

## The Rufford Foundation

### Final Report

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Congratulations on the completion of your project that was supported by The Rufford Foundation.

We ask all grant recipients to complete a Final Report Form that helps us to gauge the success of our grant giving. The Final Report must be sent in **word format** and not PDF format or any other 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. Please be as honest as you can in answering the questions – remember that negative experiences are just as valuable as positive ones if they help others to learn from them.

Please complete the form in English and be as clear and concise as you can. Please note that the information may be edited for clarity. We will ask for further information if required. If you have any other materials produced by the project, particularly a few relevant photographs, please send these to us separately.

Please submit your final report to [jane@rufford.org](mailto:jane@rufford.org).

Thank you for your help.

**Josh Cole, Grants Director**

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Grant Recipient Details	
Your name	Mariela V. Lacoretz
Project title	Assessing biodiversity and its relationship with habitat structure in coastal woodlands of Buenos Aires province: an opportunity for environmental education
RSG reference	12684-1
Reporting period	December 2014-August 2016
Amount of grant	£5000
Your email address	mlacoretz@ege.fcen.uba.ar
Date of this report	September 2016

1. Please 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
Conduct bird and vegetation sample in talares native woodlands and exotic tree plantations			X	We sampled 148 census points in 46 talares native woodland patches. Also, we surveyed 32 census points in eight exotic tree plantation patches.
Data analysis			X	We used several techniques for data analysis such as PERMANOVA and GLM. Also we calculated spatial predictors to perform a variation partitioning analysis.
Environmental education			X	We gave several talks about the talares native woodland situation that were complemented by didactic materials, such as posters and brochures, in the interpretation centre. The talks included field practices where the students were taught to recognise forest birds through the use of binoculars. An evaluation system was used to determine what impact the activities had on the public.
Publish results			X	We presented our results in an international congress and we have a manuscript in preparation.
Present our results to decision makers			X	Participation in the update information meeting for the management plan of Campos del Tuyú National Park. Report in preparation for OPDS

				(Provincial Agency for Sustainable Development)
Make networks with different institutions and members of the community			X	We received support from the Municipality of La Costa, OPDS, Aves Argentinas NGO, Campos del Tuyú National Park Intendancy, COA Tuyu (Birdwatchers Club), photographers and naturalists. Also fieldwork volunteers were mostly biology and park ranger students.

**2. Please explain any unforeseen difficulties that arose during the project and how these were tackled (if relevant).**

We faced some delay in the development of educational activities due to bureaucratic issues in the municipality where the interpretation centre is located. Although this delayed the RSG grant schedule, we were able to successfully complete all objectives.

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

1. Research

Our research has followed two main axes. The first one was the study of the relationship between richness and diversity of birds and the amount of forest and its structure. The amount of forest may be used as an alternative measure to the forest patch size and isolation. The results showed that keeping remaining relict forests is essential to maintain bird richness and bird community structure in the talares, since without these woodlands much of the bird diversity in the area would be lost. Besides the remaining amount of forest, their structure it is also important, hence maintenance of plant species composition and vertical coverage it is necessary. The second research axis was based in the comparison of the composition of the bird communities between talares native woodlands and exotic tree plantations. The results indicated that woodland type affected richness and structure of bird community. Bird species richness in exotic tree plantations was less than 50% compared to native woodlands. Moreover, bird abundance and diversity in native woodlands were higher than in plantations. These results showed that exotic tree plantations cannot replace talares native woodlands as habitat to the woodland bird community. For more information, please see the progress reports.

2. Environmental Education

We gave several talks in the interpretation center in San Clemente del Tuyú. The talks were aimed primarily at schoolchildren and based on explaining the critical situation of forest in

Argentina and, in particular, of the talaes native woodlands. To support the explanation given about native forests, we displayed informational posters about the flora and fauna of the talaes and its condition. In addition, we performed field practices with the students. We taught them to recognise woodland birds through the use of binoculars and brochures with regional birds developed for this activity. An evaluation system was implemented. Students were asked to write a list with native and exotic animals and plants of the forest, at the beginning of the activity. In general, students confused the pine and eucalyptus trees as native. After the talk and field practice we repeat the question, and then, they could remember tala trees and birds, mammals or butterflies of the native forest. The brochures included the address and a map to reach the interpretation center. Many brochures were left in the tourist office of the city that is located 300 m from the interpretation centre. Therefore, since the interpretation centre is open to the community, we expect the visit of locals and tourists.

