

The Rufford Foundation

Final Report

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.

Thank you for your help.

Josh Cole, Grants Director

Your name	Luciano Hiriart-Bertrand
Project title	Using Scientific-Based Approaches to Promote the Establishment of a Marine Protected Area for Threatened Humboldt and Magellanic Penguins in Southern Chile.
RSG reference	14468-1
Reporting period	03.2014 – 03.2015
Amount of grant	£6000
Your email address	l.hiriartbertrand@costahumboldt.org
Date of this report	March 10 th 2015

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 promote the establishment of specific conservation measures at-sea (marine protected area) for threatened Humboldt and Magellanic penguins			✓	One of the primary objectives of this programme was to promote the creation of a marine protected area for both threatened penguin species. Throughout the grant period we were able to provide crucial information to relevant authorities at local and national levels, as well within the community. Moreover, and considering that our proposal represents the establishment of novel regulations at sea, most of the promotional activities were based on marine policy modifications.
To increase awareness about the conservation status of the mixed-colony of penguin population in the target area		✓		As we proposed the establishment of conservation regulations within the area, one of the most relevant aspects was to introduce the conservation status of the mixed-colony. In consequence, we reviewed published information about population size and presented to the community and authorities.
To offer the delineation and design of a spatial protected area at-sea based the ecology and biology of both penguin species in the area			✓	This objective was successfully achieved. The delineation and design of the protected spatial area at-sea was delivered and discussed among users and authorities. The sizes and boundaries is a topic that needs to be reinforced in the near future with update data.
To ensure local and national cooperation regarding penguin conservation			✓	During the grant period we participated on diverse instances (e.g., seminars, encounters, workshops) where we were able to ensure national and regional participation on penguin conservation issues.
To obtain economic and social perceptions data linked with penguin conservation in the target area		✓		We collected data about economic and social perception through personal interviews. We also were able to determine current threats associated with tourism activities. More detail information is required in order to identify close relations among socioeconomic and penguin conservation

				activities. Information collected during the grant period is at an analysis stage and will be reported in future reports and publications.
To contribute to reduce incidental mortality of penguins associated with coastal gill net activities	✓			Although we delivered key information about the local incidental mortality caused by the interaction with coastal gill nets, there is still a recognised lack of governmental initiatives to implement regulations to mitigate the negative impact on marine ecosystem and penguins of this fishing gear.
To improve the understanding about the critical role that penguins play within the marine ecosystem in the target area		✓		Using penguins as sentinels for marine ecosystems was our “made to stick” message. Diverse ranges of audience positively received the message about the crucial role that penguins play in the marine ecosystems as an umbrella species.

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

Because of the main goal of this project was to promote the establishment of marine conservation measures based on several aspects of the ecology, biology and conservation of Humboldt and Magellanic penguins in the Puñihuil islets, southern Chile, we were able to interact with key local actors and authorities. Regarding to the idea of implementing this novel approach, we experienced different levels of perceptions among users, including both stakeholders and authorities. Primarily, most of the negative perspectives were linked to a small group of local fishermen, who are the ones that mainly use gill nets as fishing gear. This group suggested that fish population in the area is rapidly decreasing, and in consequence the use of this type of fishing gear has been reduced, which may indicate a new precedent to support the creation of marine conservation policies within the proposed area.

An additional unforeseen issue that certainly produced interference to our major goal was related to the political transition that the Biodiversity and Protected Area Agency is facing nowadays. Considering the creation of new regulations associated with terrestrial and marine ecosystems conservation, the current process of establishing novel approaches are slowed and recommended to be submitted once the new regulation will be declared by the National Congress. In consequence, to implement the establishment of regulations such as a Marine Protected Area for penguins it may take a considerable amount of time because of the priorities of the current governmental agenda. We hope that our promotion campaign can contribute to accelerate the process due to the critical pressure that penguins are receiving in the target area.

Economic interest of local tourism operators seems to be critical fact that may also delay the implementation of the proposed regulations. The government recommend the inclusion of relevant actors during the entire process of design and implementation of a protected area at both land and sea. However, the participation of local actors in the target area relies primordially on economic

priorities, which are linked to preserve penguins but they did not received positively potential changes for tourism operational regulations.

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

This project was successfully implemented due to we used several key components during the promotional activities. Mainly, we were able to organise encounters with local stakeholders and authorities whom were directly involved. As requested the three most important outcomes were:

I. Implementation of an advocacy commission:

In order to promote the establishment of a marine protected area for threatened Humboldt and Magellanic penguins in the target area, we coordinated meetings with diverse levels of authorities and stakeholders. Because the information provided based on bioecological aspects of both species and also due this approach represents the first comprehensive framework of the status of the penguins in the area, we were invited on different occasions to present our project. Moreover, and considering that this initiative is the first on this type, where the protection of specific-species was tackled, we were invited to participate as advocate members in to provide valuable data for the analysis of such measure.

