The Rufford Foundation

Final Report

Congratulations on the completion of your project that was supported by The Rufford 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.

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

Thank you for your help.

Josh Cole, Grants Director

Grant Recipient Details	
Your name	Silvana Sita
Project title	Tracking Released Black Horned Capuchin Monkeys (*Sapajus nigritus*) in Southern Brazil: evidences for future decisions.
RSG reference	15876-1
Reporting period	20th March to 31th December 2015
Amount of grant	£ 3260
Your email address	animaisilvestres@gmail.com
Date of this report	26th April 2015

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
Pre-release behaviour assessment			X	We collected behavioural data in captivity during June 2014 to February 2015, totalling 58 days of observation in 16 weeks of data collection, 151 hours of direct behavioural observation by focal-sampling and in six types of personality tests (average of three trials for each test type and at two different time blocks).
Soft release			X	A soft-release enclosure (about 3 x 2 x 2 m) was installed on the forest floor where the monkeys were kept for 3 days until release. Six feeding points were installed with two feeding platforms each at 0, 100, 200, 300, 400 and 500 metres from the release point. The first four feeding points were attached with camera traps. The remaining two feeding points were checked regularly to verify any food consumption. The monkeys visited very few times the first feeding platforms. No food was consumed at 400 and 500m feeding platforms, so no camera trap were translocated to that places.
Post-release behaviour monitoring		X		We conducted 4 months of daily field work totalling about 1,080 hours of effort. Or monitoring consisted in walking daily for defined trails around the release point and we expanded the walking distance accordantly to radio signal capture and previous location of found individuals. However, it was not possible to locate the animals regularly; thus, behaviour monitoring after release was limited, although it was possible to estimate the location and group composition by radio signals.
Food independence assessment			X	Unfortunately, not all individuals could be behaviourally monitored after release. From the five individuals monitored, totalling 149 focal follows, we could verify that they were food independent. Direct observations immediately after release gave us evidence that most of individuals were food independent as soon as they were released.
Home-range assessment			X	Despite limited visibility, the radio tracking greatly helped to locate animals and allowed to evaluate the dispersal range of each individual.

Group cohesion assessment			X	Our group divided immediately after release, and some reunion occurred after that. But generally, individuals travelled alone, with exception of a female and two juveniles that always travelled and foraged together. The overall distance among individuals could not be determined due poor visibility and difficulty in locating all released individuals simultaneously.

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

Behaviour monitoring turned out to be very difficult, not only due difficulties in locating individuals, but also due the unexpected human observer avoidance after release. As distance from humans was desired and we did not want to rehabituated them to humans, monitoring their behaviour after release was limited. We detach that the use of radio collars was crucial for locating animals, especially because the release site was a continuous area of Atlantic forest which included many valleys, allowing individuals to disperse very far from the release point and also making impossible for the observers to cover all area. Although monitoring was difficulty, we believe that for the release individuals this release site was the best option that we could offer, allowing them to stablish a foraging area nearby the wild group territory and guaranteeing better food availability while ensuring distance from human residences and activities.

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

The results of this study are detailed in my Master of Science dissertation (see attached document). Briefly, our main finds were:

- We found a confirmed survivorship rate of 37.5% in 3 months and 25% in 5 months. Most of known deaths were human-related (one individual died hit by a car and two are supposed to have died by dog attack).
- Individual differences in behavioural traits (personality) showed statistical correlation to survival and dispersal after release: neophilics and sociable individuals survived more and dispersed further, respectively. Therefore, to reduce mortality after release is important to be able to identify and select individuals at the rehabilitation phase.
- Physical enrichment including a diversity of foraging option in natural food, adding experienced individuals in social groups, period of acclimatization at the release site greatly increase individuals' normal behavior and anti-predatory responses, as well as reduction of Behaviors Potentially Indicative of Stress (BPIS).

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

The local community of Banhado Grande, Canela (RS), welcomed and promptly got involved in our project, reporting to us every time they have seen capuchin monkeys (wild or radio tagged) near residences or in the forest. Released monkeys were observed in places outside wild capuchin groups' home range and, therefore, it gave the opportunity for many residents, which have never seen capuchins closely, to appreciate them in nature. Besides the tourism benefits on the visual contact

with wild animals, it also brought awareness to the importance to preserve and respect the local fauna, since the public are very fond of capuchin monkeys.

