

## Final Evaluation Report

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Your Details	
Full Name	Felipe de Jesús Osuna López
Project Title	Distribution, conservation and community monitoring of the endangered Volcano Rabbit ( <i>Romerolagus diazi</i> )
Application ID	26893-2
Grant Amount	£5,000
Email Address	Felipe.osuna@posgrado.ecologia.edu.mx
Date of this Report	March 2022

**1. 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
Determine the current volcano rabbit distribution				
Evaluate its conservation genetics				
Workshops with the community monitoring group from Río Frío				

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

In field the weather sometimes was adverse, and we had some mechanic details with the vehicle.

In laboratory, we can't use storage faecal collects from previous years or even previous months for fast degradation of DNA, so that, we had to collect again in some places. The DNA contamination is another constant trouble in laboratory because the origin of the samples (faeces).

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

- 1) We identified 215 volcano rabbit local populations in the Sierra Chichinautzin and Sierra Nevada volcanic fields, and with this, we precisely determined the current distribution range of the volcano rabbit and identified priority areas for their conservation, some with high perturbation and in need of immediate interventions, and others highly conserve, to develop prevention.
- 2) We continued the collaboration and capacitation with the community monitoring group of Río Frío (north Sierra Nevada) and started to collaborate with the community monitoring group of San Pablo Oztotepec Milpa Alta, from east Sierra Chichinautzin.
- 3) With the information generated with this project and the first Rufford Small Grant we designed a novel wide range species monitoring with the potential to improve the monitoring, research and conservation of the volcano rabbit in its entire distribution.

**4. What do you consider to be the most significant achievement of this work?**

**5. Briefly describe the involvement of local communities and how they have benefitted from the project.**

The community monitoring group from Río Frío has been able to continue with their capacitation and started their capacitation in ecotourism. They also have met more people and groups involved in conservation.

The community monitoring group of San Pablo Oztotepec, Milpa Alta, expressed their interest in the community ecotourism and now they are one new valuable ally in the conservation of the volcano rabbit.

We began collaborating with Universidad Autónoma del Estado de Morelos (UAEM), through Dra Itzel Mónica Gómez Manjarréz, an expert in environmental psychology. We joined forces to improve the community ecotourism plan through the organisation of an ecotourism forum for the community monitoring groups.

We have established contact with the schools from the two closest communities (El Capulín and Fierro del Toro) that coexist with the volcano rabbit in the western Sierra Chichinautzí. Collaborating with these communities and providing environmental education and awareness workshops is particularly relevant because it represents one of the most perturbed regions of the entire distribution.

The detailed mapping of the volcano rabbit distribution incorporates biological value to the land of more than 30 indigenous and local communities in Sierra Chichinautzin and Sierra Nevada. These communities will get a better chance to obtain different governmental and international programs as fauna community monitoring or payments for ecosystem services.

**6. Are there any plans to continue this work?**

With the information generated through the two Rufford grants awarded we have developed a novel specific species monitoring, and now we want to conduct this monitoring in the field to evaluate and improve it.

We will continue with the community ecotourism plan with the two monitoring groups and the allies from the university UAEM.

We want to start the environmental education and sensitivity in-situ, in communities that inhabit with the volcano rabbit (like the two schools mentioned above), and ex-situ, in the Mexico City, a megalopolis that directly is benefit from the environmental services that bring the volcanic fields Sierra Chichinautzin and Sierra Nevada.

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

I have submitted an article about the current distribution of the volcano rabbit and its conservation status.

I am sharing personally the information about the current distribution of the volcano rabbit and the priority areas for its conservation identified with different governmental institutions involve in conservation, like the Comisión Nacional de Áreas Naturales Protegidas (CONANP), particularly; the National Park Izta-Popo, the National Park el Tepozteco and the Flora and Fauna Biologic Corridor Chichinautzin, with the Comisión Nacional de Biodiversidad (CONABIO) and the Comisión Nacional de Ciencia y Tecnología (CONACyT).

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

From November 2018 to December 2019. It was as established.

**9. Budget: 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. It is important that you retain the management accounts and all paid invoices relating to the project for at least 2 years as these may be required for inspection at our discretion.**

Item	Budgeted Amount	Actual Amount	Difference	Comments
Fuel, food, lodging, tollbooths and material for organize and impart the community workshops	600	600		
DNA extraction kits, fluorophores and sequencing	2500	2500		
Fuel, food, tollbooths and lodging to search the volcano rabbit presences and collect faecal samples	1900	1900		
<b>Total</b>	<b>5000</b>	<b>5000</b>		

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

Maintain the cohesive of the community monitoring group from Río Frío and help them to develop the sustainable financial strategy of ecotourism. Continue working with the community monitoring group from San Pablo Oztotepec, Milpa Alta.

Evaluate the novel specie specific monitoring for the volcano rabbit that we have developed thanks to the two Rufford Grants.

Start the in-situ and ex-situ environmental education and awareness.

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

No.

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

**Dr. Espinosa, Dr. Alcalá, Dr. Guevara** and **Dr. Meyer** participated in the sampling design and in the discussion of the results for both the distribution and genetic parts.

**Dr Lira** collaborated with the analysis and discussion of the results of the distribution part. And **Dr Espinosa** is collaborated in the writing of the article on the distribution part.

**13. Any other comments?**