Final Evaluation Report

We ask all grant recipients to complete a project evaluation that helps us to gauge the success of your project. This must be sent in **MS Word and not PDF 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 – remember that negative experiences are just as valuable as positive ones if they help others to learn from them.

Please DO NOT fill in and submit this form until the project has been completed.

Complete the form in English. Note that the information may be edited before posting on our website.

Please email this report to jane@rufford.org.

Your Details	
Full Name	Maria Luz Thomann
Project Title	The tapir as a forest ecosystem engineer in the southern Yungas forests in Argentina.
Application ID	42344-1
Date of this Report	01/09/2025

1. Indicate the level of achievement of the project's original objectives and include any relevant comments on factors affecting this.

Objective	Not	Partially	Fully	Comments
Identify the plant species consumed and dispersed by the tapir in El Rey National Park (ERNP).			x	We successfully identified several key plant species consumed by tapirs through fecal analysis and field observation. Species such as *Myrcianthes pungens*, *Enterolobium contortisiliquum*, *Vachellia aroma*, *Scutia buxifolia*, among others, were recorded as part of the tapir's diet. This information strengthens the understanding of the tapir's role as a frugivore in the Yungas forests. We collected 93 faecal samples during field campaigns in different areas of the Park. Approximately more than 3,200 seeds from 12 plant species, ranging in size from 0.3 mm to 1.2 cm, were identified and analysed.
Evaluate whether the tapir acts as a selective agent on fruit and seed traits (size, shape).		x		Although initial data suggest that tapirs preferentially consume fruits of certain sizes, the sample size and the temporal scope of the project were insufficient to statistically confirm selection patterns. More data and longer-term monitoring are needed to robustly test this hypothesis.
Map the distribution of the tapir in the study area.			x	Using GPS data from fecal samples, tracks, and direct sightings, we created preliminary maps of tapir distribution within the ERNP and its surrounding area. The data confirmed the species presence in several key areas of the park, especially in secondary forests and areas with abundant fruit-bearing plant species. Most records came from footprints and faeces (approximately 75%), while direct sightings totalled seven during the campaigns, mainly in secondary forest areas. An unexpected finding was the record of tapirs in anthropized areas, such as the campsite and the surroundings of the park's administrative office. It is worth noting that the impact of tourism in this particular protected area is very low. This indicates a broader range of habitat use than expected.
Conduct germination experiments with seeds dispersed by tapirs.		X		We managed to perform initial germination tests with seeds extracted from faeces, observing successful germination in some species. However, due to time constraints inherent to this type of experiments, we were not able to complete the germination test with all species. Further experiments are planned to complement these initial results. Germination tests were performed on seeds of 8 species extracted from the faeces. Of these, 5 species germinated successfully, e.g., *Vachellia aroma*. Germination tests could not be performed for the remaining

				identified species due to an insufficient number of seeds.
Raise awareness among local communities and park rangers about the tapir's ecological role.			X	We conducted workshops and talks with park rangers and local stakeholders from the communities surrounding the ERNP. The activities were very well received, and participants expressed interest in future conservation initiatives. Furthermore, thanks to the initial activities, we were invited to participate in more workshops and talks, some of which are planned for late 2025 and early 2026. This fostered greater awareness of our tapir conservation project.

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

a). We have been able to identify key plant species in the tapir's diet both within and around the ERNP. This information is crucial to develop conservation strategies both inside the protected area and in its area of influence, where the tapir is also present. With all this information, we are preparing a report that will be a key tool for the conservation of the tapir and its habitat, addressed to relevant organizations such as the Secretariat of Environment and Sustainable Development of Salta Province (SAyDS) and the National Parks Administration (APN), as well as for farm owners near the park.

b). Mapping tapir presence and contributing to habitat management in El Rey National Park. We developed preliminary maps of tapir distribution in and around the park, based on field evidence (faeces, tracks, and sightings). This information will allow park managers and conservation organizations to identify priority areas for habitat protection and ecological restoration, supporting long-term conservation planning for the species and its environment.