The local community was interviewed in order to verify the occurrence of capuchin monkeys, hunting activities and their knowledge about local fauna at two-time frames: at the beginning (February/2015) and at the end of the project (July/2015). The questionnaire is showed at the MSc thesis and part of the outcomes was presented at the *III Simpósio Brasileiro de Biologia da Conservação* (São Paulo, Brazil, 2015). Abstract in Portuguese were attached.

5. Are there any plans to continue this work?

Yes. Future releases of capuchin monkeys are planned by the Brazilian Environment Agency (IBAMA in Portuguese). Our research group are planning to monitor all process of the relocations, since pre-release monitoring to over 6 months of post-release monitoring. Post-release support, such as supplemental feeding, are also planned to be conducted by our research team.

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

Three scientific papers will be submitted to biological and conservation journals, as well as a technical report to the Brazilian Environmental Agency (IBAMA) and to Canela Municipal Government. We are also sending attached the master's thesis presented and approved (under review) at the Psychobiology Post-graduate Program at the Federal University of Rio Grande do Norte (Brazil). Our research were also presented at three scientific events in Brazil: *V Simpósio Latino-Americano de Etologia* (Mossoró/RN, Brazil, Nov/2014), *III Simpósio Brasileiro de Biologia da Conservação* (São Paulo/SP, Brazil, Aug/2015), *XIV Congresso Brasileiro de Primatologia* (Manaus/AM, Brazil, Nov/2015). Abstracts submitted are attached.

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

The Rufford grant was crucial for covering costs with field work at our field station in Banhado Grande, Canela (RS). This ensured all the last 6 months of the project (in situ, from April to September/2015), which have been ran 12 months (ex situ) before granted with the Rufford Small Grant.

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
6 implantable VHF transmitter	1640	817	+823	We found a better budget with the company Telenax.
2 cameras trap	500	0	+500	No camera traps were purchased as we found sufficient the use of the 4 that we already had and more urgent cover the costs with field monitoring.
6 months food	550	550	0	No applicable.

provisioning				
Transportation	570	615	-45	We did not received funding from other source to cover cost with transportation, but we also spent much less than we expected to spend at the beginning of this project.
Field supplies	0	1270	-1270	Cost with supplies, such as food and house supplies for the 4 months of intensive field work turned out to be very important to be covered by the RSGF in other to conduct field monitoring, due our limited budget from other sources. Three field researchers conducted the daily post-release monitoring in the field voluntarily (no salaries were paid), but cost with food and domestic supplies were provided in order to make it possible. In total, we spent £1110 with food and £160 with domestic supplies.
Total	3260	**3252**	+8	

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

The important next steps concerning to primate relocation in Brazil are:

- Strengthen the relation among researches/universities and the Brazilian Environment Agencies (IBAMA) in order to conducted well-monitored and careful future releases.
- Publish technical reports which will help environment agencies and rehabilitators to conduct future releases.
- Plan the monitoring of future releases organised by the Brazilian Environment Agencies (IBAMA).

10. Did you use The Rufford Foundation 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 and the Rufford Grant mentioned in all project presentations in congress and seminars: *Seminário de Proteção a Fauna Canela/RS* (Jun 25-26th/2015)[1]; *III Simpósio Brasileiro de Biologia da Conservação* (Aug 12-14th/2015)[2]; *XVI Congresso Brasileiro de Primatologia* (Nov 9-13th/2015)[3]; Master's thesis presentation.

[1]http://www.canela.rs.gov.br/index.php/educacao/2053-cuidados-e-protecao-aos-animais-silvestres-sao-discutidos-em-seminario

[2]http://www.zoologico.com.br

[3]http://congresso2015.sbprimatologia.org.br/

11. Any other comments?

I very much thank Rufford for the great opportunity to run this project with financial support to conduct soft-release and post-release monitoring of the released animals, as recommended by IUCN. Certainly, it would not be possible to conduct this research with a rigorous methodology without Rufford support.