

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.

Thank you for your help.

Josh Cole Grants Director

Grant Recipient Details	
Your name	Bruno de Oliveira Ferronato
Project title	Conservation of Amazon freshwater turtles in Ashaninkas
Project title	Indigenous communities, Peruvian Tropical Andes
RSG reference	03.01.09
Reporting period	09 April 2009 to 20 January 2010
Amount of grant	£4838
Your email address	brunoferronato@hotmail.com
Date of this report	14 March 2010



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

	Not	Partially	Fully	
Objective	achieved	achieved	achieved	Comments
Turtle's ecological information (population structure and density),			X	We captured three turtle species in the indigenous communities' area. It is important to notice that <i>Podocnemis unifilis,</i> a Vulnerable species according to IUCN, was at low densities at the study sites and most individuals captured were juveniles.
Turtle's ecological information (diet)			X	We gathered very interesting information on the diet of the three turtle species living in the same lagoon. We are now preparing a paper on the resource partitioning among them.
Turtle's ecological information (reproductive aspects)		X		We were not able to find turtle nests this year, although we extensively searched 12 beaches. We found turtle footprints on the beach during a week on August. We believe that the low densities of <i>P. unifilis</i> , in combination with unusual rains during the dry season, rivers levels rising up and poaching, influenced in our results. But we captured hatchlings of <i>Mesoclemmys raniceps</i> and <i>Phrynops geoffroanus</i> during the study period.
Educational activities (children and teenagers)			X	The activities held in the schools of the communities were accomplished and children actively participated in the workshops and the drawing contest.
Educational activities (adults)			X	We had a great workshop within adults and elder people where they commented on their traditional knowledge and uses about turtles. Also, the participation on the radio programme helped a lot to disseminated turtle conservation strategies to the communities along the Pichis River Valley



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

We had an extended period of rains in the year of 2009 and this probably influenced our reproductive studies. Usually the rainy season in this region goes from November to April and the dry season from May to October. We had occasional periods of rains until July. This made water levels rise up and flooded the beaches. The turtle's reproductive season is influenced by the receding waters. Unexpected high water levels can drown eggs and nests and influence turtles (*P. unifilis*) nesting not in the beach but in the vegetation along the river, in which is harder to find nests. We monitored the beaches during the study period but we found turtles footprints for a small period in August, we could not find their nests and we found few hatchlings of *M. raniceps* and *P. geoffroanus*.

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

These are the most important outcomes of the project:

- 1- We were able to gather basic information on the ecology of three Amazon freshwater turtle, *Podocnemis unifilis* (Vulnerable Species), *Mesoclemmys raniceps* and *Phrynops geoffroanus* in the Tropical Andes region. These three species represent new records for the Pasco State in Peru. We identified the oxbow lakes, rivers and streams where the species can be found and we are proposing the local people to protect these areas as these are the few refuges where you can find them. Four manuscripts are being prepared from our results gathered during the project support by RSG: diet (this is the first wild turtle dietary study in this country), distributional record and hatchling morphology description, population structure and density, and traditional knowledge.
- 2- We believe we raised the ecological awareness of the children and professors at the communities. The professors were excellent partners during the project and helped us to evaluate the questionnaires we used for the children at the beginning and end of the project (more than 70% of the students improved their answers). The high school students presented the turtle project held in their community in a District Science Fair by their own will. The professors are proposing a continuation of the project in their school and children now are able to recognize the turtle species occur in their territory and the wetlands they should protect. Also, we conducted some workshops with the team of biologists from the natural protect area "Bosque de Protección San Matías-San Carlos" (SERNANP), in which the communities are located in the buffer zone.
- 3- We had a very interesting workshop about the traditional knowledge on the use of the turtles in both communities. Elder people explained how turtles were abundant in their communities and they believe the main reasons for the decline of turtles during the 1980s and mid 1990s were the intense commerce/change of wild animals (including turtles) with fisherman from Iquitos and Pucallpa, the increased number of people living along the rivers (indigenous and non indigenous) and consuming turtles, and changes in the use of soil, deforestation and rivers dynamics. We filmed the workshop and systematized the



information adults and elder people shared with us. We prepared a printed material of this workshop, and the video, and gave them to the schools libraries, community authorities and students. Now the professors can use these materials in their classes and this important knowledge is being shared with all the community.

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

First, our indigenous field assistants were very important during the development of the project. They helped us during the field work, translated information to native language during the workshops with elder people and were trained in conservation issues. We are sure that can get some position if other conservationist project takes place in their community and can influence positively in conservation themes.

As commented above, children and professors participated actively in our workshops and learned about turtle ecology, conservation themes and the importance of the natural protected area their territories are bordering, the "Bosque de Protección San Matías – San Carlos". And adults participated in our workshops about the traditional knowledge and use of freshwater turtles.

