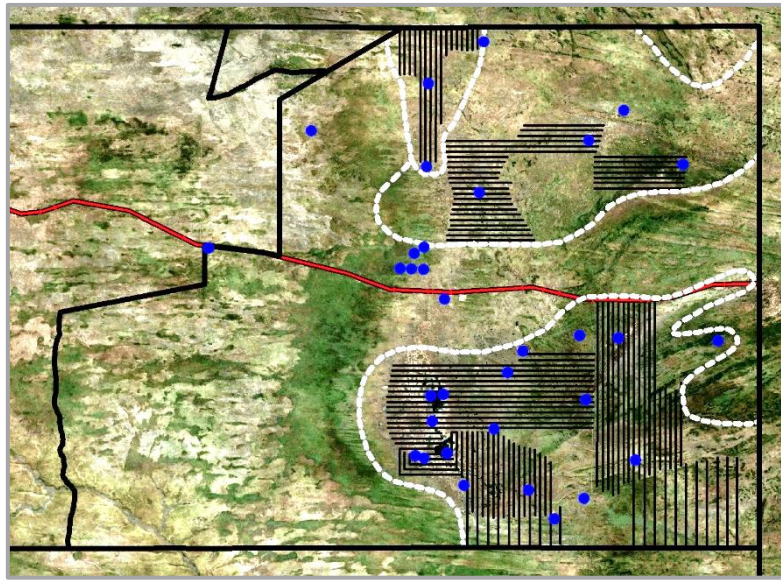


# GAME COUNTS – NYAE NYAE CONSERVANCY

## LINE TRANSECTS

### July 2022

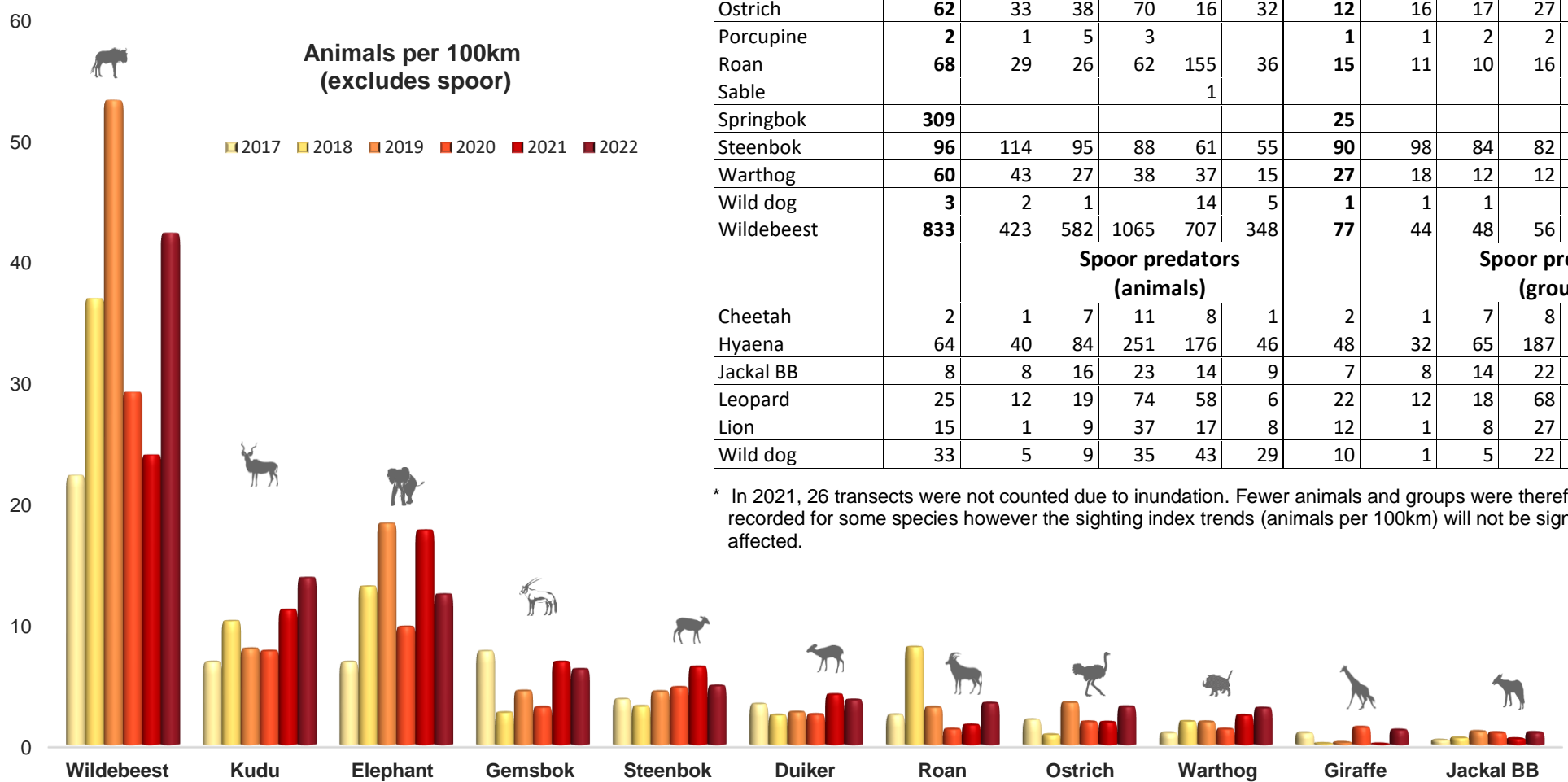
#### Line Transects



#### Animals and groups

Species	Animals Seen						Groups seen					
	2022	*2021	2020	2019	2018	2017	2022	*2021	2020	2019	2018	2017
African Wild Cat		2		1				2		1		
Bat-eared fox			2						1			
Burchell's Zebra	63						9					
Duiker	73	74	50	54	47	51	71	71	48	53	44	48
Eland	1		3		2	5	1		1		2	1
Elephant	245	316	195	366	251	91	56	61	63	70	68	39
Gemsbok	123	122	62	89	51	120	31	32	28	25	17	22
Giraffe	24	1	29	4	2	16	7	1	5	3	1	4
Hartebeest	15	31	87	51	67	16	6	8	9	7	8	3
Honey Badger	2	4	1	1			1	2	1	1		
Hyaena			2	1	1	2			2	1	1	2
Impala						6						2
Jackal BB	20	9	20	22	11	6	11	8	17	10	8	6
Kudu	272	197	155	159	196	108	69	57	44	49	50	33
Leopard	1	1	1	1			1	1	1	1		
Lion				1						1		
Ostrich	62	33	38	70	16	32	12	16	17	27	9	13
Porcupine	2	1	5	3			1	1	2	2		
Roan	68	29	26	62	155	36	15	11	10	16	22	9
Sable					1						1	
Springbok	309						25					
Steenbok	96	114	95	88	61	55	90	98	84	82	56	55
Warthog	60	43	27	38	37	15	27	18	12	12	15	7
Wild dog	3	2	1		14	5	1	1	1		2	2
Wildebeest	833	423	582	1065	707	348	77	44	48	56	56	30
	<b>Spoor predators (animals)</b>						<b>Spoor predators (groups)</b>					
Cheetah	2	1	7	11	8	1	2	1	7	8	6	1
Hyaena	64	40	84	251	176	46	48	32	65	187	133	42
Jackal BB	8	8	16	23	14	9	7	8	14	22	12	8
Leopard	25	12	19	74	58	6	22	12	18	68	52	6
Lion	15	1	9	37	17	8	12	1	8	27	10	6
Wild dog	33	5	9	35	43	29	10	1	5	22	16	6

\* In 2021, 26 transects were not counted due to inundation. Fewer animals and groups were therefore recorded for some species however the sighting index trends (animals per 100km) will not be significantly affected.



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.

