

Final Evaluation Report

Your Details					
Full Name	Alejandro Alberto Schaaf				
Project Title	Conversion of the North-western Argentina Forest into exotic Eucalyptus tree plantations: Effects on bird communities				
Application ID	30775 – B				
Grant Amount	£10,000				
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Date of this Report	April 2021				



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	
Bird-sampling: number of species and abundance bird community using the point-count and camera trap method				On this data, we are working on scientific publications, posters and bulletins. This information will be essential for future biodiversity management plans, since the recovery of bird species.	
Vegetation sampling				On this data, we are working on scientific publications, posters and bulletins.	
Data analysis and results				Based on the statistical results, we will be able to carry out the proposed criteria and indicators in this study as guidelines for monitoring programme in north-western Argentina.	
Workshop and education				Thanks to the grant, we were able to conduct school surveys, school talks/lectures, bulletins, management plans and to participate in science fairs.	
Delineate management guidelines				Based on the information gathered about the effect of exotic forest plantations on bird species, we will inform this forest practice to different sectors: the government, companies, universities, and NGOs.	

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

Difficulties were the Covid-19 pandemic during the fieldwork. Therefore, we were delayed in obtaining some data although we finally manage to finish with the bird and plant sampling, as well as statistical analyses.

We also had trouble with the talks in institutions (government, university, school) due to the Covid-19 pandemic. We finally decided to hold virtual talks in order to meet our goals.



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

- 1. Thanks to the contributions to this project, we obtained information about bird diversity and abundance in native and eucalyptus forest plantations. To our knowledge, this information is new to the region since there are no similar studies reported for the Yungas forests. Our study demonstrates that major changes in bird species richness and composition are associated with native forest replacement by commercial eucalyptus tree plantations.
- 2. We were able to establish key species for conservation and indicator species of forests condition. Further, this project will be very important to draft policy at national level which will suggest government authorities for its implementation. Many silvicultural measures could favour bird communities, such as the protection of forest remnants inside plantations.
- 3. All the information will be available in the scientific papers which will be published shortly as well as on the INECOA-CONICET web page to make it accessible to everybody. Moreover, universities, schools, and government institutions have a better knowledge of our work and bird conservation on forest exotic plantations.

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

The study of the effect on exotic forest plantation and its associated birds gives the native forests more value. Thus, the community will benefit from sustainable forest management. In addition, since Jujuy government and private companies are planning new eucalyptus plantations, our data will be used to inform about which bird species will be affected and which areas of native forest should be preserved due to the presence of vulnerable or endangered bird species.

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 company motivators were mobilised intensively in each activity.

5. Are there any plans to continue this work?

Yes, this study will be the starting point for future research using other vertebrate species such as amphibians, reptiles, and mammals; as well as exotic pine plantation, and more direct proposals for conservation such as the use of nest boxes for birds in order to increase the availability of nesting sites in forest exotic plantation. Also, being a worker of biodiversity conservation and CONICET researcher of forestry, I want to utilise my expertise and learning of this project to conserve native biodiversity in forest exotic plantations.

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

Scientific papers, scientific meetings, schools, workshops, and virtual talks open to all public. We are also planning to work with researchers from different country areas. This allows for knowledge sharing and the widening of projects. The report about the



effect on forest exotic plantation on birds' issue will be prepared and disseminated through email and internet so that local and global community also get chance to learn. Similarly, post-project results will be updated on the RF webpage.

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

The RSG was used from March 2020 to April 2021. The RSG was used as per mentioned in application:

March-December 2020: we buy and install the camera traps and recorders for nocturnal birds across the six sampling sites. They have also carried out counting points (food and fuel).

January – April 2021: Data analysis, workshops, bulletins, education material, and virtual talks (camera and Go-Pro; computer, printer, book).

8. 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
Fieldwork: Fuel and food	1500	2000	+500	
Field equipment	6700	7250	+550	
Computer – printer – Book – camera – go pro	1300	1300		
Education material	500	900	+400	
TOTAL	10000	11450	+1450	This Project was co- financed by other entities, e.g.: CONICET, Universiad Nacional de Jujuy

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

We want all forest exotic activities to be sustainable; being this a major and long-term challenge that will be achieved together with companies, government agencies, and researchers. Moreover, we want to include species other than birds which are important for conservation. We also coordinating with our local partner institutions to update their actions for the evaluation of forest companies' activities and look progress of these projects.



10. 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 the poster we presented at a scientific meeting and in all of the virtual talks. We also used the logo on the website and all of the reports we made of the project. Additionally, we will acknowledge the financial support of RF in the scientific papers, PDF material, and bulletins.

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

Roman Ruggera and **Ignacio Ferro** (Phd Biology): birds monitoring, install a camera system, statistical analyses, and education material.

Clarisa Otero (Phd Anthropology): social development, and education material.

Diego Martin Delgado and **Sergio Torres** (Forest technical): they helped us with vegetation sampling and access to different working sites. Also, they offered us information about the tasks they carry out, and they also provided us with information about the forest exotic management.

Park ranger. They collaborated in fieldwork and information about the forest and local bird species.

12. Any other comments?

We would like to express special gratitude 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 the preservation of these forests and their biodiversity.