

**A STUDY OF THE BASIC REPRODUCTIVE
BIOLOGY OF TROPICAL FOREST MAMMALS TO
AID SUSTAINABLE HUNTING**

**Progress Report II
November 2013
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Index

1. INTRODUCTION	1
2. NEW FUNDING AND FINDINGS.....	1
3. REPRODUCTION DATA UP TO NOW.....	2
4. SPECIES EXTRACTION RATES AND HUNTING EFFORT DATA.....	3
5. UNFORESEEN DIFFICULTIES	3
6. OTHER ACTIVITIES	3
7. PICTURES.....	3

1. INTRODUCTION

The present document gives an update of activities undertaken within the project “A Study of the Basic Reproductive Biology of Tropical Forest Mammals to Aid Sustainable Hunting”. This project started on February 2013 and we wrote the first update in June 2013. This is the second one.

2. NEW FUNDING AND FINDINGS

As we mentioned in the first update, we applied for funding to the Barcelona Zoo. We finally got it, and we have obtained 9,000 € which has cover the shortfall of £8,386, as indicated in our original proposal to Rufford. Moreover, in September 2013 we were able to present our project to the Ministry of Agriculture and Forestry of Equatorial Guinea which has given us 14,242 €, which allows us to formally hire Paloma Ferrer (who was working with us as a volunteer as mentioned in the first update) and extended our work till May 2014. The reason to extend the work till May 2014 is to collect enough data in the period of February-May, where we collect a low number of samples in 2013; This has been probably due to we started working only in one village (later in two) and we were less experienced at the beginning in the methodology.

On the other hand while measuring samples; we notice there were individuals of rats and blue duikers darkness than others. In the case of the rats not only the colour of the head but also the taste was different (according with the opinion of some villagers). Thank to the good relationship between Professor John E. Fa and the Département de Systématique et Evolution of the Museum National d'Histoire Naturelle of Paris we sent 10 samples of tissue and head bones of rats collected in Basilé Bubi. The results show the existence of two different species, were it was thought to be only one. We are now collecting more samples in other parts of the island. In the case of the blue duiker not only the darkness of the hair but in some cases also the horns, appear to be different in some individuals (though in this case the villagers don't speak about two different types). We are therefore taking a wider data base of pictures of the individuals measured and taking tissue samples. The new funding helps this new activity.

3. REPRODUCTION DATA UP TO NOW

	Num. of Individuals studied				
2013	Blue Duiker	Red Duiker	Rat	Porcupine	TOTAL
February	20	2	5	4	31
March	18	2	1	1	22
April	9	1	2	9	21
May	14	2	12	4	32
Jun	16	0	17	1	34
Julie	64	7	14	36	121
August	16	1	22	4	43
September	15	6	28	6	55
October	40	2	42	11	95
TOTAL	212	23	143	76	454

Table 1: Total of individuals studied per month and per species

We are drawing up a complete database with all the measurements and data collected (mentioned in update June 2013) and all this information will be analysed in detail at the end of the fieldwork period. However we show in this update a preliminary table with the sexual activity of the females per species and per month (in the worked months up to now).

2013	Blue duiker		Red Duiker		Porcupine		Rats	
	% Actives	N	% Actives	N	% Actives	N	% Actives	N
February	50	8		0		0		0
March	42	12		0		0		0
April	0	1		0	67	3	0	1
May	25	8	100	1	100	1	13	8
Jun	14	7		0		0	67	3
Julie	40	20	75	4	48	21	0	3
August	33	9		0	50	2	33	6
September	25	8		0	100	2	0	8
October	18	22	100	1	33	9	0	9
TOTAL	31	95	83	6	50	38	13	38

Table 2: % of active females out of the total (N) adult-subadult ones per month and per specie. Active means pregnant or lactating.

As expected we are obtaining more samples of the most hunted species (rat and blue duiker), which will allow us to do more statistics.

4. SPECIES EXTRACTION RATES AND HUNTING EFFORT DATA

Though we are continuing collecting this data and will continue till the end of this project (and if enough other funding, till the end of 2014), we are already preparing an article with the data collected till August 2013 (from August 2010) which completes a 3-year period.

5. UNFORESEEN DIFFICULTIES

At the end of November 2013 our collaborators (the women traders) started complaining and asked us for more gifts and compensations in exchange of their collaboration. After an afternoon of discussion and exposition of the project, they finally accepted to continue without an increased number of gifts. This problem was good to talk again of the objectives of the project, solve questions and remark the benefits for the community.

6. OTHER ACTIVITIES

In October 2013 (days 2-5), I collaborated with the National University (UNGE) and the Sapanish Cultural Center of Malabo, in organising the “II Biodiversity week”. This year was focused on the UNGE students and they were invited to present any research work related with biodiversity (already done, ongoing or proposed). I not only help in the organisation but also present this work in an oral communication.

7. PICTURES



Blue duiker pictures: showing the differences in hair colour and horns (in the right picture: horns straighter and without grooves at the base).



Giant rat pictures: two pairs of rats (first two pictures same pair, next one the other) differenced in the hair colour and length of the head.



Pictures working in the village:
A. Pastor Cham (UNGE Student) and I, weighing a Red duiker;
B. Paloma staining a sperm smear;
B. Material.

Discussion day in the village president's house (17th November 2013):



We explained the project (though we already did at the beginning of it) but this time we argue the impossibility of giving them more gifts because of the budget and we reminded them of the importance of their collaboration refreshing them on the last objective of the project. They also make questions and we talk about all issues related. We take advantage of this discussion to show them for the first time the TV documentary we did in 2011 titled “Los cazadores de Basilé (Basile’s hunters)”, where we talk about the hunting problem in Pico Basilé and the hunters situation (interviewing them). The documentary can be seen in www.asociacionecotono.org. The discussion was really productive and they liked the TV documentary a lot. To project it we used my laptop, the projector of a friend (with speakers incorporated) and a sheet.