

Giraffe Survey Report

Murchison Falls National Park

2024 - 2025

Background

Murchison Falls National Park (NP) harbors the largest remaining population of critically endangered Nubian giraffe (*Giraffa camelopardalis camelopardalis*) in the world and serves as the primary stronghold for the subspecies in the wild. The park's population has been central to both national and regional conservation efforts, providing a vital source for translocations aimed at restoring Nubian giraffe to their historical range in Uganda. Regular monitoring in Murchison Falls NP has been a key priority under Uganda's National Giraffe Conservation Strategy and Action Plan (2020–2030), enabling the assessment of population trends, distribution patterns, and demographic health. In addition to monitoring natural population growth, ongoing oil and infrastructure development in parts of the park has under-scored the importance of reliable baseline data to guide evidence-based management. This report summarizes findings from the Murchison Falls NP population surveys conducted in 2024 and 2025. Data from this project contributes to a long-term monitoring framework for Nubian giraffe in Uganda and provides critical insights for managing one of the continent's most important giraffe populations.

Objective

Our main objective is to conduct long-term monitoring and analysis of the conservation status of the Nubian giraffe in Murchison Falls NP.

Specific research goals included:

- Surveying abundance/distribution of the Nubian giraffe population in Murchison Falls NP seasonally.
- Identifying and mitigating emerging conservation threats to Nubian giraffe, including snare wounds and incidents of giraffe skin disease (GSD).

Results

Three rounds of surveys were conducted in April and December 2024, and April 2025, to correspond with dry/wet seasons in northern Uganda. Each survey comprised three complete rounds of the park, requiring thirteen days of fieldwork each season.

In April 2024, 897 unique Nubian giraffe were observed, 732 individuals in December 2024, and 1,096 in April 2025. Across all three surveys, 1,770 unique Nubian giraffe were observed with a largely adult skewed age structure.

In evaluating conservation threats, we assessed the prevalence and distribution of snare wounds and GSD lesions. Over the course of the surveys, we identified 835 individuals (47.2% with GSD lesions and 68 individuals (3.8%) with snare wounds. GSD incidents were distributed across all of Murchison Falls NP, whereas snare wounds were observed predominantly in the western delta area of the park, closer to human settlements and waterways which provide easier access to the park for poachers.

As part of developing local research and monitoring capacity in Uganda, UWA rangers and Makerere University students participated the surveys, and were trained in survey methods, data collection and recording.

Conservation Outcomes

The continued presence of a large Nubian giraffe population in Murchison Falls NP highlights the park's critical role in the species' conservation. However, the widespread threat of wire snaring, the long-term unknown of GSD, and the advancing footprint of oil development pose growing risks to their survival. Sustained, long-term monitoring is essential to detect shifts in their population dynamics, evaluate the impact of current and future pressures, and guide evidence-based management responses for Nubian giraffe. Such efforts would enable UWA to make informed conservation decisions and safeguard their future in the wild.

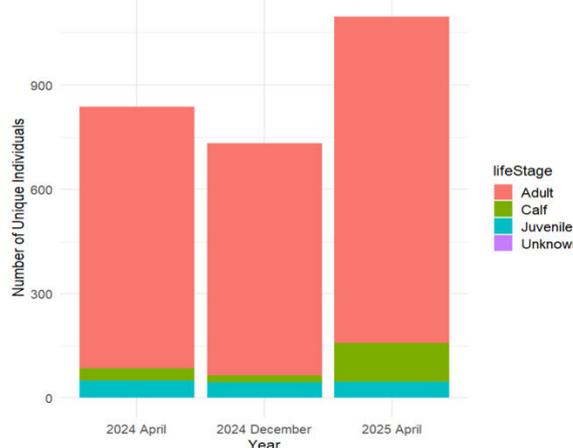


Fig 1. Number of unique Nubian giraffe identified by life stage during photographic surveys in Murchison Falls NP in April 2024, December 2024, and April 2025.

