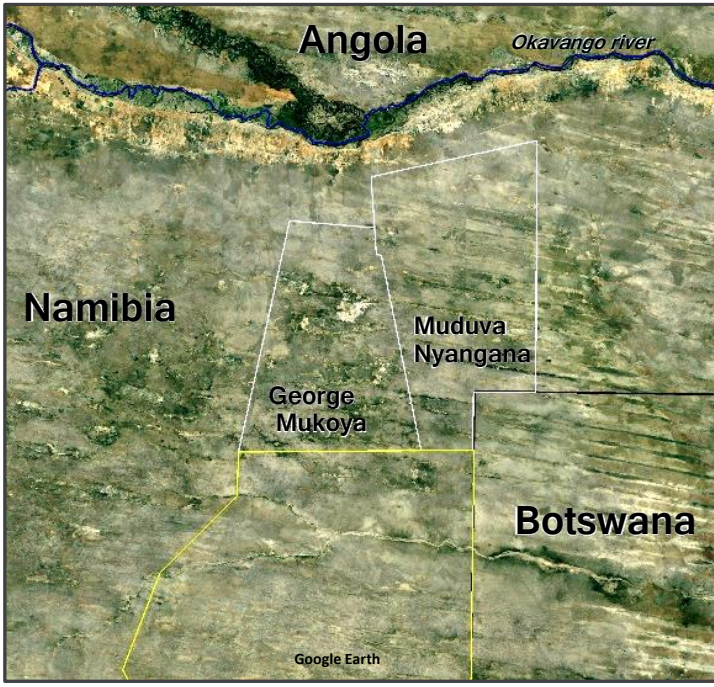


# GAME COUNTS: KAVANGO EAST July 2023



## Estimates

Species	George Mukoya		Muduva Nyangana	
	Estimate	95% CI Range	Estimate	95% CI Range
Duiker (HN)	675	490-931	379	233-616
Eland (HN)	285	118-689	434	125-1,501
Gemsbok (U)	182	79-419	116	29-475
Giraffe (U)	151	64-357	161	76-340
Kudu (U)	212	100-450	0	-
Roan (U)	184	77-443	360	126-1024
Steenbok (HN)	138	63-299	163	79-334

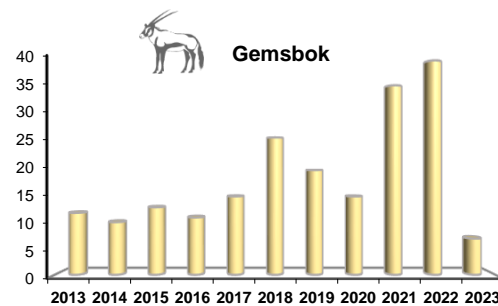
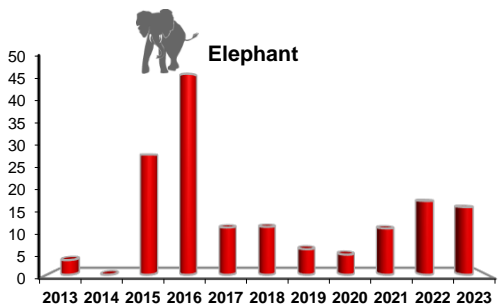
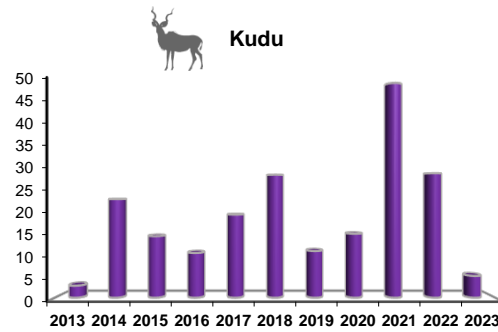
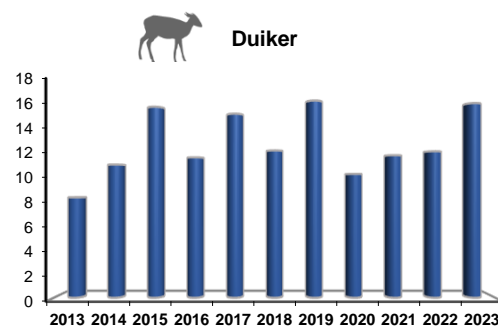
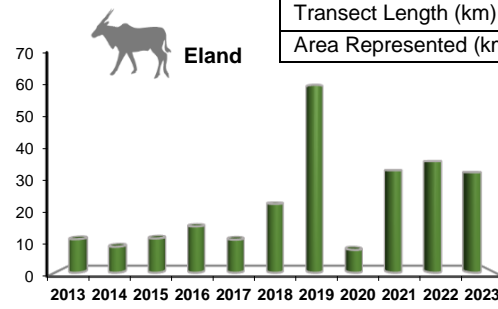
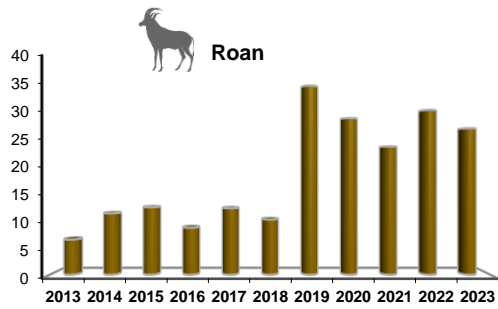
Estimates are derived using DISTANCE analysis which takes account of drop-off in detectability with distance from the transect line. Sightings from all counts were used to determine species detection profiles. Model: U=uniform; HN=half normal. Care should be taken when considering these estimates for quota setting purposes.

