

The Rufford Foundation

Final Report

Congratulations on the completion of your project that was supported by The Rufford 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	Melina Alicia Velasco
Project title	Recovering the Critically Endangered El Rincon Stream Frog, <i>Pleurodema somuncurense</i>
RSG reference	27319-B
Reporting period	March 2019 – March 2020
Amount of grant	£10,000
Your email address	mellazuli@hotmail.com
Date of this report	5 March, 2020

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
Alleviate the main aquatic threat for frogs. We will reduce the range of the rainbow trout in 1-km downstream from its current range limit.				This objective was based on: i) creation of a document for trout management; ii) building fish barriers to stop trout accessing the headwaters; and iii) removal of trout from the exclusion zone. We successfully conducted all these activities and undertook monitoring to ensure the future absence of trout in the managed area.
Improve terrestrial habitat quality. We will increase the availability of food, shelter and breeding sites and reduce the eutrophication in five hot springs.				This objective was based on: i) fencing five hot springs; and ii) restoration of native vegetation within enclosures. We successfully achieved these subobjectives and created five sanctuaries for frogs.
Reintroduce frogs to restored habitats sites where the species has gone extinct. We will reintroduce frogs in two managed sites where frogs have become extinct				This objective was based on: i) the reintroduction of two groups of captive frogs within the created sanctuaries; and ii) further monitoring of reintroduced frogs. We achieved the reintroduction of one group and the next reintroduction is planned for April 2020. We are monitoring the reintroduced group, and everything looks good.

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

Objective 1.iii. Problems encountered. Although actions were successfully conducted, times were slower and effort higher than we expected. This was related to the fact that we underestimated trout density. Preliminary surveys reported a density of 1 trout every 10 m of stream but during the removal activities we observed a density three times higher.

Objective 3. i. Problems encountered. As for objective 1.iii., we underestimated the time needed to achieve this objective. The time was enough to complete the reintroduction of a group of frogs in a restored habitat. However, the production of

froglets at the ex-situ facilities spent took longer this year, thus we were not able to do it in the time scheduled for this project. We will be able to conduct the second (and final) reintroduction of froglets in a couple of months. We already have the froglets and are waiting for the permits (that are already agreed with the environmental authorities).

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

1. *Removal of trout from 1 km downstream.* This was a key achievement in different senses. Firstly, it was the first official management of exotic trout in a stream aimed at conserving an endangered amphibian in our country. Secondly, in biological terms, it is of key relevance to start re-establishing the metapopulation dynamics of the El Rincon Stream Frog, by increasing suitable reproductive habitat and making suitable corridors among populations.
2. *Reintroduction of a group of frogs.* We already made an experimental reintroduction of this species with good results. It was also the first reintroduction attempt for a threatened amphibian in our country. This experience allowed us to conduct the second reintroduction and to plan the third one that will be conducted in a few months. The reintroduction of these frogs after restoration of the habitat allowed the re-establishment of extinct sub-populations in a key habitat. This management is of key relevance to ensure the long-lasting viability of the species by increasing the population size and the number of sub-populations.
3. *Creation of sanctuaries for frogs.* The creation of sanctuaries is of great relevance for creating new suitable habitat in sites where some sub-populations of this species have gone extinct (thus creating habitat for future reintroductions) but also for the protection of extant sub-populations. Since the current known number of sub-populations of this species is very small (only eight if you count the one that was re-established in the frame of this project), the creation of sanctuaries is necessary to increase the viability of them, in a habitat free of threats.

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

People from the local community benefited from this project in several ways. Firstly, for several of our activities (e.g. the fencing of sites during the process of creating sanctuaries), we hired local people who obtained a stipend that is small but relevant when compared with the local per capita income. Secondly, teachers and students from the local school used our activities as an example for the development of educational strategies and activities framed on environmental conservation. Thirdly, this project, together with other projects working in the area, is achieving the rewilding of an ecosystem that is considered as key biodiversity area worldwide, with at least two IUCN Critically Endangered species as well as other native and charismatic species. These activities are putting the area on the environmental agenda which is increasing the touristic interest. We are building on this process and

integrating it among the local community with the aim of promoting eco-tourism activities to allow an increase in benefit to the local economy. We expect the local community will change its unsustainable activities (like livestock) to more sustainable ones (like eco-tourism), with an increase in local wellbeing.

