Role of Hornbills in our communities of Central Uganda

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Summary

The relative abundance of hornbills in fragmented forests of Central Uganda has significant roles. 22 forest fragments were surveyed followed by socioeconomic study conducted from March 2009-August 2010. Point counts were used to survey all bird species. Three hornbill species that depend on the forests were mainly targeted. From the findings significant differences were observed between the fragmented forests. These differences were further amplified by defining their roles in our communities of Central Uganda. Because of their roles, it recommended that fragmented forests be conserved for their direct and indirect values.

Introduction

Hornbills are peculiar, large-bodied birds found only in the mature tropics that have been the focus of research in the last thirty years. There are 54 species of hornbills known from the world (Kemp 1993). In Uganda there is an estimate of 16 species (Stevenson & Fanshawe, 2002). They contribute to Uganda's biodiversity global scale being one of the biodiverse countries in Africa. Currently hornbills are associated with agricultural lands (Kaihura and Stocking, 2003) but commonly in fragmented forests with cultivations.


T. alboterminatus

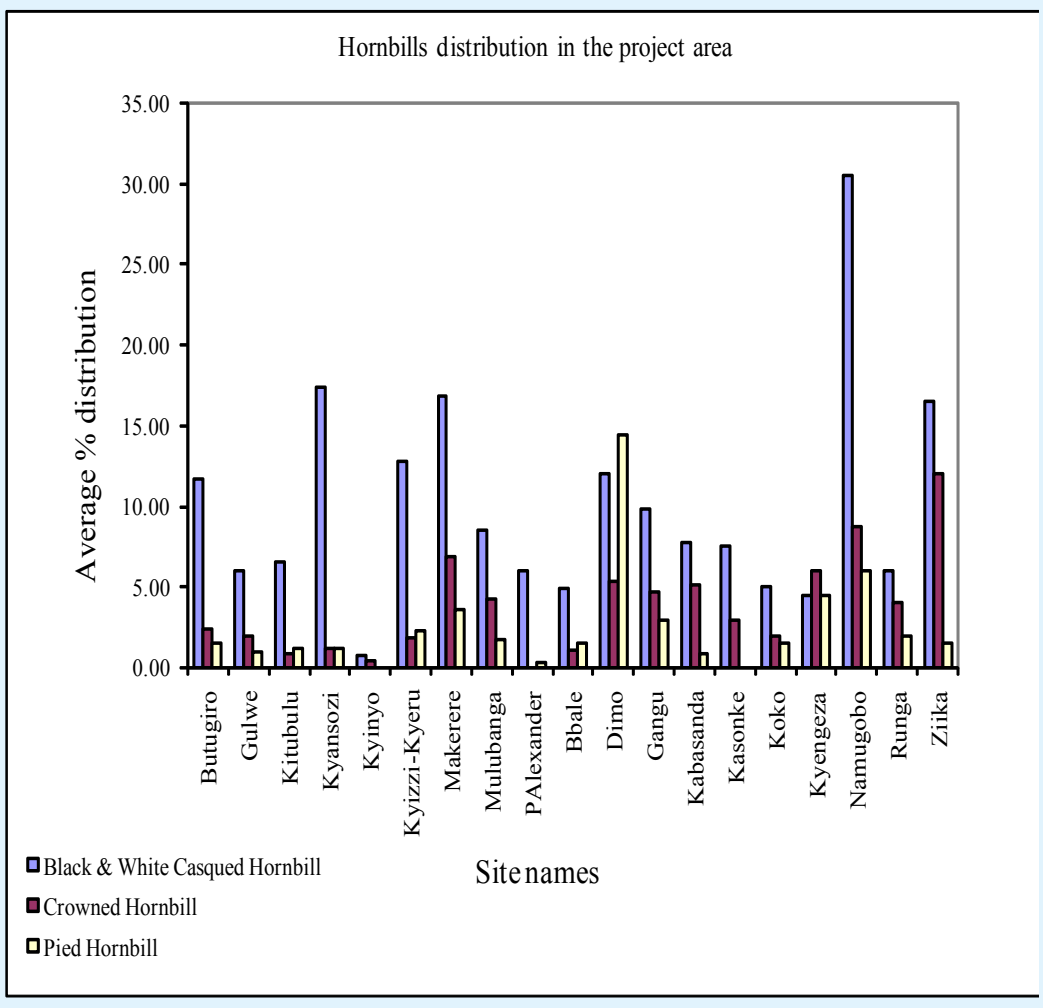
Long before hornbills were commonly recorded in less disturbed ecosystems, although today they are observed flying and foraging in fragmented forests of Central Uganda. Three species commonly recorded are the Black and White Casqued Hornbill (*B. subcylindricus*), Crowned Hornbill (*T. alboterminatus*). and Pied Hornbill *(T.fasciatus)*. These species play a very big role of environmental indicator and health change.


