

## 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. 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](mailto:jane@rufford.org).

Thank you for your help.

**Josh Cole, Grants Director**

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#### Grant Recipient Details

|                            |                               |
|----------------------------|-------------------------------|
| <b>Your name</b>           | Arturo Muñoz Saravia          |
| <b>Project title</b>       | Bolivian Amphibian Initiative |
| <b>RSG reference</b>       | 39.05.07                      |
| <b>Reporting period</b>    | 2008-2009                     |
| <b>Amount of grant</b>     | £ 5000                        |
| <b>Your email address</b>  | hyla_art@yahoo.com            |
| <b>Date of this report</b> | March 25 <sup>th</sup> 2009   |

**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  |
|--|--------------|--------------------|----------------|---|
| Training workshop                                |              |                    | Yes            | <p>We developed at the beginning of the project a workshop about amphibians and monitoring methods designed for biology students, park guards, members of conservation NGOs and community members. Unfortunately the last ones could not arrive for the course because of the social problems in the country and roads blocked by demonstrations.</p> <p>At the end of the project we co-organized the Amphibian Biodiversity Conservation Course with the International Training Centre of the Durrell Wildlife Conservation Trust. Thirty conservationists from 9 countries of Latin America participated in this course and at the moment are setting up a network of conservationist and researchers that are working with amphibians in South America.</p> |
| Amphibian Surveys                                |              |                    | yes            | <p>A total of 15 localities in seven ecoregions were surveyed obtaining new data about distribution and ecological requirements, also relative abundances and threats.</p>  |
| Educational workshops                            |              |                    | Yes            | <p>We developed education workshops in the communities near the surveyed areas, mostly in schools and in some cases also to adult people. Unfortunately we could not carry out the workshops in all the communities due to some cases the community was not available or without time.</p>  |
| Field training of parabiologists and park guards |              | Yes                |                | <p>We also trained park guards, students and community members in survey techniques during the fieldwork in the different areas. At the moment they are helping us to disseminate the information about amphibians. We could not work with all the park guards due to the availability of the parks.</p> <p>As a direct result we have two students working closely with us in their thesis degree in amphibians and reptiles using our methodology. Also we are working closely with a community member who is</p>   |

|                            |  |     |  |  |
|----------------------------|--|-----|--|--|
|                            |  |     |  | monitoring a population of a critically endangered species.  |
| Conservation and education |  | yes |  | We could not develop the week of the frog's event because our schedule was interrupted due to a car accident during the survey in one of the areas, but we developed several other activities and publications like a postcard collection and a calendar with Bolivian amphibians with pictures taken during the project. We also published in newspapers and television programmes to increase conservation awareness about Bolivian amphibians and this material still being distributed in Bolivia and other countries. |

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

We had some difficulties with social problems in the country; this was tackled having other alternative localities where surveys could be developed at the same time. In some cases it was not possible to travel because all the country was blocked, in those cases we worked in the laboratory or prepared the material for the project. Another problem was that in some areas the weather conditions (rain with big rivers and landslides) during a period were too dangerous to carry out the survey so we decided to postpone the fieldwork or to go to other locality.

Going to do the fieldwork in one area we had a car accident, this event interrupted all the activities for some time because we were not able to travel or work due the injuries we had, but we worked with the rest of the team to complete our schedule of the fieldwork. Although we had some changes in the chronogram we focused our work in the office and with meetings with other institutions and conservationists to organize several activities and educational material produced by the project.

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

*Data collection*

We obtained data of amphibians from 15 localities in seven ecoregions and in eight of the nine political departments across Bolivia; these data were very useful in the workshop for the categorization of the threatened amphibians of Bolivia carried out at the end of 2008, a meeting where we participated and provided information about distribution, natural history and threats that some species are facing. Also these data will be very useful for future projects and to other researchers, conservationists and institutions that work with amphibians.

