biodiversity conservation. I hope to be able to apply for a RSGF again, to complete this research with the best capabilities and resources.

During the work has changed the original name of work "Impact of the European wild boar (*Sus scrofa*) on the Biodiversity of the Humid Chaco. Argentina" by "Impact of the European wild boar (*Sus scrofa*) in the El Palmar National Park, Argentina "in order to define more precisely the area of study.