

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	Igor Berkunsky
Project title	Blue-throated Macaw Conservation Project: Movements, habitat use and Population Size.
RSG reference	8218-B
Reporting period	Oct 2010- Nov 2011
Amount of grant	£12,000
Your email address	igorberkunsky@yahoo.com.ar
Date of this report	November, 4 th 2011

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
Quantifying the species' potential population.		✓		More remote places must be explored in order to confirm that the known population represents the total size population of the species.
Establish the temporal and spatial distribution of Blue-throated Macaws.		✓		Our experience using transmitters was not good. We could not get information from the transmitters, so we miss that information. We must try again next time in order to know where the birds are during the non-breeding season.
Provide baseline data on essential habitat hotspots needed for conservation priority.			✓	Now we have a great database that compiles 10 years of information about Blue throated Macaw breeding biology, and habitat use.
Create findings will to be disseminated through publication in peer reviewed journals and to local level media to enhance awareness of the species' plight.		✓		We already have made a presentation at the IX Neotropical Ornithological Congress in Cuzco, Peru during November 2011. We are working on the elaboration of a draft to publish our results in a Conservation Journal.
Act as a tool, through habitat mapping, for larger scale conservation planning and implementation of effective conservation measures			✓	We share all our results with the Natural Resource Agency at national level in Bolivia (Direccion de biodiversidad y Áreas Protegidas, DGBAP). All our results are directly used by the Blue throated Macaw Conservation Project of the World Parrot Trust.

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

Our main difficulties were related to the use of satellite transmitters on macaws.

We wanted to use transmitters on fledglings, but sadly, during our first year at field, we have none fledgling. Only a few pairs decide to reproduce, and they have not success. We must quit the mission, and came back the following year (that increase our costs).

During our second year, our candidate fledglings died at nest, and we must decide to use the transmitters on adults. The experience on satellite transmitters with macaws is really scarce. They

are only one group of biologists actually working with transmitters (collars) on macaws. Our main problem was that National authorities don't allow us to use collars, and we must use backpacks and harnesses. The backpacks were used on New Zealand parrots with success (Kaká and Kakapó). Harnesses were never tried on macaws. We have a limited budget, so we can have only two transmitters. Just a few days after its collocation, one of the macaws remove its harness and we lost the transmitter. The second macaw hold the harness for several days, but due a negligence issue, the transmitter remains on standby and couldn't be activated from distance.

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

We scan most of the known distribution area of Blue throated macaw. We were available to count almost all breeding pairs and none reproductive groups. Now we have a quite precise population size number: less than 120 individuals remain!

The information from field census has led us to determine the actual distribution and habitat use. We combined field information and satellite imagery and we model the distribution of suitable macaw habitat, identifying areas for potential future distribution of the macaws. These findings have helped us to determine where additional regions contain suitable macaw habitat. This information will be very helpful for the next step on the project: the reintroduction of Blue throated Macaws in those places where it was extinct.

The project has also investigated about how local culture and economics impact the distribution of the macaws. We have built maps of risks, and potential threats. This information will guide management strategies to reduce human impact on macaw's habitat.

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

In each step of the project local people were involved. Local people help us during the field census and field work. During fieldwork they were totally involved in data collection, and we have trained two local workers on data analysis and GIS using. In each study site we liaised with local people through non-formal workshops.

5. Are there any plans to continue this work?

Yes, absolutely. Now we are planning to continue working on this species with emphasis on reintroduction and population reinforcement. The World Parrot Trust has developed a conservation project for this species, during the last decade they have been collecting captive macaws in some countries. We already get the permits from Bolivia to develop a breeding captive centre and to conduct release of individuals.

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

We are working in a scientific publication about the potential habitat for the Blue throated Macaws. We also have an article that will be published in the World Parrot Trust magazine's (Psittascene). I was invited to participate in a Symposium about Parrots conservation in the last International Neotropical Ornithological Congress (Peru, November 2011). Local newspaper (*La Palabra*) and FM

Radio has covered our project during the last years (4 notes every year). In this way both national and international researchers can know about our work helping the macaws.

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

All the RSG was used during the fieldwork. Fieldwork started in October 2010, and finished in November 2011, one month before than we expected. The extension of the project was larger than expected. The main reason was that macaws have not got any successful nest (at least one nest with fledglings) during our first breeding season. So, a project that must be done in one breeding season must be covered on two. This has a great impact on our budget, but luckily we could find support from the World Parrot Trust to continue with our efforts.

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
Transmitters and download satellite data	5,050	4,991	- 59	We must interrupt the data download before because we lost the transmitters
Nest monitoring, collar installation and vegetation sampling	10,100	14,430	+ 4,330	The birds didn't reproduce during the first year of study, and then we must come back next year. That increase our fieldwork costs
Satellite image process and Data analysis	2,350	2,350	0	Everything ok.
Scientific presentations	200	547	+347	We sub estimated the cost of our presentation at Neotropical Ornithological Congress.
Salaries	3,950	4,800	+850	Everything ok.
TOTAL	£21,650	£27,118	£5,468	The World Parrot trust has covered most part of this difference

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

We have exhausted most traditional conservation actions in-situ. I think that now is time to make a more important action. Despite all conservation efforts, the population number of Blue throated macaw is not increasing (but thanks to our effort is not decreasing). Some breeding pairs are showing clues that could be viewed as inbreeding issues (eggs that doesn't hatch, chicks with malformation, etc.). Most experts agree that population reinforcement is needed. This reinforcement must be careful planned and supported by a genetic analysis of wild and captive populations. Now that we have a good idea about Blue throated Macaw habitat use and availability, we are ready to move to next level and start with the actions in order to population reinforcement.

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?

In each activities of the project, I used the RSGF logo. During the project, I have published a poster using RSGF logo which has been distributed at a local level. We acknowledged RSGF on our papers and articles.

11. Any other comments?

I would like the opportunity to deeply thank Rufford Small Grants Foundation has given us. It would have been impossible to achieve our conservation goals without the contribution of Rufford Small Grants Foundation. Many, many thanks.