

# Population Assessment of Kordofan giraffe (*Giraffa camelopardalis antiquorum*) in the Garamba Complex Democratic Republic of Congo

1 Apr 19

## Summary

Following the last population estimation of 48 giraffes in the Garamba Complex in Apr 2018, the latest population assessment estimates the population now at 55 individuals with seven newly identified juveniles. One adult female giraffe which was assumed dead in Apr 2018 was re-found and one juvenile that was born in March 2017 could not be re-found.

## Program

In Apr 2018 the Kordofan giraffe population in the Garamba Complex was estimated at 48 giraffe based on individual identification after a first population estimation of 45 giraffes in Aug 2017. Following ongoing field work and surveys since Apr 2018, the new population estimate for Kordofan giraffe in Garamba is 55 giraffes as of Apr 2019. This number is based on all unique giraffe that were identified since Apr 2018 - a total of 596 giraffe observations in 184 herds.

Importantly, GIR42F, an adult female that was assumed to have died after no observations of this individual were made between Aug 2017 and Apr 2018 was spotted and identified, and thereby included in the new population estimate. No new giraffe carcasses were found.

Figure 1. Table of population dynamics for the population estimation of Apr 2019. Green cells are newly discovered giraffe, red cells are giraffe that have not been seen since Apr 2018 and thus not included in the population assessment.

	Juvenile (11)	Subadult(13)		Adult (31)	
	Male/Female	Male (5)	Female (8)	Male (11)	Female (20)
Block 6/9	GIR54U	GIR02M	GIR01F	GIR04M	GIR03F
	GIR58U	GIR15M	GIR44F	GIR09M	GIR05F
	GIR60U	GIR17M	GIR45F	GIR10M	GIR06F
	GIR61U	GIR57M		GIR14M	GIR08F
	GIR62U			GIR21M	GIR12F
	GIR63U			GIR38M	GIR13F
	GIR64U			GIR39M	GIR16F
	GIR65U			GIR41M	GIR20F
Gangala na Bodio	GIR59U	GIR52M	GIR30F	GIR19M	GIR11F
	GIR66U		GIR48F	GIR46M	GIR28F
	GIR67U		GIR49F	GIR47M	GIR42F
	GIR68U				GIR50F
					GIR51F
Block 10			GIR35F		GIR32F
					GIR33F
Block 1/2/3			GIR26F		GIR22F
					GIR24F

**Legend**

- Giraffe, newly discovered since Apr 2018
- Not seen since Apr 2018, excluded from count

The giraffes are considered juvenile up to the age of 18 months by which they are reliant on their mother (Leuthold & Leuthold 1978). From 18 months until approximately four years, giraffes were classed as subadults (e.g. males that still had a fringe of hair around the horn tips were considered subadults) (Leuthold & Leuthold 1978). Giraffe older than four showed an approximate adult size and shape, and were considered potentially sexually active and classed as adults (Dagg & Foster 1982).

With an estimated 55 giraffes alive it is likely that the objective of 60 giraffes by 2020 as outlined by the National Giraffe Strategy and Action Plan (NGSAP) 2018-20 is attainable and realistic.

Research throughout Africa indicates that up to 50% of newborn calves are predated before their 2nd year. It is therefore important that juveniles and sub-adults are well monitored to understand predation levels in Garamba. However, with only 1 out of 16 juveniles presumed dead, predation of juvenile giraffes in Garamba might be lower than hypothesized.

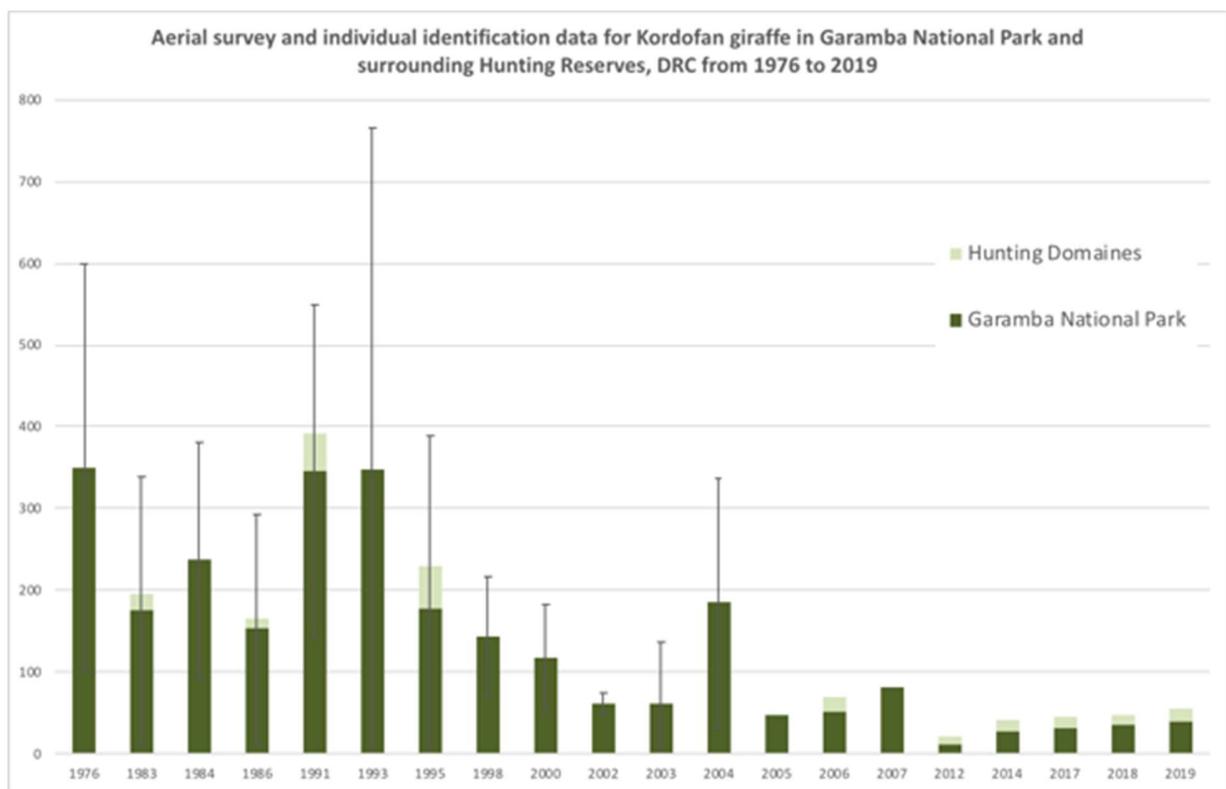


Figure 2. Graph on giraffe population trends since the first aerial survey data in 1976, with error bars indicating the standard error following the sample-count technique.

