

# The Rufford Small Grants Foundation

# **Final Report**

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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.

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Please submit your final report to jane@rufford.org.

Thank you for your help.

Josh Cole, Grants Director

Grant Recipient Details	
Your name	Agustina Cortelezzi
Project title	Conservation status assessment of the endemic Tandilean Red-
	belly Toad. Phase II
RSG reference	14106-2
Reporting period	Dec 2013 – Dec 2014
Amount of grant	£6000
Your email address	aguscorte@gmail.com
Date of this report	December 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	Partially	Fully	Comments
	achieved	achieved	achieved	
Promote Tandilean red-			$\checkmark$	We conduct briefings to the
belly toad as flagship				community in the Tandil Book
species of highland				Fair where we presented a
grasslands.				book of mountain grasslands
				and we highlight the
				importance of grasslands
				conservation to maintain the
				population of red belly toad
				and other endemic and
				threatened species. We also
				visited rural schools with
				pamphlets and posters about
				the toad. Teachers and
				students compromised to
				inform about the presence of
				toads in their area. Besides, we
				showed the project to the
				owners of the fields that
				allowed us to enter your
				property to find the toad.
Produce a non-invasive			$\checkmark$	We developed software to
marking tool from				identify individuals. This tool is
individual's spot pattern.				linked to a database in the
				server of the university,
				allowing the storage of
				photographs and avoiding
				duplicates.
Delimit the distribution		$\checkmark$		We explored new remnants of
range and estimate the				grasslands, up to 60 km away
population size.				from the known population of
				toads. Unfortunately no new
				populations of red belly toad
				were discovered.
Monitor the presence of			$\checkmark$	We confirmed the presence of
Batrachochytriumdendrob				chrytid fungus in the
atidis (Bd).				distribution area of Tandilean
				red-belly toad.



Solve the taxonomic	$\checkmark$	١	We collected DNA samples and
conflict of the Tandilean		l v	we send them to the lab.
red-belly toad using DNA		ι	Unfortunately the lab is
sequence analysis.		c	delayed with the process of
		s	samples. We hope to get this
		i	information during 2015.

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

We had no major problems during the project. Main difficulties were:

Weather: Even when we preview the weather condition to schedule the surveys, still remains as an important limiting factor to explore new sites. Consequently, some grassland remnants remained unexplored and we planned to continue our surveys during the next spring.

Lab analysis: We do not have a partner in the laboratory conducting genetic studies. This makes it difficult to achieve the expected results on time.

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

1. We obtained "Software for Animal Photo Identification" (SAPI) to identify individuals from photographs.



2. We modelled the probability of detection of Tandilean red-belly toad and the variables affecting it. This allowed us to be more efficient, scheduling the surveys when the environmental conditions maximise the probability of detection.





3- We build a potential distribution map of the species. Unfortunately, no Tandilean redbelly toads were found in the new explored sites. We also visited rural schools with pamphlets and posters about the toad. Teachers and students compromised to inform about the presence of TRBT in their area. We did not receive any report yet. This result reinforces the importance of Tandil Hills as refuge for the last populations of Tandilean red-belly toad.











4. We confirmed the presence of Bd in the region.

#### **Research Note**

First record of *Batrachochytriumdendrobatidis* infecting threatened populations of TandileanRed-Belly Toad (*Melanophryniscusaffmontevidensis*) in Argentina.

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5. We encourage one mathematic student to develop this undergraduate thesis work with the modeling of occupancy of TandileanRed-belly Toad.



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

The local community has a direct impact from the results of this project. The local community now has solid scientific information about a local endangered and endemic species. Local NGOs and government can use our results to promote the needs of protected areas in the region; and to manage the activities carried out at grassland remnants.

Childs of the community (schools and scouts) received updated information about the situation of the Tandilean red-belly toad and its environment, and participate in the activities of the project.

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

Yes. Our goal is to guarantee the conservation of Tandilean red-belly toad. We will continue with the long term monitoring of toads and grasslands, and we will continue surveying unexplored areas. The Tandilean red-belly toad, as flagship species, will help us to involve local authorities and community in a conservation plan for the highland grasslands of Tandilean Hills. We are enthusiastic, happy to work and very committed to continuing conservation efforts in our native landscape.

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

#### Scientific presentations:

Some of our results were showed in scientific congress. In the Argentinean Herpetological Congress we exhibited the SAPI (Software for Animal Photo Identification). In the Argentina 6th School of Mathematics and Biology, BIOMAT 2014, one of our students presented the results of the variables that affect detection of toad (*Melanophryniscus* aff. *montevidensis*) from occupancy models.

We also sent two manuscripts to scientific journals. One about the variables and habitat use, and another with the information of the BD fungus in Tandilean red-belly toad. Besides we publish a note about the first record of anuran egg predation by leeches in Argentina.





### General public presentations

We have made presentations to the community that shows the life history of the Tandilean red-belly toads. We were invited to talk about the project in several local media. We distributed pamphlets, posters, and stickers about the Tandilean red-belly toads.















We also presented and serve up the book: "PastizalesSerranos del Sistema de Tandilia" - about the highland grasslands, the habitat of the Tandilean red-belly toad in the 11th edition of the Tandil Book Fair 2014. In this presentation, we highlighted the importance of grasslands conservation to maintain the population of red belly toad and other endemic and threatened species.



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

As planned, we used the RSG funds from December 2013 through to November 2014.



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	Actual	Difference	Comments
	Amount	Amount		
Research activities				
Field expenses	990	800	190	
Vehicle	1040	1400	-360	
Field supplies and equipment	725	700	25	
Lab analysis	1400	2070	-670	
Educational campaign	1845	1310	535	
Total	6000	6280	-280	Difference was covered by the
			Instituto Multidisciplinario sobre Ecosistemas	
			y Desarrollo Sustentable	

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

Next steps must be addressed to determine the area of distribution of the species, to quantify threats. We need to work closely with the local community and the municipality to identify key areas for the protection of the population.

# **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 support of RSGF was acknowledged in all presentations (scientific and non-scientific) that were given during the funding period. The RSGF was and it will be also acknowledged in both scientific papers that we are evaluating.

## 11. Any other comments?

We would like to express our sincere gratitude for your support without which the continuation and establishment of this project would not have been possible.