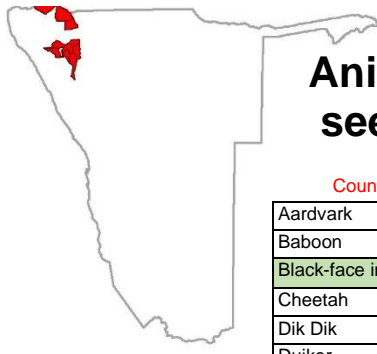


FULL MOON WATERHOLE COUNTS IN NORTHERN KUNENE

2021



Animals seen

Count days

	Kunene River	Ehomba	Okombine	Ombahu	Okangundumba	Epinguwe	Okahua	Omao	Omunuandjai	Ojite	Ombujokanguindi	Okapangekua	Ozondundu	Okarumbu	Okomuhana	Ojomatamba	Otuzemba	Okatuzembona	Omukungu	OTut-okarindi	Omatendeka	Okavanje	Okondundu	Otijkondavirongo	Okozondjupa	Ojiteje	Orupupa	Okaturukira	Ojondoka	Ombombo Masitu	Ombombo	Epupa	Etambue	Ojomazeva	Ojimborombonga	Total		
Aardvark								1																														1
Baboon												52		450				16				130	112					66							85	911		
Black-face impala		67	300	47							81							332	70			80			4		88	14					21	12	6	1,122		
Cheetah																											4									4		
Dik Dik		2									4				2										3								2	1	3	17		
Duiker		1	5	3							3													3	1							1	1	1	1	19		
Eland															15				2								3	6								26		
Elephant						12			124	2				2	1					97							54		152							444		
Gemsbok																			9													4				9		
Giraffe			29				5																													38		
Hyaena																		2									3									5		
Jackal							3	1		1		2						3	2	1					1		1									15		
Klipspringer												2			2								2	6		7										19		
Kudu			28								51				45			183	49			7	12		2		179	307		22					885			
Leopard																												1								1		
Ostrich						7			6	1				27	3			6	8								3	10							71			
Porcupine																																				1		
Springbok			3			11	21		32	9																		17								93		
Steenbok			10	2			1					2							1	1					1		4									22		
Vervet Monkey											30																									54		
Warthog																																				3		
Zebra, Burchell's																		8	22									10								40		
Zebra, Hartmann's			1												484			489	150			5	40		7		121	33							1,330			

Primary count focus:

To derive estimates for two species: **elephant** and **black-faced impala**; species which are not well represented in vehicle transect counts.

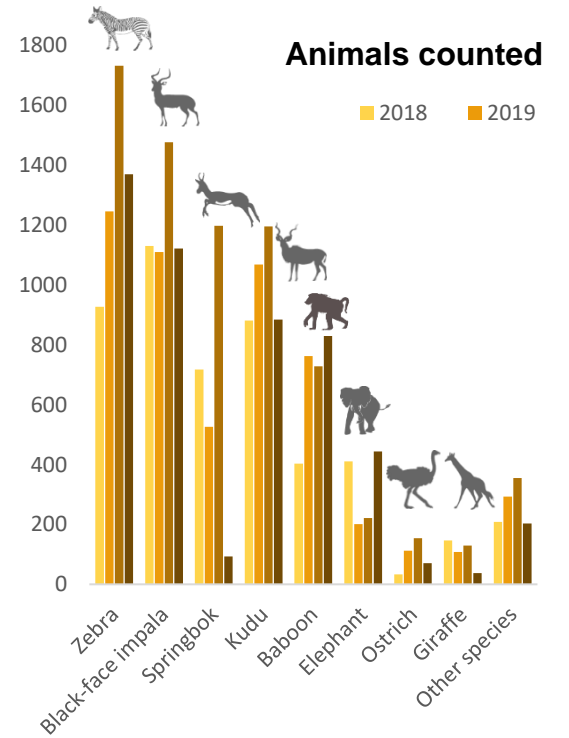
North West Waterhole Counts

Counts were undertaken at waterholes in the escarpment zone of north west Namibia. In 2018, 18 waterholes in 7 conservancies were counted while in 2019, 2020 and 2021, the number of waterholes was increased to around 26 covering 10 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 make infrequent discrete trips to specific water points.

Estimates of animals are calculated by correcting the numbers seen over the entire count period using the number of count days, and the drinking frequency of the species. They are therefore crude estimates and should be considered a guide to the relative abundance of animals in the area. Values are influenced by several assumptions including drinking frequencies and independence of sightings. Using assumed drinking frequencies of 2 days for black-faced impala and 1.8 days for elephants, the following average estimates (over the four years 2018-2021) were calculated: Black-face impala 805; Elephant 187

Of interest in 2021 is the marked drop in numbers of many of the other plains game species.



Waterhole Estimates

DF = drinking frequency (days)

Focal Species	DF	Kunene River				Ombujokanguindi				Okangundumba				Ozondundu				Otuzemba				Orupupa				Omatendeka				Otijkondavirongo				Ombombo-Masitu				Epupa				Total			
		2021	2020	2019	2018	2021	2020	2019	2018	2021	2020	2019	2018	2021	2020	2019	2018	2021	2020	2019	2018	2021	2020	2019	2018	2021	2020	2019	2018	2021	2020	2019	2018	2021	2020	2019	2018								
Black-face impala	2	276	273	392	311	54	48	26	38									268	103	147	212	68	90	103	140	53	32	63	52	3		9				26	431	1	748	977	740	754			
Elephant	1.8						27			83	45		97	2	58	47	74	58		3	34	32	34	30				7				91	9	14	266	147	121	212							
Other species																																													
Eland	4												20	8			3	11			12	19	4				19	25	45									35	46	40	45				
Gemsbok	4																12	7	7			1					84	27	77									12	92	47	77				
Giraffe	4	39	9	9			3		7													19	5			143	113	173		5							51	153	144	178					
Kudu	2	19	66	64	22	34	89	9	33		42	1	30	84	24	155	133	183	158	324	267	196	240	13	42	100	122	1	17	27	15	41	68	47	591	788	712	576							
Ostrich	4					105	95		19	18	4	40	44	5	16	19	17	12	4	17	16	20	4			18	17	12								95	219	149	40						
Springbok	4	4				252	8		97	113	101	15								23	51	21	87			887	640	733		13	32					124	1331	701	920						

The number of waterholes counted each year varied in some conservancies, and in 2018 waterholes in 3 conservancies were not counted

Distribution (of a selection of species)

Numbers seen

Low ● → ● High

