

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. 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. 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	Ana Laura Nolasco Vélez
Project title	Diurnal activity patterns in reintroduced bison and the effect of their wallows in a grassland of the Ecological Reserve El Uno, Janos, Chihuahua
RSG reference	10649-1
Reporting period	March 2012 – March 2013
Amount of grant	£5841
Your email address	laura_nolasco3@hotmail.com
Date of this report	19th October 2013

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 determine activity patterns of a reintroduced bison herd		X		We couldn't get the GPS collars, so we recorded only diurnal activity patterns through direct observation
To establish habitat use of a bison herd		X		In the same way, as we couldn't get the GPS collars to follow bison mobility, we couldn't record at night time
To describe location and wallowing behaviour by bison			x	We didn't have any problem to achieve this goal
To evaluate the wallows effect in soil parameters and in forbs and annual grasses composition			x	We didn't have any problem to achieve this goal

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

We had difficulties to obtain bison GPS collars. By the time we got the inputs, our distributor had not any more the company domain, so we got in contact with the new owner but the cost of each collar was unaffordable, we could buy two GPS collars but spend all the money provided by Rufford. So we decided to continue with the original project proposal and replace the habitat use method using GPS collars by taking a coordinate every 30 minutes during observation periods. To assess this goal, we obtained the observer GPS mark, the direction to the herd with a compass and the distance from it with a rangefinder, then we got a herd mark on a map. We made sure of this method by taking real GPS points of the heard location once the animals moved on its natural course. The disadvantage of this method is that we only got records during behavioural observation periods, that are 4 or 5 hours per day, and we didn't get records at night or during the inter-seasonal periods, that is we have no continuous records through the entire year.

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

1. - Ana Laura Nolasco master thesis dissertation in the Biological Sciences Postgraduate with ecological orientation at National Autonomous University of Mexico.
2. - A work that explains behavioural patterns and habitat preferences of the species inside the reserve in order to inform management decisions according to the area availability and taking into account the ecotourism activities.

3. - A scientific paper that explains the impact of the species in the soil and vegetation parameters at short term scale. If they are a beneficial species in the ecosystem or it has already been replaced by domestic cattle in ecological terms.

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

For fieldwork we request community people help, so we worked together in taking soil and vegetation samples. We always were accompanied during behavioural observations by people interested in animals so we could explain them the importance of this project and the species relevance. We offered presentations for elementary children school and undergraduates of regional schools in order to improve the interest and emphasise the relevance of bison and other species into the ecosystem, and the importance of conserving natural attributes for the benefit of all.

5. Are there any plans to continue this work?

Yes, we need to encourage more students in the study of grassland ecosystem. This work needs to become multidisciplinary with the objective of interlace not just main species but all components of the ecosystem for the conservation and restoration of it.

We need to continue bison project as the species impact and adaptations needs to be evaluated in a long term scale. We found differences related with bison activity, but not as many as we expected, so we need to continue with monitoring to follow ecosystem changes related with bison presence.

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

We want to produce information in outreach magazines and booklets that can be provided to the communities involved with grasslands ecosystem and bison conservation.

We want to submit our work results in to a scientific paper and to present it in national and international congress.

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

It was used over a 1-year period. Bison herd at El Uno Ecological Reserve had any tracing since its arrival, and we didn't know anything about its establishment. This project marks the beginning of a long term scale project that involves bison in to grassland ecosystem restoration. Now we know habitat preferences of these ungulates in Janos region related with activity patterns, so we can take reintroduction and management decisions based on accurate information. We also know that this number of individuals doesn't have significant impacts on the ecosystem but as the main goal is to generate a satellite herd, we will continue tracking the bison herd and its impacts on Janos grasslands.

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
Five GPS collars	1267	0	1267	Our supplier sold his company, so the prices rose like commercial standards. We could buy two collars but would have spent all the money awarded by Rufford
Soil core sampling Kit	490	490	0	
Soil analysis for 45 samples	1127	1127	0	
Four field assistants from the community	1178	1178	0	
Food and fuel during field work	982	982	0	
Transportation (4 trips Mexico City-Janos)	797	797	0	
Accommodation (payoff per day) 120 days	1102	1102	0	Agrupación Pradera A.C. didn't provide us with an accommodation grant, so we had to pay our lodgement. This was not taking into account on expenditures budget.
Geomorphology course	98.14	98	0	This was not taking into account on expenditures budget.
Climatological station	123	123	0	This was not taking into account on expenditures budget.
TOTAL		5897		

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

We need to continue monitoring the herd over a long term scale until this conform a viable population. The main objective of the whole project is to reintroduce the species inside many points of its original range, so our first herd should be healthy, stable and as to large as the carry capacity allows it. We have now the first records of the behavioural and habitat use report. We now know the main impact on the ecosystem through direct observations and analysis of soil and vegetation parameters. We need to analyse the impacts over the long time period, like every 10 years, to describe gradual changes and get a clear response of the ecosystem to the presence of this species.

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?

Not yet, because we are still preparing the outcomes of this project. But we will use it on congress presentations, on Ana Laura master thesis dissertation presentation, and will be mentioned in papers acknowledgments.



11. Any other comments?

Even if the main goals were not fully achieved, the information generated through the project is essential for guidance of management and reintroduction decisions. That is in general terms our main goal.