5. Are there any plans to continue this work?

Yes. As stated in the Action Plan for the El Rincon stream frog (shared on the webpage of the Amphibian Survival Alliance), in order to ensure the long-lasting viability of this species we will continue working in a step by step plan aimed at re-establishing the metapopulation dynamic of this species. This means at least six new reintroduction events aimed at re-establishing sub-populations of this frog and the enhancement of corridors among all of them (i.e. 10 km of stream free of trout). The trout management planned for the conservation of this frog and other endangered and endemic species living in the Valcheta Stream is the most ambitious management plan in the national context and will take several years (see our vision below). In the meanwhile, we also plan to better integrate the local community in conservation activities.

Long-term vision: The status of El Rincon stream frog was improved which is reflected in a lower threat category in the IUCN Red List and its absence in the list of the top 100 EDGE amphibians worldwide. This means that all sub-populations of this species (including several re-established sub-populations) are effectively protected and thriving in sanctuaries, all of them are connected by corridors free of threats. The local community participates in the protection of native and endemic species in the stream, taking this frog as a flagship species, and at least a half of the whole range of this frog falls within a well-managed protected area within 20 years.

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

As stated in this project, we plan to report all conservation actions in conservation newsletters (we already have a deal to send a note for the July issue of the Amphibian Ark Newsletter) and scientific journals (we are writing a research paper for Endangered Species Research Journal in June 2020). We are also creating a short video that will be uploaded to our webpage and shared among another NGOs.

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

The Rufford Foundation grant was used over the anticipated period. However, taking into account that the next reintroduction (planned in the frame of this project) will be conducted in a couple of months, the final period will be slightly longer than the anticipated.

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
Gas and maintenance	1000		-1000	We used the amount requested as we expected. There were no differences between the budgeted and actual amounts.
Truck rental	1500		-1500	We used the amount requested as we expected. There were no differences between the budgeted and actual amounts. However, for some activities that no required access to remote places, we used our own car instead of renting a truck.
Fieldwork for monitoring released frogs	1800		-1800	We used the amount requested as we expected. There were no differences between the budgeted and actual amounts. However, some volunteers were moved with the help of the Park Rangers. Thus, the real amount spent should be slightly higher.
Habitat restoration at fenced sites	1250	1000	-250	We save 250 from this item, that was passed to the next item (since both activities were framed on the same objective).
Fencing (materials & installation)	1200	1450	+250	We used the amount requested as we expected. There were no differences between the budgeted and actual amounts.
Electrofishing equipment	450		-450	We spent an extra 250 on this item, that was obtained from the previous item (since both activities were framed on the same objective).

Trout barriers	900		-900	We used the amount requested as we expected. There were no differences between the budgeted and actual amounts. However, some volunteers were moved with the help of the Park Rangers. Thus, the real amount spent should be slightly higher.
Workshop & Trout Management Plan	1900		-1900	We used the amount requested as we expected. There were no differences between the budgeted and actual amounts.
TOTAL	10000	2450	-7550	

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

We are in a step of the project where is key to maintain ongoing management. We already tested all our activities and we know they were success in biological terms. If we want to ensure the long-lasting viability of the El Rincon stream frog, we have to continue conducting habitat restoration (creation of sanctuaries), reintroduction of frogs at sites of historical presence of the species and trout management to restore natural corridors. We also have to increase the effort aimed at integrating the local community in all these activities. In summary, our next steps are to continue the management we already know is working for the sake of this species.

10. Did you use The Rufford Foundation logo in any materials produced in relation to this project? Did The Rufford Foundation receive any publicity during the course of your work?

Yes, we used the logo when we got the grant, by sharing it in a flyer through our webpage. We also used the logo in a poster related to this species that was given to the local School.

11. Please provide a full list of all the members of your team and briefly what was their role in the project.

Melina Velasco, as team leader, participated and coordinated all the activities, and organized workshops with stakeholders.

Tomas Martinez Aguirre coordinated fencing and habitat management activities.

María Luz Arellano helped Tomás with the fencing and restoration work.

Sofía Quiroga is (and was) at charge of trout management since she has experience using the electrofishing equipment.

Federico Kacoliris is part of the ex-situ initiative of the El Rincon Stream Frog. He was in charge of the reintroduction process.

12. Any other comments?

We plan to apply for another grant from The Rufford Foundation. Since we have not any continuous amount of funding, we depend on apply for grants every year to conduct the action plan for the El Rincon stream frog. We will be happy to receive any feedback on this report that help us to improve further application.