c). We successfully organized four talks and workshops (two more than we had planned in the schedule). Two were carried out at the ERNP station, one in a community centre lodging called "Pacha Kanchai" (in a neighbouring village to the Park, Las Viboras, Salta) and we were invited to give a talk followed by the presentation of a stand with educational material, at the National University of Jujuy, neighbouring province of Salta. All were very successful and reached more than 100 people from all areas, including park rangers, neighbours, ranchers, high school and university students, as well as teachers and researchers. Educational material including 130 posters and 200 brochures were printed and disseminated, which served to encourage interest in tapir conservation and even some of the participants volunteered to participate in future field campaigns, as well as talks and workshops. Thanks to these activities we were invited for the second semester of this year, to participate in radio programs in some towns of Salta, to give a talk at the Municipal Botanical Park "Baron Schuel" in San Salvador de Jujuy and to participate in events in collaboration with the Biodiversity Protection Center (ProBio), dependent on the National University of Jujuy.

These activities increased the understanding of participants of the tapir's role as a forest ecosystem engineer and its importance for forest regeneration.

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

Several unforeseen difficulties affected the implementation of the project:

a) Economic crisis and inflation:
During the project period, Argentina experienced severe economic instability, with a sharp devaluation of the Argentine peso and a significant increase in inflation. This affected the financial planning of the project, increasing the costs of transportation, fuel, accommodation and supplies. As a result, we had to adjust the budget and prioritize essential activities. We reduced the number of field campaigns (initially planned as two seasonal) to optimize costs, carrying out one per season instead. This allowed us to complete the basic data recording of the project, as well as carry out the other proposed activities (talks and workshops), while staying within budget.

b) Inconveniences with transportation:
Due to mechanical problems that made it impossible to use the vehicle of the Regional Ecology Institute (IER), which we had at the start of the project for transportation, we had to rent a vehicle for five of the field trips. Additionally, the IER vehicle couldn't be repaired due to the severe science budget cuts in Argentina.

c) Adverse weather conditions:
Heavy rains and storms during the 2024 wet season limited access to some sampling areas and complicated fieldwork logistics. In response, we reorganised our field programme, focusing sampling efforts during periods of better accessibility and adapting our fieldwork methodology to maximise data collection.

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

The project involved local communities and park rangers in several ways:

- Educational workshops and talks: We conducted awareness-raising activities aimed at park rangers and members of nearby communities. These activities helped participants understand the ecological role of the tapir as a seed disperser and forest engineer. The workshops were designed to promote dialogue and local involvement in conservation actions.

- Collaboration with park rangers: Park staff actively participated in field activities, helping with the identification of tapir tracks, locating sampling sites, identifying some plant species and supporting logistics. This collaboration not only facilitated fieldwork but also strengthened local conservation capacity.

- Local benefits: Through these activities, participants acquired new knowledge about the biodiversity of their region, the importance of ecological

interactions, and the tapir's ecological role and conservation status. These interactions fostered a sense of belonging and conservation for the protected area and its wildlife. In addition, those who participated in the talks and workshops expressed interest in continuing to collaborate on future initiatives.

- Capacity building: The project contributed to strengthening the environmental education efforts of the National Parks Administration staff, providing them with updated scientific information and educational materials to continue spreading awareness about the tapir and forest conservation.

5. Are there any plans to continue this work?

Yes, we plan to continue and expand this work through several actions:

- Continue and expand germination experiments to better understand the effectiveness of seed dispersal by tapirs and the factors influencing seedling establishment in the forest.

- Expand environmental education activities and talks, aiming to reach a broader audience in local communities, students, and other stakeholders. We plan to continue strengthening the engagement of park rangers and environmental authorities.

- Expand the study area to include other areas adjacent to El Rey National Park. This will allow us to assess tapir presence and seed dispersal processes in a larger and more connected landscape.

- Collect additional spatial data on tapir distribution, using field evidence and potential collaborations with citizen science platforms (iNaturalist, GBIF), improving our understanding of habitat use.

- Incorporate social data through interviews with local people and park visitors, aiming to understand perceptions of the tapir and its role in the ecosystem, as well as to document possible conflicts or coexistence with human activities.

- Explore the interaction between tapirs and feral cattle, a key ecological question in the El Rey National Park, where livestock presence may influence tapir habitat use and food availability.

