Second Progress Report – Rufford Small Grant- 43413-1

Project Title: [Saving vultures in Benin: Reducing habitat loss and the illegal slaughter of vultures with the involvement of the local community in north-east Benin].

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INTRODUCTION

Vultures that scavenge across tropical Africa, including Benin, offer various ecological benefits, such as cleansing carcasses, which are significant havens for bacteria and viruses. Our project aims to protect four critically endangered bird species in Benin: *Gyps africanus* (African vulture), *Necrosyrtes monachus* (carrion vulture), *Gyps rueppelli* (Rüppell's vulture) and *Trigonoceps occipitalis* (white-headed vulture). This second report presents the progress of our activities, focusing on the survey to identify vulture nesting sites in the three study areas, carried out from October to December 2024.

METHODOLOGY

The terrestrial line transect method was used across the three study sites, noting all trees with observed vulture nests. We repeated this operation several times, changing the direction of the transect to cover a representative area of the site. As far as vultures are concerned, tree sampling was more concentrated around wetlands due to the availability of potential nesting trees for vulture species. We also sampled other areas where vultures had been observed in the past. Each time we came into contact with a tree containing vulture nests, we recorded these variables (Tree species, the vegetation type, and nest number). We used binoculars to observe nests and vultures to identify the number of nests, and a GPS to locate all trees with nests.

RESULTS

Community Commitment in Vulture Conservation Efforts in Benin

The engagement of local communities has been at the heart of our vulture conservation initiative, fostering collaboration and shared responsibility for the protection of these vital scavengers. Through an extensive campaign comprising surveys and awareness sessions, community members gained a

deeper understanding of the ecological role of vultures and the urgent need to preserve their habitats.

Identifying and Protecting Nesting Sites

In collaboration with eco-guards and community leaders, we conducted field surveys in targeted forests to identify vulture nesting sites. These efforts were supplemented by the installation of warning signs around nesting areas, cautioning against activities that could endanger these vulnerable spots. The proactive involvement of the communities not only facilitated the identification of these critical habitats but also strengthened the protective measures put in place.

Empowering Communities to Take Action

Recognizing the importance of local stewardship, we established a monitoring committee composed of women, men, and young adults. This committee, supported by the eco-guards, was tasked with regularly checking the nesting sites and reporting any suspicious activities. This grassroots approach ensured continuous monitoring while fostering a sense of ownership among community members.

Addressing Emerging Challenges

The surveys and subsequent discussions revealed alarming threats, including the trafficking of vultures and their body parts for medicinal purposes. This discovery underscored the broader challenges facing vulture conservation in the region, as highlighted by studies like Buij et al. (2016), which rank Benin among the leading countries in West/Central Africa using vultures in traditional medicine. These findings have been integrated into a comprehensive conservation plan and will be discussed further with forestry authorities to devise actionable strategies.

Community Support and Future Outlook

The communities' willingness to collaborate and their openness to conservation education have been instrumental in the success of these activities. By pledging to work alongside eco-guards and uphold the established protective measures, the local population has become an essential ally in safeguarding the future of vultures.

This initiative serves as a testament to the power of community engagement in achieving sustainable conservation outcomes. It exemplifies how raising awareness, fostering local partnerships, and addressing socio-economic

factors can collectively contribute to the preservation of species critical to ecosystem balance.

The following map shows the three project sites and the vulture nest observation points, as well as the species itself.

