

Final Evaluation Report

| Your Details | |
|----------------------------|---|
| Full Name | Byron Ssemambo |
| Project Title | Ecology, anthropogenic threats, people's perception and Conservation status of Grey Crowned Crane (<i>Balearica regulorum</i>) in Lutembe Bay Wetland, Wakiso district. |
| Application ID | 43311-2 |
| Date of this Report | 12/05/2025 |

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 discover crucial information regarding the species' distribution, ecology, breeding season, habitat use, threats, and local perceptions towards its conservation. | | | | This objective was fully achieved through field surveys and stakeholder engagement. Key data was collected and analysed, offering valuable insights into the Grey Crowned Crane's presence, breeding areas, habitat preferences, and threats. Community interviews also provided rich information on local perceptions, which will inform future conservation strategies. |
| To raise awareness among local communities about the importance of conserving wildlife habitats and the repercussions associated with habitat destruction | | | | The awareness sessions were well-attended and effective. Pre- and post-training evaluations showed a significant increase in participants' understanding of wetland conservation and the importance of protecting the Grey Crowned Crane. The use of participatory methods and culturally relevant examples helped enhance community engagement. |

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

a) Improved Knowledge and Awareness Among Local Communities

The project significantly enhanced local communities' understanding of the ecological importance of Lutembe Bay wetland and the conservation needs of the Grey Crowned Crane. Pre- and post-training evaluations showed a clear shift from limited awareness to increased knowledge and willingness to engage in conservation activities. This foundational awareness is critical for promoting long-term, community-led conservation initiatives.

b) Generation of Critical Ecological and Socio-Cultural Data

The project successfully gathered vital data on the Grey Crowned Crane's distribution, breeding season, habitat preferences, threats, and local perceptions. This information is essential for developing targeted conservation strategies, guiding future research, and informing policy decisions. It also fills critical knowledge gaps in the species' ecology within the Lutembe Bay wetland.

The project successfully gathered vital ecological and socio-cultural data on the Grey Crowned Crane (*Balearica regulorum*) through extensive fieldwork and community engagement within the Lutembe Bay Wetland from October to December 2024. Field activities spanned approximately three months, incorporating bi-weekly transect walks, point counts, boat surveys, and structured interviews with 60 community members across three key locations: Bulonde, Lutembe, and Nganjo.

A total of 212 Grey Crowned Crane sightings were recorded during the study period. The highest number (123) was observed in Bulonde, followed by 62 in Nganjo and 27 in Lutembe, indicating significant variation in distribution. The presence of eight chicks recorded in Bulonde confirmed active breeding during the study period, which aligns with local accounts suggesting that breeding occurs between September and October.

Crane activity was concentrated in wetland edges and patches of undisturbed vegetation, with key behaviors including foraging, roosting, and calling. Foraging was the most common activity (43.1% of sightings), followed by roosting (25.7%). Cranes preferred ground-level nesting sites with dense cover, underscoring the importance of protecting papyrus and tall grass habitats.

The study also documented multiple anthropogenic threats, including habitat loss due to agricultural expansion, flower farm encroachment, waste dumping, sand mining, and poaching. Nest and egg destruction were among the most frequently reported direct threats, along with roosting tree removal and human disturbance.

Community perceptions were mixed but largely positive including;

- 73.3% of respondents held a favorable view of the Grey Crowned Crane, recognizing it as culturally significant and ecologically important.
- However, 41.7% believed the crane population has declined over the past five years, primarily due to habitat degradation and increased human activity.
- Most respondents (88%) were unsure of the species' breeding habits, highlighting a significant knowledge gap that presents an opportunity for future community education.

c) Strengthened Stakeholder Engagement and Conservation Dialogue

By sharing research findings with local leaders, government representatives, and conservation stakeholders, the project fostered meaningful dialogue and collaboration. This created a shared understanding of the challenges and opportunities in conserving the wetland and its biodiversity. Stakeholders expressed commitment to supporting future conservation actions, including policy advocacy and community-based initiatives.

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

- **Limited Availability of Some Community Members**

Due to the busy agricultural season and work schedules at nearby flower farms, some community members were initially unavailable to participate in the sensitization workshops.

How It Was Tackled:

The project team coordinated with local leaders to schedule meetings at convenient times, such as late afternoons and weekends. This adjustment improved attendance and ensured wider community participation without disrupting their daily responsibilities.

- **Logistical Constraints Due to Difficult Terrain**

Accessing certain parts of the wetland and adjacent communities was challenging due to poor road conditions, especially after rainfall.

