

---

ASSESSING ROLE OF SATELLITE WETLANDS AROUND LAKE OL' BOLOSSAT, KENYA FOR THE  
CONSERVATION OF ENDANGERED GREY CROWNED CRANE

---

**2<sup>nd</sup> QUARTER PROJECT FIELD REPORT**



*A pair of cranes with two fledged chicks, Laikipia county Kenya at Shamanei*

**DAVID WARUI KIRUGUI**

**2024**



## **EXECUTIVE SUMMARY**

The grey crowned crane is endemic in Africa and its population has been declining at a rate of 80% in the last 45 years, leading to it being listed as endangered in the IUCN Red Data List. This project aimed at assessing the role satellite wetlands around Lake Ol'Bolossat play in conservation of Grey Crowned Crane. During the second quarter of the project, we have been able to achieve the following specific objectives:

- Questionnaire survey conducted in five sites of the twenty –five priority satellite wetlands.
- Critical habitat, especially for breeding and foraging habitat established and also breeding activity and breeding success monitored.
- Potential threats to breeding sites for the species established and engage surrounding community in conservation of the Grey Crowned Crane.

Overall, the project will contribute to stabilizing and reversing the declining population trend of Grey Crowned Crane and strengthen conservation and protection of Grey Crowned Crane and its habitat through active local participation.

### **Summary of activities**

#### **1. Monitoring of cranes in the twenty satellite wetlands**

Monitoring the breeding of cranes plays a critical role in their conservation. Key aspects to this include:

- We can understand if crane populations are stable, growing, or declining, guiding conservation efforts efficiently.
- Identifying key breeding areas allows for targeted protection and management, maximizing impact.
- Early detection of emerging threats like habitat loss, predation, or illegal activities enables timely intervention.
- Data informs prioritization of conservation actions like habitat restoration, anti-poaching measures, or nest protection.
- Monitoring data educates the public about the importance of crane conservation, fostering wider support.
- During this quarter we managed to monitor the following wetlands and recorded the following:
  - A total of 25 wetlands were monitored during the project.
  - A total of 72 Grey Crowned Cranes (GCC) were sighted.
  - A total of 34 chicks were sighted.
  - A total of 19 chicks were successfully fledged.

<b>Locality</b>	<b>Observation</b>	<b>No. GCC</b>	<b>No. Chicks</b>	<b>Fledged chicks</b>
Laimutia	Pair sighted with fledged chicks	2	2	2
Gwa Chege dam	Pair sighted in the dam (Predation Not confirmed)	2	1	None
Limunga wetland	A pair with two fledged chicks sited in a maize plantation A pair sighted in the wetland	4	2	2
Limunga dam	Pair sighted in the dam, eggs collection (empty nest)	2	None	None
Nyairoko riverine	Pair sighted with two chicks	2	2	2
Kirii wetland	Three pairs sighted in the wetland;(two pairs' nests flooded after heavy rainfall)	6	None	None
Captain	Pair sighted with two chicks	2	2	2
Njunu riverine	Two fledged chicks sighted	2	2	2
Loitanet wetland	Two pair sighted; a pair sighted with chick and later was not seen (illegal trade)	4	1	None
Sironi dam	A pair sighted sitting on eggs and later predated	2	None	None
Ol'Jabet dam	A pair sighted with three chicks	2	3	None
Huhirio wetland	Two pair sighted in the wetland	4	None	None
Mathakwa wetland	Two pair sighted in the wetland	4	None	None

