

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. 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

Grant Recipient Details	
Your name	Priscila Belén Escobar Gimpel
Project title	Assessment of By-catch Levels of Small Cetaceans in Isla de Chiloe, Southern Chile
RSG reference	
Reporting period	27 th January 2011 to 27 th January 2012
Amount of grant	£6000
Your email address	priscila@ccc-chile.org ; priscbelleg@yahoo.es
Date of this report	25 th January 2012

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
Document species and number of individuals that are accidentally taken as well as its associated artisan fishing gear		X		<p>Due to budget limitations, field time was reduced to 1 month and weather conditions limited the number of marine surveys. Observers were included in four fishing activities and monitored 10 fishing gear.</p> <p>Baseline information gathered by on-board observers revealed interaction levels mostly with sea lions and secondly by cetacean species. This information is essential to plan long term monitoring of the species.</p> <p>Land-based surveys to fishermen were also conducted to complement information from observers.</p>
Meetings with national and local authorities and artisan fishermen to promote project			X	<p>Meetings with Chilean Navy from two different areas in Isla de Chiloe (Puñihuil and Dalcahue) and the Fishing National Service were conducted to obtain relevant information.</p> <p>Surveys to gather bycatch information were conducted to fishermen of both areas (Puñihuil and Dalcahue) in order to determinate the season with higher level of bycatch, bycatch species, associated fisheries and the disposition of the fishermen to collaborate with the project.</p>
Educational workshops and informative materials will raise awareness on coastal communities		X		<p>An official presentation of the project was conducted to the Artisan Union of Fishermen, "Viento Fuerte" from Puñihuil.</p> <p>An informative poster and brochure of the project were developed and distributed between the fishermen and the local authorities from both communities.</p> <p>Preliminary results highlight the need to increase education to report by-catch events. Therefore, educational materials will be developed and distributed to fishermen in 2012.</p>

<p>Areas whereby-catch occurs will be modeled; endangered and threatened species will be considered of particular concern; and fishing techniques and gear types will be identified.</p>		X		<p>Bycatch interaction was reported by on-board observers that includes dead species of sea lions and cetaceans and are of great concerns.</p> <p>Preliminary results also highlight that areas with higher level by-catch are likely to be found at less than 10 miles from shore. Also, discrepancies from on-board observations and fishermen surveys reveals a level of under-reporting of cetacean by-catch. However, fishermen were more willing to report sea lions' bycatch.</p> <p>Also, it was also possible to identify fishing gears frequently used, how it works and how the marine mammals entangled on it.</p> <p>More surveys are needed to increase database and robustness of preliminary analyses.</p>
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2. Please explain any unforeseen difficulties that arose during the project and how these were tackled (if relevant).

The main difficulty was the weather of Isla de Chiloé, sea conditions and frequency of intense storms. Fishermen were not able to go at sea most part of the year because of weather conditions. They could go fishing approximately once a month and just in November maximum of three times a month was possible.

Also due to budget limitations, field work was reduced from 6 months to 1 month. Continual weather monitoring allowed us to select month with best weather and therefore during November observers were able to collect data.

Weather also affected the ability to conduct workshops and land-based surveys, because fishermen stopped their activities in the beach.

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

The project made possible to document species of marine mammals that are accidentally taken as well as its associated artisan fishing gear. During the on-board fishing observations (n=10 nets) a total of four sea lions (*Otaria flavescens*) and one cetacean, Burmeister's Porpoise (*Phocoena spinipinnis*), was taken as by catch in fishing gears, between 245 and 1050 m length each.

Interviews made to fishermen help us to increase our knowledge about fishing target species, seasons, areas, bycatch data. This information was very valuable to complement information gathered on-board and allowed us to better understand the problem of using non-specific fishing gears and the high level of bycatch according to fishing gear and distance to coast among others.

It was possible to detect that fishermen do not always reveal all data on bycatch, probably because of the fear to be punish by local authorities. It is needed to develop and implement an educational program to decrease under-reporting.

This preliminary study is useful to better plan an outreach strategy and data collection planning to implement a long term by-catch monitoring in the area. This will be essential to raise valuable information to assess the problem and conducted management programs to minimise impacts on threatened species.

However, further on-board by-catch data will be needed to be gathered before a management proposal could be developed and implemented to minimise bycatch on artisanal fishing gears. Educational programmes are recommended to be implemented immediately.

