

Final Evaluation Report

Your Details	
Full Name	Eban-Odi Adrian Odi
Project Title	Preliminary assessment of Chimpanzees and other wildlife in the Somie Forest, Cameroon
Application ID	37684-1
Date of this Report	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 estimate the relative abundance of Chimpanzees and other wildlife species in the Somie landscape				<p>We confirmed the presence of chimpanzees and other wildlife species by using 10 camera traps, positioned strategically based on observed wildlife activity. We focused our research on the forested part of the Somie landscape, where we estimated the relative abundance of the encountered wildlife species during reconnaissance walks.</p> <p>We divided the forest area into three survey sites, each with reconnaissance trails of variable lengths. The abundance estimation was exclusive to these forested areas.</p>
To assess and quantify Chimpanzee habitats in the Somie landscape				<p>We have assessed chimpanzee habitats in the landscape. This enabled us to have an overall view of the different chimpanzee habitat types in the landscape. However, we were not able to clearly classify the habitat type because the satellite map used did not reflect the reality on the ground. Therefore, more studies are required using updated satellite maps of the landscape to understand the interconnectedness of the chimpanzee corridor where protection measures could be employed.</p>
To raise awareness of local communities on the importance of conserving wildlife species				<p>We conducted three awareness campaigns in Somie, Hainare and Douabang communities, and in schools, on the importance of the conservation of wildlife species. More than 500 men, women and youths participated in the awareness campaigns. All participants fully understood the importance of conserving wildlife species.</p>

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

a) Determining the Diversity and Relative Abundance of Chimpanzees and Other Wildlife Species in the Somie Landscape

Our research has validated the existence of chimpanzees along with 13 other distinct wildlife species inhabiting the Somie landscape, a discovery that highlights the biodiversity of the area and underscores its conservation importance. Among these species, we also identified the critically endangered giant pangolin.

In terms of chimpanzee presence, a lone individual was directly observed during reconnaissance walks. Furthermore, with the use of 10 strategically positioned camera traps, we captured evidence of four distinct groups of chimpanzees, varying in size from one to five individuals. The largest of these groups comprised of four adults, whose gender remains undetermined, accompanied by a juvenile (<https://www.youtube.com/@CBBM2023>).

Nest patterns of the chimpanzees were also studied, revealing groups ranging from two to 50 nests spread across 13 different sites. Based on these observations, we approximated the relative abundance of chimpanzees to be 2.3 ± 2.14 sign/km, calculated over a traversed distance of 87.3 km. Most nests were found in a cluster suggesting repeated use of the same area for nesting. I believe that this behaviour is in response to persistent threats from human activities. A map showing the location of animals recorded in the survey is attached as Appendix 1.

This research represents the first recorded evidence of chimpanzees inhabiting this landscape. Hypotheses about their origin propose a possible migration from the Gashaka Gumti National Park in neighbouring Nigeria, or that they might be indigenous to the forest-savanna mosaic habitat of the Somie landscape. Further research and conservation work will shed more light on these hypotheses.

In addition to the chimpanzees, our surveys, both on foot and via camera traps, catalogued a variety of species. These include: the giant pangolin (*Manis gigantea*), tantalus monkey (*Chlorocebus tantalus*), putty-nosed monkey (*Cercopithecus nictitans*), baboon (*Papio anubis*), bay duiker (*Cephalophus dorsalis*), blue duiker (*Cephalophus monticola*), civet (*Viverra civeta*), monitor lizard (*Varanus salvator*), warthog (*Phacochoerus africanus*), porcupine (*Hystrix cristata*), bushbuck (*Tragelaphus scriptus*), sitatunga (*Tragelaphus spekii*) and pintade (*Numida meleagris*). Bird identification was beyond the scope of this project, but we are aware that the area contains a rich and diverse avifauna.

b). To assess and quantify Chimpanzee habitats in the Somie landscape

The landscape has a broad range of natural habitats threatened by severe degradation due to unsustainable agricultural techniques, bushfires by cattle grazers, increased timber exploitation and poaching. These activities have led to a significant loss of biodiversity and a huge threat to the remaining chimpanzee habitat. Its forest-savanna mosaic which stretches from the north has been severely degraded with only a few patches of montane forest left. According to some community members, the savanna has increased over the last 5 years due to a combination of factors including:

slash-and-burn agriculture; uncoordinated and uncontrolled bushfires set by grazers and climate change. It is worth mentioning that the main activity carried out in the landscape is agriculture (70%), followed by cattle grazing (20%) and fishing (10%).

c). To raise awareness of local communities on the importance of conserving wildlife species

Thanks to our awareness campaigns, over 500 participants from the communities of Somie, Hainare, and Douabang have developed an understanding of the importance of conserving wildlife species in their forest area. The participants included local leaders, authorities, women's groups, reforestation cooperatives, and primary school students. These community members now show increasing interest in protecting wildlife in their landscape.

Over 95% of participants acknowledged the importance of wildlife conservation and expressed support for the project, promising their involvement in future conservation strategies. In addition, an interactive workshop raised awareness among 100 children, while questionnaires administered to land users provided insight into their conservation perceptions and potential benefits. A majority (75%) of respondents believe conserving species and improving agricultural techniques is vital for the survival of chimpanzees and their habitats.

