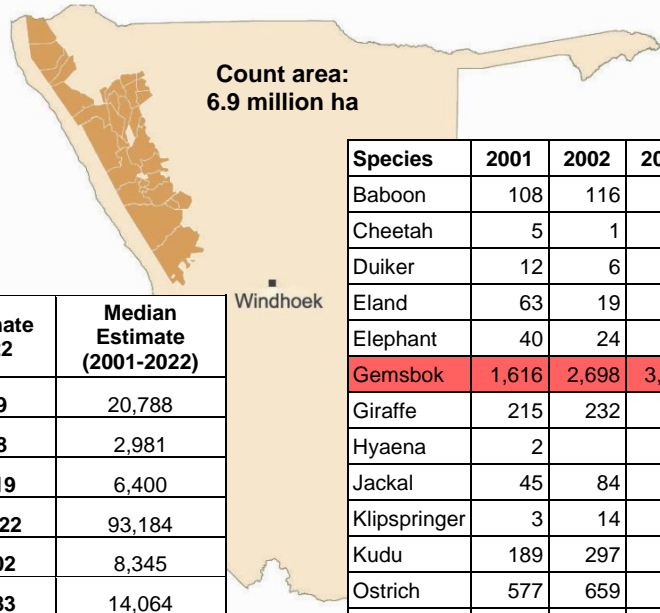


Regional Summary



Total number of animals seen each year

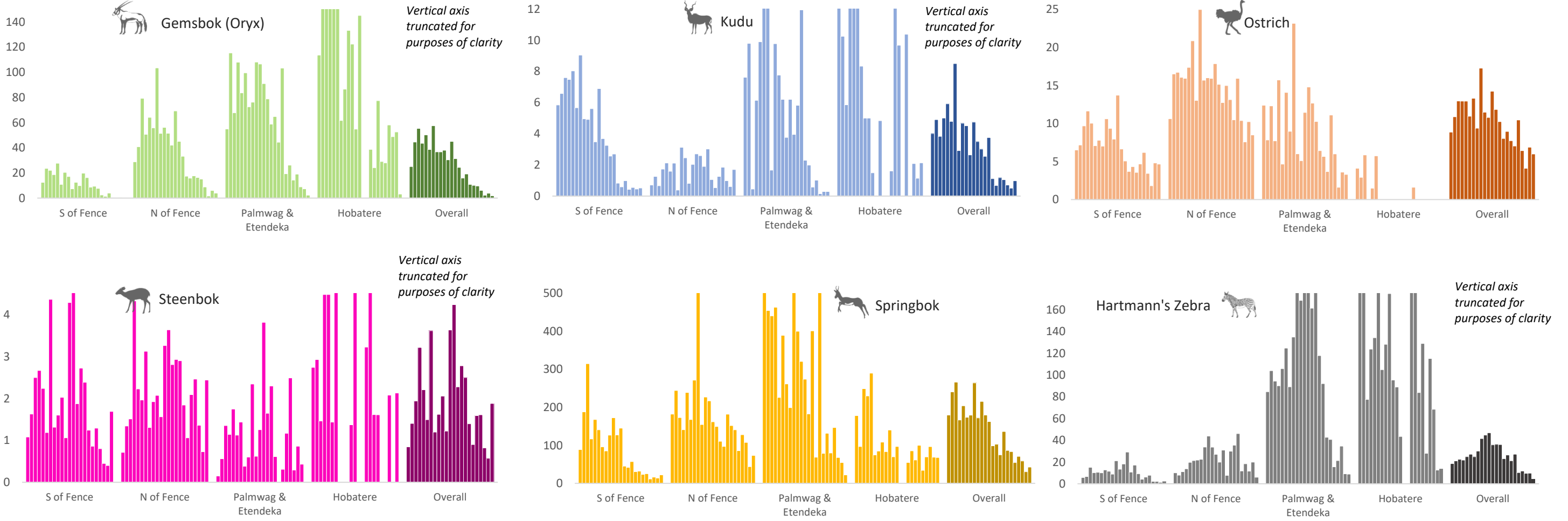
Species	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Baboon	108	116	203	135	555	165	567	239	310	390	172	510	548	192	334	667	302	356	443	136	82	144	316
Cheetah	5	1	7	7	14	2	4	7	6	3		5	3	11	5	6	6	1	2	5		1	1
Duiker	12	6	3	5	18	3	8		7	6	11	3	14	9	6	11	2	5	8	2	4	4	3
Eland	63	19		12	10	12	45	5	30		13	2		5	45	21	5	9	26	1			
Elephant	40	24	45	17	107	5	36	44	72	31	73	39	34	74	64	41	94	31	95	30	63	34	112
Gemsbok	1,616	2,698	3,483	2,749	3,506	2,612	3,898	2,609	2,652	2,755	2,238	3,244	2,413	1,791	1,247	1,510	856	782	774	491	181	309	152
Giraffe	215	232	189	281	213	296	268	231	253	441	362	420	336	256	346	504	354	418	509	382	329	260	279
Hyaena	2			1	7		4	3	1	10	2	1	9	1	5	4	8	3	3	4	2	1	2
Jackal	45	84	60	82	78	94	108	59	81	119	68	91	104	83	89	87	86	51	40	59	40	33	36
Klipspringer	3	14	20	17	34	15	24	5	19	21	10	45	27	21	9	20	14	11	6	8	2	8	16
Kudu	189	297	241	316	413	324	576	207	337	327	190	329	269	221	200	296	88	53	95	84	57	41	81
Ostrich	577	659	815	817	903	741	902	666	1,247	832	772	1,027	911	752	630	706	610	545	842	521	329	554	496
Springbok	11,606	14,560	16,734	10,509	14,227	11,746	12,135	18,729	12,411	15,601	12,818	11,711	7,586	7,531	5,876	10,744	6,823	6,456	4,384	5,717	4,697	2,449	3,540
Steenbok	49	85	122	203	154	101	245	85	117	149	88	261	325	167	218	197	110	70	128	129	66	46	156
Warthog	6	14	8	7	13	11	13	2	2	3	6	8	12	3	8	4	5	4					1
H. Zebra	1,210	1,274	1,414	1,376	1,738	1,838	1,684	2,136	3,004	3,248	3,361	2,583	2,790	2,648	1,812	2,084	1,671	2,105	830	941	768	787	358

