

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	Ronald Sosa Escalante		
Project title	Long-term effects of habitat modification on amphibians in		
Project title	the Yungas and Inter-Andean Dry Valley ecoregions		
RSG reference	Project RSG-12939-1		
Reporting period	March 2013 – June 2014		
Amount of grant	£5000		
Your email address	Yacarek@gmail.com		
Date of this report	30/06/2014		



1. Please indicate the level of achievement of the project's original objectives and include any relevant comments on factors affecting this.

	Not	Partially	Fully	
Objective	achieved	achieved	achieved	Comments
Objective To understand the responses of amphibians to potential impacts of long-term habitat change in protected areas and surrounding areas	achieved	achieved	X	It was achieved in a general way after the fieldwork and data analysis, nevertheless, to fully understand these responses, more fieldwork is needed because, there is a possible response of the amphibians in the study area to variations of the local climatic factors that difficult the interpretations, causing a inflation of the error type I. On the other hand, to achieve this objective, inconvenient of different type had to be faced. The principal was: Lack of access roads which forced to make more field campaigns (n = 6) than the expected in the original proposal. Nevertheless, it was expected, because the lack of roads or trails is one of the most serious problems for research in Bolivia.
				Despite the inconvenient mentioned, it was achieved understand in the general way the responses of amphibians to potential impacts of land-use change. In addition, it was possible due the help of park rangers who worked with us since the beginning.
To improve our knowledge about amphibian fauna and their habitats in the region.			X	Based on previous, was possible improve our knowledge about the amphibian fauna and the habitats in the region, but, to fully improve our knowledge more work is needed, in terms of field work and genetic analysis mainly. Nevertheless, based on the results obtained in the project is possible develop management recommendations for the amphibians in the study area.

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

As mentioned previously, the main difficult was the access to the study area. There was some landslide in some sectors that impediment the access to the sampling areas.



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

The most important outcomes of the project were:

- 1. We recorded a new record of an endemic frog (*Rhinella amboroensis*) for the Santa Cruz department, which only was previously recorded in the Cochabamba department (Carrasco National Park). This new record allows to extent the distribution of the species in 80 km SE, additionally, we record some aspects of the ecology of the species. At this time, the teamwork and I are preparing a natural history note for the Journal Check List with this information.
- 2. During the study, the presence of five of the 11 endemic species were confirmed in the area (Rhinella amboroensis, Rhinella justinianoi, Gastrotheca piperata, Pristimantis llojsintuta, and Yunganastes pluvicanorus). Likewise, it's possible that the individuals of Oreobates sp. collected represent a species new to science, which requires major studies to verify its taxonomic status.
- **3.** One of the main outcomes is the generation of new information for the study area. For example, as mentioned above, we have recorded new species for the region. In addition, we identify the main threats for the conservation of the amphibian fauna, for example the project for the construction of a dam in the study area. In this case, is important continue with the investigation in the study area to continue improving the knowledge about the species richness, species ecology and biology, for the development of management recommendations based in this new threat.
- **4.** Based in conversations with the teamwork, we believe that the main outcome of the project is the alliance between the Museo de Historia Natural Noel Kempff and the Parque Nacional Amboró (administrative personal and park rangers), because, without this alliance the completion of this project not have been possible. Additionally, we continue working with the park rangers in the creation a network for the collection new data.

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

The participation of local communities was very important. The people was very interested in the research and participated in all of the training sessions. After the different training sessions was possible to show that the local people change its attitudes about the amphibians and they now are planned projects of local development based in the conservation of the amphibians and their habitats.

On the other hand, was possible the implementation of a local web for data collection, the communities that are participating in this initiative are: Santa Rosa de Lima and Los Remates.

5. Are there any plans to continue this work?

Yes, there are plans to continue with this work, based on the obtained results. Because, for completion any project is necessary continue work with local communities, this is one of the most important issue in the conservation projects. Additionally, the realisation of a new project is important for reinforce the link between the research and the local knowledge obtained in this project.



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

At this point the project was shared in different instances, such as, in the Career of Biology of the Universidad Autónoma Gabriel René Moreno, the local communities of the study area.

On the other hand, the teamwork and I are preparing a couple of research papers with the results obtained in the project. One of the papers is related to the impacts of the long-term of land use on amphibian diversity and the other related to a description of amphibian richness of the region, in collaboration with researchers of the Senckenberg Museum.

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 as mentioned in the proposal, only we had some delay in the field work due to the access to the sampling areas, but all field campaigns was according the proposal.

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	Actual	Difference	Comments
	Amount	Amount		
Two tents	100	100	0	
Batteries (Alkaline D) 50 couple units	75	75	0	
Food 4 people for 45 days	900	1050	150	Difference provided for the Academia Nacional de Ciencias de Bolivia-Santa Cruz
Fuel 800 litres	360	380	20	Difference provided for the Carrera de Biología, Universidad Autónoma Gabriel René Moreno
Vehicle rental (four Wheel drive) for 45 days	2250	2250	0	
One voice recorder	300	300	0	
One GPS	200	200	0	
Local guides and support 2 people	400	400	0	
Alcohol 100 litres	150	150	0	
Formol 25 litres	75	75	0	
Plastic bottle of 1 litre, 100 units	100	100	0	
Subtotal	4910	5080		
Contingency 10%	491	508	17	Difference provided for the Carrera de Biología, Universidad Autónoma Gabriel René Moreno
TOTAL	5401	5588	187	

Is important to note that the budget present here is based in the budget present in the application. Each difference was supported for the Carrera de Biología, Universidad Autónoma Gabriel René Monero, with exception of the 150£ for food, which was supported by the Academia Nacional de Ciencias de Bolivia-Santa Cruz.



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

Continue with the field work in other regions of the study area, this is important to obtain a more realistic information about the amphibian fauna and its threats. As mentioned above, continue the work with local communities mainly to maintain the local web of data collection.

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?

Yes, we use the RSGF logo in all presentations that I and the team work was done during the project. Additionally, we will use the name of RSGF in all papers that we plan publish.

11. Any other comments?

It's noteworthy that all equipment purchased is in the Museo de Historia Natural Noel Kempff Mercado and will be used in current and future projects of wildlife conservation.