B.subcylindricus

Role and values

- They nest in holes of native trees that should be protected for natural diversity of plants
- They live in big trees that are indigenous of >180cm DBH in farmed areas, if protected, they add to agro-biodiversity value that contributes to the improvement of farm yields such as coffee.
- They disperse most of the frugivorus tree seed species in the region as they help to break seed dormancy
- Frequent calls are indicators of ripe fruits which communities prefer during harvesting season in the fragmented forests
- They contribute indirectly to conservation of other organisms

Current trend



Threats

- Increasing demand for more land for increased agricultural production
- Use of bio-fuels to support energy in the region e.g. charcoal burning
- Illegal timber production
- Lack of information about the conservation and status of the species.
- Lack of data for individual species

Conservation measures

- Regulation on fragmented forests resource utilization.
- Raising awareness about their roles.
- Conduct environmental education in the rural areas
- Promote best land use systems.
- Promote the understanding of the tree value in the rural areas.
- Sensitization on the exact description and meaning of biodiversity indicators.

Conclusions and recommendations

We recorded some significant considerable values of hornbills to different rural areas in Central Uganda. More studies, rural sensitization workshops, environmental education and value attachment on the species presence are needed to reduce on the threats and promote sustainable nature conservation

Acknowledgement

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References

1. Kaihura Fidelis and Michael Stocking. 2003. Agriculture biodiversity in small hold farms of East Africa. The United Nations University, Hong Kong
2. Kemp, A. C. 1993. Conservation of Asian hornbills and their habitats: an introduction. Pages 4-23 in Manual to the conservation of Asian hornbills. Edited by P. Poonswad & A. C. Kemp. Hornbill project, Thailand, Mahidol University, Bangkok
3. Stevenson Terry & Fanshawe 2002. East Africa Species checklist

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Hornbills

Save their habitats and protect the environment

The Rufford Small Grants Foundation

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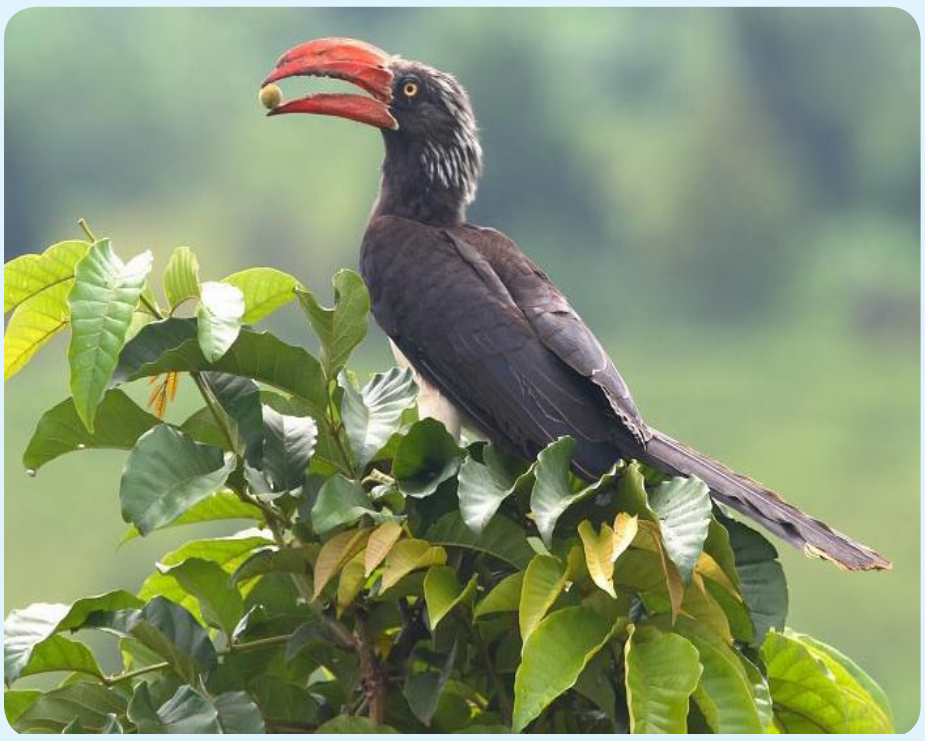
The need to protect them

Hornbills are peculiar, large-bodied birds found only in the mature tropics that have been the focus of research in the last thirty years. There are 54 species of hornbills known from the whole world. In Uganda there is an estimate of 16 that occur here. They contribute to Uganda's bio-diversity global scale being one of the biodiverse countries in Africa. Currently hornbills they are associated with agricultural lands but commonly in fragmented forests with cultivations.



B.subcylindricus

Their distribution in Central Uganda

Problems facing hornbills out-side conservation areas in Uganda

- Their habitats are disappearing at alarming rate
- Misconception of their presence in the ecosystem
- Foraging on cultivated food for the current rapid population growth in small sized farmed areas

How to protect them

- Plant more of native tree species in your farm
- Protect the fragmented forest patches
- Keep big trees of >180cm in your farm for their nests
- Report their nests to nearby authorities or research organizations such as Nature Uganda and to individuals you know
- Avoid felling trees unnecessarily

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