

Final Evaluation Report

Your Details	
Full Name	Magdalena Salas
Project Title	Population status of medium and large mammals of the highly threatened subtropical piedmont forest in a conservation landscape of northwestern Argentina
Application ID	38324-1
Date of this Report	10/18/2024

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
Fieldwork: camera trap survey		X		We were able to install 50 camera traps at different sites.
Fieldwork: local people's involvement			X	We reached a total of 4 landowners and 4 locals participated in the fieldwork.
Fieldwork: register medium and large mammals in the piedmont forest			X	We recorded 19 native species of medium and large mammals.
Statistical analysis		X		We constructed occupancy models for 7 species (single-species models) and are exploring community models for the entire mammal assemblage. We also obtained naïve occupancy values for every species registered. We will continue analysing to obtain the best models that explain mammal occupancy in the area.
Educational and participatory approaches			X	We gave 4 talks in 2 local schools and a national park centre. We also participated in a science fair with a stand about biodiversity in the piedmont forest.
Generate baseline report			X	We delivered a technical report to Salta's government based on the obtained information during this project.
Final workshop	X			We could not carry out the final workshop that was planned because of financial limitations.

2. Describe the three most important outcomes of your project.

a). Field camera survey and monitoring of medium and large mammals: we carried out field surveys at 4 different areas inside CLT, and installed 50 cameras at different

sites, covering 1912 camera days with active cameras. We recorded 991 detections of 19 native species of medium and large mammals, demonstrating the importance of CLT as a habitat for these species.

b). Documentation and occupancy values of endangered species in the piedmont forest: we generated critical information to determine the conservation status of 19 mammal species in northwestern Argentina, including those threatened at global and national levels. We reported the presence of critical species like *Panthera onca*, *Mazama americana* and *Myrmecophaga tridactyla* at several sites to Salta's government through a technical report.

c). Conservation education activities: we contributed positively to the awareness of the general public and particularly to the local communities' about the value of mammal species in the ecosystem. Photos of mammals taken by the cameras had a strong and effective response on both kids and adults. Informative posters designed during the project had information about mammals in the piedmont forest and were delivered to rural schools and a park visitor centre.

3. Explain any unforeseen difficulties that arose during the project and how these were tackled.

First, we encountered technical problems with the van in September and we were not able to carry out a camera survey across a significant area in CLT, with approximately 30 camera sites. This camera survey was initially rescheduled for the first month of the dry season, in May 2024. However, following a change in Argentina's government after December 2024 an important devaluation of the Argentine peso took place, severely impacting the value of our funds. To provide context about the devaluation, the official exchange rate when the project started was 1 £ = 330 Argentine pesos, but, by the end of the project, it had risen to 1 £ = 1143 Argentine pesos. Since our bank account automatically converts all foreign currency into Argentine pesos upon receipt, the funds we had were "frozen" to the first exchange rate, drastically reducing their real value as costs increased because of inflation. Consequently, we were forced to reduce the number of sites to survey and ultimately suspend the final workshop. Therefore, we need to secure additional funds to complete the project and fulfil its conservation objectives.

4. Describe the involvement of local communities and how they have benefitted from the project.

Locals participated from the start. We usually visited them at their houses to ask if they knew how to access some of the areas. Park rangers from "Acambuco" provincial park are also locals and they helped us with this initial task, providing their experience in the area. On two occasions locals provided us with horses to get to the furthest sites. In one area, one of the locals participated in the fieldwork and installation of camera traps. In exchange, we shared the photos taken in previous years. We could discuss with some locals about the perception and conflict around wild felids, mainly because of domestic animal predation by some species.

As for education approaches, we achieved a total of 4 talks, with the involvement of local teachers and head principals during the activities with the kids. Kids were very participative and eager to learn about mammal species. They learned about the piedmont forest and the differences between mammal species. We played games to recognize them through pictures and sounds.

5. Are there any plans to continue this work?

Yes, with this information we can establish the population status of key species such as the “yaguraté”, the lowland tapir and the collared peccary, among others. This work increases the knowledge of medium and large mammal species in the CLT and will be used to improve land management and conservation planning of the piedmont forest in the CLT. Moreover, this information will be critical to refining the status categories of these mammals at the national level. Lastly, this project is part of my PhD research and I will continue to study medium and large mammal distribution in the piedmont forest for the next years.

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

This project included essential activities of conservation education, such as social media publications and talks in rural schools. We plan to continue giving talks in schools and science fairs in Salta province and rural areas inside the CLT. On the other hand, we were interviewed by local media at the end of one of the talks, which was very important to share the message with other members of the town. We expect to continue sharing these results through social media, radio and streaming interviews. Finally, we hope to organise the workshop to share the project results with policymakers and community members, address conservation barriers and discuss potential solutions collectively.

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

It is important to continue contacting other landowners and communities that are living in potentially important forest areas and invite them to participate in future projects. We also understand that it is important to continue monitoring this area. For this, we must work to secure additional funding. There are many ecological aspects to understand about how anthropogenic impacts are affecting medium and large mammals in the piedmont forest. Moreover, other areas outside the CLT haven't been studied yet and, like CLT, require better and updated information around mammal species population status.

Finally, comprehensive training for a monitoring program should be conducted for key stakeholders, conservation practitioners and park rangers to share the methods used throughout the project. This program could be especially targeted to those landowners with dedicated environmental departments that follow up on the activities done in the area and show interest in carrying out biodiversity survey initiatives.

8. 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?

We used The Rufford Foundation logo in informative posters and divulgation material. We also used the logo in congress posters produced with information generated during the project.

9. Provide a full list of all the members of your team and their role in the project.

- Malvina Mabel Quintana. BSc Biology of the National University of Jujuy (Facultad de Ciencias Agrarias). She provided landowners and community members contacts living inside CLT area.
- Álvaro Lucas Ortiz. Undergraduate student at the National University of Jujuy (Facultad de Ciencias Agrarias). Collaborated in fieldwork.
- Fernando Díaz. Indigenous from Tartagal. Collaborated in fieldwork and provided horses.
- Park rangers of the Provincial Park of Acambuco. Helped during sites selection and collaborated in fieldwork.
- Agostina Muñoz. CEBio Foundation's field technician. Collaborated in fieldwork and engaging locals.
- Students from the National University of Catamarca. Collaborate in fieldwork and educational activities.

10. Any other comments?

We would like to thank the Rufford Foundation for its support in making this project possible. The piedmont forest in CLT faces unprecedented threats, with only 4% of its original extension under protection. This forest is unique because it is the habitat of many iconic and endangered species, such as *Panthera onca*, *Tapirus terrestris* and *Tayassu pecari*, which represent integral components of a complex web ecosystem, and so, sustain the integrity of countless ecosystem services. We understand the importance of working towards the conservation of these forests and medium and large mammals.