

## The Rufford Small Grants Foundation

### Final Report

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

We ask all grant recipients to complete a Final Report Form that helps us to gauge the success of our grant giving. 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. 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**

---

#### Grant Recipient Details

<b>Your name</b>	Natalia Politi
<b>Project title</b>	Using woodpeckers to inform sustainable forestry in the piedmont forests of Argentina
<b>RSG reference</b>	45.09.08
<b>Reporting period</b>	March 2009 – July 2010
<b>Amount of grant</b>	£11,850
<b>Your email address</b>	<a href="mailto:Natalia.politi@fulbrightmail.org">Natalia.politi@fulbrightmail.org</a>
<b>Date of this report</b>	31 July 2010

**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
Understand which trees are selected for excavation by woodpeckers			x	We were able to determine which tree species are used and which are selected for excavation by woodpeckers. The role of woodpeckers providing nesting and roosting sites for many avian cavity-nesting species has been published in BIOTROPICA. This information has allowed us to delineate management guidelines for foresters based on the requirements of woodpeckers.
Determine the rate of creation of cavities		x		The rate of creation of cavities can only be determined in long-term projects since we cannot assess the rate due to the fact that there might be disturbances that are responsible for pulses of cavity creation. However, having established permanent plots will allow us to monitor them and in the long-term reach this objective. For now we are able to conclude that woodpeckers are responsible for the creation of most cavities. This is particularly relevant since cavities are a rare resource in piedmont forests of Northwestern Argentina. These results have been published in FOREST ECOLOGY AND MANAGEMENT.
Assess which cavities are likely to persist longer		x		As with the previous point, the assessment of the persistence of cavities in time is an objective that can only be fully achieved with long-term projects. However, we have identified cavities and we will be able to follow their fate through time allowing us to obtain multi-year data to reach our objective. For now we are able to conclude that cavities in snags do not remain available for long periods and therefore special management considerations should be address to assure this important resource. This conclusion has been published in FOREST ECOLOGY AND MANAGEMENT.

<p>Delineate management guidelines based on the requirements of woodpeckers</p>			<p>x</p>	<p>The information obtained during this project was summarised into forest management guidelines focusing in one aspect of biodiversity. We hope that as our research programme includes more information (e.g., data from other groups) we are able to address other issues that need to be taken into account to assure the conservation of biodiversity. The delineation of management guidelines based on information gathered in forests where they will be applied will probably increase the chances that the guidelines are successful assuring the conservation of biodiversity. We still need to monitor the outcome of forests managed with the guidelines proposed, assess the effect of this guideline in other groups, and make an economic assessment of the guidelines proposed and if necessary proposed compensation schemes or readjust some requirements.</p>
<p>Increase natural resources agency staff and local people awareness</p>			<p>x</p>	<p>We have transferred the information gathered during this project to governmental staff, policy-makers, foresters, and locals related to forest management. The information was available in a workshop, through the distribution of booklets, and posters. Additionally, we wrote two newspaper articles and we were available for a national broadcasting media to make a documentary about our project. All of the information is available in our webpage. However, to truly increase awareness a long-term project is needed to be implemented. We need to emphasise the importance of forests and that if well-managed they can provide economic alternatives to other land-uses, such as transformation for sugarcane production. Additionally we need to address the negative impacts that transformation and degradation of forests has on the fauna and flora but also for people. Particularly it is necessary to assess if the guidelines</p>

				proposed are being used by foresters when harvesting, by governmental staff when deciding to approve forest logging operations and are delineating guidelines for land planning schemes, and by locals when removing fuel or seeds or other non-timber products.
--	--	--	--	--

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

Our main difficulty was that excavated cavities a rare feature in piedmont forest therefore we had to increase significantly our study area to obtain sufficient data of excavated cavities.

It was very time consuming to delineate permanent plots to monitor cavities and therefore, we had to spend a lot of time to establish the plots. However, we are confident that the time spent will provide to be useful since we will be able to monitor in the long-term the fate of cavities.