5. Are there any plans to continue this work?

Yes, we intend to continue the work. The basic knowledge we have raised (species distribution in the communities, population data, diet information), and now we intend to concentrate on the reproductive activities in these communities we worked, as we did not have the expected results in 2009, and make investigation in other communities. The administrator of the natural protect area "Bosque de Protección San Matías – San Carlos" is interested in supporting activities in the communities that are located in the park buffer zone, which is the case of both communities we worked with. Also, they commented in expanding the investigation to other indigenous communities in the buffer zone of the park.

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

We plan to share the results with the scientific community and we already started to share with popular media. We are preparing four scientific manuscripts of our results and they will be submitted to scientific journals (*Amphibia-Reptilia*, *Phyllomedusa*, and *Herpetology Notes*) during 2010. We are in the final preparation of the Capture License Report to be sent to INRENA (Peruvian Environmental Agency), which will be available for the scientific community and people in general. I am going to present the results of this project in the conference:

8th Annual Symposium on the Conservation and Biology of Tortoises and Freshwater Turtles (August 2010, Florida, USA)

Also, I am going to present the project results in a talk at the Universidad Ricardo Palma (May 2010, Lima, Peru) for the Biology Course students.



We had been sharing our activities and results of the project in the Radio Selva, a local radio in Puerto Bermúdez, during the program "Te habla la Tierra", done by the Conservation International —Peru. Our last programme happened in January 2010.

We shared our information, printed materials and results within the administrators of the natural protected area "Bosque de Protección San Matías – San Carlos", which will be used for their Environmental Educational Program.

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

The RSG was used during the period 01 May 2009 to 25 January 2010. The proposal initially would start in April 2009 and would end in December 2009, but as the grant was announced in 09 April and released in 29 April 2009, we started our activities in May and ended in January, completing it in 9 months, as initially proposed.

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. Rate of exchange for April 2009 - 1 £sterling = 4, 2 Nuevos Soles Peruanos (S/.)

Item	Budgeted	Actual Amount £	Difference £	Comments
Field trips (Gasoline and motorboat rent)	630	1030	-400	We initially planned to go twice a month in each community, but as we received additional funding (Cleveland Metropark Zoo), we could go more times to the field and visit other areas in the communities, and have the help of another undergraduate student.
Field expenses (Food expenses for field work)	540	890	-350	The same as above
Subsistence payment (For two young indigenous)	972	1072	-100	We had to hire occasionally other Indigenous people to help during the fieldwork (CMZ)
Educational workshops (Printed materials and snacks)	702	700	2	No significant difference
Laboratory costs (diet analysis)	146	180	-34	Due to the variety of food items in turtles diet, other



				specialists were necessary to identify the items (covered by CMZ)
Artificial nesting beach (Fences, planks and feeding volunteers)	140	130	10	No significant difference
Communication expenses (Email /phone services)	135	135		
Equipment	1245	1745	-500	We had to buy two trammel nets that were not in the costs covered by RSG. Covered by additional funding (CMZ)
Capture Permit	52	50	2	No significant difference
Undergraduate student expenses (2 bus tickets (Lima to P. Bermúdez), hostel and food for two months)	276	476	-200	Another Peruvian undergraduate student helped us during the field work, covered by additional funding (CMZ)
TOTAL	4,838	6,408	-1,570	Additional funding was provided by CMZ

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

I think the next steps for the conservation of freshwater turtles in this region should include the continuation of reproductive activities, to help in increasing the population numbers in the communities, protection of the oxbow lakes and lagoons were the turtles still inhabit (including a massive campaign the Pichis River Valley to avoid the use of dynamite fishing) and continue activities of environmental awareness and investigation in other communities that are located in the buffer zone of the natural protected area of the "Bosque de Protección San Matías – San Carlos". Also, I think it is really important to distribute our manuscripts as soon as they get published as this information can be used for other researchers in the Amazon basin and it could stimulate other Peruvian students in pursuing their own projects for the conservation of Amazon freshwater turtles.

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, the logo was used in our printed materials we prepared for the environmental education activities in the communities, and in the banner used by the students in the District Science Fair.



We are acknowledging RSGF in the manuscripts we are writing and in the INRENA Capture Permit Report and we will use the logo during the talk I will have in Lima and in the conference in USA.

We made publicity of RSGF during the several times we participated in the radio program Te habla la Tierra.

11. Any other comments?

I and my crew would like to immensely thank Rufford Small Grants foundation for the support we had during this project. We expect during 2010 we will have our papers published and we will make them available in the RSGF website and other channels.