

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	Alejandro Ruete
Project title	Conservation of the Chaco Tortoise (<i>Chelonoidis chilensis</i>) on Sierra de las Quijadas National Park, Argentina
RSG reference	14565-1
Reporting period	January 2014-March 2015
Amount of grant	£3973
Your email address	aleruete@gmail.com

Date of this report	06 April 2015
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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
Generate baseline			x	A baseline of tortoise density and suitable habitats within the national park has been successfully established.
Predict the viability of the population	x			Unfortunately, because of the low tortoise density found in the park, it was impossible to fit a proper population model to estimate the population's viability.
Evaluations of the performance of the national park for preserving the species		x		The national park is not holding large tortoise populations, and connectivity among them is questioned. Preliminary results, point out that this is mainly because of the long history of cattle presence within the park. Modelling work is still under development to interpret the data.
Identification of core areas for the species protection		x		We found four restricted areas within the park where the species was present. Particular effort for protection of the species within these areas is recommended.
Educational campaigns		x		A first step of prospection of popular knowledge was successfully carried out prompting a generalised lack of knowledge about the species biology and conservation status among the park visitors. Educational posters were widely distributed on paper and over the internet. It was not possible for us to reach local aboriginal communities (Huarpes) due to their social organisation and difficult access.

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

The species was by far less abundant than expected. We increased the number of transects by revisiting the park as many times as possible. A total of four field campaigns were carried out. In the last campaigns we focused the resources on areas where the species was more expected.

Heavy rains in late February-March 2015 impeded field work forcing us to interrupt and reprogram the campaigns. The last campaign programmed for March 2015 had to be cancelled because of an extraordinary rainy period, but couldn't be reprogramed.

We understood that conservation issues regarding the intrusion of cattle within the park by neighbours were more sensitive than previously expected; therefore we will wait until we could count with the help of sociologists and pedagogues to design a proper approach to prospect their view of the species without increasing the problem with the park neighbours.

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

- a) For the first time we estimated the abundance of *Chelonoidis chilensis* in the national park, establishing a baseline for future conservation programs. In total we found 10 direct observations (live or dead specimens) on a total of 45 km of surveyed transects. A maximum of about 0.076 direct and indirect observations per km² was estimated for the western sector of open plain scrublands. Only 0.043 observations per km² were estimated for the Eastern part that includes grounds of variable topography, vegetation and human impact.
- b) We identified four independent locations where the species is more likely to be found, on which further studies are planned to recommend management plans.
- c) We identified a generalised lack of knowledge about the species biology and conservation status among the park visitors mainly from the major cities in the country, reflecting a severe misconception about the species, and revealing an ignorance about basic aspects of the species diet, habitat requirements, behaviour, conservation status and threats. Most of them ignore the fact that it is illegal to buy specimens of the species, and did not link the species with its natural habitat and food sources. Although expected, this information is novel and a solid baseline to educational campaigns. This information helped us to design a poster with the aim to revert common misconceptions and to educate potential buyers of the species. The poster has been widely distributed on paper and on line (shared 1440 times on Facebook as of today). Rough estimates allow us to assume that our educational campaign has reached at least 30.000 people (1440 Facebook shares x 20 unique visitors each + 250 interviewed visitors to the park x at least 2 word of mouth communication + 150 posters delivered x 5 at least readers).

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

The results of the study are being discussed and will soon be officially reported to the local park administration office. We had an interesting exchange with the local park rangers to whom we taught the novel sampling methods using smartphones. From their interest, a small project is being

developed to educate volunteer park rangers to collect species observations in other nature reserves in the region.

5. Are there any plans to continue this work?

Three research lines are thought to continue this work:

- a) To increase the knowledge of the biology of the species in the park, including sub-populations' connectivity and viability, as well as to explore their interaction with small mammals.
- b) To expand the coverage of the study to similar nature reserves in the region, with help of voluntary observation reports.
- c) To prospect the knowledge and use of local (aborigines and non-aborigines) people.

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

We presented preliminary results on the XV Argentinean Congress for Herpetology (2014). To inform citizens about the species vulnerable conservation status and some results of our research, we prepared posters to show on public places and on-line. Rough estimates allow us to assume that our educational campaign has reached at least 30.000 people. A report to the National Park Administration office is being prepared to inform about the results of our research and planned research lines. Two scientific articles are planned to be written; one showing the habitat preferences and threats of the species, and another one showing the perceptions of the species by potential buyers on the pet market (big cities inhabitants).

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 during Jan 2014-Mar2015. This included two more months than expected to complement field work.

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
Food	943	-491	452	Park rangers covered the need for volunteers, and their food was cover the park administration
Fuel	285	-152	133	Fuel for excursions within the park where cover by the park administration
Bus tickets to Cordoba city (headquarters)	643	-360	283	No other member of the team required to travel to Cordoba
Hand-held Android Devices (x3)	542	-440	102	Unexpectedly cheaper
Solar charger (x2)	174	-120	54	Unexpectedly cheaper
Portable Projector	215	-215	0	

Brochures, educational material and posters	567	-411	156	Cost was shared with the Centre of Applied Zoology (UNC)
Micro SD 16Gb memory cards (x2)	33	-18	15	
Kick-off workshop with park rangers	107	-90	17	
Antiophidic gaiters (x2)	92	-140	-48	Unexpected importation fee from USA to Sweden, including in the package other field items for the campaign (Pesola)
Antiophidic first-aid kit	63	-65	-2	
Scientific meeting inscription	309	-250	59	
Pesola (x2)	0	-140	-140	Required to weigh found animals
Bank account maintenance cost	0	-20	-20	Needed to extract cash from location
TOTAL	3973	-2912	1061	

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

A critical next step to know about the direct human pressure on the species in this area is to get in contact with NGOs and researchers of the social sciences to prospect local uses of the species. This study brings more evidence to the already planned cattle removal from the park. However, given that the species turned out to be so rare in the area, a deeper understanding of the underlying mechanisms of the threats acting on the species is needed to plan site level management actions and to estimate its viability.

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?

The RSGF logo was used in the above mentioned poster (attached to this report) and in the oral presentation held in the XV Argentinean Congress for Herpetology (2014).