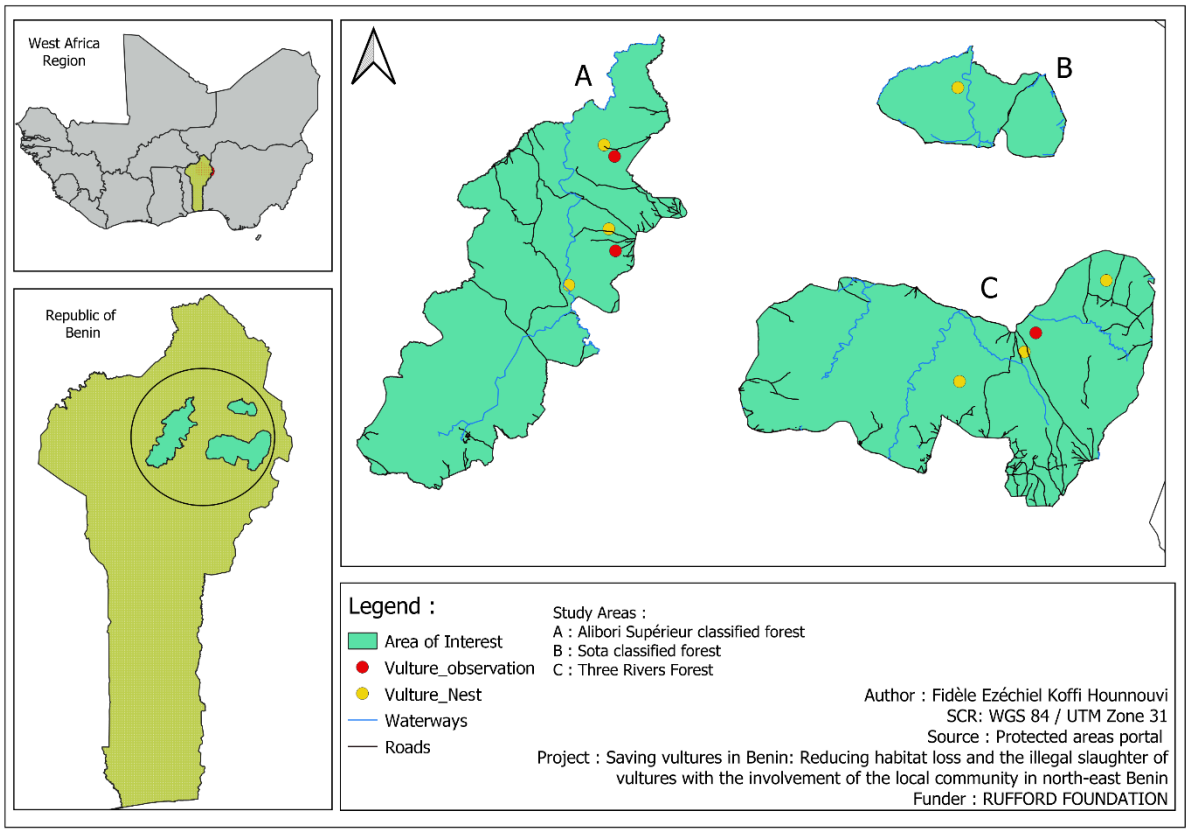

Figure: Observation points for nests and vultures in the study sites.

These three forests were home to enough vultures to be frequently observed by the local population, but these figures show that the vulture population is unfortunately in serious decline. The low number of sightings tells us that the threats to vultures are real, but that there is still hope of conserving the remaining population. This project has had a considerable impact on the local population's perception of vultures. Our future actions will certainly reinforce conservation measures for vulture species.

Table: Description of observation sites

Protected Areas	**Type of observation (Nest/ Vulture)**	**Number**	**Habitat**	**Tree species**	**Coordinates**
Sota classified forest	Nest	01	Savana	*Khaya senegalensis*	11°05'45.3"N 3°12'59.8"E

Three rivers forest	Old nest observation site	01	Savana	*Milicia excelsa*	10°43'48.6"N 3°29'48.8"E
Three rivers forest	Nest	01	Agricultural fields	*Milicia excelsa*	10°34'46.9"N 3°21'44.3"E
Three rivers forest	Nest	02	Agricultural fields	*Khaya senegalensis*	10°32'23.5"N 3°14'14.4"E
Alibori Superieur forest	Nest	01	Agricultural fields	*Borassus aethiopum*	10°59'46.4"N 2°28'55.3"E
Alibori Superieur forest	Nest	01	Savana	*Borassus aethiopum*	10°54'39.1"N 2°29'39.8"E
Alibori Superieur forest	Nest	01	Agricultural fields	*Borassus aethiopum*	10°35'29.6"N 2°22'50.6"E
Three rivers forest	Vulture	01	Wooded area	*Khaya senegalensis*	10°36'08.3"N 3°22'33.7"E
Alibori Superieur forest	Vulture	01	Agricultural fields	*Khaya senegalensis*	10°59'08.5"N 2°30'09.5"E
Alibori Superieur forest	Vulture	01	Savana	*Borassus aethiopum*	10°54'02.1"N 2°29'55.9"E

During field surveys, very few observations of vulture nests and vultures were made in three protected areas in north-east Benin: The Sota classified forest, the three rivers forest and the Alibori Supérieur forest. Observations were made mainly in savannahs and agricultural fields, with trees such as *Khaya senegalensis*, *Milicia excelsa* and *Borassus aethiopum*. In all, seven vulture nests and three vultures were observed, with precise geographical coordinates recorded for each sighting. This data is essential for vulture conservation in the region, identifying key habitats and monitoring vulture populations.

Whenever a vulture nest or a vulture in flight was observed, we installed signs in these areas. These signs, bearing the words "Protected area. It is forbidden to cut down trees. Prohibition to shoot vultures and other birds", were intended to dissuade local people from activities that might endanger the nests or the vultures themselves. The eco-guards organized a meeting with the local population to explain that failing to respect what is written on these signs is equivalent to breaking the law.

Conclusion

These observations and data are crucial for identifying key vulture habitats, better managing these habitats, monitoring vulture populations over time, raising awareness of the importance of these species in local communities and supporting scientific research. By providing accurate information on vulture nesting and populations, they enable conservation and management efforts to be focused where they are most needed, while involving local communities and strengthening conservation strategies.

Acknoledgment

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Next steps

Organization of workshops with project stakeholders to define and implement vulture conservation strategies. This activity consists of bringing together representatives of local communities, protected areas managers and conservation organizations to discuss the results of the study and draw up action plans for the protection of vultures with the participation of all stakeholders.