How It Was Tackled:

The project used the funds received from Rufford Foundation to hire a reliable vehicle and cover fuel costs, which enabled the team to navigate difficult routes efficiently. Routes and schedules were also adjusted in real time to minimize delays and ensure timely delivery of planned activities.

- **Language and Communication Barriers**

Some community members had limited literacy or were not fluent in the language used during presentations, which could have affected their understanding of the conservation messages.

How It Was Tackled:

The team included local facilitators who translated the key messages into the local language and used visual aids and participatory methods (e.g., storytelling, Q&A sessions, and illustrations) to ensure concepts were well understood by all participants.

These challenges, although unexpected, were effectively addressed through flexibility, community collaboration, and proper utilization of available resources. As a result, the project was able to achieve its intended goals without major disruption.

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

Local community involvement was central to the success of the project, particularly because the long-term conservation of Lutembe Bay wetland and the Grey Crowned Crane depends on the active participation of those living closest to the habitat.

Community Involvement

1. Participation in Sensitization Workshops

Community members from Lutembe, Bulonde, and Nganjo villages including local leaders, flower farm workers, and wetland users, actively took part in sensitization workshops held in May 2025. The workshops provided an open platform for dialogue, learning, and experience sharing.

Community members from Lutembe, Bulonde, and Nganjo villages including local leaders, flower farm workers, and wetland users actively took part in sensitization workshops held in May 2025, with a total of totaling 25 individuals (16 Males:9 Females) in attendance across the three locations. The workshops provided an open platform for dialogue, learning, and experience sharing, strengthening community ownership of Grey Crowned Crane conservation efforts.

Topics discussed included;

1. *Importance of Wetlands.* Educating participants on the ecological functions of wetlands, such as water filtration, flood control, carbon sequestration, and their role as breeding and feeding grounds for birds, including the Grey Crowned Crane.
2. *Threats to Lutembe Bay Wetland.* Discussing human-induced threats such as encroachment, poaching, pollution, unregulated harvesting of wetland resources, and climate change impacts that endanger the wetland ecosystem and its wildlife.
3. *Sustainable Resource Utilization.* Training participants on responsible wetland use, including sustainable fishing, bee keeping, controlled harvesting of papyrus and other plants, and eco-friendly agricultural practices that prevent wetland degradation.
4. *Community-led Conservation Initiatives.* Encouraging the formation of community wetland conservation groups, promoting alternative livelihood options such as beekeeping, ecotourism, and handicraft-making to reduce pressure on wetland resources.
5. *Grey Crowned Crane Conservation.* Highlighting the significance of the Grey Crowned Crane as a flagship species for wetland conservation, educating communities on its habitat needs, threats such as habitat loss

and poaching, and actions they can take to protect it, such as reporting illegal activities and restoring degraded wetland areas.

6. Policy Awareness and Compliance. Informing participants about existing environmental laws and policies related to wetland protection, emphasizing the importance of compliance and community involvement in enforcement.

Participants also shared local experiences with crane sightings, changes in the wetland over time, and traditional practices that could support conservation. The workshops enhanced awareness, fostered positive attitudes toward the species, and laid the groundwork for future community-led conservation actions.

2. Engagement in Data Collection

Community members, particularly the research assistants, played an active role in data collection by contributing local knowledge and firsthand observations during the research phase. Their input on habitat changes, Grey Crowned Crane sightings, and patterns of wetland use provided valuable insights into the species' ecology and the dynamics of human-wildlife interaction in the area.

Community members, particularly the research assistants, played an active role in data collection by contributing local knowledge and firsthand observations during the research phase. A total of three (3) community members were trained and engaged as research assistants (Community Monitors). These individuals were selected based on recommendations from local leadership and received a 5-day intensive training in bird monitoring techniques, data recording, and habitat assessment.

Their input on habitat changes, Grey Crowned Crane sightings, and patterns of wetland use provided valuable insights into the species' ecology and the dynamics of human-wildlife interaction in the area. Their continuous bi-weekly monitoring efforts significantly enriched the quality and accuracy of field data, while their deep connection to the land helped interpret ecological changes in a socio-cultural context. This participatory approach also empowered the assistants to become local conservation ambassadors, advocating for wetland protection and responsible resource use within their communities.

3. Feedback and Co-creation of Solutions

Community members were encouraged to give feedback and suggest locally feasible conservation actions. This inclusive approach promoted a sense of ownership and collective responsibility for wetland protection.