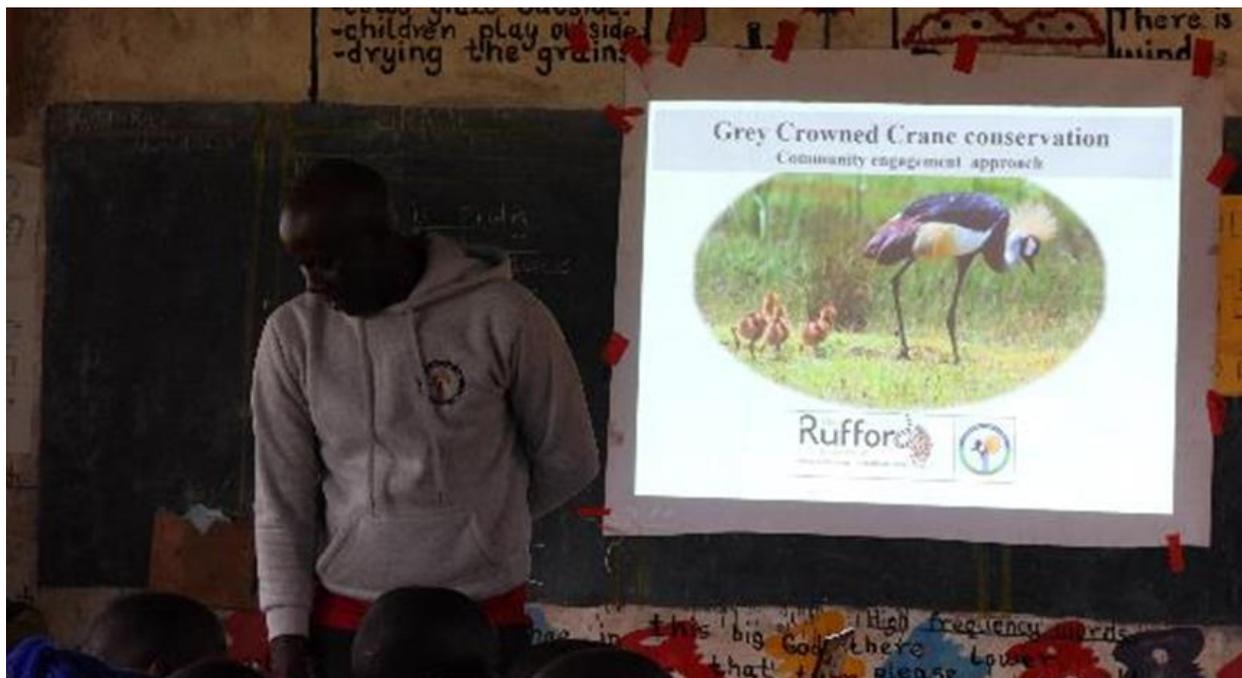
Manyatta dam	A pair sighted in the dam with one chick	2	1	None
Mukindu dam	Four pair sighted sitting on eggs; a pair hatched two chicks	8	2	None
Kingi dam	A pair sighted in the dam	2	None	None
Mugamba Chiura dam	A pair sighted feeding in the nearby farm	2	None	None
Smith dam	A pair sighted in the dam incubating but later the nest destroyed by the hippo	2	None	None
Gathara wetland	Two pair sighted: one pair with a fledged chick	4	1	1
Silale wetland	A pair sighted in the wetland	2	None	None
Losogwa wetland	A pair sighted in the wetland	2	None	None
	<b>OTHER WETLANDS MONITORED</b>			
Kamwana Dam	Pair sighted sitting on eggs and two chicks hatched successfully	2	2	
Maili saba wetland	pair sitting on eggs	2	None	None
Igwamiti dad	Pair sighted with two fledged chicks	2	3	3
Mbarakira area	Pair sighted with fledged chicks	2	2	2

## 2. Community engagement to create awareness on conservation of Grey Crowned Crane School awareness programme

An education and awareness program on Grey Crowned Crane conservation was conducted at Kianduba primary school, located near Robert's Dam. The program addressed challenges like egg collection and habitat degradation and engaged pupils in understanding the threats and their role in conservation.

Here are the key points:

- The program was conducted at Kinaduba primary school, which is located near Robert's Dam.
- The dam is currently hosting four breeding pairs of Grey Crowned Cranes, three of which have already hatched chicks.
- The program addressed the challenges of egg collection, crane persecution, and the presence of the invasive species *Salvinia Molesta*, which is depleting the habitat in the wetland.
- Ninety-two pupils and two teachers were engaged in the program.
- The pupils were interactive and showed comprehension of the threats to the cranes and their role in conservation.
- Kenya Wildlife Service staff also joined the program and discussed wildlife in Nyandarua County, the role of pupils in conserving wildlife, and the laws that protect wildlife in Kenya.



**Fig 2: Engaging pupils of Kianduba primary school through presentation on conservation of cranes.**

In an effort to raise awareness about the endangered Grey Crowned Crane, we conducted an educational program for 102 pupils and 4 teachers at Faith Church School Manguo. The Kenya Wildlife Service also joined the initiative, providing valuable insights into local wildlife and conservation efforts.

The program highlighted the critical issue of egg collection and chick removal from wetlands, which often leads to the death of these vulnerable birds due to improper care. We emphasized the importance of protecting wetland habitats and discouraging the collection of eggs, not just for Grey Crowned Cranes, but for all waterfowl species.

