

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	Arturo Muñoz Saravia
Project title	Bolivian Amphibian Initiative
RSG reference	77.04.09
Reporting period	July 2009- July 2010
Amount of grant	£6000
Your email address	hyla_art@yahoo.com
Date of this report	July 30 th 2010

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
Amphibian Surveys			Yes	<p>We developed the amphibian surveys in nine areas of Bolivia in six ecoregions. We also monitored two localities in different times of the year, doing our transect and monitoring work normally once in a month.</p> <p>In this component we obtained information about some populations of amphibians and their habitat, data that are allowing us to prioritise species and areas for conservation purposes.</p>
Training			Yes	<p>During our work we have been training different people, sometimes students and local community members that joined us during the fieldwork and we trained them about amphibian work. We also developed a training workshop for parkguards of protected areas and people working in conservation NGOs in Tarija Department.</p>
Conservation education			Yes	<p>We developed educational workshops in local communities and also different activities in the Museum for people in the cities, sometimes bringing local community to the museum. We organized the week of the frog in the Museum where our amphibian exhibition was created and now a permanent exhibition is open in the Museum. We also developed our website and blogsite where information, news and tools are available for people interested about Bolivian amphibians.</p>
Captive breeding			Yes	<p>We created a small area in the Natural History Museum for captive breeding populations of threatened amphibians. At this moment we are holding some species and learning to keep in captivity and also trying to breed them. We are obtaining very interesting results and soon will be published. We also have some frogs for education purposes in the exhibition.</p>

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

Sometimes we had problems with roads blocked to get access to the different areas, that in some cases we had to go back to the city because was no possible to continue our trip, in some cases we had to change the locality due the access was no possible with public transport.

In some situations we wanted to go to one area but there were no available public transport, this will be changed in the next stage of the project working in some cases with private transport.

Weather was another issue because in some cases rivers increasing the size and landslides did not allow us to keep with our plans. In this case was no possible to have another plan due the very difficult access to the area and we had to go back and to work in another area.

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

Data collection

We obtained data of amphibians from nine localities in six ecoregions and in five of the nine political departments across Bolivia; these data are being used in different publications that we are developing and also will be critical in the captive breeding component of this project. With the data that we are obtaining, we have the option to see with more detail and also to prioritise the species that really need the urgent help and also to follow the next steps to try to save some species.

We obtained data of 39 species of amphibians, seven of them are endemic and nine are endangered. We also have photographs of more than 30 species of amphibians which some of them are been used for several publications and educational material in Bolivia and also outside the country in different publications and by some institutions in their exhibitions and publications. Recording calls were obtained, which are available in the Museo de Historia Natural Alcide d'Orbigny and also we are preparing different publications to share this information. We collected data about natural history and habitat requirements that was used for other researchers and will be available through publications. One initiative is the implementation of the collection of samples of chytrid fungus (*Batrachochytrium dendrobatidis*, a fungi species that is killing several amphibian populations across the world), where in this project we collected several samples from the different localities surveyed and is planned to be analyzed in the future.

With some of the data of this project, a student from the university is developing her thesis degree, prioritising areas and species of one Bolivian ecoregión; work that is very important for the conservation and this will provide the institutions and decision makers the tools to make the correct decisions in prioritising the conservation of amphibians, this work will be presented in the next month.

Training

We organised an amphibian conservation course with park guards and members of one NGO that works with education and conservation. We teach them basic facts about amphibians and also about conservation and methods to monitor amphibian populations; with the practical part we developed the start of a monitoring campaign in one area where several endangered species are present and now with the equipment that we provided them, they will be able to obtain information and we plan to work together for the conservation of those species.

During our fieldwork we also worked with local community and young biologists and we trained them about the work with amphibians and how they can learn more about this work, now we have a “supporting team” in some areas that when we go to these sites to monitor the species, they always go outside with us and they also are taking data during all the year and we plan to work together in different ways to protect the species of the area.

Education

Increasing the awareness about amphibian situation is very important in our project, this is the reason that we are carrying out educational workshops in local communities and in all the areas we go. In some cases it is not possible to organise the workshops and we work with local people, occasions that we use to teach them and to share the information about amphibians. We are finding that some communities are open to this new information and some of them are interested to work with us; in some cases there are some members of the communities are supporting our activities like in Titicaca lake, a National protected area in Tarija and an association of touristic guides that are working with us during the fieldwork and we have plans to work more closely and we are organising to develop a field guide of amphibians of the areas.