Key Feedback Received

- Concern over rapid habitat degradation, especially due to expanding flower farms, unregulated waste dumping, poaching of wetland wildlife for meat and eggs and illegal encroachment.
- Requests for regular conservation education sessions, particularly targeting flower factory owners (business tycoons), youth, poachers and farmers, to increase awareness about the ecological importance of the Grey Crowned Crane and the wetland.
- A need for alternative income-generating activities to reduce dependence on unsustainable practices such as poaching, wetland farming, papyrus cutting, and egg collection.

Suggested Conservation Actions

- Establishing community wetland patrols to monitor illegal activities like poaching, sand mining, and tree cutting.
- Promoting wildlife-friendly farming techniques, such as buffer farming and reduced use of agrochemicals near wetland edges.
- Establishing Community led initiatives to provide alternative sources of income and food (proteins)
- Launching school-based conservation clubs to engage young people and integrate environmental education into local schools.
- Creating a community-led wetland management committee involving representatives from each village to oversee conservation actions and liaise with local authorities.

Benefits to Local Communities

1. Increased Awareness and Knowledge

Through targeted training and interactive discussions, participants gained a deeper understanding of the ecological value of wetlands, the threats facing the Grey Crowned Crane, and how unsustainable practices harm both wildlife and human well-being. This awareness has led to more positive attitudes toward conservation within the community.

2. Capacity Building and skill development

Community members acquired practical skills in sustainable wetland resource use, such as controlled harvesting, eco-friendly farming, and alternative livelihood options like beekeeping and ecotourism. These skills can contribute to income diversification and reduced environmental impact.

Additionally, community members, especially the research assistants, gained hands-on experience in ecological data collection, species monitoring, and the use of basic research tools. This enhanced their skills and knowledge in field research and conservation practices.

3. Empowerment and Inclusion in Conservation Efforts

By being actively involved in both the research and awareness components, community members felt empowered to take action. Many expressed willingness to form local conservation groups and advocate for the protection of their natural environment.

5. Are there any plans to continue this work?

Yes.

Building on the momentum and positive outcomes of the initial phase, there are concrete plans to continue this work with a strong focus on promoting community-led conservation initiatives. Future efforts will prioritize strengthening community capacity to monitor and protect the Grey Crowned Crane and its habitat through the formation of local conservation groups and youth-led environmental clubs.

A key area of focus will be addressing the emerging threat of poaching or killing of Grey Crowned Cranes for meat and eggs, which has been increasingly reported as a coping mechanism in response to rising poverty among communities adjacent to Lutembe Wetland. These harmful practices not only threaten the survival of this endangered species but also undermine the long-term health of the wetland ecosystem.

To mitigate this, the project aims to work closely with community members to:

- Promote alternative and sustainable sources of income and nutrition, such as poultry and piggery farming depending on their preference, and apiary and kitchen gardening for source of income, to reduce dependence on wildlife for food.
- Support the formation of Village Savings and Loan Association (VSLA) groups within communities adjacent to Lutembe Wetland. These groups will provide members with access to soft loans at low interest rates, enabling them to invest in alternative livelihood activities such as poultry rearing, small-scale businesses, and sustainable agriculture. This will help reduce reliance on hunting Grey Crowned Cranes for meat or collecting their eggs for food
- Conduct targeted awareness campaigns to educate the public on the ecological and cultural importance of the Grey Crowned Crane, emphasizing its protected status and the legal consequences of harming it.
- Strengthen community-based surveillance and reporting systems, empowering local people to play a direct role in preventing illegal activities in and around the wetland.
- Collaborate with local government and conservation partners to advocate for livelihood support programs that address the root causes of poaching linked to poverty.

These planned actions will help ensure that conservation becomes a shared community responsibility, leading to a more sustainable coexistence between people and wildlife in the Lutembe Bay area.

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

The results of the project will be shared through a multi-pronged approach to reach diverse audiences and maximize impact.

- **Scientific and Conservation Publications**

The findings were compiled into a comprehensive report and will be submitted for publication in peer-reviewed journals and conservation bulletins. This will help disseminate knowledge to researchers, practitioners, and policymakers working on wetland and bird conservation.

We plan to submit manuscripts to the following journals;

- *Journal of African Ornithology* – for regional relevance and reach among African bird conservationists.
- *Wetlands Ecology and Management* – for its interdisciplinary focus on wetland ecosystems and applied conservation.
- *Bird Conservation International* – published by BirdLife International, this journal is ideal for sharing species-focused findings with a global conservation audience.
- Also, summarized versions of the results will be submitted to conservation newsletters and bulletins such as those published by NatureUganda to inform national and international conservation networks.

