

## 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>	Fabián Andres Sanchez Dorado
<b>Project title</b>	Sea turtle community based conservation, recovery, research and education project on the Osa Peninsula, Costa Rica
<b>RSG reference</b>	<b>21.05.07</b>
<b>Reporting period</b>	October 2007 – December 2008
<b>Amount of grant</b>	£4983
<b>Your email address</b>	<a href="mailto:fasanchez@racsa.co.cr">fasanchez@racsa.co.cr</a>
<b>Date of this report</b>	June 2009

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

Objective	Not, Partially or Full achieved goals	Comments
To decrease egg-poaching activity (by people and domestic animals) by control and protection activities such as night and daily patrols	This objective was "partially" achieved during the 2007-08 season. Three sea turtles species were identified (Olive ridley – <i>Lepidochelys olivacea</i> , Pacific green - <i>Chelonia mydas agassizii</i> and the Leatherback – <i>Dermochelys coriacea</i> ). From the total nests they laid (2914), we protected 62% <i>in situ</i> , 13% in a protected hatchery and 5% were relocated on the beach. 20% were recorded as false crawls. From the <i>in situ</i> nests and those relocated along the beach, at least 5% were depredated by humans, less than 1% by dogs and dramatically 35% were partially depredated by raccoons and coatis (natural predators). Human and dogs depredation before we arrived to the Osa was estimated over 80%.	We consider this objective partially achieved because sea turtles, as endangered species, require permanent conservation actions. This means for the long term we hope to continue seeking to achieve the same goals until we finally could consider the Osa Peninsula as a healthy and secure place for sea turtles.
To recover the nesting sea turtle populations through conservation and protection of "key" sea turtle nesting beaches on the Osa Peninsula.	Partially achieved. Since 2004, when we started the Osa Sea Turtle Conservation Program, we have recorded information from an average that ranges from 3500 to 4000 of nesting attempts. Also, seasonally and using turtle hatcheries, we have protected between 10 and 15% of the nests laid. This percentage represents the same amount of nests that used to be depredated by humans and domestic animals (seasons 2004, 2005 and 2006).	The results of all this conservation effort will be appreciated in 10 or 15 years, once these new generations of sea turtles return to the Osa. This will help to recover the population from a potential upcoming collapse, due to several years when most of the nests (80%) were depredated by humans.
To consolidate a sea turtles tagging program on the Osa Peninsula.	Full achieved. Since 2004 the program designed a sea turtle tag series that this and other projects along the Osa have been using. This fact made it possible to get reports from people who found our tags thousands of miles away. At this point we could establish migratory corridors between Costa Rica and Colombia and El Salvador for species such as the olive ridley. Currently, more than	

	<p>3500 sea turtles have been tagged on the Osa. In the near future we hope to confirm these migratory movements through the implementation of a satellite-tracking program.</p>	
<p>To record scientific data that fills gaps in knowledge about specific topics of these sea turtle nesting populations</p>	<p>Fully achieved. Our data forms allowed us to record more than 25 different variables from the nesting female sea turtles, the nests, the eggs, babies and the beach environment. All this information is entered into a database that in a short term will let us develop statistic population analysis and projections.</p> <p>Additionally, scientific evaluations about the natural depredation are currently being carried out. The strategic plan also identifies other research priorities that we hope to start progressively working in upcoming seasons.</p>	
<p>To educate the scholar community on turtle conservation and teach the communities about how to protect a natural resource and perceive a economic income at the same time</p>	<p>Partially achieved. We have been able to develop some educational activities in schools and strategic coastal communities. However, our limited funds made difficult to cover more places.</p> <p>On the other hand, there are two activities that we hope to continue in the future due to the positive results we have achieved: (i) The <b>1st Sea Turtle Festival</b> made it possible for a lot of people to come to the beach and learn more about how and why to protect these marine reptiles; and (ii) The <b>Weaving for Nature</b> initiative - 14 women from the Osa were trained in making beautiful purses from supermarket's plastic bags. The group of weavers from Osa will recycle and reuse an average of 12000 standard sized supermarket plastic bags per month, with the hope that each weaver produces 12 purses per month. This will represent a group income estimated in \$2700 or an income of \$180 per weaver per month.</p> <p>Widecast - Costa Rica established the first group in Gandoca beach</p>	<p>We hope to be able to raise more funds for specific issues such as educational campaigns.</p>

