

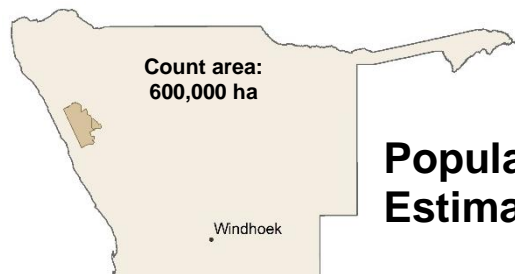
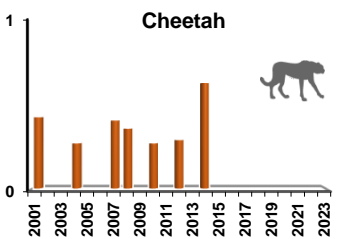
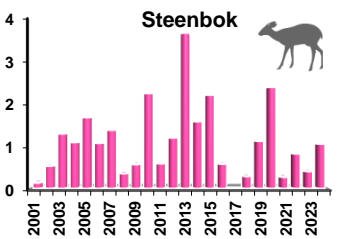
# GAME COUNTS IN NORTH-WEST NAMIBIA

## Palmwag and Etendeka Concessions

May 2024

### Total number of animals seen each year

Species	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Baboon				3	66		95		28	37	32	54	70	23	24	27	8	104	10		11	29	19	14
Cheetah	3			2			3	3				2		4										
Eland														3						12				
Elephant	3		19	7	16		3	9	15	1	17	23	20	15	28	2	6			42	3	39	15	11
Gemsbok	368	825	452	756	575	620	505	595	719	728	587	503	370	394	290	675	126	171	98	130	68	51	16	47
Giraffe	71	71	69	62	88	75	80	93	99	193	111	76	61	63	50	164	42	107	86	55	79	40	10	39
Hyaena, Sp.	1						1				6	1			5	2	5	2	2	1	1			
Impala, BF									2		16	14		19	7	2	6	7	9	1	4		1	3
Jackal, BB	9	14	6	11	11	26	13	5	21	34	7	20	18	16	25	17	9	9	10	11	6	7	1	4
Klipspringer					2	2				2	1		1			2						3		
Kudu	51	70	3	43	68	75	204	13	65	53	40	24	39	24	38	78	15	13	4	7	1	2	2	1
Ostrich	83	56	82	54	108	29	98	70	154	41	33	73	93	77	67	42	37	24	76	41	11	25	20	17
Springbok	3,822	3,248	2,933	3,241	1,550	2,421	1,819	1,553	3,349	2,730	2,067	1,747	1,149	2,435	448	3,487	515	859	545	1,002	469	380	118	192
Steenbok	1	4	9	8	12	7	10	3	4	16	4	8	24	10	15	4		2	8	17	2	6	3	8
Zebra, H	567	744	629	631	728	777	621	1,054	1,623	1,152	1,845	1,122	1,016	1,253	770	602	279	266	107	146	237	64	62	147

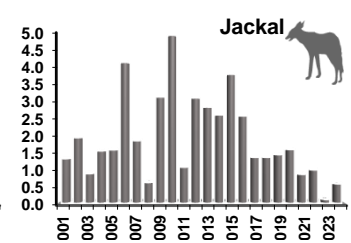
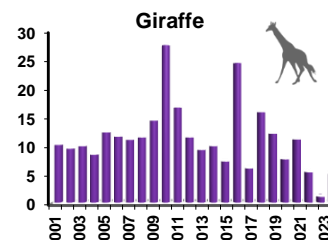
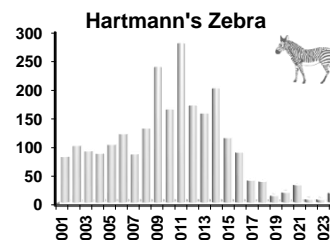
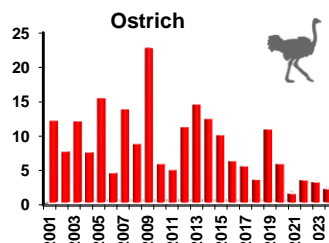
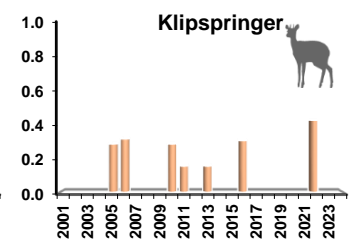
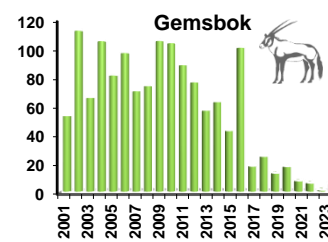
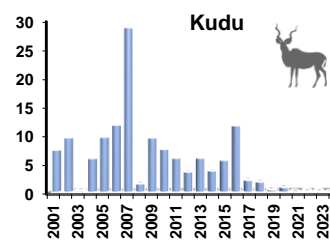
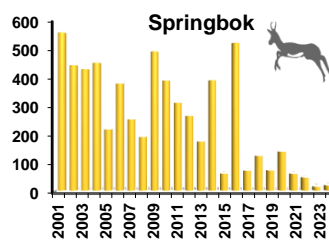