## Animals seen

Species	Transects				Total Seen	Total Groups
	George Mukoya		Muduva Nyangana			
	Seen	Groups	Seen	Groups		
Duiker	39	35	19	19	58	54
Eland	49	7	67	10	116	17
Elephant	18	8	38	5	56	13
Gemsbok	11	5	13	3	24	8
Giraffe	27	8	34	8	61	16
Hyaena					0	0
Impala					0	0
Kudu	18	6			18	6
Leopard					0	0
Ostrich					0	0
Porcupine					0	0
Roan	26	6	71	11	97	17
Steenbok	10	9	10	10	20	19
Vervet Monkey					0	0
Warthog	2	1	1	1	3	2
Wild dog					0	0
Wildebeest	40	1			40	1

## Trends overall: Animals per 100km

	George Mukoya	Muduva Nyangana
Transects	24	11
Transect Length (km)	241	116
Area Represented (km <sup>2</sup> )	238	122



Species	Animals				
	2018	2019	2020	2021	2022
Duiker	42	61	42	42	40
Eland	76	225	30	117	118
Elephant	38	22	19	38	56
Gemsbok	87	72	59	124	130
Giraffe	135	75	99	170	145
Hyaena			1		
Impala	15				28
Kudu	96	40	60	175	94
Leopard				4	
Ostrich	14	2	5	5	1
Porcupine		2			
Roan	35	130	118	84	100
Steenbok	16	16	19	19	12
V. Monkey	41		41	15	13
Warthog	10	6	12	5	1
Wild dog	6				
Wildebeest	37	60	23		2

## Sightings: previous 5 years

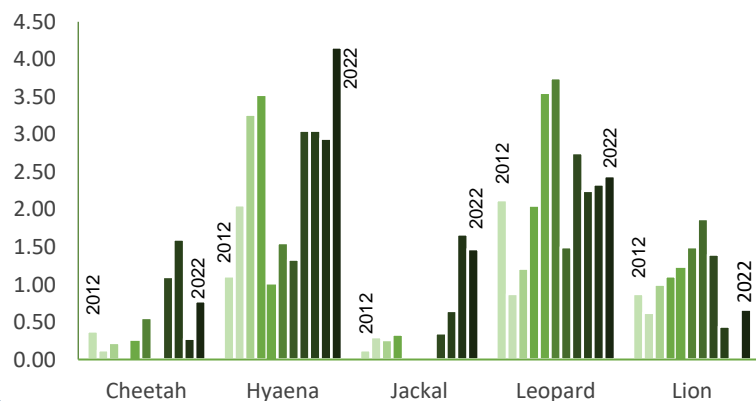
	Groups				
	2018	2019	2020	2021	2022
Duiker	38	51	38	41	35
Eland	16	21	8	17	17
Elephant	7	7	7	2	10
Gemsbok	10	18	15	15	18
Giraffe	22	19	23	36	35
Hyaena			1		
Impala	1				3
Kudu	14	15	17	23	16
Leopard				3	
Ostrich	4	2	4	2	1
Porcupine		1			
Roan	9	24	15	19	19
Steenbok	14	15	17	16	10
V. Monkey	3		2	1	3
Warthog	4	2	5	1	1
Wild dog	2				
Wildebeest	2	5	3		1

## Supplementary Data

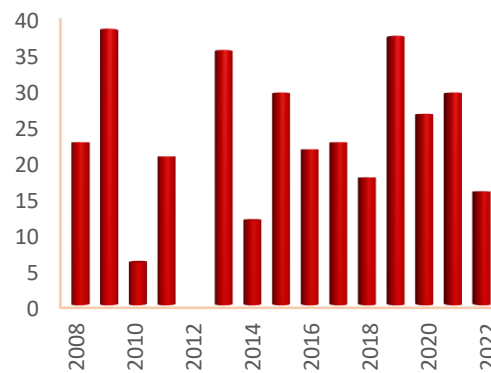
### Predator index and mortalities from the Event Book & rainfall from CHIRPS

(<https://earlywarning.usgs.gov/fews/datadownloads/Global/CHIRPS%202.0>)

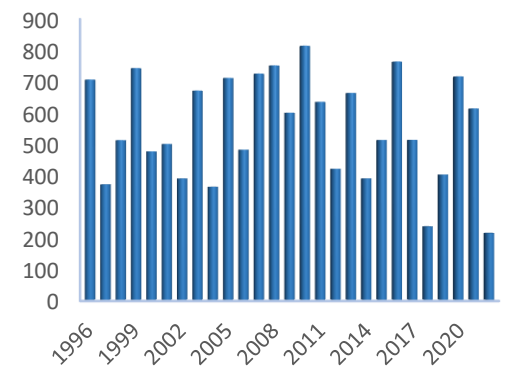
### Predator Sighting Index



### Mortalities (animals)



### Rainfall Season (Jul-Jun) (mm)



## Overview

The fundamental purpose of game counts in communal areas is to inform conservancies and MEFT of wildlife trends for the purposes of adaptive management of resources. While estimates of species numbers are provided, these should only be considered as an approximate guide to species abundance.

### The 2023 data suggest:

- populations for 4 of the main game species (Roan, Eland, Steenbok and Duiker) showed positive or stable trends. There were however sharp drops in the numbers of gemsbok and kudu seen.
- estimates suggest that these populations are still well balanced in number.
- recent rainfall seasons have been quite variable. The validity of the 2022-23 season is questionable as all north-eastern values seem unreasonably low.
- lion presence has seen a marked drop since 2019, while hyaena sightings have risen to an all-time high.
- since 2017 elephant numbers initially dropped but have now risen.

