

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	Felipe Ennes Silva
Project title	Behavioral Ecology and Conservation of white uacaries (<i>Cacajao calvus calvus</i>) in Amazonian floodplain forest, Brazil
RSG reference	14861-1
Reporting period	March, 2014 to March 2015
Amount of grant	£5932
Your email address	interfaceh@gmail.com
Date of this report	June 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
To collect data on the ecology and behaviour of <i>Cacajao calvus</i>		X		We collected data on the feeding ecology, but without systematic information on social behaviour.
To verify the influence of selective logging in diet, home range and activity patterns of White-uacaries		X		We identified the tree species of commercial value used by local communities. At the same time we identified the species used by uacaries in the feeding ecology. However, more data are needed to link this information and the home range and activity patterns of the uacaries.
To understand the habitat structure and to verify seasonal variations in the availability of food resources			X	
To strength the relationship with local people			X	We conducted informative meetings in the local community where the project was implemented as well as in another local community to replicate the project in the future.

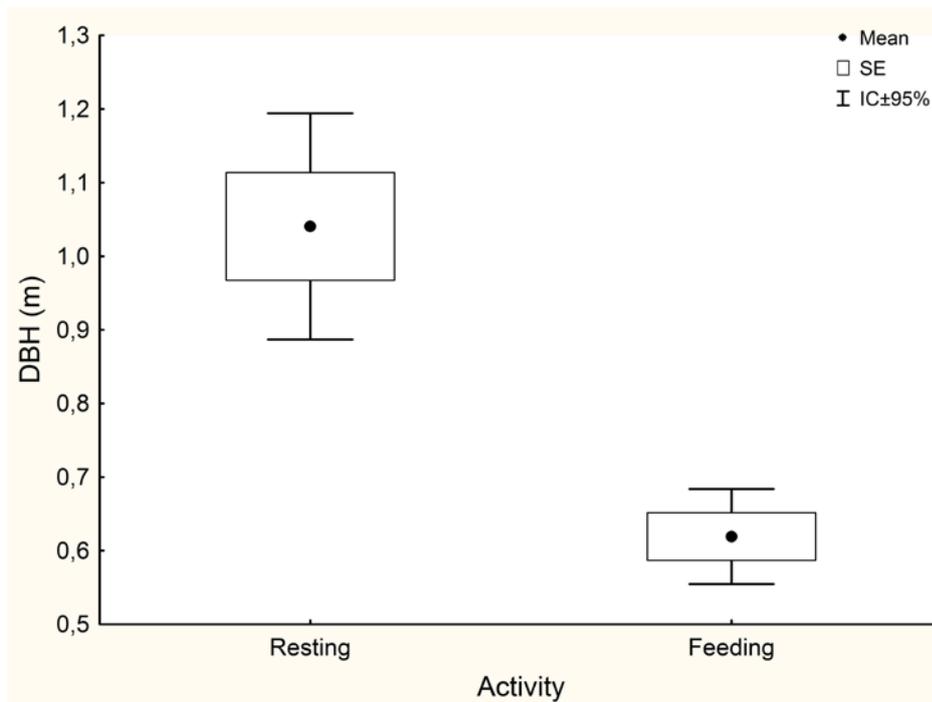
2. Please explain any unforeseen difficulties that arose during the project and how these were tackled (if relevant).

We try to implement GPS collars in four adult individuals. The licence to capture the animal was provided by the Brazilian Institute of Environment and Renewable Natural Resources – IBAMA, System for the Authorization and Information on Biodiversity – SISBIO (Permit Number 39475-1). The first expedition to capture the white-uacaries occurred during the dry season. In that occasion we used a remote equipment of chemical restraint model Dan Inject CO2 JM, but with no success in the capture. We changed the method to capture the uacaries during the end of the wet season and the beginning of the follow dry season. We implemented five platforms with a tomahawk trap each one. During 4 months we used as bait different fruits that we recorded as an item of the diet of uacaries. During this period we captured 13 capuchin monkeys (*Sapajus macrocephalus*) and 10 porcupines (*Coendou prehensilis*). We are now studying other methods to capture the uacaries and implement the telemetry equipment.

