

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	Carlos Eduardo Valeris Chacín
Project title	Ecology and conservation of <i>Paleosuchus trigonatus</i> (Crocodylia: Alligatorinae) in Erebato River Basin, Upper Caura, Venezuela
RSG reference	12964-1
Reporting period	May 2013- June 2014
Amount of grant	£5800
Your email address	cvaleris@yahoo.es ; cvaleris@uneg.edu.ve
Date of this report	June 30, 2014

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 know the population status and distribution of <i>P. trigonatus</i> in the upper and middle Erebato River Basin			X	We were able to evaluate 20 locations in the basins of the rivers Ka'kada and Yudi (middle Erebato River Basin) and nine locations in Upper Erebato River. A total of 90 individuals were geo-referenced. These are more complete and recent data on this species in Venezuela. The information will update the locations where the species occurs.
To get information on reproductive events and home range of <i>P. trigonatus</i>		X		The first data on the reproduction of <i>P. trigonatus</i> to Venezuela were obtained, including the first description of a nest of this species in the country. Moreover, although the radio transmitters were purchased have not been placed mainly by the low number of adult individuals observed in the more accessible areas for para-biologists and biologists. Is expected to place transmitters in the next stage of the project.
To know the species' use pressure by the communities Ye'kwana y Sanema			X	It was possible to obtain hunt data of <i>P. trigonatus</i> in three communities: 1 Ye'kwana and two Sanema (between March 2013 and February 2014), and achievement data in another three communities Ye'kwana and three Sanema through interviews.
To propose a Community Management and Conservation Plan for <i>P. trigonatus</i>		X		Conservation and management recommendations for <i>P. trigonatus</i> in two communities Sanema and progress results in two communities Ye'kwana were presented. In the next phase, once analysed all the data, the results will be presented in all communities Ye'kwana and Sanema involved, to propose and discuss a management and conservation plan for <i>P. trigonatus</i> in the Erebato River Basin.
To generate a publication designed to promote awareness of this species in Sanema and Ye'kwana language with the most relevant research information.	X			The information to be published is being generated, so the document is expected to develop in the coming months. It will be published in a digital version and will process its physical impression.

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

The main difficulties were logistics, due to the remoteness of the study area. In addition, illegal mining in areas within the route, forced us to use air transportation in some of the field trips, for safety reasons. Another difficulty was the absence of some members of the communities visited during interviews and record hunting and fishing, because they were in their “conucos” (agricultural spots) or traveling to other communities/ localities.

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

This project is the first to evaluate ecological aspects of *Paleosuchus trigonatus* and its use by indigenous communities in Venezuela. From the results we can highlight:

1. The description of the first *P. trigonatus* active nest, and finding five other inactive nests, hatched and predated, which provides important data on the characteristics of locations and reproductive habitat of the species in the Erebató River Basin. This knowledge will serve to recommend conservation of breeding areas for the species.

2. Assessment of *P. trigonatus* population status in Ka’kada River Basin, one of the most important hunting and fishing areas in middle Erebató River allowed to check the pattern referred by indigenous communities on the abundance of the species, higher in the headwaters of streams and rivers and lower in bottom and near communities. This aspect corresponds to the hunting localities used by indigenous communities, higher in the bottom of streams and rivers and less on headwaters.

3. This project is the first to recommend guidelines for conservation and management of *P. trigonatus* in Erebató River Basin and there is no one for any other location in Venezuela. These were presented and discussed in two Sanema communities and their agreed: protecting nests, hatchlings, juveniles and females during reproduction, in the areas of influence of those communities. The success of this should be evaluated in future phases of the project.

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

The communities were involved in all stages of the Project:

a. First, communities approved the project in 2012 General Assembly.

b. Nine para-biologists and six resource monitors participated in data collection: interviews, spotlight surveys, nest and traces searches, hunting and fishing register, among other activities. They received training in research techniques and management of crocodylians, which will help to continue with the next phase of the project in many of the communities involved.

c. The communities participated in the hunting records, interviews and as field guides, indicating places where hunters had found nests of *P. trigonatus* and hunted localities. The results obtained allowed them to know the importance of the species as food resource and the current status of its populations. This knowledge is fundamental to make decisions for conservation and management. Overall they were very receptive to the project and expect to continue to evaluate compliance with the agreements generated.