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

Our first hurdle was a delay in the project schedule due to late delivery of our survey equipment. We had ordered camera traps and GPS devices from abroad, but the delivery took longer than anticipated. Consequently, our survey began 2 months later than the original date. The major challenge that emerged during the project implementation involved assessing and quantifying the chimpanzee habitat. We were unable to obtain the most recent (2022) satellite maps of the landscape. As a fallback, we purchased WorldView 30cm Panchromatic and 1.2m 8-Band Satellite image data, dated November 30, 2018, from Satellite Imaging Corporation (<https://www.satimagingcorp.com/>).

Unfortunately, this image, being several years old, didn't accurately reflect the current state of the forest due to intervening human activities, making it unsuitable for our purposes. The 2018 satellite map showed extensive forest areas that had since been significantly degraded due to human activities. This discrepancy made it difficult to reconcile ground observations with the outdated satellite map. Ultimately, we had to rely solely on field observations to describe the habitat, presenting its own unique challenges.

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

Local community members were fully involved in the planning and implementation phases of this project. Prior to the implementation of the project activities, a protocol was signed with the community through the chief, spelling out the working modalities

and the responsibility of both the project owner and the community members. Different categories of community members were involved in different components of the project such as: sensitisation/awareness meetings, training workshops, data collection and the validation process.

During awareness raising, over 500 community members from different groups such as farmers, hunters, grazers, women's groups and cooperatives, notables, and local authorities were involved. They provided invaluable insight into species richness and habitat quality in the area. They gained knowledge on the threats to wildlife and their habitats, and on the importance of protecting their forests and conserving wildlife.

All three chiefs of the concerned communities were involved in consultation meetings before the implementation of the project. They gave their consent for the implementation of the project and also agreed to mobilise their community members during the awareness campaigns.

A total of 58 community members (60% men, 20% youth and 20% women etc) were involved in the 3-day training workshop on camera trap manipulation and deployment, the use of GPS to collect data, compass handling, and survey techniques. They benefited from knowledge and skills on the use of survey equipment and how to carry out biodiversity surveys.

Two community members were recruited during the project to serve as field guides. They were involved in camera trap deployment and rotation, and the collection of biodiversity data. They gained practical skills and knowledge in biodiversity data collection and camera trap deployment in the field. They also benefited financially from the project.

5. Are there any plans to continue this work?

This project was specifically focused on biodiversity assessment in the gallery forests in the immediate vicinity of Somie. The insightful findings from this project have led my organisation to partner with the Somie community and the Government of Cameroon. Together, we aim to initiate the legal procedures required to establish a 5000 ha community forest. This initiative will serve the dual purpose of preserving local wildlife and supporting the livelihood of the local population. However, our efforts don't stop here. To successfully support the community forestry process, it's crucial to gain a comprehensive understanding of how chimpanzees and other wildlife species interact with the landscape. We also need to continually assess and mitigate the threats they face. Given the acute vulnerability of chimpanzees, we urgently need to amplify conservation education within schools and the broader community to foster sustainable forest use practices.

We also plan to bolster the community forestry process through an enhanced understanding of the conservation status of chimpanzees and other species. This will be achieved through a community-based chimpanzee monitoring project, also known as "the chimpanzee guardianship project". The data collected from this initiative will play a pivotal role in the community forestry process. It will help identify

specific areas to be included within the community forest boundary and zones that need absolute protection from human activities, among other crucial details. Furthermore, we will intensify our conservation education in schools with different groups in the community: grazers, farmers, timber exploiters, etc.

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

This report has been presented to the communities and all stakeholders in the landscape including the Ministry of Forestry and Wildlife. It will also be published in my personal and my organization's all social media platforms. In the coming weeks, videos from camera traps and school conservation education activities will be uploaded on YouTube and shared on Instagram, Facebook, and Twitter. We also plan to develop an article based on this research for publication in a scientific journal.

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

- This project confirmed the presence of several endangered species in the forested area of the landscape. Further surveys in the savanna area are necessary to fully understand the range and threats to chimpanzees' survival.
- Enhanced conservation education in schools within Somie and neighbouring villages will help increase understanding of conservation importance and the need to protect wildlife habitats.
- More in-depth studies are needed to understand the behaviour and dynamics of chimpanzees in this area, generating information that is needed for long-term conservation planning.
- The establishment of a village forest management committee is crucial to engage the community and stakeholders in wildlife conservation within the landscape.

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?

Yes, the Rufford Foundation logo was featured in all printed materials and presentations during the project and was used on project-related t-shirts. The Foundation was also acknowledged in the presentation of results to the communities and stakeholders on July 06, 2023.

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

Eban-Odi Adrian Odi: Principal investigator. Led the team in the planning, implementation, supervision and reporting of the project.

Niki Buroro Agbor Ekpe Jerome: Team member. Assisted in the planning of surveys.

Tatchim Idris Daryl: Team member. Assisted in the planning and implementation of the project.

Lougue Boniface: Field guide. Assisted in data collection during recce walks and camera trap deployment.

Djou Celestin: Field guide. Assisted in data collection during recce walks and camera trap deployment.

10. Any other comments?

I would like to express profound gratitude to The Rufford Foundation for their financial support. This aid has facilitated my contributions to conservation, confirming the presence of chimpanzees and other wildlife in the Somie landscape, and raising awareness on the importance of species conservation. I have also learnt a lot and developed my conservation and leadership skills during this project. I eagerly anticipate your continued support for advancing conservation and research work in the Somie landscape.

Appendix & photo below.

Appendix 1: Location of animals recorded in the survey.

2023 Somié Preliminary Biodiversity Assessment Results









