CMS GIUM

Global Initiative on Ungulate Migration

FACT SHEET

Nubian Giraffe: Murchison Falls National Park, Uganda

Migration Description

Murchison Falls National Park is home to the world's largest remaining population of Nubian giraffes, serving as the primary stronghold for this Critically Endangered subspecies of giraffe. The population in the park has grown steadily in recent years, with 2,000 individuals reported in 2025, according to the Giraffe Conservation Foundation's State of Giraffe 2025. The giraffe population in Murchison Falls exhibits partial migration, with many individuals migrating from the Acacia (Vachellia/Senegalia) dominated savannas during the wet season to broad-leaf evergreen savannas in the dry season, reflecting both large-scale migrations and finer-scale foraging adjustments. As the dry season begins, giraffes migrate east to habitats characterized by broadleaf tree species. Between mid and late April, they return west as the short rainy season starts. During the wet seasons, giraffes concentrate in the park's western sector. Migration patterns also vary by sex. Males are more likely to migrate than females due to their larger size, higher energy needs, and need for breeding opportunities. Additionally, males often seek out larger quantities of lower-quality forage during the dry season, while females remain where competition is less intense. These movements help balance resource use and reduce competition within the population. Additionally, researchers believe that migration in response to both seasonal conditions and population density has allowed for robust population numbers.

Threats to Migration

Migration has enabled the Nubian giraffes of Murchison Falls National Park to grow to the largest known population of northern giraffes anywhere in the continent. However, increasing linear infrastructure development could impede seasonal movement between the distinct savanna habitats that giraffes use and potentially increase density dependent population regulation within their seasonal ranges. Construction and upgrading of roads for oil extraction and tourism may increase habitat fragmentation, creating isolated populations and heightening the risk of vehicle collisions. Expansion of petroleum development in the Albertine Rift region, particularly production drilling in the northern part of the park, threatens to fragment vital giraffe habitats and disrupt established migration corridors. The park's ecosystem has also shifted due to historical declines in elephant numbers, resulting in denser woody vegetation. While this provides more forage for giraffes, it alters the ecological balance and could impact long-term habitat suitability. Wire snares pose another threat, in particular in the western part of the park where animals are closer to human settlements. While giraffes are not often targeted, they may get entangled in wire traps set by poachers and sustain injuries.

Local Population Facts

Migration

Seasonal

Medium *14.3 km (avg.)*

Threats

Climate change; Energy dev.; Urban sprawl; Linear barriers; Agriculture; Livestock; Illegal killing; Other