	<p>with 19 women, the second in Changuinola, Panama, Bocas del Toro with 15 women and now helped to start this one in Osa. Locals have been trained in sea turtle biology and conservation techniques. This made possible to incorporate them in a productive system as guides in turtle-watching tours.</p>	
--	--	--

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

More than unforeseen difficulties, since the project started we have been dealing with thoughts/beliefs from identified sectors along the communities that mainly consume sea turtle eggs as a cultural habit. This erroneous understanding is common in the country and the region; people used to eat sea turtle eggs because of their *benefits* (i.e. as aphrodisiacs) but there is a lack of scientific and/or nutritional validations. As a result of this, still there is a local sea turtle egg trade that supplies local cantinas and bars.

Even though the sea turtles on the Osa used to face a dark and uncertain future, since the programme started, things have progressively changed and now there is a second chance. To make this change possible, the programme developed permanent and intensive activities of control and protection along the beaches. Here it is important to mention that rangers from government agencies permanently supported all these initiatives. Also, we developed several educational campaigns for kids at schools and adults from coastal communities on why and how to help the conservation of the sea turtles on the Osa. The results of all these activities are currently tangible; the statistics show that we reduced from approximately 80% to less than 8% the humans and domestic animals turtle egg depredation.

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

- The project has developed conservation actions that made it possible to decrease significantly egg depredation, both by humans and domestic animals. Before the project was established, at least 80% of the nests use to suffer a total or some level of depredation. This season the nesting depredation was less than 10%. Additionally, the tagging programme covers currently the most important nesting beaches on the Osa, making it feasible to track the turtle movements along their distribution area. As a result of this tagging programme, migratory routes between Costa Rica and Colombia and Costa Rica and El Salvador have been described. Also local movements among beaches along the Osa Peninsula have been reported.
- As part of the previous achievement and simultaneously to the conservation actions, the project developed an educational strategy based in the premise “learning by doing”. Throughout the theory and practical sessions, students and locals have been educated on basic topics about conservation and biology of sea turtles. After interacting with the baby turtles and helping the biologists on the beach, locals could understand how important the kind of work we do is and how significant their support can be. These are the kinds of activities that raise awareness among the communities and generate instant and permanent outcomes.

- The third main outcome is the renewed perspective the programme and locals have about community-based conservation. Some of the socio-economical alternatives we have proposed and implemented (i.e. sea turtles tour-watching and weaving for nature) have proved how non-extractive uses generate better revenues than the extractive ones (poaching).

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

The communities have been involved in the project in several ways. As I mentioned as part of the outcomes, progressively we have been creating capacity towards a better use of this natural resource. Some members from the communities are getting income leading groups of tourists in the beach as part of sea turtle-watching tours. The initiative *Weaving for Nature* benefits, besides the families that currently perceive significant profits, the rest of the communities due to the amount of plastic that we remove from the environment periodically. Finally, we guarantee turtles will have a better future throughout the education of new generations. It is important to mention that all those kids we currently work with and teach about natural resources on the Osa will make the critical decisions in the future.

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

We plan to continue developing this monitoring and conservation sea turtle programme for a long time. There are two reasons for this: (i) the extensive life cycle of sea turtles that takes approximately 15 years for new generations to reach maturity and before they start migration events among nesting and feeding sites; and (ii) local threats and risks such as fisheries, poachers, pollution, coastal development, habitat disturbance, climate change and predators, among others that greatly affect the normal development of this nesting colony. If we guarantee healthy and secure beaches for sea turtles on the Osa, the amount of hatchlings that reach the ocean and become adults will increase significantly, making it possible for a successful generational rate of exchange/replacement. At the end, this conservation effort will help these populations to avoid their extinction.

