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Kordofan Giraffe: Zakouma National Park, Chad

Migration Description

Zakouma National Park in southeast Chad is a vital sanctuary for the Critically Endangered Kordofan giraffe (*Giraffa camelopardalis antiquorum*), a subspecies of the northern giraffe. Of the roughly 7,000 northern giraffes left in the wild, only about 2,400 belong to the Kordofan subspecies. Over half of the global population resides within Zakouma National Park, underscoring the park's importance for the species' survival long term. Broadly, giraffe species across the continent generally do not display migratory behavior. However, new GPS satellite tracking initiatives have greatly enhanced the scientific understanding of the giraffe's spatial ecology and migration patterns.

Zakouma National Park's Kordofan giraffes are perhaps one of the few populations known to migrate. Strong variation between wet and dry seasons marked by intense seasonal flooding in the park's eastern lowlands during the wet season prompts giraffes to migrate to areas north and occasionally west of the park boundaries. The giraffe's extensive seasonal movements point to the importance of extending conservation and community engagement beyond the park's boundaries. The park's unique geography and the pressures of seasonal resource shifts make it essential to prioritise landscape-level conservation strategies to secure the future of this rare giraffe subspecies, both within the park and across neighbouring habitats.

Threats to Migration

Wildlife in Central Africa, particularly outside the bounds of Zakouma National Park in Chad, are pressured by ongoing economic and political instability. Persistent conflict often goes hand in hand with illegal wildlife hunting, as armed groups may rely on wildlife products for funding, which in years past plagued the country and even protected areas such as Zakouma National Park. Additionally, increasing habitat pressures from expanding agriculture and livestock around the park boundaries may also impact giraffe movements to critical areas during migration. However, improved security and conservation measures have allowed the endangered Kordofan giraffe and other wildlife in this area to rebound and remain stable within the park and surrounding faunal reserves in recent years.

Local Population Facts

Migration

Seasonal 

Medium 20 km (avg.)

Threats



Species Facts

Common name: Kordofan giraffe

Species name: *Giraffa camelopardalis antiquorum*

Range: Central Africa

Diet: Woody browse, twigs and seeds

Global population: 2,400

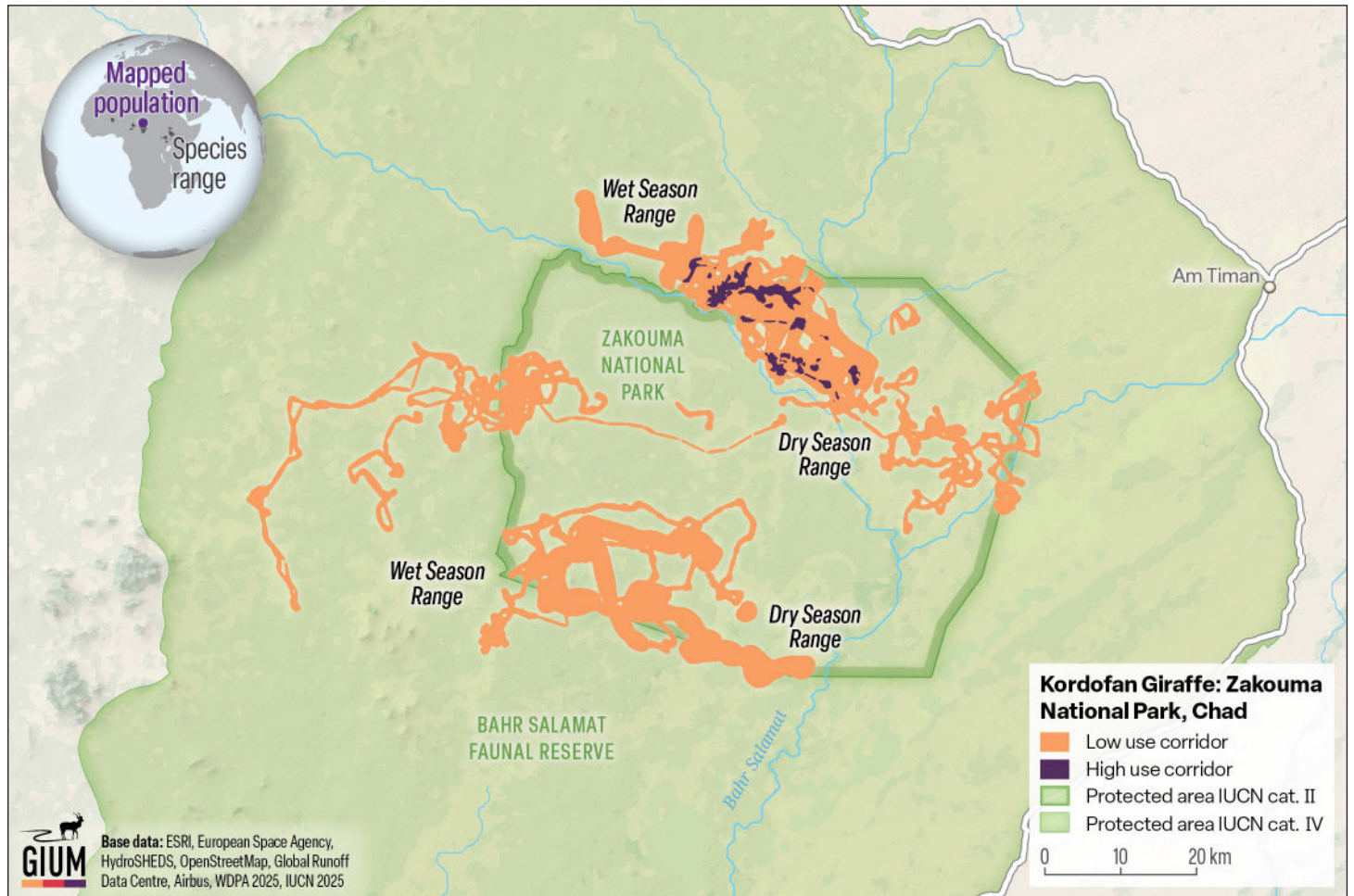
IUCN Conservation Status

CR Critically endangered

CMS Status

Appendix II Migratory species conserved through agreements

Giraffe Migration



Study Information

Sample size

36 individuals, 15 migratory

Relocation frequency

Hourly GPS

Project duration

2019–2024

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: October 10–October 31
- Dry-Wet transition: June 24–July 10

Average number of days migrating

- Wet-dry season transition: 13 ± 6 days
- Dry-wet season transition: 18 ± 5 days

Migration route length

- Min: 6.0 km
- Mean: 20.0 km
- Max: 60.6 km

Data Providers

Data were collected and provided by the Giraffe Conservation Foundation in partnership with African Parks.

In partnership with:



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.



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. Kordofan giraffe: Zakouma National Park, Chad. Global Initiative on Ungulate Migration, editors. *Atlas of Ungulate Migration*. Convention on the Conservation of Migratory Species of Wild Animals.