Total Population Estimates

Species	Population estimate	Lower 95% CL	Upper 95% CL	Estimate 2022	Median Estimate (2011-2022)
Gemsbok (U)	1,292	725	2,303	899	20,788
Kudu (HN)	1,005	472	2,143	658	2,981
Ostrich (HN)	4,856	3,478	6,780	4,419	6,400
Springbok (HN)	59,250	42,717	82,182	33,422	93,184
Steenbok (HN)	10,857	7,001	16,838	2,202	8,345
Hartmann's Zebra (HN)	4,474	2,661	7,525	5,083	14,064

Estimates are derived using DISTANCE analysis which takes account of drop-off in detectability with distance from the transect line. They are conservative estimates as, on average, 28% of the count area is not sampled (due to inaccessibility) and is consequently assumed to hold no animals. Model selection: U = uniform; HN = half normal.

Trends - Number of animals per 100km (2001-2023)



Species highlighted in red require careful monitoring and management. Although only half as many animals of these two species were sighted in 2023 compared to 2022, population estimates between years are similar due to the higher proportion of animals seen on or near the transect line in 2023. This influences the species detection curves and results in a smaller effective strip width (ESW).

Synopsis

Wildlife populations in north-west Namibia were severely impacted in the 1980s by a combination of severe drought and poaching. Community conservation, formalised in 1996 through conservancies facilitated an increase in wildlife numbers through controlled utilisation and effective control of poaching. Between 1996 and 2012 most species experienced stable or growing population trends, however, a prolonged dry phase after 2013 resulted in a steady decline in populations of many game species. It is unclear how much illegal harvesting contributed to the drop in animal numbers. Predator numbers increased sharply initially but have since stabilised or dropped. In response to the decline in numbers, official harvesting through controlled hunting has been reduced since 2014 to enable populations to recover.

The north-west comprises 4 distinct sub-areas: conservancies south of the veterinary fence, conservancies north of the fence and the concession areas (where no utilisation is permitted); Palmwag & Etendeka and Hobatere. There are clear differences in animal density between these areas with the concession areas normally having highest densities and the southern area having the lowest.

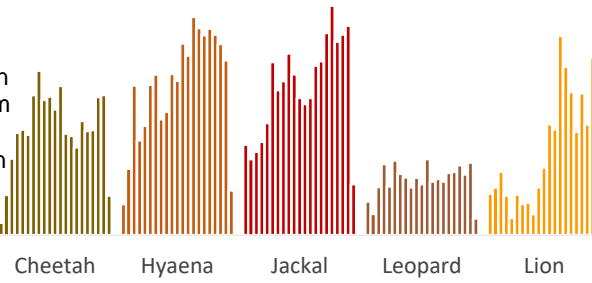
The concession areas of Palmwag and Etendeka (which represent only slightly more than 9% of the region) are important natural refuges for many wildlife species. Trends in these areas often show radical spikes between years reflecting animal movements to and from the concessions, Skeleton Coast, conservancies, and freehold land. In any given year many animals may be missed due to under-sampling in counts; 43% of this area is excluded.

Estimates for the main harvested game species in the 4 sub-areas are indicated bottom right.

Average rainfall (mm)

The CHIRPS dataset replaces the RFE dataset used in previous posters. A rainfall season is from July of the previous year to June of the current year.