We obtained data of 78 species of amphibians, four of them are endemic and five are endangered. We also have photographs of more than 70 species of amphibians some of which have been used for several publications and educational material. Recording calls were obtained of more than 50 species with about 380 recording files, which are available in the Museo de Historia Natural Alcide d'Orbigny. We also 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 at the moment a student from the university is developing her thesis degree, prioritizing 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 prioritizing the conservation of amphibians .

#### *Training*

We were able to train 10 young biologists, one member of conservation NGO and 6 park guards in the first course about amphibian conservation and monitoring methods. They obtained the knowledge about amphibians at global and national level, basic tools and skills to carry out different projects across Bolivia and also will be able to obtain good quality data about amphibian populations fluctuations. In 2009 we co-organized the Amphibian Biodiversity Conservation course in Lake Titicaca together with Durrell Wildlife Conservation Trust, Asociacion Boliviana de Herpetología, and some other Bolivian and international institutions. In this course we were able to bring the knowledge of the staff from Durrell institute and other international researchers and conservationists, where we increased the capacity of amphibian biologists and conservationists within South America to research and conserve the amphibian species that exist within the region.

Now these 30 researchers and conservationists are trying to work more closely and actively towards amphibian conservation.

#### *Awareness*

One aspect we realized during this project is that local communities and people in general know nothing or almost nothing about amphibians and it is necessary to increase the awareness about amphibian issues and conservation. With the activities we carried out in the project we increased this knowledge and awareness through the different workshops we organized in the different local communities and now some of them are trying to have a less impact in the amphibian populations present in the area and, even better, some of them are working together with us in the monitoring of some populations of endangered species. We also organized in the city public presentations of the postcard collection and 2009 calendar of the Bolivian frogs where we had people in general that were present and also the media like television, radio, newspapers that supported us in the diffusion of the information we wanted to disseminate. At the moment we are trying to increase this awareness in the population but more work is needed.

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

During the work we trained at least one person from the community, we organized an educational workshop for all the community to increase the knowledge about amphibians and conservation issues, and we also provided reports to the communities that they can use for their interests. The local communities are involved in several levels depending of the interest; some of them are working with us to make available that data to conservationist and also for the needs of the community. One example is the Titicaca case where they are taking data and we are supporting them to develop a touristic plan using the Titicaca frog as one of the attractions of the place, so the community will have a benefit if they protect the species. Also some of the integrants of the local communities that participated in our surveys learning about amphibians, conservation and monitoring methods, in the future they will develop projects by themselves or as a part of a future project with us. We also

involved the local communities in the process of monitoring and conservation programme that we want to set up in those localities.

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

Yes because we realized the urgent need to keep working in this manner due the very few or any conservation actions developed in Bolivia focused in amphibians apart from just research. At the moment we are organizing the second part of this project, we want to be focused in the Bolivian Highlands where most of the threatened species are present and mostly with the aquatic frog of the genus *Telmatobius* that is one of the most threatened groups. For this initiative we talked with several institutions, researchers and conservationist to work with more partners. For this initiative we obtained the support of the herpetological departments three Natural history museums in Bolivia and the Asociacion Boliviana de Herpetología, some conservation institutions like Durrell Wildlife Conservation Trust that will be one of our main partners supporting us with the experience and contacts.

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

At the moment we already shared some of our results in the work that soon will be published in the red book of Bolivian threatened vertebrates where we provided very important data, information and photos not just of amphibians but also reptiles and mammals. We also are sharing our findings with the community through workshops, meetings and also in the media like newspapers, television, radio news, websites and informative material. Scientifically we will provide our database to the Bolivian Herpetological Association where everybody will be able to obtain our data, we also are developing our own website where we will publish our data and if somebody needs more information can contact us. Other way is through scientific papers that we are preparing and in scientific meetings as herpetological congress. An important way will be the presentation of the main results to the governmental and conservation institutions that in the future can support our conservation work. Once we organize all our data we will provide our database to the Global Amphibian Assessment (GAA) and IUCN as we did before in other projects.

