GONDWANA KALAHARI PARK GAME COUNT 2023

GONDWANA KALAHARI ANIB LODGE NAMIBIA

This poster provides summarized results and analysis of the annual game count held in the Gondwana Kalahari Park on 16th and 17th of June 2023.
The relentless drought has left the park in dire veld condition. The 2022-2023 rainfall season was 63% lower than the previous years rainfall.
However, due to the above average rainfall of 319mm in 2021-2022, there is still enough grazing for the animals. Due to the available grazing, no animals received additional feeding during these periods. This year's game count results showed an increase in the game numbers by 45.2%, with gemsbok numbers increasing by 165% compared to 2022 and plains zebra and wildebeest up by 17% each.
Red hartebeest have all disappeared from the park as most of them died, a few were harvested, and a few got onto neighbouring properties since 2019.
As a result of the drop in number of animals and species during the drought period of 2019 and 2020, followed by the increase in rain over 2021 and 2022, all the animals have been successfully reproducing during the past year.
The parks modelled carrying capacity has increased and the grazer biomass has remained low.
This allows the management of the park to relook at potentially introducing more animals which in turn will benefit the gene pool of the current species in the park.

Count Methodology

The main objectives of the game count is to determine the density and distribution of game using a combination of road strip census and the game distribution map. This information is then used to get the total estimate number of game in each area.

Road-Strip count:

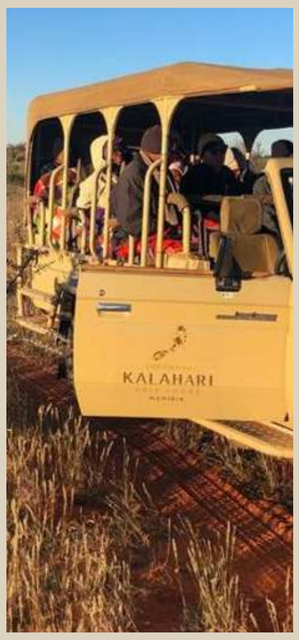
During the game count, 5 game count routes are driven and the animals on each side of the road are counted. The number of animals that were recorded and the total distance travelled on that route are then used to calculate the population estimates.

Game distribution maps

Each route is supplied with a map containing the monad grid which is used to determine and show the distribution of games in the various zones of the count.

Objectives of the game count

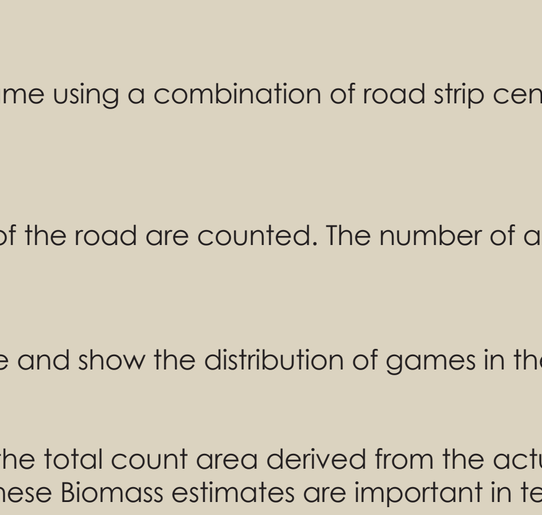
1. **Population and Biomass estimate** is the population estimate for individual species in the total count area derived from the actual number of animals seen during the count. As well as, the relevant species and area correction-factors that are applied to that number. These Biomass estimates are important in terms of managing habitat conditions and inert-species competition.
2. **Wildlife density and distribution** is used for resource management purposes. This gives a better reflection of where the animals are and how densely populated each count zone is.
3. **Population changes** is the total number of game counted compared to those from previous years to illustrate the population change.