Giraffe Skin Disease Distribution

Snare Wound Distribution

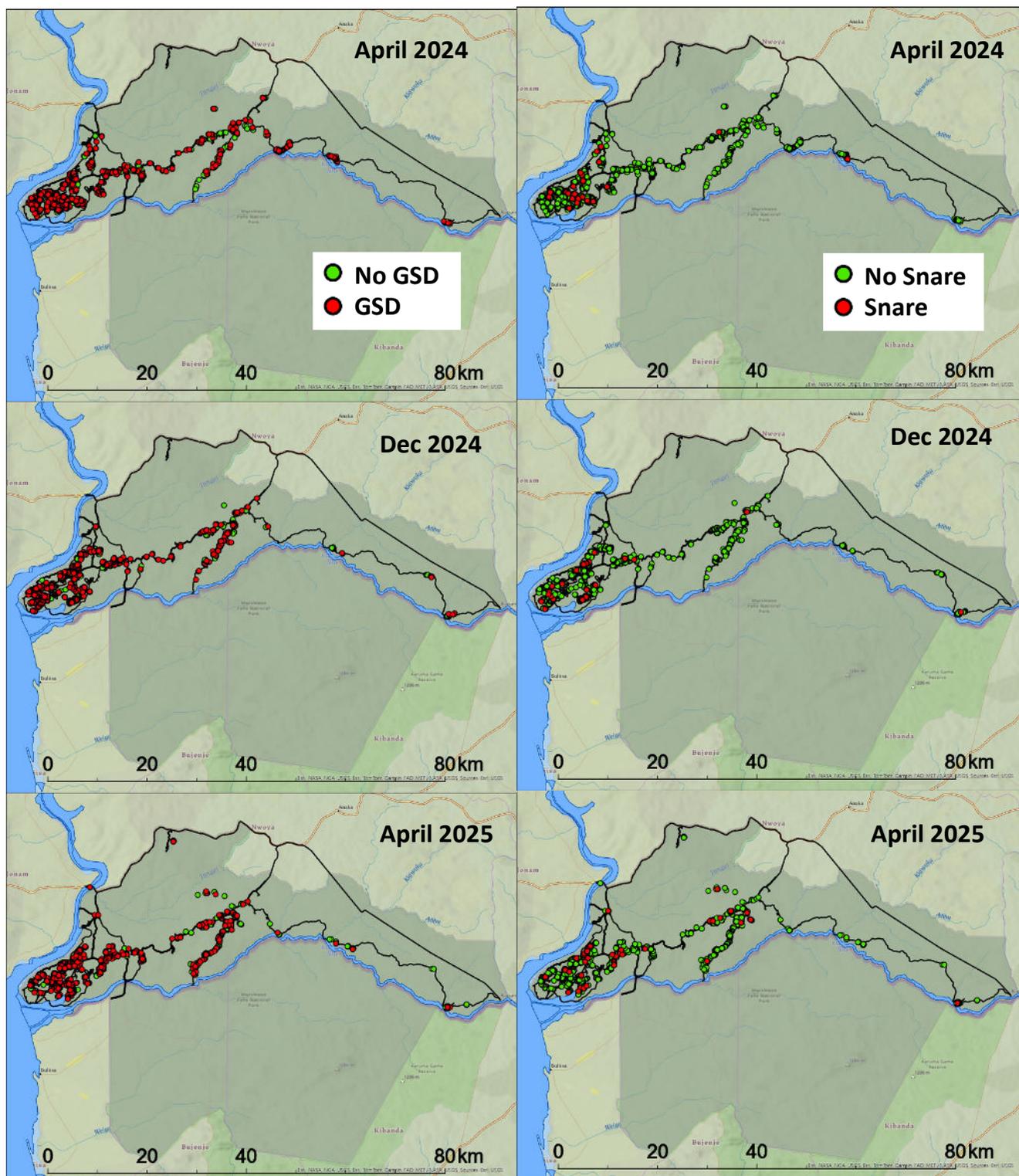


Fig 2. Spatial distribution of Nubian giraffe with and without giraffe skin disease (GSD; left panels) and snare wounds (right panels) across three photographic survey periods (April 2024, December 2024, and April 2025) in northern Murchison Falls NP. Data reveals consistent GSD presence throughout the park and spatial clustering of snare wounds near the river delta.