5. Are there any plans to continue this work?

Yes, absolutely. The extensive of study area and the elusiveness of the species requires continued monitoring to generate more ecological and harvest information, to adapt the recommendations to each locality. The next phase involves the selection of four locations: two in the Erebató River Basin: Ajuju- Madajano River and Kuyuwí- Yudi River; and two in the Caura River Basin: near Entre Ríos (Sudumo) and Fedekudiña- Wokiya and Kudujadu). In these locations the communities are very interested in continuing the project.

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

This project is part of my final work to obtain the degree of Master in Environmental Sciences- Applied Ecology (UNEG) which will be done in next few months. On the other hand, I expect to publish at least two papers and a short note about the results obtained (between 2014 and 2015).

On November 2013, were presented two oral presentations of the project and its results project at the X Venezuelan Congress of Ecology (Mérida-Venezuela): Abundance and records of *Paleosuchus trigonatus* (Crocodylia: Alligatorinae) in Ka'kada Basin, Upper Caura River, Venezuela; and First record of *Paleosuchus trigonatus* (Crocodylia: Alligatorinae) nesting for Venezuela. Also, it will be presented the results at the VIII Conference of Institutional Research of UNEG and the next Workshop of the Crocodile Specialist Group of the IUCN.

Finally, the results will be presented and shared into the communities through an informative book on the species that meet traditional and scientific knowledge in three languages: Spanish, Sanema and Ye'kwana.

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

The grant provided by RSGF was used between May 2013 and June 2014. The project started in April 2012 and we expect to complete in November 2014, with the publication of the book with the results and with the former presentation of the results in Ye'kwana communities.

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.

Exchange rate: 1£= 45Bs. / 1£= 1.5USD / 1USD= 30Bs.

Item	Budgeted Amount	Actual Amount	Difference	Comments
Gasoline and oil	220	117,99	102,01	It was necessary less gasoline and oil due the support of Caura Program of WCS.
Outboard motor	380	0	380	This budget was used to buy radio-transmitters and the Yagi antenna
Food for field trips	450	478,78	-28,78	This item was completed with surplus of gasoline and oil.

Assistants payment	1300	1354,42	-54,42	More days in the field and more people made necessary use more food. This item was completed with surplus of gasoline and oil.
Purchased services	660	503,49	156,51	The remained budget was used transportation costs.
Radio-telemetry equipment	400	964,7	-564,7	The equipment was much more expensive than estimated. Four radio transmitters and a Yagi antenna were acquired. Shipping costs are included.
Kayak	450	0	450	The remained budget was used transportation costs.
Printing conservation book	350	0	350	The budget was used transportation costs.
Accommodation	150	137,44	12,56	
Transportation	375	1700,17	-1325,17	It was necessary to transport assistants, equipment and food in-flight in some field trips. This due a security and logistics reasons.
Miscellaneous equipment	100	310,87	-210,87	It was necessary to acquired more equipment and materials than estimated.
Headlamps	25	0	25	
Maintenance & repairs	75	0	75	It was not necessary to repair any equipment.
GPS & accessories	125	126,11	-1,11	
Boat rental	230	44,15	185,85	The boat was rent for few days due the support of Caura Program of WCS. The remained budget was used to buy the radio-telemetry equipment.
Indigenous translator	100	0	100	It was used to complete the deficit of other items
Copies	30	44,48	-14,48	
Pesola digital hanging	135	0	135	The budget was used transportation costs.
Kestrel pocket weather station	205	0	205	The budget was used transportation costs.
Communications	40	33,11	6,89	
TOTAL	5800	5815,71	-15,71	

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

1. Continue monitoring hunting in communities involved and in new communities in the Erebató River Basin. This will provide a broader picture and compare the use of *P. trigonatus* before and after the recommendations for conservation and management agreed in each community.

2. Placing radio-transmitters in four adult specimens. Since equipment is available.
3. Evaluate three locations intensively. It will be selected locations with the highest number of *P. trigonatus* to evaluate repeatedly in order to obtain more accurate data on abundance, density, detection probability and reproduction.

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, RSGF logo was used in each of the public presentations of the project results, in the posters referring to the project and the t-shirts used by the biologists, para-biologists and resource monitors who participated in the project. Likewise, RSGF will be mentioned in the acknowledgments of all documents arising from the analysis of the results of the project.

11. Any other comments?

Many thanks to Rufford Small Grant Foundation for its support, without most of the proposed activities would not be made. I hope to receive the support of the foundation for the development of the next phase of the project.

