

Giraffe Rapid Assessment Report

Meru National Park & Kinna Community Conservancy, Kenya

Symon Masiaine, May 2025

Introduction

Reticulated giraffe (*Giraffa reticulata*), historically widespread across the semi-arid landscapes of northern Kenya, have experienced a marked population decline of 56% over the past 35 years. This is a result of human-induced and environmental pressures such as habitat loss, degradation and fragmentation, disease, poaching, and the escalating impacts of climate change. In response to these threats, the Giraffe Conservation Foundation (GCF), in collaboration with the Kenya Wildlife Service (KWS) and local conservation partners, conducted a rapid assessment of reticulated giraffe in Meru National Park (NP) and the adjacent Kinna Community Conservancy (CC) in March/April 2025.

Objective

To better understand the population size, distribution, structure, and threats of reticulated giraffe in Meru NP and Kinna CC through photographic surveys, in critical giraffe habitats in northern Kenya to support future conservation efforts.

Results

The rapid assessment conducted in Meru NP and Kinna CC covered over 2,125 km driven transects in 20 consecutive days. The data collected can be summarised in:

- **417** individuals identified
 - **277** adults, **87** subadults, **7** juveniles, **46** were not photographed and sexed due to skittish behaviour and dense vegetation cover.
 - **28** resights
 - **343** new individuals added to GiraffeSpotter
- **11** average herd size
 - **58** individuals in largest heard

With only 7 juveniles observed, the low calf survival is a concern, especially in Kinna CC where no

juveniles were observed. However, the subadult population is positive. Sightings in Meru NP were widely distributed in the northern zone, yet in Kinna CC they were restricted to the southern part, near Bisanadi National Reserve and Meru NP.

Average observed herd size was 11, ranging from 1-58 individuals. The sex ratio in Meru NP was even (120 male : 148 female) but in Kinna CC, the sex ratio of male:female was 2:1.

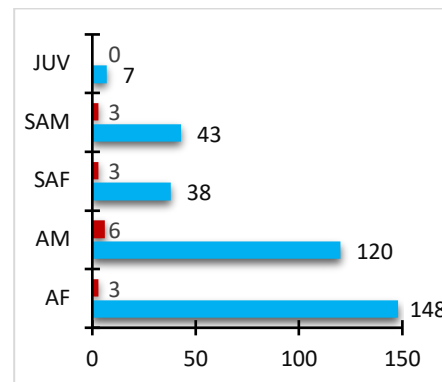


Fig. 1: Number of reticulated giraffe identified in Meru NP (blue) and Kinna CC (red) by age class and sex.

Discussion

This assessment has significantly enhanced the national reticulated giraffe monitoring database and has contributed to our understanding of population giraffe dynamics across both protected and community-managed landscapes. Age structures in both areas revealed positive recruitment, though low juvenile numbers raise concerns about recent calf survivorship. Although unknown, high predation is likely the key factor or livestock disturbance. Giraffe detection was limited by dense vegetation, seasonal inaccessibility, and road constraints, especially in Kinna CC and under-utilised zones of Meru NP. Notably, movement patterns in Kinna CC suggest temporal use of riparian zones and a tendency to avoid open areas during daylight,

underscoring the need for future ecological monitoring.

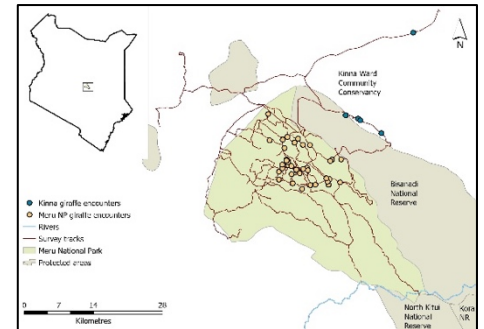


Fig. 2: Distribution of reticulated giraffe encountered in Meru NP and Kinna CC.

Recommendations

1. Conduct long-term reticulated giraffe population monitoring including calf survival and subadult recruitment.
2. Assess predation risk and anti-poaching surveillance through targeted patrols, camera traps, and improved community-based systems.
3. KWS and Kinna CC should improve infrastructure access in key giraffe zones to enable more effective and consistent monitoring, particularly in remote or seasonally inaccessible areas.
4. Promote community-led conservation and education programmes to enhance coexistence and early threat detection.
5. Advance collaborative reticulated giraffe monitoring across protected and community-managed areas to inform landscape-level population management and corridor connectivity.

Acknowledgements

Thanks to KWS and Kinna CC for their invaluable assistance with logistics, security, and general field support, and to the Giraffe Conservation Foundation for their financial and technical support.