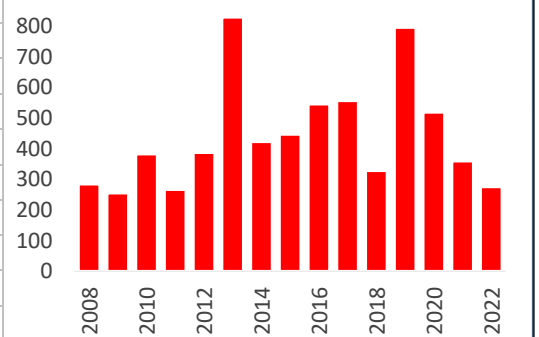
Predator sighting index 2002-2022



Harvesting offtake

Species	Animals								
	2014	2015	2016	2017	2018	2019	2020	2021	2022
Gemsbok	572	208	163	131	43	35	1		1
Giraffe	16	9	6	11	2	6	1	3	2
Jackal	14	5	15	12	13	2			
Klipspringer	5	5	7	5	4	5			
Kudu	120	49	91	86	54	34	7	10	3
Ostrich	95	75	100	55	27	12	1	3	
Springbok	1727	821	768	719	76	85	64	42	52
Steenbok	8	3	13	3	4	8	2	1	
H. Zebra	350	288	150	234	72	45	8	10	15

Mortalities: number of animals



Summary 2023

Overall, the 2023 count showed positive trends for four of the six main game species. However, numbers of Oryx and Hartmann's Zebra sighted in all sub-areas were alarmingly low.

In the sub-areas (see relevant posters), trends for all species in conservancies north of the veterinary fence, (and Hobatere concession), were promising. However, the opposite was true for conservancies to the south, and the concession areas of Palmwag and Etendeka, where downward trends and reduced game numbers persist.

Animals seen(*) during this count and minimum estimates(**)

	Total	Ikhorro /Goreb	#Kheadi //Hòas	Anababb	//Audi	Doro Nawas & Utbasen /Twyfelfontein	Eh-Rovipuka	Etendeka	#Gangu	Hobatere	//Huab	Marientluis	Ohungu	Okangundumba	Okonjombo	Onatendeka	Ombujokanguidi	Ongongo	Orupembe	Orupupa	Ojambangu	Ojikondavirongo	Ojimboyo	Ojju-west	Oruzemba	Ozonduudu	Palmwag	Pures	Sanilatias	Sestontein	Sorris sorris	Torra	Teiseb	
Total Route km	8,284	251	477	241	57	491	277	121	807	94	424	273	188	141	190	189	163	93	297	155	38	129	98	89	101	89	577	327	152	298	265	515	678	
Total area (km ²)	69,489	1,337	3,358	1,636	335	4,137	1,979	633	7,756	258	2,129	3,034	1,245	1,130	1,643	1,613	657	619	2,616	1,775	348	1,067	432	1,208	741	743	5,891	3,564	1,446	2,469	2,290	3,492	7,908	
Number of routes	159	4	9	5	2	9	5	3	10	4	8	6	3	3	4	4	3	5	6	3	1	4	2	2	3	2	11	6	4	8	4	8	8	
% Area excluded	28	30	45	51		6	28	44	17	5	4	28	14	29	16	48	26	53	10	44	74	58	30	71	26	55	43	31	28	42	18	25	16	
NDVI Difference (%) (***)	-17.6	-30.8	-29.1	-10.1	-14.6	-21.6	-39.6	-13.8	-29.4	-28.2	-19.6	-19.9	-17.9	-26.3	-23.6	-23.6	-24.6	-18.4	-16.8	-32.9	-35.1	-8.5	-30.2	-16.2	-25.6	-20.3	-17.0	-19.9	-20.8	-16.2	-21.0	-13.0		
Average Rainfall (mm)	62	62	51	88	36	98	54	49	97	56	29	61	135	46	82	112	107	32	117	112	67	46	92	140	106	36	36	43	40	41	36	40		
Species																																		
Gemsbok						4	9	3	7											33						4	7	16	18	30				
Giraffe		13	5			6	23	2	17				2	16	54				7	2		10			1	8	39	18	26			20		
Kudu				1		10	2		25	12					51						4			8	13	20							1	
Ostrich		2	12			20			17		53	1	16	15	31	35	7	12	13	4	3	36	23	8	8	23	30	3	5	22	63	37		
Springbok		89	378			6	102	26	91	64	19	116	2	12	98	336	154	3	93	83	174	54	232	11	103	128	110	75	260	47	270	186		
Steenbok		6	6		1		17		2	32		13	4	1	3	11	1	1	19				2		4	2	3	1	1	15	1	10	1	
Hartmann's Zebra		21	23		8	94			4	121		75	22	4	11	48	4		115			3	8	5	8	14	3	5	34	10	62	12		
		20	43			59	62		13	26				18	26			1				3				28		10			49			
		101	130			199	182		16	70				128	104							10				100		72			250			

(*) Values in bold are numbers of animals seen along transects.

(**) Values in shaded rows are minimum estimates assuming all animals within 500m on each side of the transect line are detected i.e. there is no adjustment for drop off in detection with distance from the transect line. In addition, for springbok, gemsbok and giraffe, large groups were excluded from extrapolations and added afterwards. The sum of these values will be significantly lower than the totals indicated in the top left table as the total estimates take account of species detection curves.

(***) NDVI is a measure of 'greenness' or biomass cover. The value presented is the % difference between the current year and the long term average (2013-22). A negative value (red or orange) indicates there was less biomass cover than average while a positive value (green) indicates there was more cover.