#### **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 August 2007 to July 2008

Developed project

From November 2007 to January 2009

The start of the project was delayed because the funds arrived in October 2007 so we started with the first activities in November, we also had some delays during the project because the car accident that stopped several of our activities.

The end of the project was later as anticipated because one of the last activities was the international Amphibian Biodiversity Conservation course that was postponed from September 2008 to January 2009

#### **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.**

At the end of the project we had a difference between budgeted and actual expenditure, but we moved some funds from some items to others and with the lacking resources we used the money

from subsistence payments. The local exchange rate was fluctuating during the project but we had an average of **1 £ sterling = 1.56 \$ = 12.76**

| Item  | Budgeted Amount | Actual Amount | Difference | Comments   |
|---|-----------------|---------------|------------|--|
| General equipment (Digital camera, camcorder, computer, sound recording equipment, head lamps, drift fence traps) | 250             | 240           | +10        | We found cheaper head lamps  |
| Camping equipment (e.g. Tents, stoves, backpacks, GPS, sleeping bags)   | 100             | 100           | 0          |  |
| Fungible material (batteries, museum material for specimens)  | 250             | 260           | -10        | The cost of the batteries increased in the period of the project                             |
| Accident insurance  | 70              | 75            | -5         | The cost was 75 in the insurance company   |
| Transport for fieldwork   | 500             | 600           | -100       | The cost of the transport was more but we shared the costs with other projects of the museum |
| Supplies for fieldwork  | 500             | <b>570</b>    | -70        | The cost of some items increased during the project  |
| Porters and field guides services   | 200             | <b>200</b>    | 0          |  |
| Subsistence payments  | 2200            | <b>2200</b>   | 0          | For the lacking funds we used some of this item  |
| Printing and office (ink, photocopies, printing, phone calls)   | 100             | <b>100</b>    | 0          |  |
| Community workshops   | 350             | <b>350</b>    | 0          | We used part of this money to pay part of the postcard collection                            |
| Park guards and young biologists training workshops   | 180             | <b>184</b>    | -4         | We bought more material to provide the students  |
| Material for workshops  | 200             | <b>200</b>    | 0          |  |
| Amphibian conservation event  | 100             | <b>100</b>    | 0          | We used this money to pay part of the postcard collection                                    |
| <b>Total</b>  | <b>5000</b>     | <b>5179</b>   | -179       |  |

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

The first step is to continue this project and for this we talked with some communities, researchers and conservationists and institutions that will help in this initiative, we also plan to apply for the second RSGF among others.

We want to 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 international 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 realized 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 with our own resources 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 a couple of months ago, 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.

**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 published the postcard collection of the Bolivian frogs where the RSGF logo was used, also in the 2009 calendar of Bolivian frogs. 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 plan to use the logo and to make a link in the website we are developing and in all the future publications indicating that RSGF supported this work.

**11. Any other comments?**

At the moment we are working to show the community and public in general about the amphibian issues and also we are trying to make this project sustainable in the future through different meetings with national and international institutions, some examples of the first achievements we had are the presentations of the project and the results in some international institutions like Gothenburg Natural History Museum in Sweden, presentations and meetings in the Durrell Wildlife Conservation Trust offices, and with some activities in the media of this island to obtain support in equipment for future projects. In a couple of months I will have the opportunity to travel again to Europe and will take advantage to do some presentations and talks about the status of conservation of Bolivian amphibians, the challenges we have to work in conservation and the initiative we want to continue to work in conservation. Also we are using the produced material like postcards collection and the calendar to obtain some funds to keep working toward the conservation of Amphibians.

Following we present some list of links where our work was in the media:

BBC Jersey UK

[http://www.bbc.co.uk/jersey/content/articles/2009/02/12/andean\\_frog\\_feature.shtml](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](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.lostiempos.com/noticias/26-11-08/26_11_08_trag1.php)  
<http://www.opinion.com.bo/Portal.html?CodNot=46587&CodSec=19>



The critically endangered Titicaca frog *Telmatobius coleus*.



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