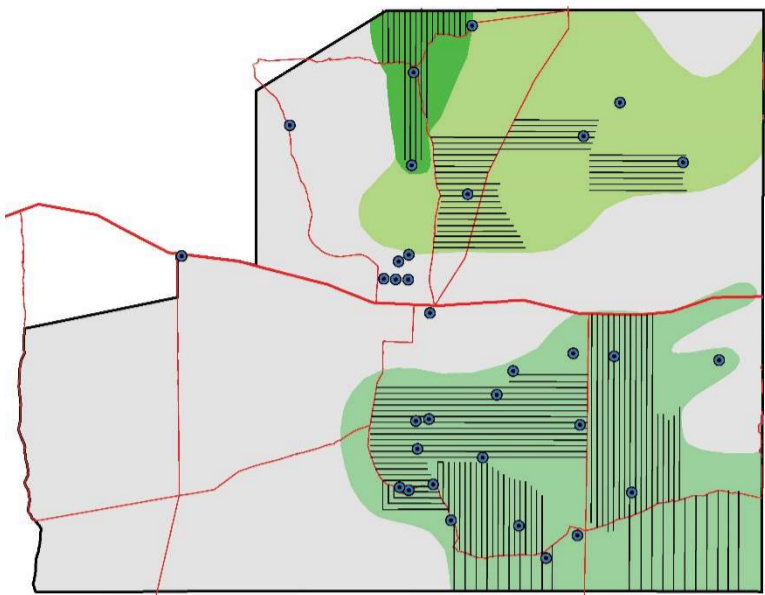


GAME COUNTS – LINE TRANSECTS & WATERHOLE COUNTS

2018

NYAE NYAE CONSERVANCY

Line Transects:



Area represented = 420,000 ha.

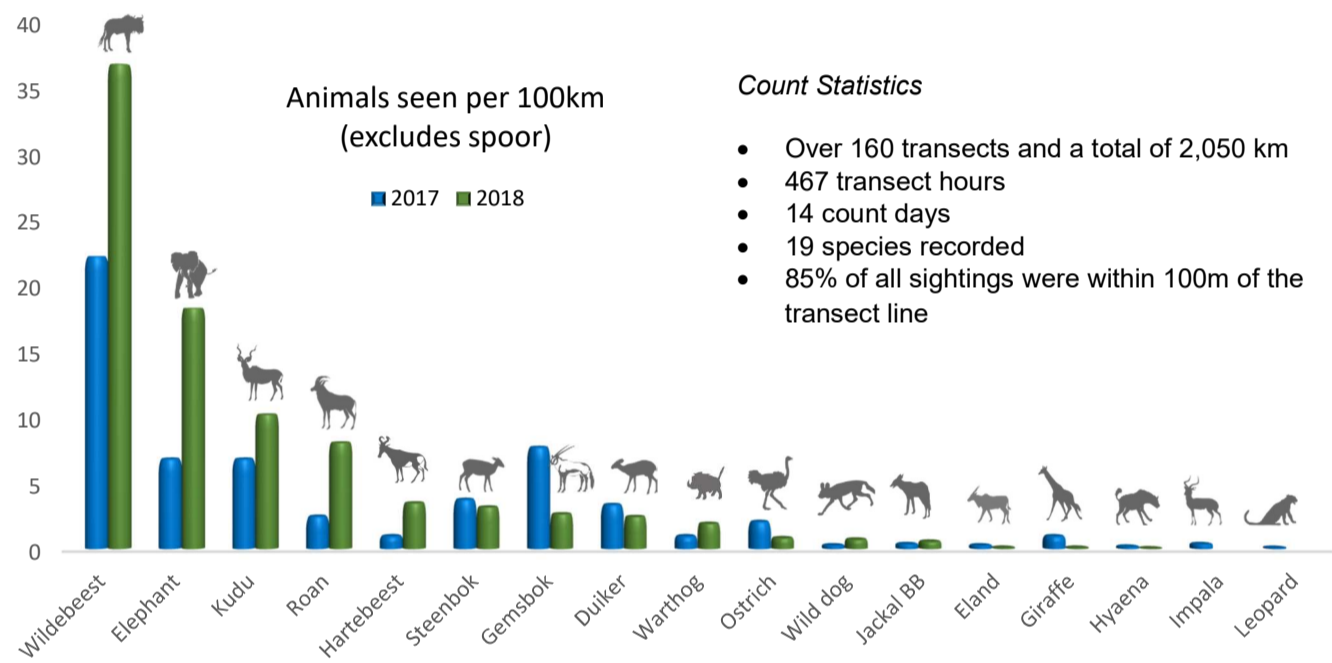
Estimates

Species	Estimate	95% CL Low	95% CL High	Model
Duiker	780	520	1170	HN
Elephant	1150	690	1940	U
Gemsbok	320	170	610	U
Kudu	1480	930	2340	HN
Ostrich	70	30	160	U
Roan	670	320	1405	U
Steenbok	1360	990	1880	HN
Warthog	290	130	670	U
Wildebeest	3750	2350	5980	U

Estimates (rounded) were derived using DISTANCE analysis which takes account of drop-off in animal detectability with distance from the transect line. Nine species had sufficient sightings to adequately derive species detection curves and therefore produce estimates. This number will increase with additional count years. Model: U=uniform; HN=half normal.

