

Final Evaluation Report

| Your Details | |
|----------------------------|---|
| Full Name | Alejandro Alberto Schaaf |
| Project Title | Effects of forest exotic plantation on mammals in a North-western Argentina Forest: implications for management |
| Application ID | 36728-D |
| Date of this Report | 2 May - 2023 |

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 |
|---|--------------|--------------------|----------------|---|
| Map the study area (GIS) and, install camera trap | | | | We quantify the mammal species composition and abundance on 60 sites: 20 native forest sites, 20 eucalyptus plantation sites, and 20 pinus plantation sites. |
| Measure vegetation | | | | We measure vegetation at all sites. |
| Photo/video records. | | | | We check all photos and videos. |
| Statistical analysis | | | | We perform basic statistical analysis. We continue with complex analyses for future publications. |
| Workshop/education Delineate management guidelines | | | | We conduct school surveys, school talks/lectures, and participate in science fairs. Based on the information gathered about the effect of exotic forest plantations on mammals species, we will inform this forest practice to different sectors: the government, companies, universities, and NGOs. |

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

a). Thanks to the contributions to this project, we obtain information about mammal diversity and abundance in native and exotic forest plantations. To our knowledge, this information is new to the region since there are no similar studies reported for the Yungas forests.

b). Our study demonstrates that major changes in mammal species richness and composition are associated with native forest replacement by commercial exotic tree plantations.

c). Many silvicultural measures could favour mammal communities, such as the protection of forest remnants inside plantations. The "indicator" species and all the information will be provided to rangers and managers for future management plans.

d). All the information will be available shortly on the INECHOA-CONICET web page to make it accessible to everybody. Moreover, universities, schools, and government institutions have a better knowledge of our work.

The study of the exotic forest and its associated biodiversity gives the problem more value and commitment. Thus, this project is directly concerned with local farmers and conservation stakeholders, so it emphasised a participatory approach in implementation. During the project period, forest exotic companies' motivators were mobilised intensively in each activity. Finally, during the project period, forest exotic company motivators were mobilised intensively in each activity.

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

Difficulties were only climatic since the area selected has a period of intense rainfall during the summer. Therefore, we were delayed in obtaining some data although we finally manage to finish with the mammals and plant sampling.

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

N/A

5. Are there any plans to continue this work?

In the future, it is expected to continue carrying out work on different land uses and biodiversity. This will allow having broader panoramas on the effects of other anthropic activities (e.g., urbanisation, agriculture, hunting) in vertebrates. As well as involving different sectors of society in the monitoring of native animals. We hope to be able to carry out mappings of threatened animals and land uses, and in this way guarantee a sustainable management of the anthropic activities carried out in the northwest of Argentina.

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

In this first stage, we are carrying out scientific meetings, schools, workshops, and virtual talks open to all public. We are also planning to work with researchers from different country areas on scientific papers. This allows for knowledge sharing and the widening of projects. The report about the effect on forest exotic plantation issue will be prepared and disseminated through forestry companies, email and internet so that local and global community also get chance to learn. We will continue to work with forestry companies, in this way we will be able to continue monitoring other groups of animals and carry out sustainability monitoring.

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

The next steps to follow is to continue evaluating other different changes in land use in these forests (e.g., agriculture, urbanisation). We want all anthropic activities to be sustainable; being this a major and long-term challenge that will be achieved together with companies, government agencies, and researchers.

In addition, we want to involve different social actors in the sustainable management of the Yungas forests from Argentina; as well, we want to generate

priority areas to guarantee the conservation of different groups of animals and plants.

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 RF logo in all of the virtual talks. We also used the logo on the website, workshops and reports we made of the project.

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

Claudia Martin. PhD in Biology. Vegetation fieldwork and workshop.

PhD Roman Ruggera: Fieldwork and data analysis.

Clarisa Otero, Anthropology: Social development, education material and workshop.

Laura Fuchs. PhD Biology. Social development, statically analysis, education material and workshop.

Miguel Cura. Biologist. Camera trap analysis, photographer and fieldwork.

Nadalino Riojas. Student PhD in Biology. Fieldwork.

Agustina Murgia. Student PhD in Biology. Fieldwork and camera trap analysis.

Eduardo Jimenez. Staff INECHOA-CONICET. Audio-visual production for the communication of science, education material and workshop.

Diego Martin Delgado. Forest technical: forest sampling and provide information about the number of trees extracted.

People Forest Company. Fieldwork, information about forest exotic plantation and forest management implementation.

Volunteers was participating in field campaigns: The volunteers were undergraduate students and professionals from different provinces in Argentina, essential for fieldwork.

10. Any other comments?

We would like to express special appreciation to The Rufford Foundation for its contribution because its financial assistance had made possible this project implementation. We hope that future funding will contribute to this and other projects. This will be the starting point for future research using other vertebrate species; as well as continue working on other land change uses and their effects on biodiversity, to establish sustainable management tools.

