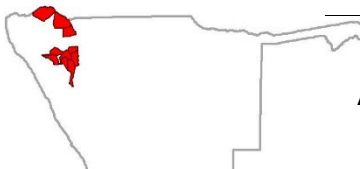


FULL MOON WATERHOLE COUNTS IN NORTHERN KUNENE

2024



A collaboration between NACSO, MEFT and environmental NGOs



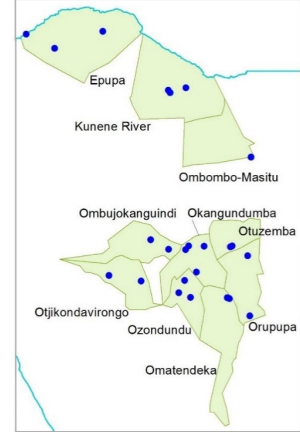
Waterhole Animals Seen

Primary count focus:

To derive estimates for two species:

Elephant
Black-faced impala

These species are not well represented in vehicle transect counts.



Waterhole Animals Seen	Epupa		Kunene River		Okangundumba				Ombujo-Kanguindi		Orupupa		Ozondundu			Otuzemba				Omatendeka				Otjikondavirongo		Ombombo-Masitu		Otjambangu		Total									
	Elambue	Ojomazeva	Okombine	Ombahu	Epunguwe	Okahua	Omao	Omunuandjai	Oijite	Okapangekua	Okatumba Dam	Okaturukira	Otjondeka	Okarumbu	Okomuhana	Otjomatamba	Okatuzembona	Omukungu	Otjikongo	Otut-Okarindi	Okavare	Okondundu	Okavantje	Otjomumbonde	Okozondjupa	Otjijeue	Okozongupa	Ombombo	Otjiuere										
Count days	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	
Baboon										89	69	39																									101	716	
Black-face impala	31	16	75	7						32	17	78	38		15		428	88	37						1	2												1,095	
Cheetah												10			1											2													13
Dik Dik	13	3								5		1		5	4																							33	
Duiker	7	2	3	3						1					2								3												9		30		
Eland															23																							84	
Elephant						165	4	93	17			99		13	8	6																		4	4			437	
Gemsbok																																			9		9	55	
Giraffe			4	1								13	3																									116	
Hyaena, Spotted												1			1		3	1	3																2			14	
Jackal, Black-backed						2		2	3	8		1		2	2		3	1	4	1														3	24		67		
Klipspringer		1									5				5																						19		
Kudu			8							66	12	61	245		77	18	213	59	68						10	4	5	216						37			1,155		
Leopard															5																						6		
Lion																																					3		
Ostrich						13			9	6				2	3																					26	88		
Porcupine																																					3		
Springbok				3		26			9	6		29																								228	936		
Steenbok																																					16		
Warthog																																					1		
Zebra, Hartmann's																																					103	1,883	
Cattle	65		63		1,031	161	286	586	808			82		273	469	9	342	187	22	177	23															5,747			
Goats	50		190		3,621	1670	2,990	2,070	3,473			317			1,690	60	1,832	325	253	186																	25,151		
Sheep			40		1,087	40	888	1,177	931			96			644	291	70	67	91																		5,815		

Overall Estimates

Last 5 years

Species	2024	2023	2022	2021	2020	Seen in Transects 2024
	Focal Species					
Black-faced impala	731	839	703	748	977	15
Elephant	261	293	316	266	147	2
Other species						
Eland	113	97	172	35	46	0
Gemsbok	73	167	125	12	92	7
Giraffe	154	323	237	51	153	35
Kudu	769	859	393	591	788	8
Ostrich	118	174	159	95	219	108
Springbok	1,248	1,047	871	124	1,331	1,256
Zebra, Hartmann's	1,256	1,310	1,223	888	999	48

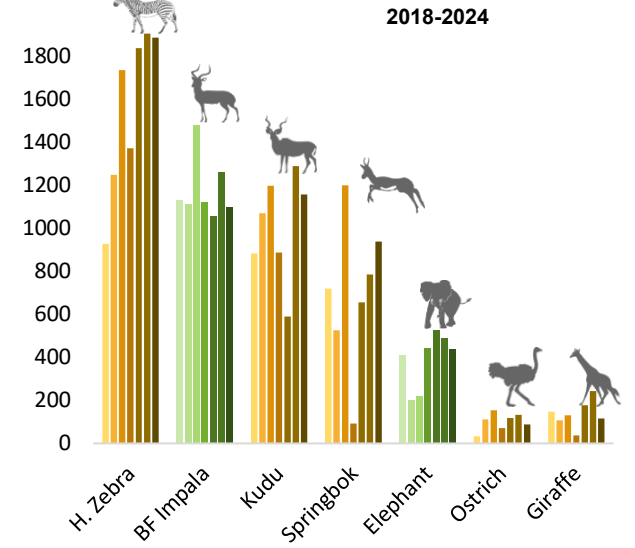
Waterhole counts were undertaken at selected sites in the escarpment zone of north-west Namibia. In 2018, 18 waterholes in 7 conservancies were counted but from 2019 onwards, the number of waterholes was increased to more than 25 covering 11 conservancies. Counts were undertaken over a period of 2, 3 or 4 days during which time all animals seen were counted.

Game species differ in the frequency with which they need to visit water resources with some able to acquire much of their hydration needs through foraging. Waterhole counts are therefore best suited to species (like elephants) which need to make regular trips to water points.

Estimates are calculated using the number of count days, and the drinking frequency of the species. They are crude estimates as they are influenced by several assumptions including drinking frequencies and independence of sightings.

The value of waterhole counts over line transect counts for some species, is well illustrated opposite. In the same conservancies, many more black-faced impala, elephant, kudu and Hartmann's zebra were recorded in the waterhole count, compared to the transect count.

Animals Counted 2018-2024



Using assumed drinking frequencies of 2 days for black-faced impala and 1.8 days for elephants, we obtain the following average estimates (over the five years 2020-2024): **Black-face impala 800; Elephant 228.**

Waterhole Estimates (by conservancy)

DF = drinking frequency	Epupa				Kunene River				Ombujo-Kanguindi				Okangundumba				Ozondundu				Otuzemba				Orupupa				Omatendeka				Otjikondavirongo				Otjambangu				Ombombo-Masitu			
	2024	2023	2022	2021	2024	2023	2022	2021	2024	2023	2022	2021	2024	2023	2022	2021	2024	2023	2022	2021	2024	2023	2022	2021	2024	2023	2022	2021	2024	2023	2022	2021	2024	2023	2022	2021	2024	2023	2022	2021				
Focal Species																																												
Black-faced impala	2	32	97	107	26	55	374	222	276	32	34	39	54																															
Elephant	1.8																																											
Other species																																												
Eland	4																																											
Gemsbok	4																																											
Giraffe	4					6	45	6	39					3	4	7																						5						
Kudu	2	21	5		5	111	32	19	52	40	27	34	4	8		63	26	41	30	226	215	111	155	204	254	90	324	33	73	31	13	10	5	5	1	25	39	46	147	67	5	15		
Ostrich	4																																											
Springbok	4				4			4	39	16																																		
Zebra, H.	2					1		1																																				

The waterholes counted each year varied in some conservancies.

Distribution (of a selection of species)

Numbers seen: Low ● → High ●

