

## Final Evaluation Report

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Your Details	
<b>Full Name</b>	Guetse Francis
<b>Project Title</b>	Conservation status of the endangered Mt. Cameroon Francolin <i>Pternistis camerunensis</i> and initiation of community-based conservation awareness around Mt Cameroon
<b>Application ID</b>	37249-1
<b>Date of this Report</b>	15 <sup>th</sup> June 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 determine local community attitude and perception towards the Mt Cameroon francolin				To approach this objective, we designed a questionnaire to gather information directly from members of the local community around the Mt Cameroon National Park. This involved asking questions about their knowledge of Mt Cameroon francolin in their area, their attitudes and perceptions of the population trend of this species. So, we exchanged with 200 local people. Interviews with locals reveals that the population of Mt Cameroon francolin has drastically declined in the past due to hunting and habitat loss, but now it is increasing. Francolins are the most targeted birds in this area because of their meat. In local language, the Mt Cameroon francolin is called "Ndollé", which means the most palatable meat, highly coveted in this locality. Moreover, its eggs are used for cultural practices by traditional doctors and are expensive (\$10/egg). The results will be used for the fulfilment of my PhD thesis.
Provide quantitative population density, abundance and distribution data for Mt Cameroon Francolin				140 point counts were randomly established across the Mt Cameroon National Park, where not only data on the Mt Cameroon francolin but also the bird community were successfully collected. Due to the rarity of the francolin, we decided to collect the bird community information of Mt Cameroon in order to capitalise our sampling effort. This gave us data on the entire diversity of the Mt. Cameroon bird community. Point count data are currently being analysed statistically with a view to preparing a manuscript for submission

			<p>to a peer-reviewed journal. I expect to complete the analysis by the end of June 2023 and submit the manuscript by July 2023. A preliminary analysis shows that several important bird species remain in Mt Cameroon. Through this survey, we identified areas of the mountain where francolin is still found and four francolin hotspots (Fermencam, Crater Lake, Nitele and transition forests of Etinde area). The francolin distribution map has been developed to show the areas where the species is found in Mt Cameroon in order to facilitate its conservation by the authorities of the Mt Cameroon National Park.</p>
Identify and characterise habitat types as well as associated threats			<p>To approach this objective, we recorded habitat type and all GPS locations where francolin was found. The presence of francolin was identified in montane forest, elephant pasture and savannah. The main threats identified included uncontrolled bushfires for clearing savannah (hunters), poaching, modification of vegetation structure by elephants, farmland creation around the park, illegal and unsustainable exploitation of the threatened <i>Prunus africana</i> bark for medicine.</p>
Determine seasonal effect on francolin abundance			<p>Some variations were found between seasons. According to the preliminary results, francolins were more abundant in forest habitat during the rainy season, in contrast to the dry season where they predominated in elephant pasture. We have even observed several times in the elephant dung the imprints of francolins which search this dung to consume insects. Further studies need to be done to better understand because perhaps the elephant as a keystone species would contribute to the protection of the francolin by creating a favourable habitat for them.</p>

Fully train two local guides as potential future research assistants in the area.			Our two guides (Mokuku Francis and Jongele Grigory) were successfully trained to collect data, on the use of playback technique, GPS, compass, and habitat surveys.
Engagement of local community in the search for sustainable strategies for the conservation			We were able to discuss with the local populations around the park in the search for sustainable strategies for the conservation of francolins. Through these discussions, local peoples reveal their perceptions of the effectiveness of francolin management strategies. This has been formulated among the recommendations addressed to the park authorities and to the NGOs partner working for the biodiversity protection of this park.
Sensitise and educate local communities for Francolin conservation through Education and awareness campaign			Education and awareness campaigns through workshops were organised in different surveyed communities where we raised awareness for the necessity to protect the Mt Cameroon francolin. Schools and chiefdoms were the strategic places targeted to conduct educative and awareness campaigns based on the importance of francolin conservation. 100 t-shirts were printed as promotional materials and distributed to field assistants, meriting students, group leaders and more enthusiastic locals to foster conservation initiatives.
Identify priorities for further research and conservation management activities			A project proposal on habitat use preference of the endemic and endangered Mt Cameroon francolin under anthropogenic pressures is in preparation.
Contribute to the update of Cameroon's National Biodiversity Strategy Action Plan (NBSAP) and the global biodiversity conservation priority areas.			This is still being prepared, as an up-to-date list of species constituting the avifauna of Mt Cameroon, threats to conservation and proposed measures have been channelled through the administrative authorities in charge of forestry and wildlife, in order to include it in the upcoming version of the NBSAP document.