Animals seen

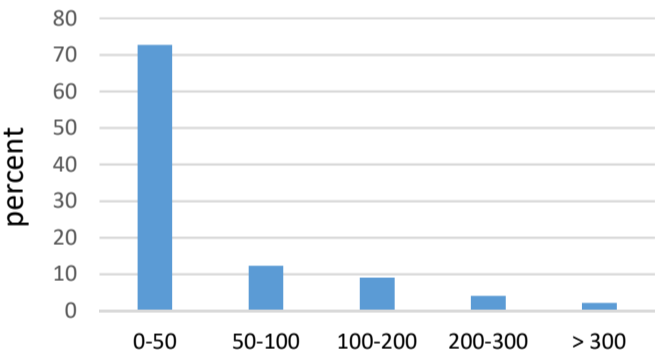
Species	Animals Seen		Groups seen	
	2017	2018	2017	2018
Duiker	53	47	50	44
Eland	5	2	1	2
Elephant	107	351	43	68
Gemsbok	122	51	23	17
Giraffe	16	2	4	1
Hartebeest	16	67	3	8
Hyaena	3	1	3	1
Impala	6		2	
Jackal BB	6	11	6	8
Kudu	108	196	33	50
Leopard	2		2	
Ostrich	32	16	13	9
Roan	39	155	10	22
Steenbok	59	61	59	56
Warthog	15	37	7	15
Wild dog	5	14	2	2
Wildebeest	348	707	30	56



Count Statistics

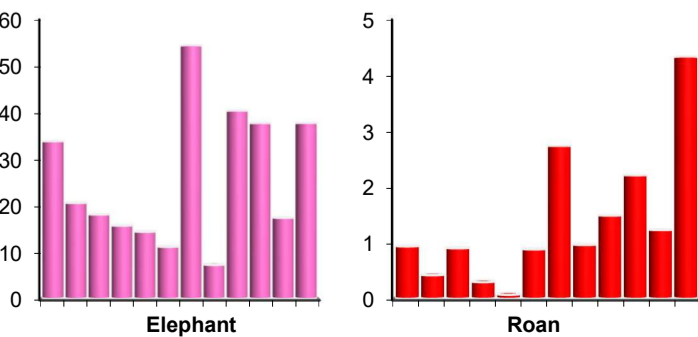
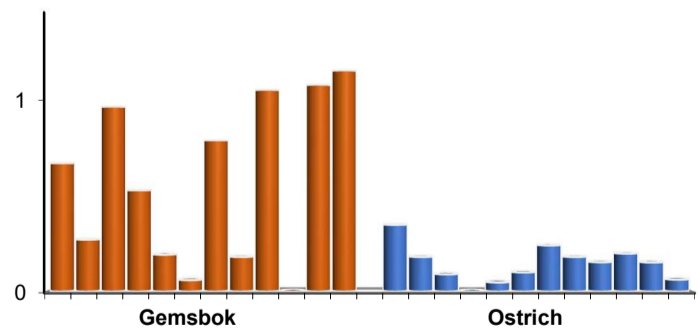
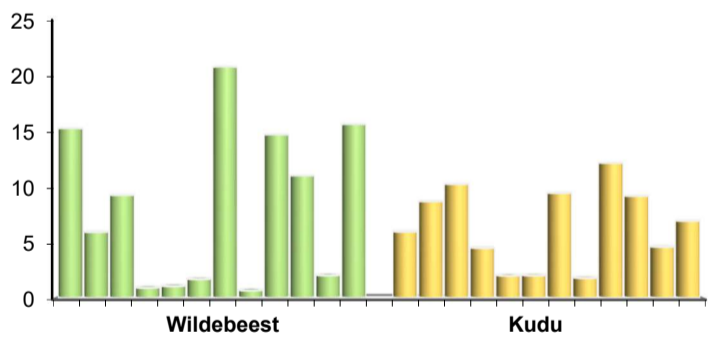
- Over 160 transects and a total of 2,050 km
- 467 transect hours
- 14 count days
- 19 species recorded
- 85% of all sightings were within 100m of the transect line

Distance to animal/s (m)



Waterhole Counts:

Animals per day per waterhole (2007-2018)



2018 Count

Species	Seen	Waterhole Estimate	Transect Estimate
Buffalo	384	192	**
Duiker	4	*	780
Elephant	1733	1573	1150
Gemsbok	55	110	320
Kudu	315	324	1480
Ostrich	3	*	70
Roan	207	155	670
Steenbok	13	*	1360
Warthog	89	89	290
Wildebeest	597	448	3750

* these species are not waterhole dependent
** Transects are not undertaken in the buffalo camp

Count Statistics

- 45 waterhole count days
- 23 waterholes
- 22 species recorded
- Top 5 species in terms of numbers recorded were elephant, wildebeest, buffalo, kudu, roan antelope

Synopsis

Line transects were started in 2017 and represent almost half of the total area of the conservancy and include most of the waterholes. The area not covered by transects has low animal densities due to reduced habitat suitability and people pressure.

Transect counts recorded 19 species and waterhole counts recorded 22.

The top 5 species in terms of sightings from both counts included elephant, wildebeest, kudu and roan antelope. Buffalo were recorded at waterholes but not in transect counts because they are confined to a camp not covered by transects.

In addition to game species all the main predator species i.e. lion, leopard, cheetah, hyaena and wild dog were recorded in both counts. Based on spoor sightings in transects hyaena are the most common predator, followed by leopard and wild dog.

Between 2017 and 2018 the waterhole count trends (left), are consistent with those from transect counts for most species. With the exception of elephant, estimates from waterholes are much lower than from transect counts. This is because waterhole counts are affected by the general availability of water in the landscape. Also estimates are derived from an approximation of species drinking frequency. Therefore, transect counts provide a means of deriving both better estimates and estimates for significantly more species than waterhole counts. However, it is very useful to be able to compare species trends provided by two separate counts and methods.



http://conservationphotographynamibia.com