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

The publication of our results occurs in different levels. The programme produces monthly electronic newsletters in order to keep people and donors posted about the nesting season evolution and general results. Also, we produce annual technical and financial (for donors) reports that people can download from the internet. Beside this, posters and oral presentations are submitted to the sea turtle international symposium and other related meetings. Scientific papers are currently being written.

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

This grant was used between October 2007 and December 2008. This timeframe meant a couple of additional months that did not represent any conflict in the budget. This was possible because the grant allowed us to save some institutional funds that we planned to use for materials, equipment and food.

**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.**

The grant was used carefully as we originally planned. This was possible basically because the counterpart we had for this specific application. The grant and the counterpart was enough to cover materials, equipment and food for our staff throughout the season. As a result of this, the money we were supposed to spend in these logistic issues was used to cover additional socio-economical alternatives such as the weaving for nature project and the training package for Turtle Tour Guides.

Budget Item	Budgeted Amount	Actual Amount	Comments
Ground transportation Pto. Jimenez - Field sites - Puerto Jimenez	420	420	
Meals	1600	1600	
<b>Equipment</b>			
Backpacks for nests relocation	125	125	
Alkaline batteries	200	200	
Rubber gloves (different sizes)	180	180	
Buckets	50	50	
Pens (packs)	5	5	
Pencils (packs)	5	5	
Plastic sheets protectors (data sheets)	75	75	
Flagging tape (different colours)	50	50	
Dry storage bags (Sea Line, 5 20 HD)	50	50	
Measurement tapes	75	75	
GPS Garmin Model Vista C	100	100	
Folders for data storage	50	50	
Permanent markers (packs)	10	10	
Plastic bags (different sizes - packs)	50	50	
First aid kit (up to 25 people)	75	75	
Back packs	80	80	
Raincoat	100	100	
Acrylic board	27.5	27.5	
VHF Portable Radios (Marine band)	200	200	
Callipers for hatchling measurements	80	80	
Pesolas Medio line (300gr x 2gr)	160	160	
Rain Gauge Direct reading	10	10	
Notebooks /data collection (rain paper)	105	105	
Headlamps (rayovac)	100	100	
Training and educational workshops	1000	1000	
Turtle Tags			
<b>TOTAL in £sterling</b>	<b>4982.5</b>	<b>4982.5</b>	

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

We look to consolidate the structural basis of the programme, such as the financial and technical components. The financial sustainability will guarantee permanent conservation activities, and reliable conservation measurements.

Throughout, effective community-based conservation activities, to make of this programme a trustworthy conservation effort for other international grants programmes. The grant provided by the RSGF made a significant contribution to this commitment.

We also aim to continue developing more socio-economical alternatives for the local communities. Several sea turtle conservation initiatives worldwide have demonstrated how these efforts have made significant contributions to the conservation of species after involving local groups. Conservation *per se*, without a doubt is part of the solution, but it is not the answer itself to the extinction that species such as sea turtles currently face.

**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?**

Yes, we used the RSGF logo in one of our newsletters. This digital resource helps us to provide a public recognition to all those donors that decide to support all our work. Also, the logo was included in the final report we deliver to the Costa Rican Environmental Ministry and some Power Point Presentations we permanently develop. Finally, a permanent recognition to the RSGF has been declared in several public presentations.

**11. Any other comments?**

We would like deeply to thank to RSGF for the grant you provided to the programme. This financial support allowed us to achieve the goals we originally proposed for the 2007 – 2008 nesting season. In addition, as a result of this the programme could release funds that consequently were invested in other activities such as socio-economical alternatives. The conjunction of all these elements at the end let us to enhance tremendously our success.

Finally, The Osa Sea Turtle Conservation Program would like to thank Widecast - Costa Rica for all the technical and managing support provided during the season.