### 3. Shared Results

We presented our results at the X Neotropical Ornithological Congress & XXII Congresso Brasileiro de Ornitologia (19th-24th July 2015), winning the third prize in poster presentation category. At this time, we are preparing a manuscript for publication, it will be called "Can exotic tree plantations preserve bird diversity of native coastal forest in south Bahía de Samborombón, Buenos Aires, Argentina?"

Also, I attended to the update information meeting for the management plan of Campos del Tuyú National Park, to which I had been invited to show the main results of our analysis. We highlighted the problems and opportunities presented by the talaes environment on the study site. It was attended by national park authorities and we are confident that our results will be taken into account for the future management plan of the national park and its surroundings. Moreover, we are preparing a report for OPDS (Provincial Agency for Sustainable Development).

### **4. Briefly describe the involvement of local communities and how they have benefitted from the project (if relevant).**

The involvement of the local community was an essential part of our work. Particularly, we counted with the participation of the heads of the Interpretation Center, authorities of La Costa Municipality, members of COA Tuyú (birdwatcher club of the Tuyú region), park rangers for OPDS and Campos del Tuyú National Park, and also members of Aves Argentinas NGO who help us in the development of infographic posters. We also had interaction with many children and school teachers who received brochures and toured the facilities of the Interpretation Centre. Moreover, we received photo donations of many photographers from this region for the development of bird brochure and posters. Besides the Interpretive Centre it is open to the general public, so the content of posters and brochures will reach not only local residents but also tourists visiting the center.

**5. Are there any plans to continue this work?**

Yes, we will continue with environmental educational activities, we still have brochures for future talks and activities. La Costa Municipality is interested in our project, and we will continue working with them in the development of new infographic posters. These posters will focus in other habitats of the Tuyú region such as beaches, dunes, grasslands, sea, crab mudflats, lakes and marshes. This information is already being collected and organised. We also want to continue with our research in the talares native woodlands.

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

As discussed in the outcomes, much of the work has already been shared. For what remains, we intend to write at least one manuscript more and attend more conferences. We are planning to present our environmental education work in the "IV Jornadas RESA" (IV Conference of Social Responsibility in Environmental Education" which will be on October 15, 2016 in Buenos Aires, Argentina.

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

December 2014-August 2016. The project took seven months longer than planned.

**8. Budget: Please 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.**

Item	Budgeted Amount	Actual Amount	Difference	Comments
Food	2200	2030	170	The number of members of the crew fluctuated, sometimes being fewer people than expected.
Fuel	750	1100	-350	Fuel price increases due to inflation
Bus Tickets	200	170	30	
Insurance	150	150	0	
Rubber boots	80	65	15	
Tape measure	50	50	0	
Binoculars	220	186	34	
GPS	200	115	85	cheaper than expected
Posters and brochures (x5000)	810	751	59	

Congress presentations	50	110	-60	I got funding from the Buenos Aires University for travel expenses. However, because it was an international congress, there were more expenses than expected.
Memory cards and Rechargeable batteries	90	90	0	
Stationery and Office supplies	200	233	-33	
<b>Total</b>	5000	<b>5050</b>	-50	

*When I received the grant 1GBP was 13.7 ARS, today 1GBP is 19.6 ARS, this has an impact mainly on the price of fuel (gasoline rose 60%, had gone from a 11.9 ARS to 19 ARS a liter). I did not change all the money to ARS at the beginning of the project and the budget was calculated with the original exchange rate.*

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

Concerning research, it would be important to continue doing forest bird surveys periodically. We investigated birds and plants, but there are many other taxonomic groups which no information is available. At the same time, I think it is important not only study the remaining talares but also consider how to restore them. The nursery in which the interpretation center is located has facilities for experiments of native plant germination.

#### **10. Did you use The Rufford Foundation logo in any materials produced in relation to this project? Did the RSGF receive any publicity during the course of your work?**

The Rufford Foundation logo was shown on the poster of the international congress, it is present in the 5000 brochures distributed and in posters that were installed in the interpretation centre. It was also included in PowerPoint presentations of talks given for schools and the authorities of Campos del Tuyú National Park.

#### **11. Any other comments?**

I am grateful to Rufford Small Grants Foundation for giving us the opportunity to develop these activities in the Tuyú region, which allowed us to show these very important but forgotten woodlands of the province of Buenos Aires, Argentina. The research conducted served to finish my PhD in biology and we hope that our results will be useful for management decision about talares.