II. Economic and sociocultural data collection:

Collecting economic and sociocultural data associated with perception information from stakeholders was a very important outcome produced during the period. We conducted several interviews to key local actors, and consequently based on the results, we asked them for a formal petition through a support letter signed. These letters will be crucial to present the final proposal of the establishment of the conservation measure.

We finally expect to add this valuable information on the formal national proposal and presenting it on our upcoming encounters with authorities and policy makers, programmed during the second semester of the present year. Also, data collected is considered to be included on a future peer-reviewed article.

III. Raise awareness at different levels of group organizations:

Increasing the attention of public about the relevant issues that are facing not only penguins but also the entire marine ecosystem in the target area was identified as a critical fact. We were able to turn people's attention about the negative effects of anthropogenic activities in the area such as gill net fisheries. In consequence, local people agree with our perception, and requested more support to implement new regulations in order to avoid the increase of tourism operators, reduce mortality of penguins associated with fishing operations, and to improve information about the current status of penguins and potential effects of climate change in the area.

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

Although local community is permanently involved on activities related to promote conservation efforts around and within the target area, there is still a lack of interest on applying novel

conservation initiatives. Mainly, the responsibility of the gap is certainly because of the economic priorities linked with tourism activities instead to accurate responsible measures. Also, is extremely required to continually reinforce knowledge of the importance of penguins in the area. As practically the entire community have close relation with tourism activities, it is crucial to strengthen initiatives oriented to protect and conserve marine ecosystem, penguins and other marine wildlife. Considering that the area has received nearly 50,000 visitors during the current breeding season (September-March), it is necessary to implement a strategic framework in order to mitigate the impact produced by human disruptions. Due to we have close work relation with local actors, we are planning to visit the area occasionally, providing information and updating with the policy status of implementing a protected area at-sea for penguins.

5. Are there any plans to continue this work?

Yes. Because this project was designed in order to initiate the first approaches to promote the establishment of a marine conservation measure based on bioecological attributes of threatened Humboldt and Magellanic penguins, it is required to implement a strengthen program oriented to build capacity among users. Also, we plan to continue with our meetings with policy makers and fortify our working relationships with the Ministry of Environment.

An additional considerable approach it would be to evaluate the current status of penguins in Puñihuil islets in the near future. Understanding the dynamics of marine ecosystems as well the mixed-colony of penguin population in the area, it is crucial to continues to obtain more detail information in order to reinforce the protection of the marine habitat in the target area. In that context, we pretend to update information about foraging areas of both species during the breeding season, population size, post moult migration, evaluating the interactions with coastal fishing activities, and finally to support the recognition of marine coastal corridors based on dispersal movements of both species of penguins. We believe that more bioecological data is required in order to demonstrate the changes of penguins dynamics associated with human activities and Climate Change.

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

Primordially, the results of this project will be presented upon request to the authorities and stakeholders on a report. Secondly, we are planning to present our results at the Rufford Foundation Conference South America, which will be held in May in Chile. Finally, we are preparing a manuscript that emphasis the recognition and delineation of marine protected areas and coastal migration corridors for both penguin species along the south central coast of Chile based on both bioecological and socioeconomic approaches. We pretend to submit the article for reviewing during the second quarter of the present year.

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

Funds were spent according the time scale proposed initially. Most of the grant (65% approx.) was spent during the first semester of the past year and, the rest were spent during second semester.

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
Materials and Outreach	1450	650	+800	We developed materials for presentations and promotional activities. The difference lies on we are planning to develop new materials using recent data collected (e.g., socioeconomic)
Sustenance	600	850	-250	This item increases due to in several occasions we host diverse ranges of meetings.
Salaries	1150	1850	-700	The amount of hours involved of the staff was more than expected.
Photography supplies	150	170	-20	We purchase a small water resist camera.
Video supplies	400	500	-100	This item supports to purchase of audio and data projector equipment.
4WD truck rental and fuel	1150	1450	-300	Costs of the fuel were higher than expected.
Travel	400	550	-150	Bus tickets and the amount of travels were higher than expected.
Accommodation	550	490	+60	On two occasions we were invited to stay with locals at their dependence.
Office supplies	150	150	0	
Total	6000	6660	-660	NGO Costa Humboldt covered difference.

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

Because of the increasingly pressures that the target area is receiving, and especially the lack of enforcement initiatives implemented, the largest mixed-colony of threatened *Spheniscus* have experienced diverse ranges of negatives threats. In order to mitigate these disruptions, and consequently providing opportunities to improve population status of both penguin species, it is require to evaluate the current conditions of the colony through a new study of the foraging ecology, migration behaviour and population size of the mixed-colony.

**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?**

Yes. We used the RF logo during public presentations and materials prepared. We permanently use our social media to promote activities and regularly we acknowledge the RSGF support, including the logo.

11. Any other comments?

We appreciate very much the support from RSGF not only for its contribution to our work, but also for the great support and vision providing funding opportunities to people who is involved on the study of biodiversity and conservation in the South America region and worldwide.