

GONDWANA CANYON PARK GAME COUNT 2023



Following the good and consistent rainfall in 2022, unfortunately this year the park received low and scattered rainfall. Rainfall is the biggest driver of veld and animal condition in the 117,360 ha semi open Gondwana Canyon Park. Due to the good rainfall from 2022, the veld in the central plains was still in a relatively good condition. As a result, the wildlife was still in a good condition as well. The Gondwana Canyon Park's annual game in July 2023 showed a significant increase in oryx (+75%) and mountain zebra (+53%) numbers, while springbok (-172%), ostrich (-177%), klipspringer (77%) and kudu (-77%) decreased compared to 2022. The park modelled carrying capacity now stands at 5.1 kg/ha, while its total grazer biomass is 4.7 kg/ha. Thr game distribution has shifted to the central plains compared to 2022's more northern density. This is due to low overall rainfall in the park this season, but the central plains maintained good grass biomass. Thus, most of the wildlife was counted in the central regions of 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, 8 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.

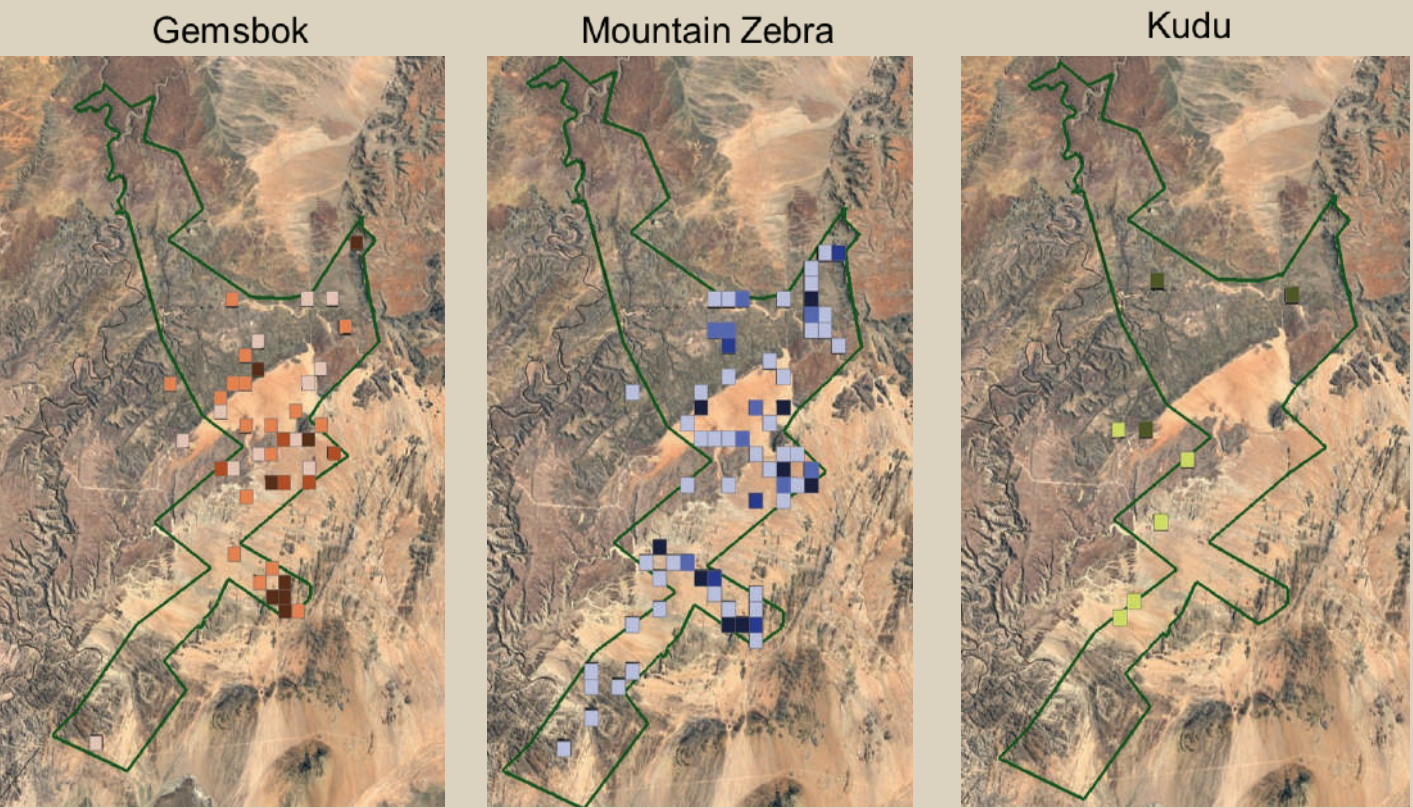
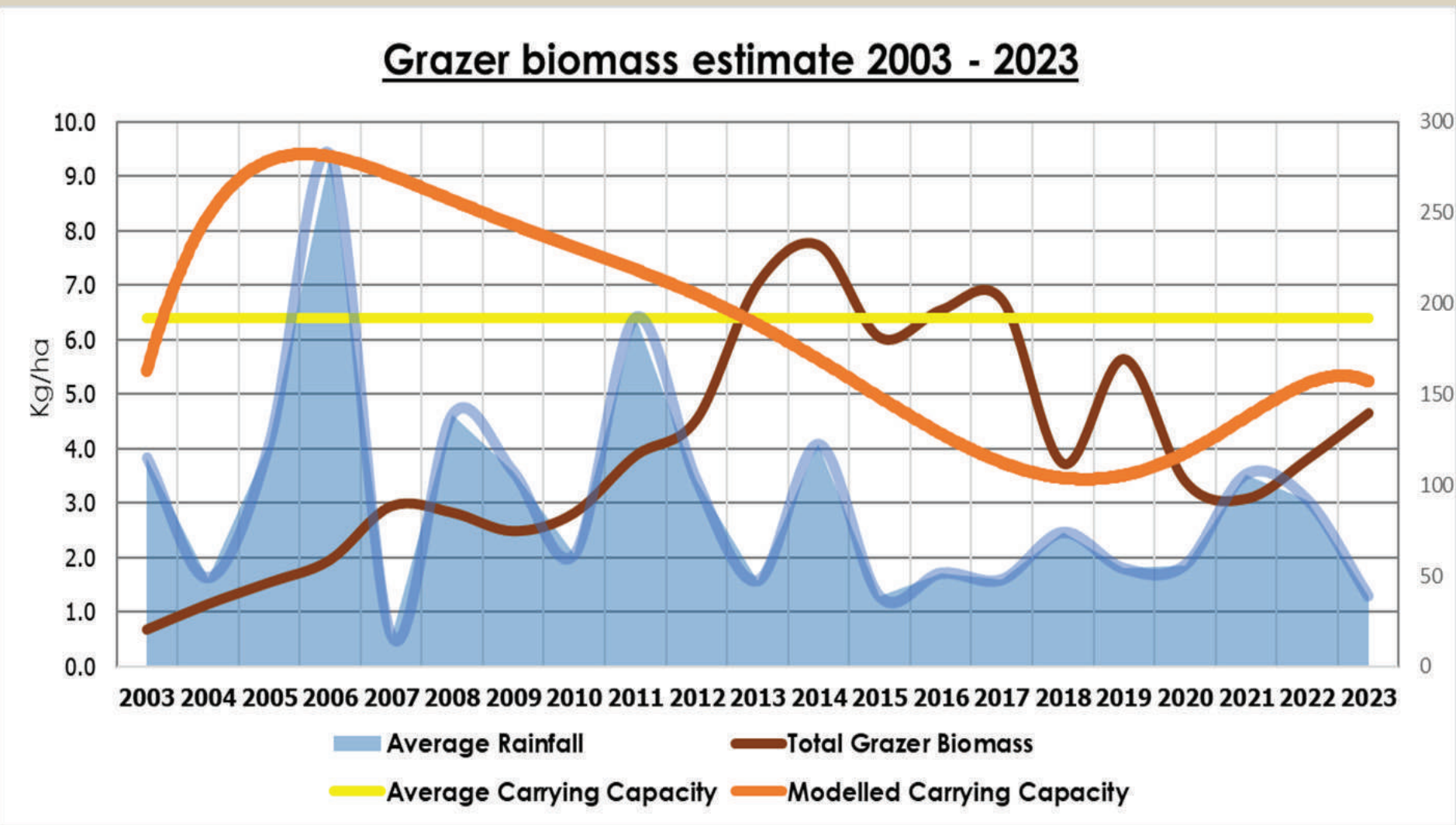
