

## 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](mailto:jane@rufford.org).

Thank you for your help.

**Josh Cole, Grants Director**

Grant Recipient Details	
<b>Your name</b>	Agnese mancini
<b>Project title</b>	Incidental by catch or directed harvest? Mortality rates of sea turtles in Baja California Sur, Mexico.
<b>RSG reference</b>	13.04.07
<b>Reporting period</b>	March 2007 – June 2008
<b>Amount of grant</b>	4670
<b>Your email address</b>	<a href="mailto:amancini79@yahoo.fr">amancini79@yahoo.fr</a> (new e-mail adress)
<b>Date of this report</b>	08/03/2009

**1. Please indicate the level of achievement of the project's original objectives and include any relevant comments on factors affecting this.**

<b>Objective</b>	<b>Not achieved</b>	<b>Partially achieved</b>	<b>Fully achieved</b>	<b>Comments</b>
Assess minimum mortality rate per species per year and identify major mortality causes in the area of BCS over a period of two years.			X	We found a minimum annual mortality rate of 502 sea turtles in Baja California Sur. Most affected species are the green and loggerhead turtles. The first one is commonly caught for consumption while the second one often is caught accidentally in the nets. While consumption accounted for 40% of total mortality, in more than 505 of the cases we were unable to identify the cause of death.
Complete a national GIS database, identifying the fishing areas corresponding to all the major local communities and compiling the respective fishing calendar;			X	We put in place a database including fishing areas and fishing calendar at the 13 monitoring sites we used for our census. We also created a model using the GIS technology to determine the correlation between incidental fishery and number of stranded turtles. The model showed not only that these two factors are strictly related; it also allowed us to identify areas where although we could not find any stranded turtles, incidental fishery can be high due to the fishing gear that are used. The fact that we could not find any stranded animal is related to the direction of winds and currents.
Compile 200 interviews with people from all the state on sea turtle conservation issues;			X	We compile 185 interviews with people from local communities. Most of them were fishermen. The general perception is that sea turtles are delining and that consumption is the most important threat to these animals in Baja California Sur. We could identify three place where an international sea turtle meat traffic originates (Guerrero Negro, Bahia Magdalena, Todos Santos). In these places we conducted interviews with local poachers and we found that between 8,000 and 32,000 turtles were killed per year in the period 2000-2008. Poachers are motivated essentially by the net benefits. However the substantial lack of law enforcement encourages this kind of behavior. We made different simulations and we found that with a rise in the number of inspections, sea turtle illegal fishery could be reduced. A report is being written to be submitted to the Mexican Police for Environmental Crimes (Procuraduria Federal para la Proteccion

				del medio ambiente, PROFEPA, in Spanish).
Collect genetic samples of stranded turtles found on the beaches to identify their genetic origin.			X	Genetic samples have been collected and are currently analyzed by Dr Sergio flores Ramirez and his team here at the University of Baja California Sur

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

The hardest part of the project was conducting interviews among local people and illegal fishermen. As sea turtles are protected and (illegal) consumption is still very high in the region, most of people were reluctant to answer our questions. However as I have been working for almost 3 years in the region, people started trusting me and most of the time answered honestly my questions. In certain communities I was supported by a local community member that came with me to make people feel more comfortable.

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

This is the first work aimed at compiling sea turtle mortality data for the entire state of Baja California Sur. The data we collected will be used in regional risk assessment for sea turtle populations. Our major outcomes are:

- we identified a very important hot spot for sea turtle bycatch (Laguna San Ignacio), where during the month of June more than 400 turtles are killed in the nets;
- we found the first reliable estimate of sea turtles killed for consumption (between 8000 and 32000) in the state;
- we identified areas where sea turtle incidental fishery can be potentially high although we could not find any stranded turtles. We suggested to conduct more studies on these sites.

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

Local communities were involved directly in the project through the interviews. In some cases we collaborated closely with fishermen that helped us not only during the beach census but also encouraging people to answer our questions.

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

We received more funds from the Mexican government to continue with the project for at least another year.

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

We presented our main results at different national and international conferences:

28<sup>th</sup> International Sea Turtle Symposium, Loreto, Mexico, January 2008,

10<sup>th</sup> Annual Meeting of Grupo Tortuguero, Loreto, Mexico, January 2008;  
10<sup>th</sup> Annual meeting of Monitoring Groups, Punta Abreojos, Mexico, August 2008;  
11<sup>th</sup> Annual Meeting of Grupo Tortuguero, Loreto, Mexico, January 2009;  
29<sup>th</sup> International Sea Turtle Symposium, Brisbane, Australia, February 2009.

We also published two articles in a free access review:

Mancini A & Koch V (2009). Sea turtle consumption and black market trade in Baja California Sur, Mexico. *Endangered Species Research*, 7(1): 1-10.

Peckham SH, Maldonado-Diaz D, Koch V, Mancini A, Gaos A, Tinker MT, Nichols WJ (2008). High mortality of loggerhead turtles due to bycatch, human consumption and strandings at Baja California Sur, Mexico, 2003 to 2007. *Endangered Species Research*, 5:171-183.

Both articles can be downloaded at <http://www.int-res.com/journals/esr/esr-home/>.

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

We used the RSG for the entire period of the project (from March 2007 to June 2008).

**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	1200	1000	+200	Food at certain communities was kindly offered by local families
Accommodation	1800	1500	+300	Accommodation at certain communities was kindly offered by local families
Fuel	420	620	-200	Fuel prices risen significantly over the last few months of the project.
Repair and maintenance	400	750	-350	We had a problem with the ATV motor and had to change some parts unexpectedly
Supplies and materials	250	200	+50	
<b>TOTAL</b>	4670	4670	0	

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

Next important steps are:

- continue the mortality census especially along the Pacific coast;
- put in place a pilot project to study sea turtle incidental fishery in the Gulf of California;
- work closely with community members to reduce social acceptance of illegal sea turtle fishery and increase the education programs at local school.

**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 all our presentations and posters at local and international meetings. We also acknowledged RSG for their financial support at the end of our two articles.

**11. Any other comments?**

I would like to thank RSG for their support. This work would have not been possible without your help and support.