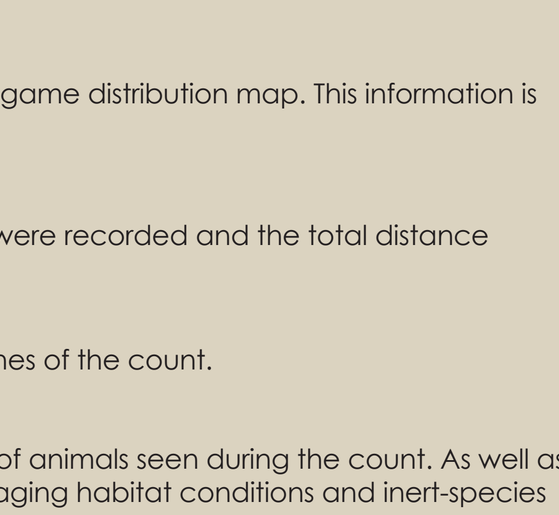
Total number of game counted

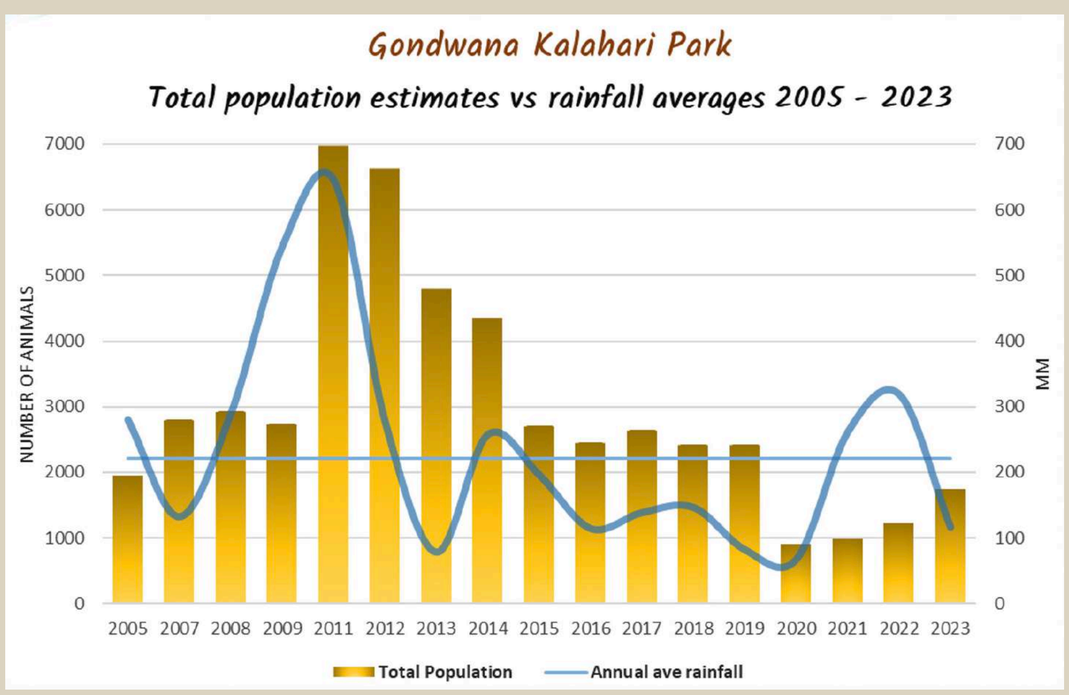
2022		vs	2023	
Species	Ave No. Counted		Species	Ave No. Counted
Gemsbok	28		Gemsbok	80
Springbok	494		Springbok	715
P Zebra	8		P Zebra	30
Blue Wildebeest	22		Blue Wildebeest	41
Red Hartebeest	0		Red Hartebeest	0
Eland *	16		Eland *	27
Ostrich	21		Ostrich	42
Kudu	12		Kudu	15
Giraffe *	24		Giraffe *	26
Steenbok	2		Steenbok	7
Total	**625**		**Total**	**982**