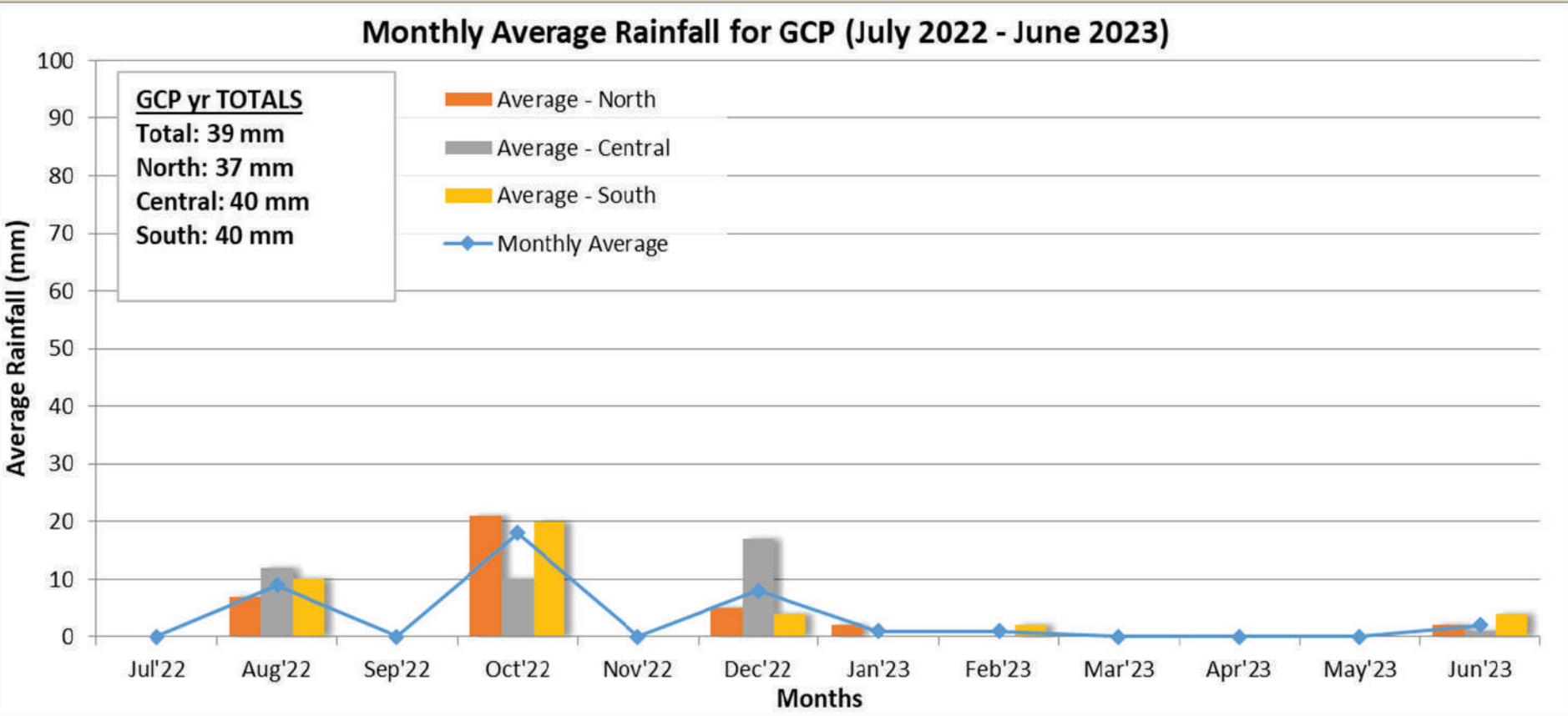
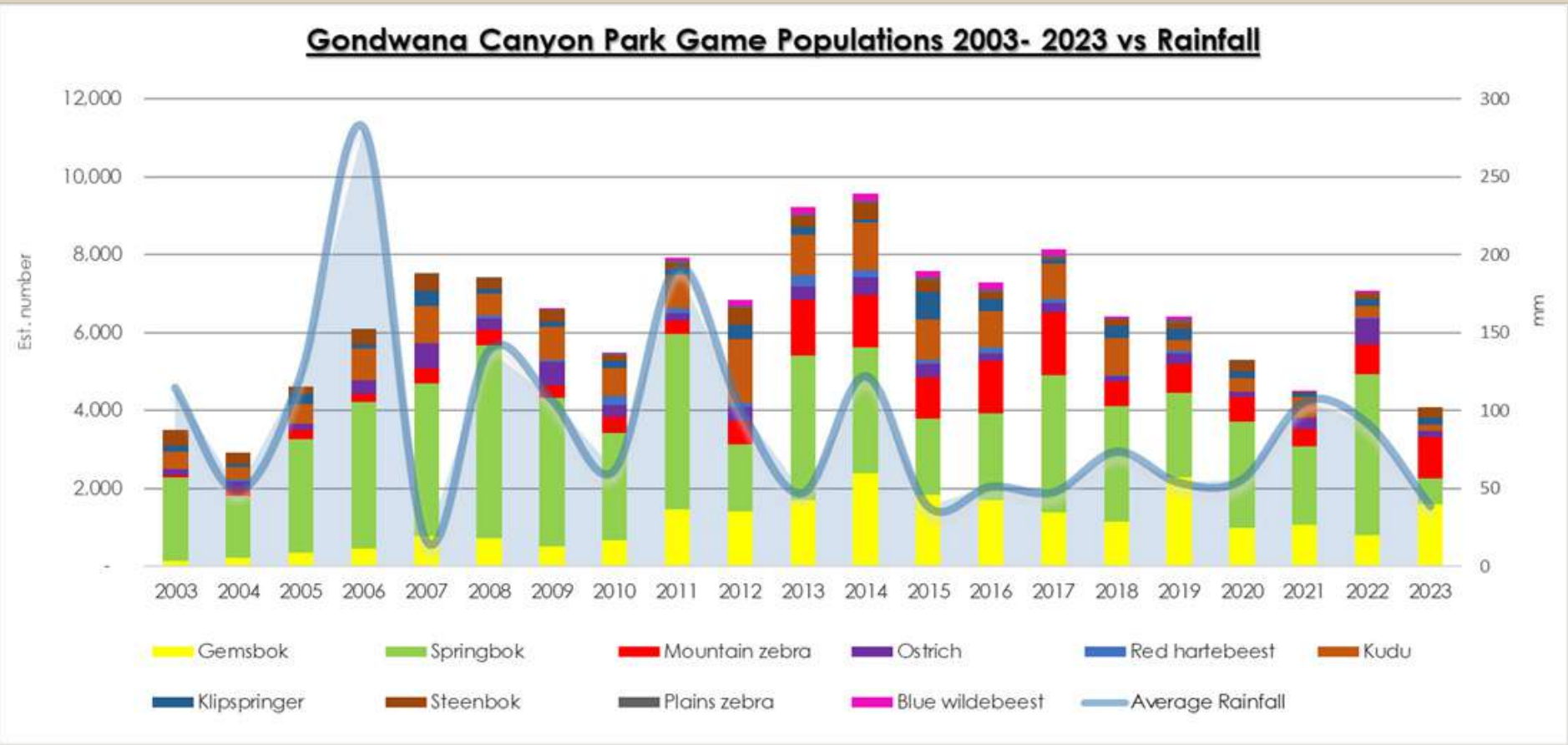
Game distribution maps

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.

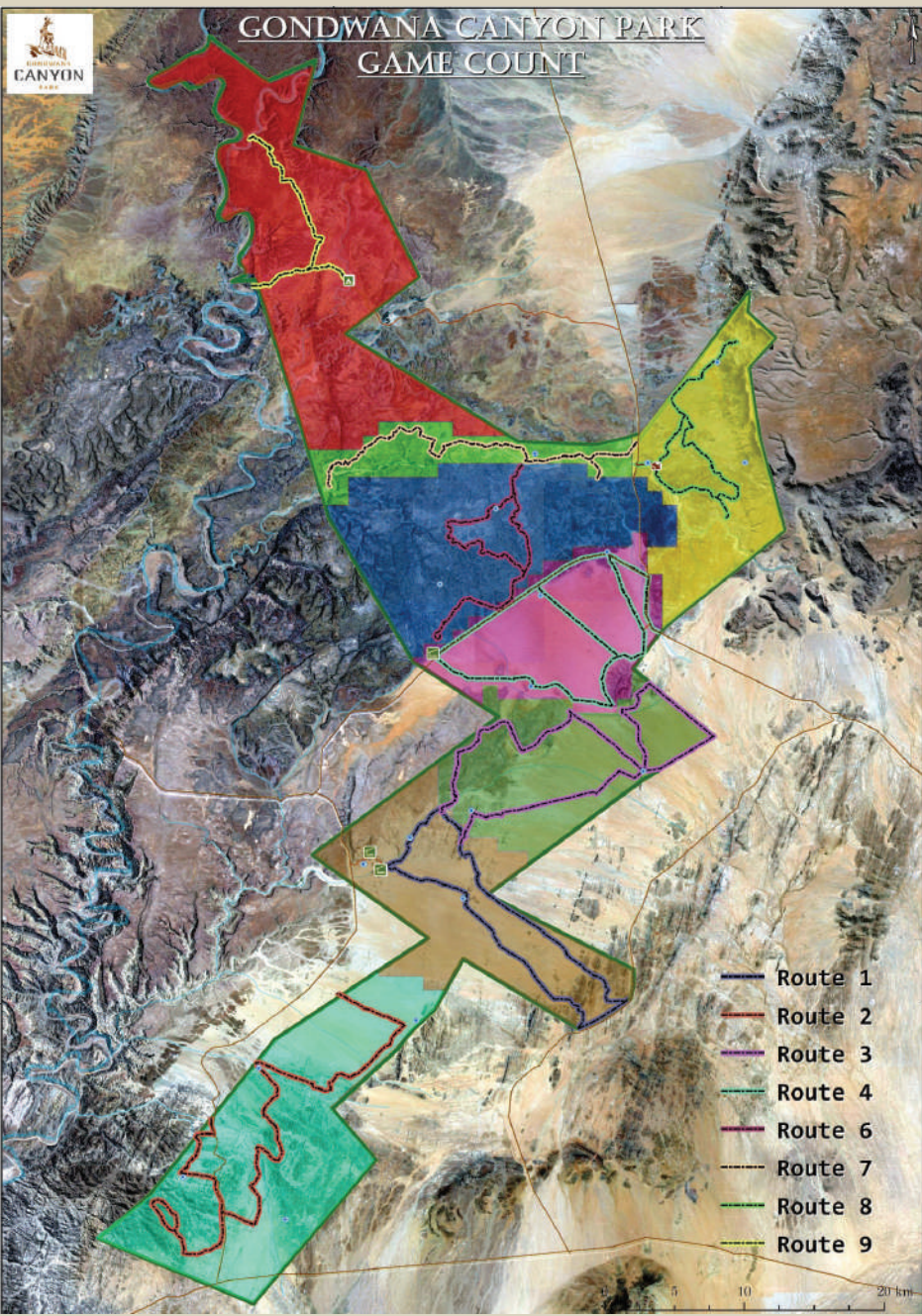
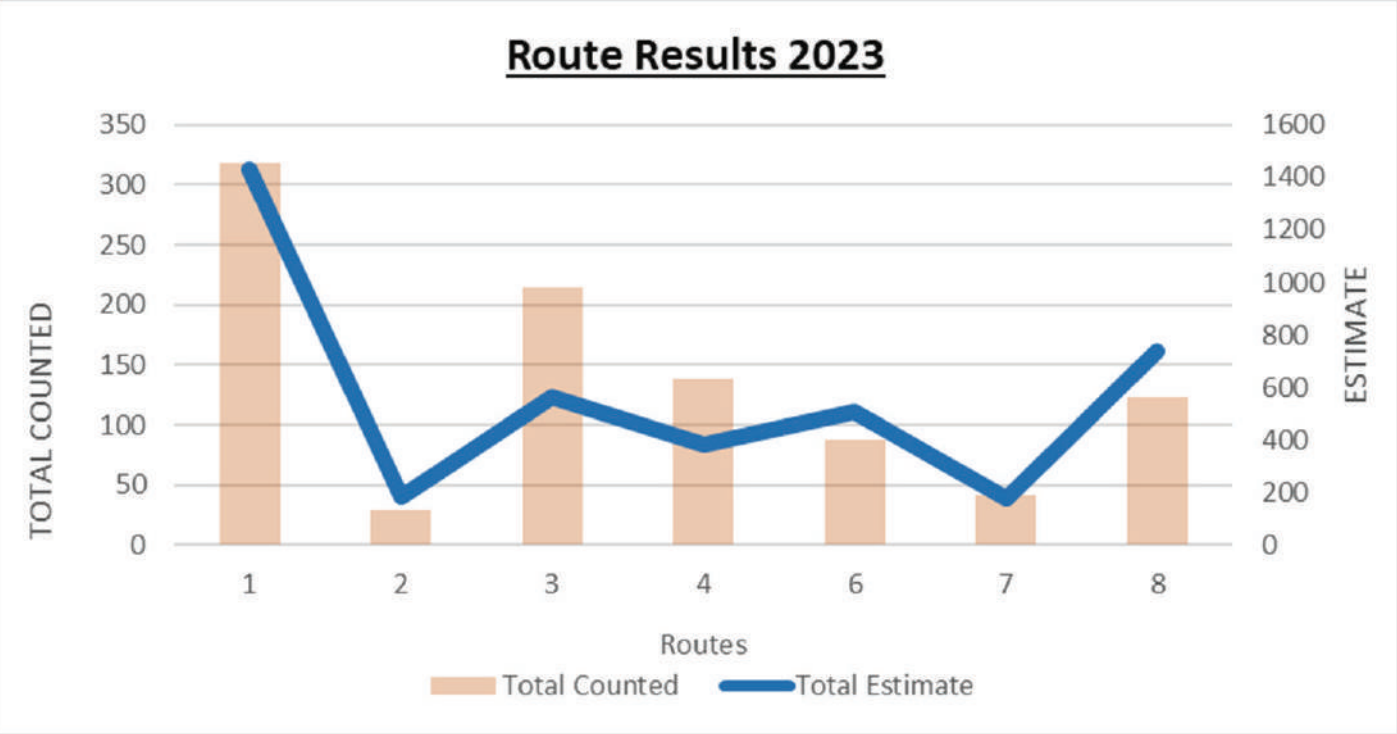
Objectives of the game count

- 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.
- 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.
- Population changes** is the total number of game counted compared to those from previous years to illustrate the population change.

Gondwana Canyon Park Game Populations 2003- 2023															
	2003	2005	2007	2009	2011	2013	2015	2017	2018	2019	2020	2021	2022	2023	Change 2022-2023