A very wet year prevented us from starting our activities in January and we had to wait until March to start our field work. Therefore the activities were shifted three months.

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

We were able to determine the tree species and characteristics that are used by woodpeckers to excavate cavities. This is particularly relevant since woodpeckers excavate cavities that are selected for by many cavity-nesting birds. Therefore we expect that logging operations that retain these features are very likely to thrive for this guild and therefore contribute to the conservation of biodiversity.

We were able to summarize the information generated in this project and in others projects to delineate management guidelines. This information is particularly relevant since land planning schemes being implemented in Argentina require that forest management is conducted with an eye toward biodiversity and therefore, having this information allows fulfilling this requirement.

The information has been made available to governmental staff involved with approving forest harvesting activities and to foresters therefore, a more sustainable use of forests is expected to address conservation issues.

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

Local communities were involved passively since they received the information gathered in this project. Local communities will benefit with the results of this project, since it is likely that forests will start to be managed sustainably and this will maintain the economic value of forests. Forests that retain their economic value are less likely to be transformed to other land uses and therefore will continue to provide the services and goods. The goods and services that forest ecosystems provide enhance the quality life of local people. Many of these local people use the goods (seeds, fuel wood, wild meat) provided by forests as resources to maintain their livelihood and therefore are

dependent on forests that are maintained in relatively good conservation status so that they continue to provide these goods. However, many of the recommendations that we suggest are based on information gathered through talks with local people.

The data gathered has been useful to fulfil the requirement of the land planning scheme currently being implemented in Argentina, allowing policy makers and governmental resource staff to have information to guide their guidelines. Foresters have also benefit since forests managed with an eye toward biodiversity are likely to retain their integrity and will be able to regenerate and continue proving merchantable timber which foresters depend upon.

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

Yes, we hope to continue with this work since there are still many more aspects of biodiversity that need to be addressed in order to delineate forest management guidelines that take into account different biodiversity features. Additionally, we need to continue our work to monitor cavities and permanent plots to be able to validate our results and assess if our recommendations are been applied and if they produce the desire effects on cavity-nesters and for other groups. Finally, raising awareness among governmental agency staff, foresters, and locals requires a sustained work of education. We have been able to secure funding to continue our work with the National Scientific Agency but we hope to receive additional support from RSG through funds to continue our work.

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

We presented our results in a workshop to allow foresters, local people, resource agency staff, and policy makers to acknowledge the importance of forests for many species and that simple and possible guidelines can assure the conservation of a piece of the biodiversity puzzle. We have summarised our results in a booklet that was distributed to many foresters, local people, resource agency staff, and policy makers. We have published two articles in local newspapers on the importance of forests and how they can be managed sustainably to assure the conservation of woodpeckers and many species that depend on woodpeckers. The results gathered through the support of RSG was compiled and summarised so it was available to policy-makers because it is relevant to guide their work to delineate guidelines to manage sustainably working forests in the framework of the land planning scheme being implemented for Argentinean forests. Forest certification schemes use guidelines and mandate requirements based on information generated in other forest ecosystems, but with information provided to them with our results they will be able to assure that guidelines are based on information gathered in the forest been applied. A national broadcast programme has developed a documentary on our project and it is scheduled to go on air this year. We hope to upload this documentary in the web so many people can see our project and its implications on forest conservation. The booklet is also available in our webpage so it can be accessed by many people. We have prepared four scientific manuscripts: two have already been published and two are under consideration to be published. We presented our work in a national scientific meeting. Finally, the area studied is within Las Yungas Biosphere Reserve (BR) in the buffer zone and if the guidelines are implemented they can truly help that Las Yungas BR is not only a paper reserve but assures the conservation of biodiversity while assure that people use and benefit from the forest resources, therefore the information will be sent to staff in charge of the BR.