Species Facts

Common name: Nubian giraffe

Species name: *Giraffa camelopardalis camelopardalis*

Range: East Africa

Diet: Woody browse, twigs and seeds

Global population: 3,096 – 4,862

IUCN Conservation Status

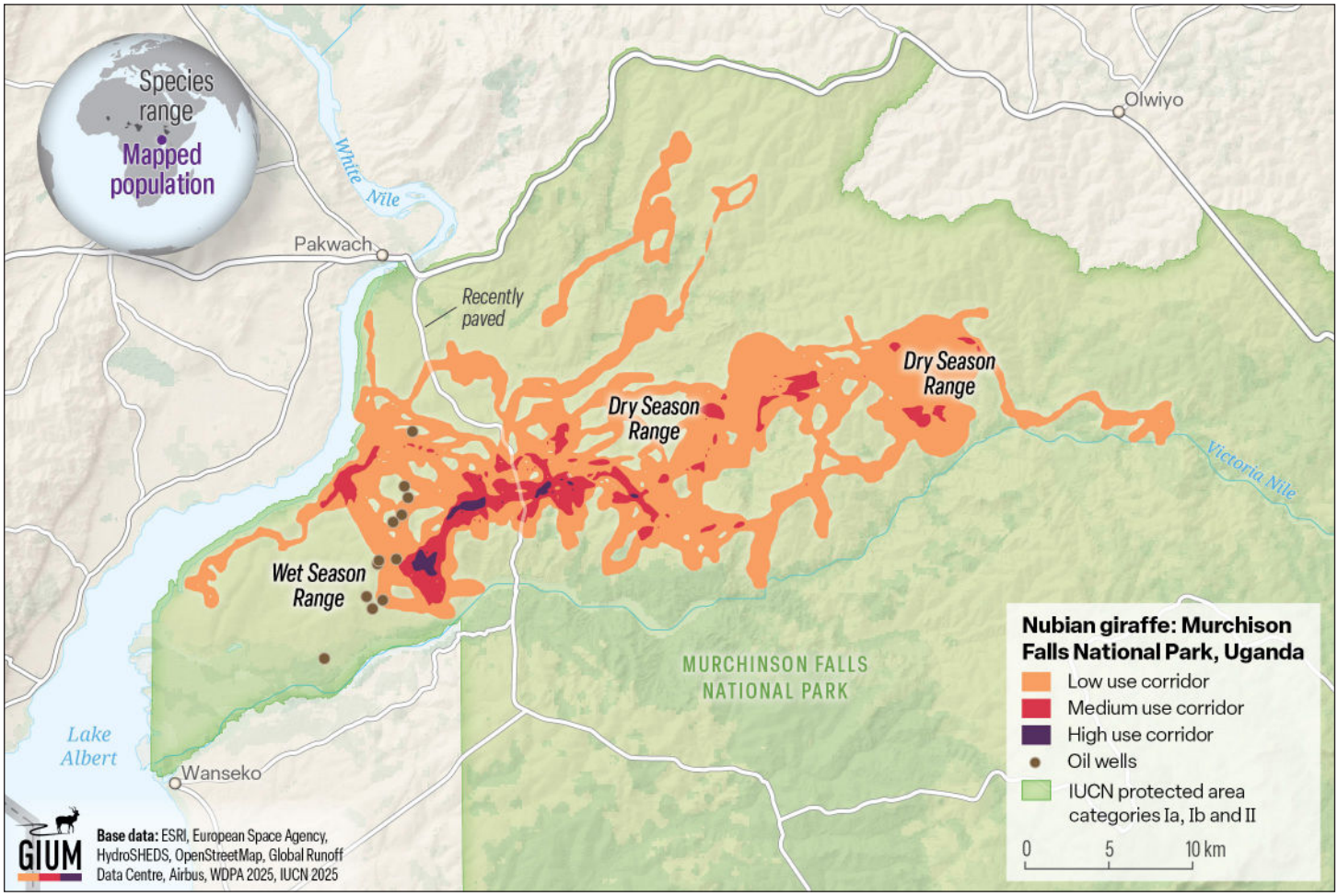
CR Critically endangered

CMS Status

Appendix II Migratory species conserved through agreements

Published: March 24, 2026

Giraffe Migration



Dry season range			Dry-wet transition	Wet season range							Wet-dry transition
Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec

Study Information

Sample size
37 individuals, 11 migratory

Relocation frequency
Hourly GPS

Project duration
2016–2025

Data Analysis

Delineation of migration periods
Net squared displacement to delineate migration between seasonal ranges.

Models derived from
Brownian Bridge Movement Model

Route Summary

Migration start and end date (median)

- Wet-Dry transition: December 21–December 27
- Dry-Wet transition: April 13–April 17

Average number of days migrating

- Wet-dry season transition: 6 ± 2 days
- Dry-wet season transition: 5 ± 2 days

Migration route length

- Min: 3.4 km
- Mean: 14.3 km
- Max: 32.3 km

Data Providers

Data were collected and provided by the Giraffe Conservation Foundation.

In partnership with:

GCF Giraffe Conservation Foundation

UWA

CMS www.cms.int

The Convention on the Conservation of Migratory Species of Wild Animals (CMS), also known as the Bonn Convention, is an environmental treaty of the United Nations that provides a global platform for the conservation and sustainable use of terrestrial, aquatic and avian migratory animals and their habitats.

GIUM www.cms.int/gium

The Global Initiative on Ungulate Migration (GIUM) was created in 2020 to work collaboratively to: 1) create a Global Atlas of Ungulate Migration using tracking data and expert knowledge; and 2) stimulate research on drivers, mechanisms, threats and conservation solutions common to ungulate migration worldwide.

View and Download Map Data from the GIUM Migration Atlas

Brown, M., C. Marneweck, & J. Fennessy. 2026. Nubian giraffe: Murchison Falls National Park, Uganda. Global Initiative on Ungulate Migration, editors. *Atlas of Ungulate Migration*. Convention on the Conservation of Migratory Species of Wild Animals.