We also are sharing our knowledge about the situation of amphibians in Bolivia through an amphibian exhibition in the Natural History Museum in Cochabamba, where we show them about the diversity, the threats and the work we are developing with the project. In this way they realise that locally they also can do something to help this initiative.

We participated in different publications in the newspapers and in the news where we show main aspects about amphibians, the situation in Bolivia and about the project. Lately we also are sharing all this information and about the project with the website www.bolivianamphibianinitiative.org and also about the news in the project and about our fieldwork with a blogsite www.bolivianamphibianinitiative.blogspot.com, at the moment is just in English but in a near future will be also in Spanish and with more information and tools.

Captive breeding

This new component is providing very interesting data and also very critical. We obtained some individuals from the wild to learn how to keep in captivity and to try to breed them; a lot new information previously unknown to science is being obtained and soon will be published. We also are learning a lot things about the species in captivity because nobody before was working in long term with those species. For this stage we obtained different species from different areas of Bolivia and now with meetings with the government and other researchers and institutions we are planning to create the captive breeding facility in the Natural History Museum in Cochabamba and for that initiative we also are looking for support and resources that will allow us to have a safe population of amphibians in captivity in case something happens with wild populations.

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

Since the beginning the local communities are involved in the project, first with the educational workshops, then in some cases with the training or during the fieldwork. One example is in Titicaca lake where local members learned to do snorkel and always joined us in the transects and now they are working with us and also taking data during all the year of the frogs that are trapped in their fishing nets. Also we are looking for the options where they can find an extra income protecting the species and one option that we want to develop is the ecotourism.

We also are working with the park-guards and one association of local touristic guides, we are developing a fieldguide of amphibians of the area and also obtaining data of the amphibian populations in this way they have a direct benefit from the project. Also with a previous assistant of the training workshop, member of a NGO, we are working together in a guide of the frogs of amphibians of the area where he is working and in this second workshop two more members assisted to work with us.

With this work with the communities we want to develop a network of para-biologist that are working with the project and they will be able to in some time to share all this information and benefits with other people and also with other researchers that are working in conservation.

5. Are there any plans to continue this work?

After this stage of the project we saw the need to continue with the project because we found a hole in this aspect in the amphibian conservation in Bolivia. Obtaining data, doing conservation activities, training people and working closely with the local communities and a captive breeding programme, is a work that very few people or nobody is doing in Bolivia. This is the reason that we want to increase our efforts and also to increase our team to have a bigger impact. After some meetings with researchers, institutions and the government we are planning the Bolivian amphibian conservation strategy that will allow us to protect our species in a better way.

We also are working at the moment with resources from other foundations and personal support that will allow us to increase our conservation work. We are planning a next step with Durrell Wildlife Conservation Trust and the Bolivian government to try to work in the conservation of Bolivian endangered species and we are organizing the permits and the details for this next step.

For the following stages of this project we have the support of several national and international institutions that are interested to support this initiative in different ways.

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

At the moment we already are sharing our results with other researchers through scientific congress, papers that we are preparing, also just providing our data and samples that are needed by others.

Another way is through our workshops in local communities and the educational activities and exhibition in the museum. The newspapers are another way that we are sharing this information and results. Recently with our website and blogsite that we are developing and that in the next months will be updated and provide a lot new and useful information about Bolivian amphibians.

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

Proposed timescale
From July 2009 to July 2010

Developed project
From July 2009 to July 2010

The RSG was used from July 2009 to July 2010 and it is in the period anticipated in the project. In some cases we changed the order of the activities for the convenience but all of them were accomplished.