## **2. Describe the three most important outcomes of your project.**

**a).** Detailed information on the endangered Mt Cameroon francolin and other threatened birds was provided to Mt Cameroon National Park (MCNP). The francolin hotspots were identified across the MCNP but also their abundance and distribution. This will facilitate the task of the conservator's office by providing information for the right action. It will also constitute baseline for future francolin monitoring in the site because very little information exists on the population and ecology of this species. The breeding, nest site characteristics and habitat use preference of Mt Cameroon francolin remain undescribed.

**b).** Improved understanding of local community awareness and perceptions: the study has provided insights into the local community's knowledge and understanding of the Mt Cameroon francolin and the threats it faces. It may also reveal their perceptions of the effectiveness of francolin management strategies.

**c).** Development of the sustainable conservation strategies: the study provided information on the effective and sustainable francolin conservation strategies that consider the local communities perceptions and practices. This information can be used to develop management plan in favour of the protection of francolin and other threatened species in Mt Cameroon National Park. The conservation of the Mt Cameroon francolin and its habitat is very important because it is strictly endemic in Mt Cameroon. Through awareness campaigns, the community awareness and understanding of wildlife conservation and their ecosystem were significantly increased.

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

Due to the insecurity linked to the Anglophone crisis, workshops and awareness campaigns were not organised in the Bomboko community. However, the community leaders of this community were invited to the workshops held in the neighbouring communities (Buea and Mapanja); they will carry the message to their local people. Also, the dry season survey was a little disturbed by the elephants because of the only water point in Mt Cameroon ("Crater Lake") where they come to get water. But the sample size we were able to collect nevertheless allowed us to get an insight of the seasonal effect on the species.

During the fieldwork, per diem of field assistants (guides, and assistant researchers) were requesting more than budgeted amount for daily payment. To solve this problem, we had a discussion between traditional authorities and guides with the support of administrative authorities. We came to an agreement but still with an increase in the per diem of guides and assistants.

## **4. Describe the involvement of local communities and how they have benefited from the project.**

This project was carried out with the help of the local communities who assisted in all stages of the survey. At the beginning of the project, we encountered local

administration and traditional authorities (chiefs) to let them know about the project and solicit their collaboration. We also trained two field guides (Mokuku Francis and Jongele Grigory) during the project implementation. During fieldwork we worked with a park staff member (Njie Francis), local community (Luma Francis, Kum peter, Mokuku Francis and Jongele Grigory) as field assistants without forgetting the porters who were recruited within the community to carry our luggage. Additionally, we were able to discuss with the local populations around the park in the search for sustainable strategies for the conservation of francolins. They participated during the outreach campaigns, and they agreed to help conservation of endangered species.

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

Yes, based on the results obtained and the drastic decline of the species in some of its previous historical sites, we are planning to continue monitoring the populations of the Mt Cameroon francolin and to expand studies to better understand the habitat use pattern of the species. To carry out this project, however, funding with a 2nd Rufford Small Grant will be critical. To this end, I plan to apply for the 2<sup>nd</sup> Rufford Small Grant to continue the work on the little studied Mt Cameroon francolin.

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

Results from this work will be submitted to peer-reviewed journals and will also be presented in BirdLife International newsletter and IBA monitoring database. Additionally, we will present our results at the national level in Cameroon (Bioscience, CAFOBIOs, seminars, etc.) and at international level at the Student Conference on Conservation Science in 2024, if bursary for attendance is granted. Results will also be defended because this study form part of my PhD thesis,

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

Next steps are:

- Complete data analysis.
- To publish the articles.
- To conduct further community outreach programme.
- To spread the results of our current study through seminars, training, conferences and meetings.
- To contribute with conservation strategies to reduce anthropogenic threats on the Mt Cameroon francolin as well as other threatened species.

#### **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?**

The logo has been used in all presentations related to the project (t-shirts, lectures, workshops, posters).

The respective acknowledgments will be given in the manuscript that will be published. Links about RF's activities from the website, that regularly published on Facebook page are being shared in our various networks.

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

**The field team:**

**Guetse Francis:** applicant and principal investigator

**Njie Francis Motombe** (Park staff): participated as field assistant.

**Luma Francis** (local community): participated as field assistant.

**Mokuku Francis** (local community): participated as field guide.

**Jongele Grigory** (local community): participated as field guide.

**Kum Peter:** participated as field assistant.

**10. Any other comments?**

We are sincerely grateful to The Rufford Foundation for supporting this study on the endemic Mt Cameroon francolin. Funds have helped to bring out preliminary information on the presence and distribution of the Endangered Mt Cameroon francolin in Mt Cameroon National Park. This could be used as database for future francolin monitoring and will contribute to the management plan elaboration of the park in favour of this species. Although we still in data process, it also permits to bring out indigenous attitude and perceptions towards this species, for an effective conservation measures.



**Left: Mount Cameroon Francolin. Right: Mount Cameroon francolin on wire trap.**



