The pupils actively engaged in the program, demonstrating a clear understanding of the threats faced by cranes and their role in conserving them. This positive response underscores the importance of education in fostering responsible environmental stewardship among future generations.

### **3. Conducting questionnaire Survey**

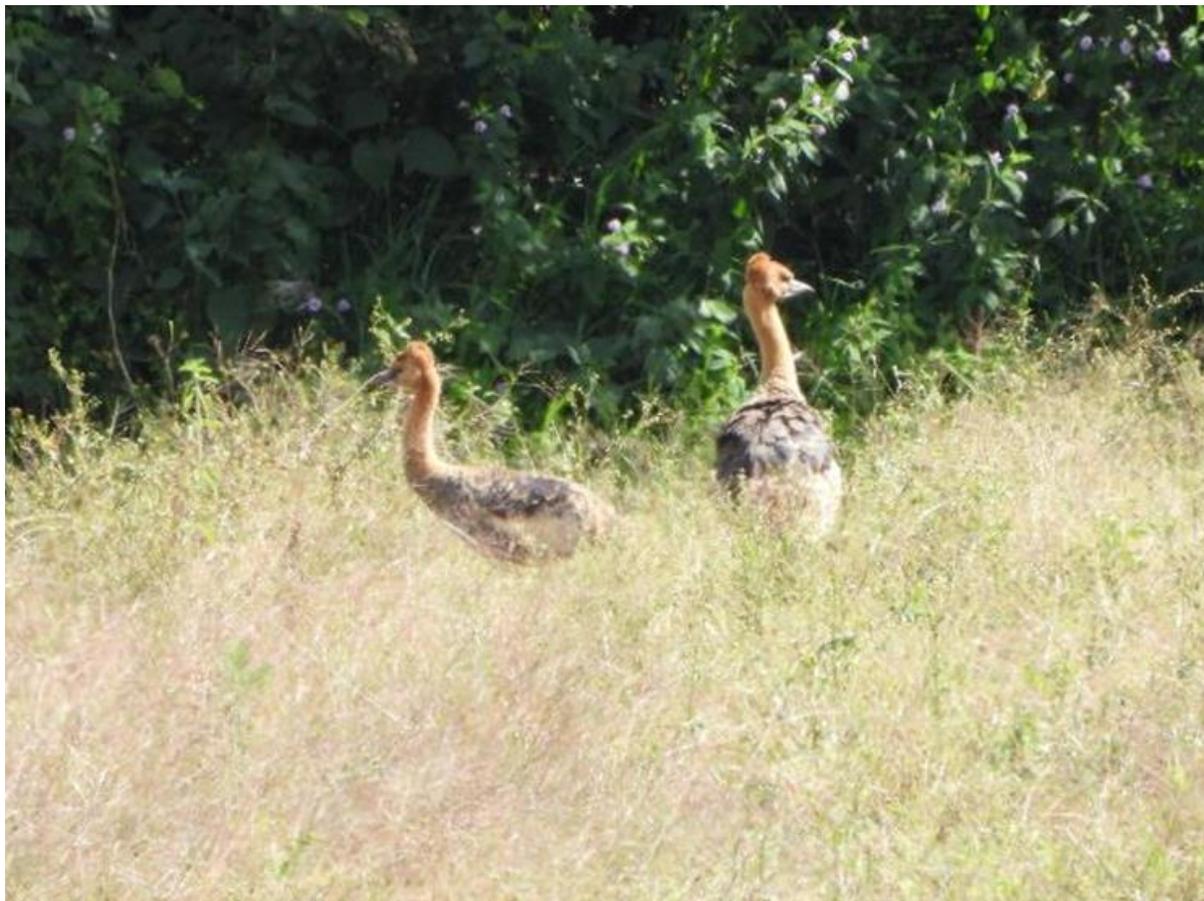
Twenty satellite wetlands were visited, and a questionnaire survey conducted in the last quarter, five satellite wetland remaining were concluded in this quarter for analysis. A structured questionnaire survey was also executed to gather essential information about these satellite wetlands. The survey involves engaging with local communities and stakeholders to understand their perspectives and concerns regarding crane habitat and conservation.



*Fig3: Conducting survey by engaging community using Loitanet wetland in Laikipia county.*



*Fig 4: A pair with one week old chick at Loitanet wetland, Laikipia County.*



*Fig 5: Two nine-week-old chicks that were hatched Marmanet dam feeding in a nearby farm.*



*Fig 6: Engaging pupils P.C.E.A Faith Church School on importance of conserving cranes.*