Final Evaluation Report

We ask all grant recipients to complete a project evaluation that helps us to gauge the success of your project. This must be sent in **MS Word and not PDF 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 – remember that negative experiences are just as valuable as positive ones if they help others to learn from them.

Please DO NOT fill in and submit this form until the project has been completed.

Complete the form in English. Note that the information may be edited before posting on our website.

Please email this report to jane@rufford.org.

Your Details	
Full Name	Thaddeus Pev Apezan
Project Title	Enhancing the conservation of a rapidly declining large frugivorous forest bird in southeast Nigeria: The Yellow-casqued Hornbill *Ceratogynma elata*
Application ID	44668-1
Date of this Report	

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
What is the current population of YCH in Cross River National Park?			Yes	We surveyed the population of the Yellow-casqued Hornbill (YCH) in the Okwangwo Division of Cross River National Park using point count and song meters. We randomly established and surveyed 60 sampling points interspaced by 500 m using QGIS. At each point, we conducted focal observations and recorded hornbills seen or heard for a period of 10 minutes within a radius of 100m. We measured the vegetation variables that predict presence of YCH. Additionally, we placed automated song meters at each sampling point to record calls of hornbills even when the researcher is not on the field. YCH calls have been detected in the Song Meter audio. During the point count survey, we encountered 12 YCH across the 60 points we surveyed. We are still doing some training to estimate abundance from the song meters.
Do the YCH select nest sites and what are the factors predicting nesting sites?		No		We conducted focal observations to record nesting behaviours and to locate nests. However, we did not find nesting activity. In future surveys, we will increase temporal coverage of nest searches to improve the likelihood of locating

				active nests.
What is the local knowledge/significance of the YCH, and the threats to the species?			Yes	We interviewed 284 people, with a higher proportion of respondents being older adults (36–55 years), men (69%), and those with secondary school education (47%). There was a very high reported propensity to harvest Yellow-casqued Hornbill (YCH), with respondents identifying forest loss (59%) and hunting (55%) as the primary threats to the species. Despite this high propensity to harvest, approximately 55% of respondents demonstrated a very strong knowledge of the hornbill's ecological importance, as well as a strong awareness of conservation laws and the need to protect the YCH. The dominant driver of YCH trade was the need to sell its parts, followed by the need for food, spiritual motivations (charms and voodoo), cultural display, and medicinal use. When linking the motivation to sell to buyer type, the main buyers were reported to be (in order of importance): people from afar, members of the same community, and people from neighbouring communities. Among buyers from afar, the Nigerian states most frequently mentioned were Lagos (~816 km), Oyo (~906 km), Akwa Ibom (~117 km), Plateau (~723 km) from Cross River National Park, International destinations included Ghana, Cameroon, and Togo.

Community education on the threats and ecosystem importance of the YCH			Yes	We conducted separate town hall meetings with secondary school students (about 361), hunters (13), and lumbermen (28) and farmers (154) to educate them on how the YCH disperses seeds and aid in forest regeneration, thereby maintaining ecosystem functioning. We also educated them on how anthropogenic disturbances limit these roles played by birds. We made audio-visual presentations during all education programs to enhance understanding. Additionally, we presented students with a booklet 6-page booklet on the biology, distribution, threats and ecosystem functions of the YCH.

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

Current population of the YCH in the Okwangwo Division of Cross River National Park, Nigeria. We hope to provide an update of the site population of the species since the species was last assessed in 2016 by IUCN. We are still analysing the recordings from song meters.

Our conservation education reached out directly to about 556 people via town hall meetings and school education to increase awareness on the ecosystem importance of the YCH and the need of local people to be engage in conservation of the environment. In addition, we also reached a wider audience through a one-off radio broadcast on a local radio station, with an estimated reach of 40,000 listeners.

We submitted a manuscript titled "Conservation at the Crossroads: Divergent Community Attitudes and Trade Pressures on the Yellow-casqued Hornbill *Ceratogymna elata"* to the Journal of Biodiversity and Conservation on the 31st August 2025, which is under review.

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

We planned to increase capacity of university students on internship with the Cross River National Park, who will be part of data collection and community engagements. However, at the start of our project there were no interns so we trained and used field assistants from the communities.

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

The involvement of local communities is a key component for the conservation of the species. Prior to commencement of our project, we had meetings with community leader who accepted and supported the implementation of the project. We enhance the capacity of six local community members on biodiversity survey using point count technique and bioacoustics. Additionally, they were trained on vegetation survey.

Primary school students were very happy to participate in conservation education activities, which enhanced their knowledge on the threats and ecosystem services provided by the YCH.

5. Are there any plans to continue this work?

Yes. The Yellow-casqued Hornbill is classified as Vulnerable by the IUCN, it remains unlisted under CITES, in contrast to other hornbill species globally. The Hornbills in Trade Database reveals that the Yellow-casqued Hornbill faces 'extreme' domestic and 'high' international trade pressures, driven by demand for its bill, live birds, and meat, which is also supported by our findings. We hope to conduct all year monitoring to have information on the annual population dynamics such as total population and recruitment of the species which will enable us to communicate with relevant stakeholders on the urgent need for heightened legal protection and awareness initiatives targeting this species, including its listing under CITES.

Upon completion of the species conservation strategy for the Yellow-casqued Hornbill, we plan to engage local conservation stakeholders, community leaders, and individuals involved in logging to explore the potential for a forest regeneration project. Additionally, we aim to promote the involvement of citizen science initiatives in long-term monitoring, using the YCH as an indicator species for forest health.

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

We plan to present the findings of this project at both local and international conferences to reach a wide audience of researchers, practitioners, and policymakers. Already, findings have been presented at the Student Conference on Conservation Science, Hungary, by Iniunam Iniunam on the 2nd to 6th September 2025, where the talk was awarded one of the best presentations with a score of 14 out of 15 based on the outline and scientific quality, quality of delivery and relevance for conservation. There has also been a submission for publication in the journal Biodiversity and Conservation.

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

Model the population and vegetation variables that predict the presence of YCH in the Okwangwo Division of Cross River National Park, Nigeria, which we enable us to provide an update on the site population of the species since the species was last assessed in 2016 by IUCN.

Develop a conservation strategy on the YCH and share with local stakeholders on biodiversity conservation, such as the National Park Service, local ministries of environment and the Nigeria Conservation Foundation.

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, we used the Rufford Foundation logo in the production of shirts, handbills and booklets for conservation education. The logo was also used on the slides of Iniunam Iniunam during the Conference on Conservation Science, Hungary. Additionally, the Rufford Foundation is well acknowledged in the submitted manuscript.

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

Thaddeus Pev Apezan:

- Team lead
- Development of project work plan
- Implementation of all the field work
- Training of field assistants and interns
- Data analyses
- Manuscript and report writing
- Funds management

Iniunam Iniunam:

- Development of project work plan
- Implementation of all the field work
- Training of field assistants and interns
- Data analysis
- Manuscript and report writing

Joy Kingsley Aidati:

- Implementation of all the field work
- Training of field assistants and interns
- Manuscript and report writing

10. Any other comments?

Funding from The Rufford Foundation has enabled us to carry out the first hornbill specific study on the Yellow-casqued Hornbill, a sentinel of forest ecosystems in Nigeria. Findings from this study has aid to understand the population, threats and the trade network on the species, which could aid make an argument for enlisting the species under CITES.

ANNEX – Financial Report

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