

Final Evaluation Report

Your Details					
Full Name	Nkemnyi Standly Nkengbeza				
Project Title	Saving the Endangered Preuss's guenon (Allochrocebus preussi) at the brink of extinction in the Ebo forest, Cameroon				
Application ID	37707-2				
Date of this Report	20 th December 2023				



1. 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 investigate how anthropogenic disturbances affect the distribution of Preuss's guenon in the eastern part of the Ebo forest.				We surveyed the eastern (northern and southern) part of the Ebo forest via recce survey methods. The survey team documented presence/absence of Preuss's guenon, population structure and different types of anthropogenic activities observed. We collected signs of Preuss's guenon such as direct sightings, vocalisations and feeding remains during the survey. The population structure of Preuss's guenon was dominated by adult female individuals compared to adult males and infants. Signs of anthropogenic activities included poaching (individual snare traps, snare lines, hunter's camps, hunter's tracks, hunter encounters, gunshots heard and spent shotgun shells, etc.) and logging (cut stumps, logging roads, abandoned logs, loading areas and logging camps). The team equally collected data on other large mammals in order to assess their community in the Ebo forest. All signs of encounters were georeferenced using a GARMIN 64s GPS. Data are under analysis to assess the effects of anthropogenic disturbances on the distribution of Preuss's guenon in the Ebo forest.
To document habitat features that influence Preuss's guenon occurrence and distribution in the area.				Our findings during the survey demonstrated ecological factors such as habitat types, habitat structure and landscape influence Preuss's guenon distribution in Ebo forest. Most direct observations and vocalisations were in mature forest. This species was also reported to use



To investigate local perceptions to changes in prey (especially primates) distribution and abundance over time and the prospect of implementing conservation activities in the area.		swampy areas as we documented feeding remains in this habitat types. Our results showed this species used different altitudinal gradients, but majority of encounters occurred above 700m. Sighting of Preuss's guenon occurred between 0-10m above ground but most were at a perch height of 6-10m above ground level. We sighted this species to equally use the forest floor. We are currently analysing the data generated to explore the relationship that exists between sightings of Preuss's monkey and habitat characteristics such canopy openness, canopy height, perch/vertical height (height where Preuss's guenon was sighted), landscape gradient, altitude and relative percentage cover of stratified vegetation types documented. We conducted ethnographic survey in the four most populated village communities of the eastern part of Ebo forest using structured questionnaire comprised of both open- and closed-ended questions. This survey meant at understanding specifically the local perceptions in the distribution and abundance of Preuss's guenon in the area. We found a decreasing population trend of this species in the area as a result of hunting pressure for bushmeat. Hunting pressure for bushmeat because of lack of alternatives source of protein intake
		result of hunting pressure for bushmeat. Hunting pressure for bushmeat because of lack of alternatives source of protein intake and income. However, the local people still stand for the conservation of Preuss's guenon and its habitat (the Ebo forest).
To conduct Outreach campaigns in four most populated village communities of the eastern part of Ebo forest.		We conducted outreach campaigns with local communities on the importance to conserve Preuss's guenon and other threatened wildlife species and on national wildlife legislation. We



			equally visited schools of the area to initiate conservation talks. We used t-shirts, posters and flyers bearing sensitisation messages and the logo of Rufford as promotional materials during our campaigns.
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2. Describe the three most important outcomes of your project.

a). Our survey in this part of the Ebo forest yielded important findings on Preuss's guenon that would be valuable for monitoring its population trend. We recorded 18 encounters of Preuss's guenon comprising of direct sightings, vocalisations and feeding remains of Preuss's guenon. These remains were mainly feeding signs on *Afromumum* species. We recorded 58 individuals in nine groups of Preuss's guenon based on direct sightings throughout the survey. The group size of this species ranged from 3-12 individuals. Preuss's guenon population was mostly composed of older individuals dominated by adult females. We observed mixed groups with Preuss's guenon in association with putty-nosed guenon (*Cercopithecus nictitans*) and crowned guenon and red-eared guenon (*Cercopithecus erythrotis*); Preuss's guenon in association with putty-nosed guenon and crowned guenon and red-eared guenon, red-eared guenon and crowned guenon.

b). Of the different anthropogenic signs recorded during the survey, we found hunting signs as the most frequently encountered anthropogenic disturbance in that part of the Ebo forest. These were individual snare traps, snare lines, hunter's camps, hunter's tracks, hunter encounters; gunshots heard and spent shotgun shells. These signs were distributed with no significant variation in the area. We found logging evidence in the north-eastern site of the forest such cut stumps, logging roads, abandoned logs and loading areas. However, we documented no sign of logging in the south-east of the Ebo forest.

c). Majority of our participants reported a decreasing population trend of Preuss's guenon in that part of the Ebo forest. They also mentioned that the probability to encounter a group of this species in the area has reduced over time due to hunting pressure for bushmeat because the local people have poor livelihood options in the area. They reported some human-wildlife conflicts attributed to Preuss's guenon in the area as this species destroys crops by raiding cocoa farms and food crops. Preuss's guenon is among the most targeted primate species during off-takes because of its larger size and semi-terrestrial habit which exposes individuals to snare traps set for ground animals. The outreach campaigns helped improve local knowledge and understanding of the national wildlife law and threats faced Preuss's guenon in the area. Local people living around this part of the Ebo forest are now able to classify (Class A, Class B and Class C) wildlife species as stated by the law and the sanctions that follow illegal hunting of threatened wildlife. These outreach activities at the school level equally helped to initiate conservation talks with the young generations. At the end of our awareness campaigns, the local village communities were committed to support the conservation of Preuss's guenon and to



report anyone who hunts this species to local government officials of the area for sanctions.

