

Final Evaluation Report

Your Details	
Full Name	Duran Fernando
Project Title	Raising awareness and alleviating threats on the southernmost Vulnerable tortoise in Patagonia, Argentina
Application ID	41830-1
Date of this Report	February 17, 2025

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
Reduce the mortality of tortoises			X	During the project's execution, more than 61 tortoises that had fallen into the canal and were destined to drown were rescued.
Determine the sectors where the highest number of tortoises drops		X		Due to bureaucratic reasons, data could only be obtained from two canal sections. However, this information is highly valuable.
Reduce the local pet trade			X	We carried out a strong local awareness campaign in schools, on social media, on posters, and in workshops with the canal employees.

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

During the season of maximum tortoise activity (from December 2023 to February 2024, and a period at the beginning of the 2024-2025 season, we worked intensively with the research group and with around 15 volunteers, rescuing more than 61 tortoises from the canal, which were released and monitored to ensure their survival. Numerous data on the biology and ecology of the species were also obtained, which are being analyzed for future publications.

We carried out a strong local awareness campaign in schools and on social media, we made posters and workshops with the canal employees. On the other hand, we had numerous meetings with officials from the Provincial Water Directorate (D.P.A.), with the company that manages the canal, and also with the Secretariat of Environment and Climate Change of the province of Río Negro. Another of the outstanding achievements was that The Patagonian Tortoise Conservation Program was declared of social, educational, environmental, and scientific interest by the Province of Río Negro on November 26, 2024, under Resolution No. 507/2024.

While monitoring several rescued animals released into the wild, we observed four females laying eggs on different occasions. We took measures to protect these nests from predation, especially from the introduced wild boar and cattle trampling. From

these nests, we have already witnessed the hatching of one tortoise and are awaiting the rest. For this, camera traps were purchased to monitor the nests.

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

One of the difficulties we encountered was that halfway through the project there was a change of authorities in the Provincial Water Directorate (D.P.A.) and the Secretariat of Environment and Climate Change, Undersecretariat of Wildlife of the province of Río Negro, which made all previous progress with the previous officials useless. From that moment on, we had little cooperation between the management of the canal company and the Provincial Water Directorate, we were unable to install the grid at km 70, where more tortoises were trapped. The new authorities did not cooperate with the project and significantly hindered its implementation. As a result, it was very difficult to continue with the animal rescue tasks during the 2024-2025 activity season, despite the employees who remained in their positions and continued collaborating and raising awareness about the species.

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

Working with the local community was very rewarding. On one hand, workshops were held with canal employees, who became part of the project and actively participated in rescuing tortoises and informing us of any relevant situations. On the other hand, efforts were made with residents of the ranches surrounding the canal, where the rescued tortoises were released and monitored daily. The residents were always highly supportive of the project. They began to develop a greater awareness of the importance of tortoise conservation, especially now that the species has moved from being categorized as "vulnerable" to being "endangered" on the IUCN red list, a recategorization that will be released shortly and Dr. Erika Kubisch participated as a member of our research group (XII Congreso Latinoamericano de Herpetología 30th – 3rd November 2023, Cochabamba, Bolivia).

Thanks to media outreach, school talks, and workshops, we have achieved significant progress in raising awareness and engaging the community. This has led to increased participation from individuals who keep tortoises in captivity, allowing us to collect valuable data, better understand their health status, and educate the public on the implications of keeping them as pets.

A key message emphasized was that long-term captive individuals cannot be released into the wild due to factors such as unknown origins and the risk of introducing harmful pathogens to wild populations. Additionally, growing public interest in the topic has resulted in a surge of inquiries through social media. This has enabled us to rescue many tortoises through people who reach out to us. In cases where release is not possible, we have also provided guidance on responsible care to ensure the best possible welfare for these animals.

5. Are there any plans to continue this work?

A document is being prepared proposing various mitigation measures based on observations made throughout the project. We promote some suggestions that could be implemented with the collaboration of both the D.P.A. and the Provincial Secretariat for Environment and Climate Change.

Increase the number of grids to prevent tortoises falling into the canal from being dragged by the water current over long distances (currently up to 150 km). Increase the frequency of daily checks of the grids, mainly during the season of maximum activity of the tortoises and fundamentally at midday. Install more adequate corrals to keep rescued animals separated until a specialist can evaluate their state of health and authorize their release. Provide periodic training on the management of wildlife to employees of the canal and the water company. Recondition the culverts so that they function as effective wildlife passages. Currently, they do not fulfill this function due to unevenness, and flooding due to leaks in the canal, among other causes. Collaborate with the Wildlife Department, mainly when new construction or maintenance works are planned. Place shelters and exit ramps for wildlife in areas where there are diversions from the main canal to prevent animals from dying due to exposure to heat. Place metal fences or substrate barriers to prevent tortoises from entering areas with a high risk of falling.

