

Project Update: January 2024



Introduction

The primary objective of our project is to contribute valuable insights into the breeding ecology of the critically endangered hooded vulture *Necrosyrtes monachus* in the Cape Coast Metropolitan Area, Ghana. Additionally, we aim to foster citizen science initiatives for monitoring the species' population and nesting sites while concurrently raising awareness through a conservation science education campaign.

Nesting Activity and Ecological Data Collection

Our approach to engaging secondary school students, aged 16 to 19, in the search for nests yielded unexpected results. Despite the enthusiasm of over 97 students from second-cycle institutions, the nests discovered by the students belonged to either the pied crow *Corvus albus* (**Fig 1**) or the yellow-billed kite *Milvus aegyptius*.

While this outcome did not meet our initial goal, it served as an educational opportunity, enlightening students about the crucial ecological role played by these species in communities and the significance of their conservation.

Undeterred, we turned our attention to reported nesting sites and observed breeding behaviours, such as aerial displays, copulation, courtship, conflicts, and nesting material transport. This alternative strategy proved successful, leading to the identification of seven active nests. Currently, four nests contain an egg each and are currently in the incubation stage, providing a unique opportunity to monitor the breeding success of hooded vultures. These nests also are being monitored with camera traps (**Fig 2**).



Fig 1. A nest of Pied Crow observed during a search for nests of Hooded Vultures in Cape Coast.



Fig 2. Hooded vulture nests with an egg being monitored by a Camera trap in Coast.

One of the nests had a chick, and two were under construction. Unfortunately, one nest with an egg was destroyed completely by human activity; this incident underscores the urgent need for community awareness and engagement in safeguarding the nesting sites of these critically endangered birds.

Another unfortunate finding was a bird that had stepped on the egg causing it to crush while it was arranging nesting materials in the nest. Nesting activity observation

and the collection of ecological data to enhance our understanding of the breeding ecology of hooded vultures are currently ongoing.

Conservation Education and Population Monitoring

In December 2023, we conducted a 2-day workshop to train 12 citizen scientists, comprising seven students from the University of Cape Coast and five from local communities in Cape Coast (**Fig 3**).



Fig 3. Volunteers and citizen scientists undergoing bird identification, and vulture populations, and nest site monitoring training.

The training focused on general bird identification, birdwatching, vulture populations, and nest site monitoring. Equipped with a pair of binoculars and a field guide to the birds of Ghana, these citizen scientists are actively monitoring nests and occasionally organise bird walks to engage other locals. Additionally, these volunteers received training on bird atlasing, data entry, and submission using the BirdLasser app, aligning with the African Bird Atlas Project (ABAP).

On December 17, 2023, a vulture awareness conservation education event was organised where trained citizen scientists engaged with their communities to disseminate knowledge about vultures and emphasise the importance of their nesting sites for population recovery (**Fig 4**).



Fig 4. Trained citizen scientists and volunteers engaging with community members to disseminate knowledge about vultures and emphasize the importance of their nesting sites for population recovery.

This involved one-on-one discussions between volunteers and community members. To further amplify vulture conservation awareness, the project team participated in two live sessions on the local radio station "Radio Central" (**Fig 5**).



Fig 5. The project team creating awareness to the public through live sessions on the local radio station "Radio Central" about Vultures.

These sessions facilitated discussions on vulture ecology, and threats faced by vultures in the region, and included phone-in sessions to address questions from the public.

Conclusion

While facing challenges in our initial approach, the project has made substantial progress in understanding the breeding ecology of hooded vultures and engaging local communities in conservation efforts. The combination of scientific research, citizen science initiatives, and targeted education campaigns forms a comprehensive strategy towards the long-term conservation of this critically endangered species. We remain dedicated to our mission and look forward to further advancements in our project.



Volunteers and citizen scientists undergoing bird identification, and vulture populations, and nest site monitoring training.



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A pair of Hooded vulture nest being monitored by a Camera trap in Cape Coast.