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

- We registered 32 species used by uacaris as food and 11 species used as resting sites. The mean height of the trees consumed and used as resting site was 19.4 and 25.7 m, respectively. The mean DBH of the trees consumed and used as resting site was 0.6 and 1.1 m, respectively. The height and DBH were correlated ($r=0,70$, $p<0,01$), i.e., the larger the

DBH, the higher is the tree. The DBH of the trees used as Resting site were significantly larger than those used for Feeding ($t=5, 82; df=85; p<0,01$) (Fig. 2).



- Seeds accounted for 62.2% of the items consumed, followed by 15.5% of fruit, 13.3% of leaf stalk and 4.5% of flower and leaves. Two other species of frugivorous primates (*Ateles chamek* and *Pithecia monachus*) have been identified in the same area and I recorded three instances of sakis feeding on the same items as uacaris.
- From the top 10 tree species recorded as food source for uacaries, five are used in forest management.

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

The local community where the project was implemented was very important since all the moments where I work in forest they were present. The knowledge of the locals about the tree species used in the forest management was important to compare with the species used as food by the uacaries. In this first approach the most important aspect was the good relationship with the locals that were very receptive to the implementation of a long term project.

5. Are there any plans to continue this work?

Yes. The local community where we are conducting the project is implementing a lodge managed by the locals. We want to unify the scientific approach for the conservation of white-uacaries with community-based tourism. At the same time, we aim to keep the data collection of ecology and behaviour in a long term. To understand how the phenology in flooded forest is affected by the climate change is another approach that will provide us a good framework to implement a platform for the uacaries conservation.

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

We are working in two papers. The first one is a partnership between several authors working with the feeding ecology of Pitheciidae. This paper was recently published in the American Journal of Primatology. The second paper aims to link the forest management with the conservation of the *Cacajao calvus calvus*. We are working on this paper. I also presented a poster in the International Journal of Primatology. We conducted informative meetings in other sectors of Mamirauá Reserve to share the information with other local leaders.

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 Foundation grant was used in different occasions for 13 months. However, the project is ongoing and we want to include new approaches.

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
Telemetry - MiniTrack 90 Collar with GPS receiver-Lotek (4 units)	3252	3002	-250	We bought just one Cable DL4 (required to download the data from GPS Collar) and one antenna.
Field Expenses (Food, First Aid Kit)	1214	1350	+136	Subsistence costs were higher than previously thought.
Fuel for Boat	566	890	+324	We used more fuel than anticipated.
Capture/Release, Veterinary medicines	400	388	-12	
Scholar Notebooks	500	300	-200	We got support from other donors for the costs of the notebooks.
Total	5932	5930		

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

I think that is very important to keep the data collection on the feeding ecology of the groups of *Cacajao calvus calvus*. This process will be very important to improve the habituation of the groups monitored and allow us to collect data on social and behavioural aspects of this species along with the feeding ecology. To collect data on the ecology and behaviour of *Cacajao* is a challenge because of its intrinsic characteristics in terms of daily route, shy behaviour, groups that change in terms of composition throughout the year, with fission-fusion. At this sense the RSGF fund was very important to enable the first step in this way.

**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. I presented a poster in the International Primatological Society Congress, in Hanoi, Vietnam, 2014. In the same year I presented a poster in the Symposium on Conservation and Wildlife Management in the Amazon that took place in Mamirauá Institute, Tefé, Amazonas State, Brazil.

11. Any other comments?

We are extremely thankful for the financial support provided by the RSGF. It was the first step for a long term project with white-uacaries in a remote region of Amazon. We are establishing a network with researchers from different countries to consolidate the project involving the local communities in the Mamirauá Reserve.