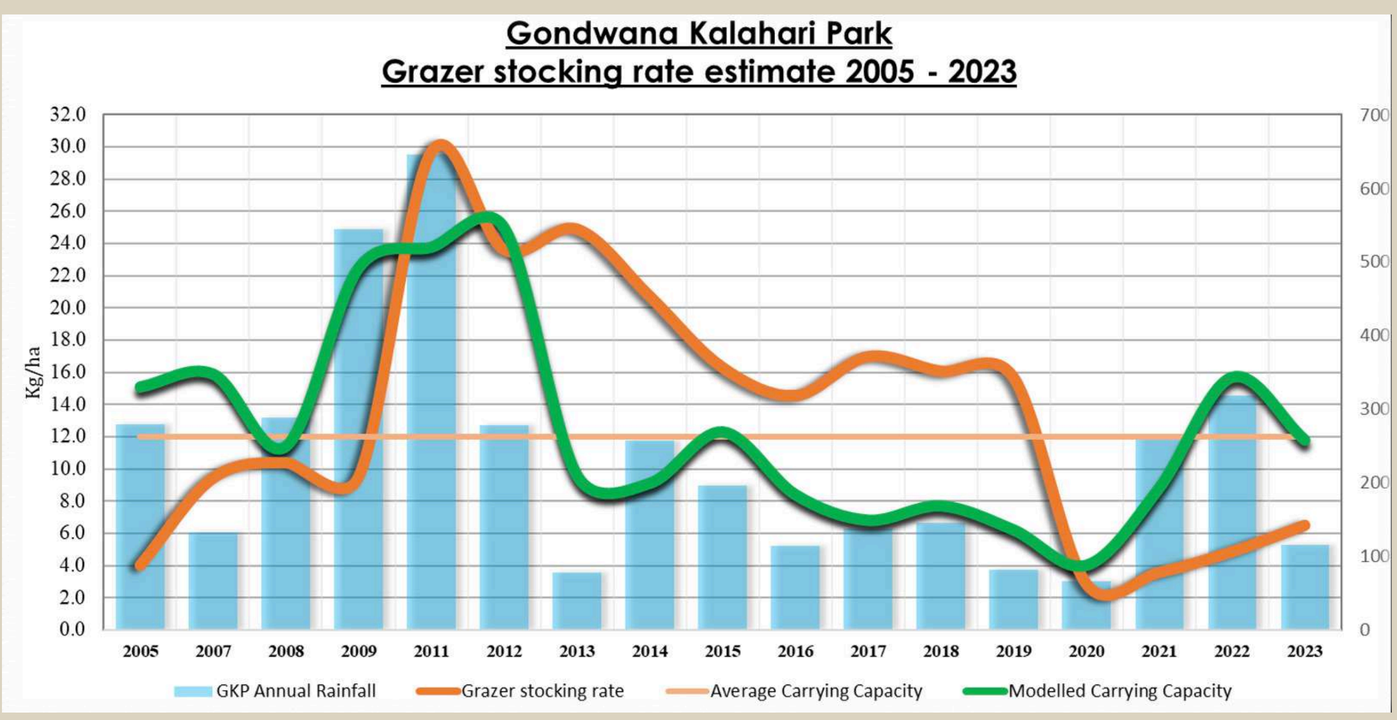
Grazer/Browser biomass composition 2023



Grazer/Browser biomass composition 2022







Species population estimate change 2016 - 2023

	2016	2017	2018	2019	2020	2021	2022	2023	
Gemsbok	172	279	255	180	24	55	56	148	165%
Springbok	1478	1519	1317	1032	683	741	1188	1622	36%
***P Zebra** *	72	80	89	*90*	7	25	30	*35*	17%
***Blue Wildebeest** *	222	230	247	*220*	7	35	43	*50*	17%
***Red Hartebeest** *	109	121	118	*120*	0	0	0	0	0%
***Eland** *	*92*	*100*	*88*	*90*	18	18	24	*30*	26%
Ostrich	219	228	123	421	58	60	39	72	81%
Kudu	70	67	79	87	28	32	24	29	25%
***Giraffe** *	*13*	*15*	*16*	*18*	22	23	25	*27*	8%
Steenbok	251	144	101	168	53	18	21	93	343%
Total	**2697**	**2782**	**2433**	**2426**	**899**	**1007**	**1450**	**2105**	45%
Total population change	**-0.3%**	**3.2%**	**-12.5%**	**-0.3%**	**-62.9%**	**12.0%**	**43.9%**	**45.2%**