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
General equipment (Digital camera, camcorder, computer, sound recording equipment, head lamps, drift fence traps)	250	250	0	More equipment was obtained but covered and donated by other funds
Camping equipment (ex. tents, stoves, backpacks, GPS, sleeping bags)	100	100	0	More equipment was obtained but covered and donated by other funds
Fungible material (batteries, museum material for specimens)	250	250	0	More equipment was obtained but covered and donated by other funds
Accident insurance	75	70	+5	Was less expensive
Transport for fieldwork	500	500	0	We also paid with other resources the extra expenses
Supplies for fieldwork	500	550	-50	We covered from other sources
Porters and field guides services	200	250	-50	We used the extra in other item
Subsistence payments	3200	3200	0	
Printing and office (ink, photocopies, printing, phone calls)	70	70	0	
Community workshops	255	255	0	
Park guards, and young biologists training workshops	200	230	-30	We used more due we used our own car to transport the park guards to the site where we developed the workshop
Material for workshops	200	150	+50	We used some material that we already had and the extras were designated to other item
Amphibian activities in the Museum	200	200	0	
Total	6000	6075	-75	the deficit was covered by other sources

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

We plan to continue this project and for this we already are talking and organising with some local communities, researchers and conservationist, institutions and government that will help in this initiative. We also plan to apply for the third RSGF among others that will allow having a long term action in conservation of Bolivian amphibians.

We will focus our work in the Bolivian Andes where most of the threatened species are present mainly in the areas where the aquatic genus *Telmatobius* is distributed and a lot pressure of different threats are occurring.

Another step is to find more partners to develop the project and to have more impact and at the moment we already have contacts with stakeholders, conservation institutions both national and internationals which will help us to carry out and to have better results. An important partner needs to be the local communities who will help us to set up the conservation actions in the area.

We also realised that the community knows nothing or almost nothing about amphibians and conservation problems they are facing, so a key step is to increase the awareness and the conscience of the community and institutions for the conservation of the threatened amphibians.

Another step we want to carry out and at the moment we are developing at small scale is a captive breeding programme; to take out from the wild some individuals of some species that are critically endangered. With the chytrid fungus reported in Bolivia, this step is more critical if we want to protect some species that can disappear in very short time because their very restricted distribution and several threats that are facing at the moment. This step we are starting with the support of knowledge of the Durrell Institute that has the experience in these aspects and with small resources from other foundations.

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?

In all the activities like courses, workshops, talks, presentations we used the logo and indicated that RSGF was supporting this work both in national and international events. In the publications we had in the media like newspapers, television and radio we mentioned the RSGF as the supporting foundation.

We are using the logo and we have a link in our website we are developing and in all the future publications indicating that RSGF supported this work.

11. Any other comments?

With the results that we are obtaining until now, we are trying to increase our efforts and our impact in amphibian conservation and for that we are having meetings with people, institutions in Bolivia and outside of the country, this will allow us to work in a network with other interested partners, also after some meetings with the government we are organizing a Bolivian amphibian conservation plan that will allow the better study, work and conservation actions with endangered amphibians. We also we are sharing our data with researchers and people in general one case is the pictures of endangered species that are being used for educational books that will be used in all Bolivian schools and also for international exhibitions and websites of different kind, so the species that we are trying to protect will be more known.

Some examples are those websites:-

Last year publications:

Arkive UK

<http://www.arkive.org/lake-titicaca-frog/telmatobius-culeus/image-G61229.html>

Natuurpunt Gent Belgium (conservation institution)

<http://www.natuurpuntgent.be/snep/Snep%20jg8nr1/websnep-jg8nr1.pdf>

Los Tiempos Bolivia (amphibian exhibition and captive breeding program)

http://www.lostiempos.com/click/invitados/invitados/20100521/inauguracion-del-programa-de-cria-en-cautiverio_71631_132527.html

La Prensa Bolivia (amphibian crisis in Bolivia)

<http://www.laprensa.com.bo/somos/06-06-10/edicion.php>

Bolivian Amphibian initiative website

www.bolivianamphibianinitiative.org

Bolivian amphibian initiative blogsite

www.bolivianamphibianinitiative.blogspot.com

Previous publications:

BBC Jersey UK

http://www.bbc.co.uk/jersey/content/articles/2009/02/12/andean_frog_feature.shtml

Los Tiempos Newspaper (postcard collection of Bolivian amphibians)

http://www.lostiempos.com/noticias/14-09-08/14_09_08_vyf1.php

Los Tiempos and Opinion Newspaper (calendar Bolivian amphibians)

http://www.lostiempos.com/noticias/26-11-08/26_11_08_trag1.php

<http://www.opinion.com.bo/Portal.html?CodNot=46587&CodSec=19>