#### Overview

Line transects were initiated in 2017 and represent almost half of the total area of the conservancy and include most of the waterholes. The area not covered by transects has low animal densities due to reduced habitat suitability and people pressure.

Transect counts have recorded 25 species including 6 predator species. Based on average spoor sightings and Event Book records, hyaena are the most common predator, followed by wild dog, leopard and jackal.

The top 3 species in terms of sightings between 2017 and 2022 included wildebeest, elephant and kudu. Most species showed stable or increasing trends.

#### Count Statistics 2022

- 154 transects and a total of 2,066 km
- Over 400 transect hours
- 12 count days
- 19 species recorded
- 97% of all live sightings were within 200m of the transect line
- Estimates represent a conservancy area of 4,200 km<sup>2</sup>

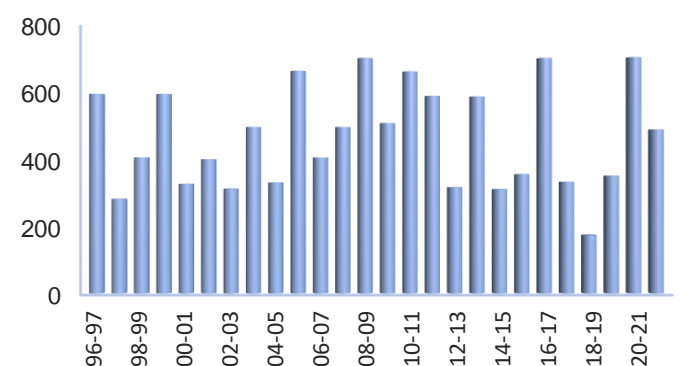
Estimates (rounded) were derived using DISTANCE analysis which takes account of drop-off in animal detectability with distance from the transect line. Eleven species had sufficient sightings to adequately derive species detection curves and therefore produce estimates. Model: U=uniform; HN=half normal.

#### Estimates

Species	Estimate	95% CL Low	95% CL High	Model
Duiker	1,760	1,300	2,390	HN
Elephant	1,660	1,130	2,430	HN
Gemsbok	835	470	1,480	HN
Hartebeest	178	78	404	U
Kudu	2,940	1,980	4,365	HN
Ostrich	264	120	590	HN
Roan	150	80	280	U
Springbok	975	420	2,280	U
Steenbok	1,590	1,230	2,050	HN
Warthog	310	180	525	U
Wildebeest	5,490	3,610	8,340	HN

#### Rainfall mm (by season Jul-Jun)

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



#### Predator sighting trend (left) and Mortalities (right) from Event Book