Scientific publications published:

1. **Politi, N.**, M. Hunter, Jr., & L. Rivera. 2010. Availability of cavities for avian cavity nesters in selectively logged subtropical montane forests of the Andes. *Forest Ecology and Management*.
2. Miranda M.V., **N. Politi**, & L. Rivera. 2010. Cambios Inesperados En El Ensamble De Aves En Áreas Bajo Explotación Forestal En La Selva Pedemontana Del Noroeste Argentino. *Ornitología Neotropical* 21: 323-337.
3. **Politi, N.**, M. Hunter, Jr., & L. Rivera. 2009. Nest selection by cavity-nesting birds in subtropical montane forests of the Andes: Implications for sustainable forest management. *Biotropica* 41: 354-360.
4. Cornelius, C., K. Cockle, **N. Politi**, I. Berkunsky, L. Sandoval, V. Ojeda, L. Rivera, M. Hunter, Jr. & K. Martin. 2008. Cavity-nesting birds in Neotropical forests: cavities as a potentially limiting resource. *Ornitología Neotropical* 19: 253-268.

Educational publications published:

1. Brochure: La conservación de las Yungas y su biodiversidad. L. Rivera & **N. Politi**. 2008.
2. Poster: Protejamos los bosques, protejamos los árboles, protejamos su futuro. **N. Politi**, L. Rivera & D. Regondi. 2008.
3. Booklet: Recomendaciones para un manejo forestal que considere la biodiversidad en la Selva Pedemontana del Noroeste Argentino. **N. Politi** & L. Rivera. 2010.

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

The RSG was used from March 2009 to July 2010. The length was not modified only the dates since we had to postpone our activities due to a very wet year that prevented us from starting in January as it was anticipated.

**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.**

£1 = \$6.07 Argentine pesos

Item	Budgeted Amount	Actual Amount	Difference	Comments
Field equipment	710.00	758.00	-44.00	
Field expenses	8640.00	10038.00	-1398.00	The difference in the amounts was a result of having to spend more resources to field work to establish the permanent plots.
Management guidelines	2500.00	1098.00	1402.00	We did not have expenses to conduct the workshop because we obtained support from the University of Jujuy, and the booklet was printed in a paper quality that allowed us to save money.
<b>TOTAL</b>	11850.00	11898.00	48.00	

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

The next steps are that our recommendations are implemented, through for example a requirement to approve forest harvesting proposals. Additionally, we need to assess the effect that our recommendation have on foresters that take them into account, through implementing a monitoring scheme. The monitoring scheme will additionally allow us to assess in the long-term the rate of cavity creation and loss. This monitoring programme can be implemented in the long-run if local people are given the task to conduct them and therefore there is a need for capacity-building. In forests that are severely degraded it would be a good alternative to increase the availability of cavities by supplementing box-cavities to ensure that many cavity dependent species are able to persist in degraded forests and are able to fulfil the many ecological functions that these species play. It would be wise also to include local people in the task of monitoring and guarding these box-cavities to assure a long-term assessment of the effect of these artificial cavities in degraded forests and help in forest restoration. We also need that the monitoring plans consider other biodiversity aspects (e.g., tree regeneration). It is important to assess the effect of timber harvesting on other groups (e.g. understorey birds, raptors, fungus, etc.) and develop recommendations that consider their requirements. Furthermore, we need to continue raising the awareness of actors involved in forests of the importance of taking into account biodiversity in forest managed for timber exploitation. We need to assess the economic gains and losses that can arise from implementing our recommendations and find compensations schemes where direct economic losses are detected.

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

We used the RSGF logo on the booklet we made, and poster we presented in the scientific meeting. We also used the logo in the website and all the reports we made of the project. Additionally we acknowledged the financial support of RSGF in the documentary that the National Broadcast made, in interviews, and acknowledged the support of RSG in the scientific papers.

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

RSG has made an important contribution to forest management of a critical forest ecosystem by sustaining the funding since 2003 for this project. Only projects that are sustained for long periods are able to gather enough data to use to generate recommendations that can contribute for the conservation of biodiversity. Furthermore, changing attitudes requires a sustain work of education which is achieved through the continuation of the support of RSG. Foresters with the information that we transferred with the support of RSG are starting to take into account biodiversity now the task remains that they implement these guidelines to their forest management.