- **News Articles and Media Outreach**

Selected highlights and human-interest stories from the project will be published in national and local newspapers, radio talk shows and online platforms. This will raise public awareness and generate broader support for the conservation of the Grey Crowned Crane and Lutembe Wetland.

- **Community Feedback Meetings**

Results were already presented to local communities through village meetings, involving the same participants who engaged in the sensitization workshops. This participatory feedback process will be used to reinforce learning and ensure community members understand their contributions to the project.

- **Stakeholder Engagement Forums**

The project team already organized a follow-up session with local government officials, environmental agencies, NGOs, and other stakeholders and presented findings and discussed strategies for integrating the results into ongoing conservation efforts.

Key outcomes and integration strategies include;

- Using the data to inform land-use planning and environmental impact assessments in particular, in relation to the expansion of the flower factory. Stakeholders acknowledged the need to consider crane breeding and roosting sites as ecologically sensitive zones requiring protection.
- Findings on the distribution of Grey Crowned Cranes and their habitat preferences have been shared with the District Environment Department (Katabi and Kajjansi Town council) and Conservation local association (Lutembe Wetland User's Association), which committed to integrating the data into local wetland management plans and monitoring enforcement of wetland buffer regulations respectively.

Strategy for Community-Led Conservation Initiatives;

To address the root causes of habitat destruction and poaching, the project contributed to promoting community-led initiatives that offer sustainable alternatives and improve local livelihoods:

- Village Savings and Loan Associations (VSLAs). These groups, can be introduced in Lutembe, Bulonde, and Nganjo, to empower community members in particular women and youth to pool savings, access small loans, and invest in non-destructive income-generating activities such as vegetable gardening, poultry keeping, bee keeping and eco-crafts.
- Livestock Seedbank. As an alternative to poaching Grey Crowned Cranes for meat or collecting eggs for consumption as a source of protein or trade, interested households can be supported to rear small livestock such as goats, chickens, or pigs. This provides a direct protein source and income, reducing reliance on wetland wildlife.
- Wetland-friendly livelihood options including; beekeeping, papyrus handicrafts, and community tourism should be explored in partnership with donors/funders and local conservation NGOs to ensure long-term sustainability.

- Social Media Platforms

Visual summaries, infographics, and short videos capturing project activities and outcomes will be shared through donor websites and other social media channels to engage a wider online audience, including youth and urban populations.

- Educational Materials

Simplified materials such as posters have already been developed in English and local languages to be distributed in schools, community centers, and local institutions to support ongoing awareness and education efforts.

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

The important next steps include

- Establish and support community-based conservation groups and youth environmental clubs to monitor wetlands, report threats, and lead awareness campaigns. Empowering these local groups will ensure sustained grassroots engagement in conservation beyond the project's timeline.
- Establish and support for Village Savings and Loan Associations (VSLAs) and promote alternative income-generating activities such as poultry farming, beekeeping, and eco-tourism. These efforts will help reduce economic dependence on unsustainable wetland use and poaching of Grey Crowned Cranes.
- Conduct regular awareness sessions and develop school-based conservation programs to foster long-term environmental stewardship among youth and the broader community. Incorporating conservation education into local institutions will help shift cultural attitudes and behaviors.
- Engage with local government and environmental agencies to advocate for stronger enforcement of wetland protection laws and integration of project findings into district-level planning. Continued dialogue with stakeholders will ensure institutional support and resource allocation.
- Implement a follow-up monitoring plan to assess behavioral changes, adoption of sustainable practices, and improvements in wetland and crane conservation outcomes. This data will guide adaptive management and inform future project design.

By focusing on these strategic steps, the project will build on its success and contribute to a more resilient and community-driven model for conserving Lutembe Bay Wetland and safeguarding the future of the Grey Crowned Crane.

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 used on materials produced in relation to this project, including awareness banners, presentation slides, presentation poster and printed handouts shared during community sensitization workshops and stakeholder meetings. This helped acknowledge and highlight the Foundation's support throughout the project activities.

Also, the Foundation also received publicity during the course of the work. It was mentioned and credited during opening remarks at community awareness events, and acknowledged in all formal presentations and summary reports shared with participants and stakeholders. In addition, the Foundation's contribution will be recognized in upcoming media articles and publications resulting from the project, further increasing its visibility and demonstrating its impact in supporting community-led conservation efforts in Uganda.

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

1. Mr. Ssemambo Byron – Project Lead / Conservation Educator

With dual MSc. degrees in Education for Sustainability and Landscape Ecology, Byron led the project, applying his extensive experience from eight years as a Conservation and Education Officer on Lake Victoria. He was responsible for project coordination, activity planning, stakeholder engagement, and delivering training sessions during community sensitization workshops.