These next steps will help us build a more complete ecological and social understanding of the tapir's role in the southern Yungas and will support conservation actions in the region.

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

The results of this project will be disseminated through multiple channels to reach both the scientific and general public:

- Scientific publications: we aim to publish ecological findings in peer-reviewed journals focusing on conservation, mastozoology and seed dispersal ecology.

- Technical reports: Results will be shared with the National Parks Administration (APN), the Ministry of Environment of Salta Province and local conservation organisations such as ProYungas Fundation.

- Community workshops and talks: We will continue to carry out workshops and talks with local communities, schools and park rangers to share the results of the project and promote greater awareness of the tapir's role in the ecosystem.

- Digital platforms: Outreach material will be shared through the El Rey National Park website and social media to reach a wider audience.

- Conferences and symposia: Results will be presented at national and regional scientific meetings, such as the "Jornadas Argentinas de Mastozoología" and ecology congresses.

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

Looking ahead, the most important next steps for tapir conservation include:

- Continue and expand germination experiments to assess the efficacy of seed dispersal by tapirs and its implications for forest regeneration.

- Collect social data through interviews with local communities and stakeholders to understand human perceptions, potential conflicts and opportunities for coexistence between people, livestock and tapirs.

- Investigate interactions between tapirs and feral livestock, especially in areas where habitat use may overlap, to inform management strategies for both species.

- Strengthen environmental education and outreach activities, extending them to more schools and communities to build long-term support for tapir conservation.

- Seek new funding opportunities and collaborations to sustain and expand this research and to support the implementation of conservation actions derived from our findings.

- Expand the geographic scope of the research to include adjacent areas, improving connectivity and conservation efforts across the landscape.

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?

Yes, the Rufford Foundation logo was included on all educational materials produced during the project, such as brochures, posters and presentations used in workshops and talks.
In addition, the Rufford Foundation was acknowledged during each educational activity and its support was publicly mentioned in formal and informal talks and meetings with stakeholders. The Foundation's contribution was also highlighted in social media posts shared by the project team and partner organisations, helping to raise awareness of Rufford's support for conservation work in Argentina.
We will continue to mention the Rufford Foundation in future publications and presentations related to this project.

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

Marlene Zaracho: Field assistant. Participated in field sampling, seed processing and educational activities. She provided logistical support and assisted with sample processing and seed measurement.

Germán Roselló: Park Ranger at El Rey National Park. He contributed with his knowledge of the flora and fauna of the park and helped to locate the sampling areas. He provided logistical support and facilitated coordination with the park administration.

Mariano Ordano: Scientific advisor. He provided guidance on study design, data analysis and ecological interpretation of results. He collaborated in the elaboration of the scientific results and also in the writing of manuscripts that we plan to publish as scientific articles.

Guillermo Funes: Scientific advisor. He provided expertise in seed ecology, germination experiments and supported the ecological analysis of the data collected.

Park rangers and local collaborators were also involved in specific activities such as field logistics, sample collection support and participation in environmental education workshops.

We would like to highlight that the success of this project was possible thanks to the commitment of all team members and the collaboration of El Rey National Park staff, local agents and volunteers.

10. Any other comments?

This project represents an important step towards understanding and conserving the ecological role of the tapir in the forests of the southern Yungas, an ecosystem where such studies are rare. Despite financial and logistical difficulties, we were able to generate valuable ecological data, establish strong relationships with park rangers and local communities, and lay the groundwork for future conservation actions.

The collaboration between scientific institutions, park authorities and local stakeholders was key to achieving the project's objectives and highlights the importance of interdisciplinary and participatory approaches to conservation.
Our commitment to continue this study and to broaden its impact remains strong, both scientifically and socially.
The support of the Rufford Foundation was essential to initiate this project, and we are deeply grateful for the opportunity to carry it out. We would like to make emphasis on the importance of this grant, without which it would have been impossible to carry out this study, given the circumstances of underfunding of science in Argentina. This grant has empowered us to carry on with this project, and we would be very grateful to continue counting on your support in our next steps.

ANNEX – Financial Report

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