Also, currently, Rocío Rudack, a biology undergraduate thesis is being developed with the data collected during this project, and an article is being prepared to publish in a scientific journal.

On the other hand, due to the lack of cooperation the last time from the authorities to allow us to continue working on the canal, we are collaborating with the National Ombudsman's Office, other Latin American researchers facing similar problems, and numerous national NGOs to initiate legal actions aimed at demanding mitigation measures to address the impact of the canal on local wildlife.

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

All the news about our work was shared throughout the year with the scientific and non-scientific community on our Instagram and Facebook pages (https://www.instagram.com/tortuga_patagonica/ and <https://www.facebook.com/tortugasPatagonia/>). We already shared some of our results in the National Congress of Herpetology of Argentina 2024 "Variación temporal del perfil leucocitario de la Tortuga *Chelonoidis chilensis* en silvestría", and in IV Jornadas Internacionales y VI Nacionales de Ambiente, Viedma, Argentina 2024, "Impacto del Canal 'Pomona-SAO' en la Fauna Local: Un Estudio de Monitoreo y Rescate de la Tortuga Patagónica". Results from these studies were also presented at the 22nd Annual Symposium on the Conservation and Biology of Tortoises and Freshwater Turtles. "Home range seasonality of the world southernmost endangered tortoise (*Chelonoidis chilensis*)". 31st -4th August 2024, Tucson, Arizona, USA.

On the other hand, we have given talks on the problems that affect the survival of this species and its conservation status, and we intend to continue offering and

giving these talks in different scientific and non-scientific settings such as contribution to the community. We have been invited for the third consecutive time to host a stand at Tecnocampo in the city of Las Grutas, providing an opportunity to showcase our work and raise awareness about the issue among the rural community. This group has always been highly engaged and interested in the topic, and our participation has already led to developing new collaborative projects.

Additionally, we have planned our annual activities with local schools, continuing our commitment to education and outreach. It is also expected that it will be declared a natural monument in the legislature of the Province of Rio Negro. In SAO the program is already declared of interest.

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

Continue talking and raising awareness among D.P.A. staff and related authorities to continue working together and reduce the risk of mortality of the land tortoise and other animals. Also, continue working together with the community to reduce the pet ownership of this species and raise awareness. The latter is of utmost importance since pet ownership is one of the most relevant problems that are causing the number of individuals to decline, along with the loss of habitat due to urbanization, the modification of their environment by livestock farming, and the impact of invasive species such as wild boars.

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?

Effectively, we used the Rufford Foundation logo on our Instagram and Facebook pages, and the material shown in educational campaigns. In addition, the poster published at the National Congress of Herpetology in 2024 and the poster published at the IV International and VI National Environmental Conferences, Viedma, Rio Negro 2024, had the logo. The presentation at the 22nd Annual Symposium on the Conservation and Biology of Tortoises and Freshwater Turtles also used the logo. Finally, we mention the Rufford Foundation in the acknowledgments of the different talks given by the research group about the current problems and conservation of this species.

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

- Dr. Fernando Duran: Project leader, budget manager, Coordinator of project activities, participation in fieldwork and educational activities, and in charge of analyzing the results obtained from the different campaigns carried out.
- Dra. Erika L. Kubisch: Professional advisor, budget manager, participation in fieldwork activities and educational activities, and purchase of necessary equipment for work.
- Dra. Jorgelina M. Boretto: Professional advisor and budget manager.

- Lic. Maria E. Echave: Assistant in fieldwork, education campaigns, and budget manager.
- Biology student Rocío Rudak: Assistant in fieldwork activities.
- Biology student Campos Haedo Kenya: Assistant in fieldwork activities.
- Dra. Karina Laneri: Assistant in fieldwork activities.

And volunteers who were selected according to their CVs and letters of intent for field activities and data collection. They were: Luis Canero, Belén DeBiassi, Juan Musso, Juana Caferri, Paula Almeida, Jérica Espinoza, Ayelén Olivera, Agostina Moreira, Santiago Schortrede, Camila Gómez, Gabriela Azorza, Lucía Abraham, Oliver, Paula Soprano and Milton Perelló.

10. Any other comments?

This project helps us to raise awareness among the authorities and employees of the Department of Waters of the Province of Rio Negro about the problems that the species presents, as well as in the local communities about the importance of conserving the land tortoise. This is largely the merit of the Rufford Foundation.

We are very grateful to the Rufford Foundation because it has recognized the problem and with its contribution, we were able to advance in our study of the species and the possibilities of creating knowledge to prevent the loss of more individuals. We also hope that the Rufford Foundation will continue funding these lines of work, to help conservationists prevent the loss of species.