3. Explain any unforeseen difficulties that arose during the project and how these were tackled.

We had some village heads that were not open to welcome us in their communities when we travelled to introduce the project in the area. They thought we came to the community as spies. So, when we presented our research permit and explained the purpose of our trip and the importance of the study, the village heads now abide with us and promised good collaboration throughout the project.

4. Describe the involvement of local communities and how they have benefitted from the project.

In all the stages of the project (forest surveys, ethnographic surveys and outreach campaigns) in the area, we collaborated with village heads and the village youth president of each village to mobilise porters and local guides. They all participated in our outreach campaigns and were informed on the national wildlife law and the importance of conservation. They were encouraged to diversify their sources of income and reduce hunting pressure on threatened species that are protected by law. All those who participated in the ethnographic and outreach activities learnt new skills in conservation activities and gained some incentives. During forest surveys, all our local guides and some porters who spent time with us in the forest received some training on the use of GPS and a compass, and how to collect data on primates and anthropogenic activities; by doing so we ignited community participation in conservation and monitoring of Preuss's guenon. This helps engage communities in research and especially how to document population trends of Preuss's guenon in the Ebo forest.

5. Are there any plans to continue this work?

We have plans to continue this work on Preuss's guenon in the Ebo forest.

This study elucidates the population status of Preuss's guenon in Ebo forest. Additional scientific research is required, such as using standard survey methods to determine the population density of Preuss's guenon in Ebo forest.

This study provides baseline knowledge on Preuss's guenon in Ebo forest. Further surveys should be undertaken to monitor the population trends of Preuss's guenon in the Ebo forest to inform its protection.

A comprehensive study of the behavioural ecology, feeding ecology and home range of Preuss's guenon in the Ebo forest should be undertaken to enhance their conservation in the area.

We found Preuss's guenon to raid crops in the area of Ebo forest. An in-depth exploration of interactions between Preuss's guenon and local people around the area of Ebo forest should be conducted to foster the conservation of this species.



Map the genetic structure of Preuss's guenon in Ebo forest. Conservation genetic analyses of Preuss's guenon can also help reintroduction programmes currently lacking the knowledge where prospective individuals should be returned to their wild habitats.

Foster positive attitudes by raising conservation awareness on Preuss's guenon and other threatened primates in villages and schools around Ebo forest.

Develop site specific conservation awareness tools for Preuss's guenon and engage communities in its conservation.

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

I will share the outcome of my work through the websites of The Rufford Foundation, the University of Buea and in peer reviewed journals. Currently, I am finalising drafts of manuscripts from field data generated during our surveys on Preuss's guenon in the area of Ebo forest. This project helped collect data for my PhD at the University of Buea, so a copy of my PhD thesis will be deposited at the library of University of Buea and at the library of my job site (Institute of Agricultural Research for Development). Oral and posters presentations will also be done both in national and international conferences.

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

Further surveys should be undertaken to monitor the population trends of Preuss's guenon and drivers of anthropogenic disturbance in the Ebo forest to inform its protection.

It is important to conduct an in-depth exploration of interactions between Preuss's guenon and local people around the area of Ebo forest to foster the conservation of this species, since these local people reported crops raiding incidents with Preuss's guenon in the area.

Foster awareness, attitude and behavioural education in villages and schools through conservation education sessions with the long-term objective to promote co-existence with Preuss's guenon, to tackle bushmeat consumption and wanton killing and destruction of the wildlife ecosystem of Ebo forest.

Engage the next generation in the conservation of Preuss's guenon through the initiation of wildlife conservation clubs in schools around the Ebo forest.

Develop site specific conservation awareness tools for Preuss's guenon and engage communities in its conservation.



8. Did you use The Rufford Foundation logo in any materials produced in relation to this project? Did the Foundation receive any publicity during the course of your work?

I used the logo of The Rufford Foundation in outreach activities. The foundation received high publicity during the course of my project in Ebo forest. As far this study is concerned, I will acknowledge The Rufford Foundation in all my communications (talks, posters and research papers). The Rufford Foundation logo will be used during my PhD defence oral presentation to acknowledge funding source of my research and equally in my thesis.

9. Provide a full list of all the members of your team and their role in the project.

Nkemnyi Standly Nkengbeza: Principal investigator.

Pr Eric Fokam: PhD Advisor of the principal investigator, provided assistance in designing field work and data collection.

Ngome Laura Mesame: Assisted during outreach activities.

Ngansop Eric and Epanda Germain: Field Assistants during field work

Rose Makak: assisted in the survey design (map production)

Zacchary of Logndeng and **MOOH Samuel of Saha'a** for always dedicating time to mobilize local guides and porters throughout our forest trips.

10. Any other comments?

It is my pleasure to thank The Rufford Foundation for providing support to this project in the Ebo forest. This support has helped to elucidate the status on a little known primate species, Preuss's monkey and initiate its long-term conservation effort in the Ebo forest, an area of high conservation value in the Lower Gulf of Guinea forests.



Some photos from field work in the Ebo forest

A - Survey team in the Southeast of Ebo forest. From left to right: Principal Investigator, local guides and field assistant.



B - Principal Investigator documenting hunting evidence (Spentcartridge) during recce survey in the Ebo.





C- Collecting field data with the help of local guide. D – Logging sign documented in the area in the Ebo forest.



E – Active hunter's camp documented during survey.





F – Collection of tree bark in the Ebo forest for medicinal purpose.