### Population Estimates

Species	Estimate	Lower 95% CL	Upper 95% CL
Gemsbok (HN)	539	205	1,418
Kudu (HN)	24	4	154
Ostrich (HN)	219	85	563
Springbok (HN)	2,729	1,104	6,749
Steenbok (HN)	529	114	2,453
Hartmann's Zebra (HN)	1,087	338	3,492

All above estimates are derived using DISTANCE analysis. This takes account of drop off in detection with distance from the transect line. They are conservative estimates as 43% of the count area is not sampled (due to inaccessibility) and is consequently assumed to hold no animals. Model selection: U = uniform key; HN = half normal

### Trends - Number of animals per 100km



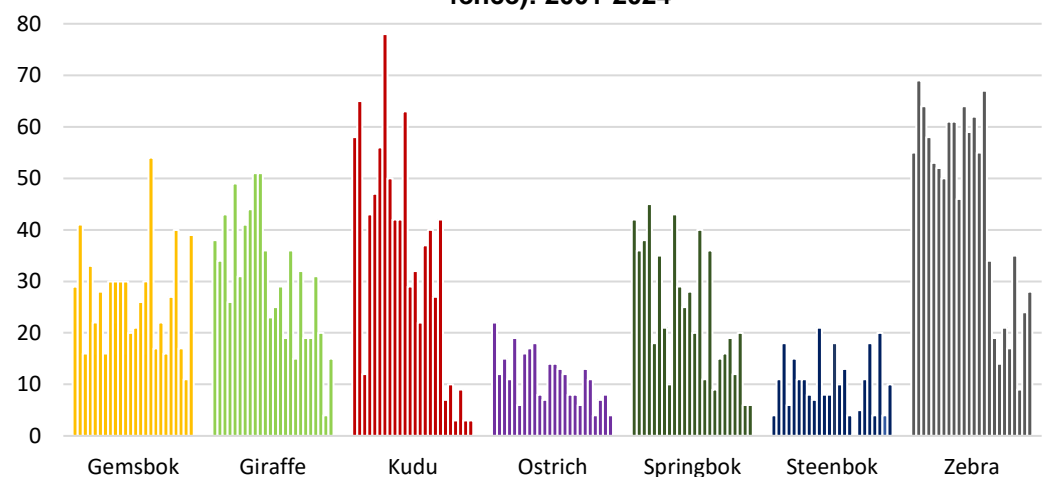
### Animals seen during this count and minimum estimates

	Total	Etendeka	Palmwag
Total Route km	758	135	623
Total area (km2)	6,336	508	5,828
Number of routes	15	3	12
% area excluded	43	44	43

Species	Etendeka	Palmwag
Gemsbok	21 (90)	26 (338)
Giraffe	17 (31)	22 (121)
Kudu	1 (4)	
Ostrich		17 (179)
Springbok	104 (553)	88 (1,419)
Steenbok		8 (778)
Hartmann's Zebra	127 (352)	20 (168)

Values without brackets are numbers of animals seen along transects. Values in brackets are estimates derived using the Effective Strip Width (ESW) for each species from Distance analysis. While totals will be similar in magnitude to the estimates presented top left, they will not be the same. Giraffe estimates have not been adjusted for drop-off in detectability.

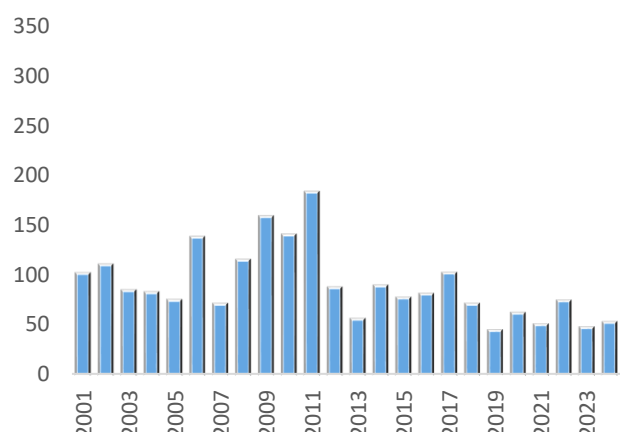
### Percentage of all animals counted in the NW (north of the vet fence): 2001-2024



The Palmwag and Etendeka concession areas are important refuges for at least five of the main game species. Spikes suggest movements of animals into the concessions from conservancies or the Skeleton Coast Park, while troughs point to losses, either from outward movements or a general reduction in numbers. Since around 2017 there has been a downward trend in numbers seen for most of the main game species in these concession areas, and (with the exception of steenbok) a corresponding drop in the proportion of 'north-west' animals found in them.

### Rainfall

Average rainfall (mm)



The rainfall season is from July to June and values are an average for the whole area.

### Vegetation



NDVI is a measure of the density of chlorophyll in vegetation cover. It can be used as an indicator of the amount of biomass available to wildlife. The map shows the NDVI status in the current year (Feb-Apr) and the trend indicates the average deviation of the concession areas from the long-term mean, in each year.

NDVI - percentage difference from long term mean