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

Fishermen interviews and social work was useful to explain to them the importance to record bycatch events and were a very valuable opportunity to gather information about the ocean health, species distribution, target and by-catch species, etc. Fishermen in Punihuil, where Centro de Conservacion Cetacea (CCC) has worked for nine years, were very cooperatives. By contrast, in Dalcahue it was more difficult to get interviews and on-board observations were postponed until a stronger relationship is achieved and fishermen are more receptive to allow observers on-board. Fishermen benefited from collaborate with research projects and the development of future conservation strategies to ensure a high productivity of marine resources that help fishermen and ecotourism community. Fishermen were also interested in the getting the opportunity to work with CCC in the future to improve fishing techniques.

5. Are there any plans to continue this work?

Yes, this was a preliminary study to verify the occurrence of bycatch in the area and assess the extent of the threat to marine mammals and feasibility of implement monitoring programmes. During upcoming years, CCC will continue to gather on-board information on bycatch and implement educational program to improve fishermen reporting and raise awareness.

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

Preliminary results of the work will be socialized at local level by CCC and educational material will be distributed to coastal communities. Using CCC web site, an outreach strategy to increase awareness will be developed. At national level, meetings will national maritime and fishing authorities will be carry out to raise concerns on the occurrence and frequency of those events. At international level, when more data becomes available, results will be presented at international forums to increase knowledge on the extent of by-catch threat to marine mammals in southern Chile.

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

The project was conducted from January to December 2011, thank exclusively to the support of the RSGF.

Due to budget limitations, field monitoring of cetacean by-catch was the only activity that was considerable reduced from 6 months to 1 month. All the other activities were essential to the project and were conducted completely. Those activities include review of bibliography, identification of fishing communities, design and production of informative material, preparation and conduction of workshops. Project findings will be socialised during 2012. Some activities were either delayed or anticipated according to in-situ conditions but most of the activities were conducted in the time previously 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.

At the time the proposal was submitted, the exchange rate used was 789 Chilean pesos per one £ sterling and the total cost of the project was estimated at £ 10,932. However, due to international crisis, the exchange rate at the moment the funds were received was drastically reduced to 722 Chilean pesos per one £ sterling, increasing the estimated costs of the project to £ 11,946. The exchange rate used here for both budgeted amount and actual amount is 722 Chilean pesos per one £ sterling. In budgeted amount, it appears the amount requested to RSG Foundation and the necessary amount to conduct the complete project. Unfortunately, the project was not able to rise additional funding and some activities needed to be reduced while other needed to be maintained.

Item	Budgeted Amount	Actual Amount	Difference	Comments
Review of bibliography & Preparation of baseline report and agenda of work	261 / 519	334	-73	Due to lack of funding, total budget for this activity was reduced but RSG support in that item increased because this was an essential activity that needed to be completed.
Identification of fishing communities	542/ 1080	699	-157	Due to lack of funding, total budget for this activity was reduced but RSG support in that item increased because this was an essential activity that needed to be completed.
Design and production of informative material	296 / 588	334	-38	Due to lack of funding, total budget for this activity was reduced but RSG support in that item increased because this was an essential activity that needed to be completed.

Preparation and conduction of workshops	1071/ 2133	1376	-305	Due to lack of funding, total budget for this activity was reduced but RSG support in that item increased because this was an essential activity that needed to be completed.
Monitoring of cetacean bycatch on board artisan fishing boats and landing ports	3742/ 7451	3033	709	This activity received a considerable reduction in budget. The time period (estimated in 6 months) was reduced to 1 month because of weather and budget limitations.
Final report & Presentation of Recommendations	88 / 173	0	88	Not yet completed. Promotion of preliminary results and recommendations among fishing communities and governmental authorities will be conducted in 2012.
Total	6000/ 11946	5776	224	

The difference will be used to print educational materials and will be distributed when promoting results found by the project.

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

This preliminary assessment of bycatch is the beginning of a long-term project that will help to increase our knowledge about one of the most important threats that affect cetaceans around the world.

The experience will be very useful to plan logistics of a long-term bycatch monitoring programme and highlight the need to strengthen fishermen education about reporting by-catch events.

Additionally, data collection of dead marine mammals in fishing gear give us important information about their ecology, biology and oceans health.

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 RSGF logo was used in the poster project attached, as the unique sponsor organisation.

11. Any other comments?

We are very thankful for the support of RSGF. This preliminary and valuable information obtained by the project was obtained thanks to this support.