2. Mr. Muwanguzi Ibrahim – Environmental Management Specialist

Holding a B.Sc. in Environment Management and serving as the District Assistant Environmental Officer in Wakiso District, Ibrahim provided technical input on wetland management and local policy implementation. He supported stakeholder mobilization, environmental assessments, and aligned project activities with district conservation priorities.

3. Mr. Innocent Ampaire – Community Engagement and Education Advisor

As a Senior Conservationist and Education Officer at Chimpanzee Trust Uganda, Ampaire contributed his expertise in environmental education and community outreach. He played a key role in developing training content, facilitating sessions, and promoting community-centered conservation messaging.

4. Mr. Katende Dallaus – Community Liaison / Local Conservation Advocate

Serving as the Chairperson of the Lutembe Wetlands Users Association (LWUA), Dallaus provided crucial community insights and ensured strong local participation. Having grown up near Lutembe Wetland, he helped bridge the gap between the project team and the community, advocating for sustainable wetland use practices.

5. Mr. Tumusiime Augustine – Policy and Field Program Advisor

With experience in biodiversity conservation, primate research, and field program management, Augustine contributed to project planning, monitoring, and policy alignment. Currently applied to pursue an MPhil in Conservation Leadership, he supported technical backstopping and strategic direction, especially around wetland governance and community engagement.

6. Community-Based Bio-Monitors – Local Ecosystem Guides

These local guides played an essential role in data collection and interpretation, offering intimate knowledge of the wetland's flora, fauna, and land-use patterns. They supported research activities, guided field teams, and contributed local perspectives on biodiversity and ecosystem changes.

7. Mrs. Kukundakwe Stella – Social Science and Community Engagement Specialist

Bringing a social science perspective, Stella enhanced the project's ability to understand and respond to community dynamics, perceptions, and behaviors. She led community engagement processes, facilitated stakeholder analysis, and applied behavior change strategies to improve conservation outcomes and foster stronger community ownership.

This diverse and multidisciplinary team combined scientific knowledge, local experience, and community-based approaches to deliver impactful conservation and education outcomes in Lutembe Bay Wetland.

10. Any other comments?

Building on the success of this project, we recognize the need for continued support to sustain and scale up community-led conservation efforts around Lutembe Bay Wetland. While the current activities have laid a strong foundation, there is an urgent need to secure additional funding to promote community-driven conservation initiatives, particularly through income-generating activities that address the root causes of habitat degradation and wildlife exploitation.

Future funding will enable the establishment and strengthening of Village Savings and Loan Associations (VSLAs), support alternative livelihoods such as beekeeping, poultry farming, eco-tourism, and sustainable crafts, and reinforce conservation education. These initiatives will not only reduce the community's dependence on natural resources like Grey Crowned Cranes for food but also foster long-term stewardship of the wetland ecosystem.

We welcome opportunities for partnerships and support from conservation-focused donors and organizations committed to biodiversity protection and sustainable development at the grassroots level.

Balancing my responsibilities between Fauna & Flora and Embaka-AGCCA has been manageable, primarily due to the structured nature of my primary role and the flexibility built into both organizations' workflows.

My position with Fauna & Flora is a full-time role, though it is project-based and the specific project I was assigned to concluded towards the end of last year. Following the project closure and subsequent cut-off of donor funding, a window of opportunity opened up for me to dedicate time to advancing my individual conservation work, including the Rufford-funded Grey Crowned Crane project and my part-time role with Embaka-AGCCA.

Importantly, I am entitled to 30 days of annual leave, and I work Monday to Friday, which has enabled me to execute my responsibilities with Embaka-AGCCA and the Rufford-funded Grey Crowned Crane project during weekends, public holidays, and pre-approved leave days without compromising my commitment to Fauna & Flora. I've also been strategic in scheduling field activities and report writing during off-peak periods of my full-time role.

Also, both the Rufford and Embaka projects are implemented through a collaborative, team-based approach. My role is primarily coordination-focused,

which allows me to align tasks with field schedules. Whenever I am engaged with Fauna & Flora duties, I ensure that my colleagues at Embaka and the Rufford-funded Grey Crowned Crane project are supported with clear planning, delegation of responsibilities, and regular communication. This coordination has ensured continuity of project activities without any disruption to either engagement.

Generally, the ability to work across these roles has allowed me to deepen my conservation impact while maintaining professional integrity, clear boundaries, and high standards of delivery for all the organizations I am privileged to work with.