Gemsbok	135	347	776	520	1,467	1,716	1,842	1,388	1,155	2,298	980	1,059	806	1,588	97%
Springbok	2,158	2,906	3,916	3,801	4,487	3,704	1,950	3,528	2,968	2,148	2,726	2,020	4,133	659	-84%
Mountain zebra	33	247	407	330	355	1,424	1,059	1,596	625	756	649	452	773	1,071	39%
Ostrich	168	155	631	600	181	344	340	235	141	252	123	284	658	154	-77%
Red hartebeest		12	5	57	130	296	123	120	19	91	-	10	10	-	-100%
Kudu	459	492	940	846	844	1,025	1,021	886	943	268	338	536	295	175	-41%
Klipspringer	142	270	396	121	149	198	706	120	336	285	204	93	191	168	-12%
Steenbok	404	183	440	301	188	269	297	32	147	134	260	18	131	272	108%
Plains zebra	(Numbers known)		13	30	45	71	71	60	20	91	31	-	38	-	-100%
Blue wildebeest	(Numbers known)			33	86	170	170	170	60	100	-	50	50	-	-100%
Total	3,499	4,612	7,524	6,639	7,932	9,217	7,579	8,135	6,414	6,423	5,311	4,522	7,085	4,087	-42%



GCP Estimated Wildlife Populations 2003 - 2023							
	2018	2019	2020	2021	2022	2023	
Gemsbok	1,155	2,298	980	1,059	806	1,588	74%
Springbok	2,968	2,148	2,726	2,020	4,133	659	-172%
M zebra	625	756	649	452	773	1,013	53%
Ostrich	141	252	123	284	658	154	-177%
R hartebeest	19	91	-	10	10	-	
Kudu	943	268	338	536	295	104	-36%
Klipspringer	336	285	204	93	191	119	-77%
Steenbok	147	134	260	18	131	272	
P zebra	20	91	31	-	38	-	
B wildebeest	60	100	-	50	50	-	
Total	6,414	6,423	5,311	4,522	7,085	3,909	0%



Total estimated numbers of game 2022		
Species	No. Counted	Estimate 2022
Gemsbok	184	806
Springbok	739	4133
Mountain Zebra	227	773
Ostrich	205	658
Hartebeest	0	5
Kudu	46	295
Klipspringer	30	191
Steenbok	5	131
Plains zebra	18	38
Blue Wildebeest	0	50
Total	1454	7080

Total estimated numbers of game 2023		
Species	No. Counted	Estimate 2023
Gemsbok	403	1588
Springbok	139	659
Mountain Zebra	319	1013
Ostrich	43	154
Hartebeest	0	0
Kudu	17	104
Klipspringer	13	119
Steenbok	12	272
Plains zebra	0	0
Blue Wildebeest	0	0
Total	946	3909