

## 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>	Francisco Aguirre S.
<b>Project title</b>	Ecological parameters related to the regeneration of Chilean palm forests ( <i>Jubaea chilensis (Mol.) Baillon</i> ) in the Region of Valparaíso - Chile.
<b>RSG reference</b>	78.08.09
<b>Reporting period</b>	1 year
<b>Amount of grant</b>	£6000
<b>Your email address</b>	<a href="mailto:fco.bio@gmail.com">fco.bio@gmail.com</a>
<b>Date of this report</b>	30th June 2011

**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
To assess the effect of floristic composition on the natural regeneration of the Chilean palm.			X	The most important vegetable species were determined regarding the points where regeneration is found. All this, through phytosociologic census according to the Zurich-Montpellier methodology. Moreover, the absolute abundance of Chilean palm regeneration was recorded based on the age classification of this specie suggested by María Teresa Serra and others.
To assess the existent ecological interrelation between micro-mammals and sapling of the Chilean Palm.			X	The abundance and diversity of micro-mammals was considered through the catch with Sherman tramps. The captured rodents were characterised in a database and were marked with numbered ear tags. Nine species were able to be caught, six of them were native and three were introduced.
To assess the effect of geomorphology on the area of study. This is about the natural regeneration of the Chilean palm.			X	Sampling points were established according to the vegetal coverage of tree and bush species, the inclination and the slope exposure in which a matrix chart was built.
To assess the effect of the physico-chemical parameters of the ground on the regeneration of the Chilean palm.		X		Only the ground temperature and some pH data were measured due to difficulties subsequently identified.

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

- Due to the earthquake that hit the centre-south area of the country on February 27<sup>th</sup>, 2010, there was a loss of minor equipment.
- Technical problems with data logger which precluded its use in field.
- "Palmar el Salto" Nature Sanctuary is a private sector. Therefore, its access was restricted.
- During the development of this project several fires took place at "La Campana" National Park. Even though only small areas were affected by them, the fires precluded the access to it.

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

- Information about the abundance and distribution of the Chilean palm regeneration at “La Campana” National Park and at “Palmar el Salto” Nature Sanctuary.
- Characterisation of the ecology of the Chilean palm forests regarding the existing interrelations between vegetation and fauna.
- To generate management and conservation plans of the Chilean palm related to the saplings of it.

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

The community was not involved in this research.

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

Yes, there are. It is thought that accomplishing the research is essential to understand the dynamic of the regeneration of Chilean palm forests. What causes this is that, nowadays, the management plans focus on adult stages of the specie, not considering the ecologic niche of the seedling.

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

It is planned to share the results through publications in scientific magazines, presentations in congresses and conferences, even in environmental education workshops which generate consciousness about the conservation and ecological importance of the specie.

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

The project ran for 14 months from January 2010 to March 2011. During summer 2010 planning excursions were carried out in both places (a week in “La Campana” National Park and three days in “El Salto” Nature Sanctuary). In “Palmar El Salto” Nature Sanctuary, work took place 18 days for season approximately; in “La Campana” National Park it took 14. The corresponding months where the work was done are May, June, July, August, November, December 2010; January and February 2011. During the unmentioned months the obtained data were analysed.

**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
Bibliography	£171	£54	£117	Some borrowed books were used instead of buying them all.
Standard size Shermann traps	£2130	£1185	£945	Only 150 traps were bought; instead, a more intensive field work was carried out.

Transport	£518	£1567	-£1049	This item of transport and food was not considered at first.
Wages	£2064	£2064	£0	
Material for soil characterisation	£184	£368	-£184	Due to the fragility of the thermometers, most of them were broken. Therefore, five more had to be bought.
Data Logger	£319	£452	-£133	
GPS	£240	£249	-£9	
Digital Camera CANON SX110	£245	£0	£245	The digital camera was not bought.
Office Materials	£131	£61	£70	Recycled material and digital files were used in this work which helped to reduce the cost of it.
<b>TOTAL</b>	£6000	£6000		

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

- ✓ To create conservation measures, in order to avoid the disappearance of the few Chilean palm forests that are left.
- ✓ To produce mitigation measures of the anthropogenic impact, in a sustainable manner, that affect Chilean palm forests.
- ✓ To create management measures of spaces and uses on the studied places.
- ✓ To make more ecological studies on the habitat and biologic interactions associated to Chilean palm forests.
- ✓ Perform environmental education to the community directly related to sectors and the surrounded area about the importance of conservation and care of unique places in the world.

#### 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?

The logo was used in the elaboration of T-shirts for each of the members of the group. These were used in field at the moment of work.

RSGF was advertised in scientific talks with students and researches related with the situation.