

DE BEERS CONSOLIDATED MINES LIMITED

WILDLIFE MANAGEMENT

ROOIPOORT AERIAL CENSUS  
22-24 MARCH 1996

## ROOIPOORT AERIAL CENSUS - 1995

The annual Rooipoort aerial census was carried out from 23 to 24 March 1996 using a Dauphin helicopter ZS-RDL. For NFO, RCB & MPSB this was the fourteenth census since 1982. Richard Liversidge has "retired" on account of his failing eyesight and could not be present as he was overseas. PIP was on safari and his place was taken by assistant manager, Warwick Mostert. BVH, GARM & CS have been part of "the team" for the past four years.

Flying conditions were generally ideal with little wind and good light. However, below average rainfall in some blocks gave a brown background which reduced sightability in these areas.

The methodology was the same as in 1994 and 1995 with an strip width of 740 meters. Strip coordinates were programmed into the helicopter's GPS and all systems functioned without any problems.

Pilots:           Nicky Oppenheimer  
                  Norman Marais

	<u>PORT</u>	<u>STARBOARD</u>
Counters:	Warwick Mostert Clive Swanepoel	Graham Main Rudi Bigalke
Recorders:	MPSB	Berty van Hensbergen

### FLYING TIMES

Date	Area	Start	End	Counting time
23/3/95	ATS	07h18	08h25	1 hr 07 min
		refuel		
	Waterkolk	09h06	010h32	1 hr 26 min
		midday break		
	Sandveld	15h54	17h10	1 hr 16 min
24/3/95	Koppies	06h50	09h20	2 hr 30 min
		refuel		
	Pan	09h53	09h57	04 min
	No 3	09h58	11h11	1 hr 13 min
		<b>Total</b>		<b>7 hr 36 min</b>

Total flying time was 58 minutes longer than in 1995 due to a similar increase in flying time in the Koppies. In 1995 with no GPS four fewer strips were flown in the Koppies which reduced flying time in this block.

Areas were the same as in 1995. Strips started at the Box for Sandveld & ATS; Shaws Drift for the Koppies; tar road for No3; and, Pniel boundary for Waterkolk. The Sandveld/ATS blocks need to be revised to take account of the enlarged Sable Camp.

### SPECIES TOTALS

The totals are summarised in the attached table. These audited totals are the same as the provisional totals with the exception of jackal for which there was a typing error in the Koppies (reduced from 70 to 59).

A computer crash was experienced by the port side at the end of strip 3 in No3. The starboard computer recorded all observations for both sides for the remaining strips in this block. Attempts to retrieve port strips 1-3 were unsuccessful. The total animals seen by the starboard side for strips 1-3 was:

bateared	4	ostrich	2
blesbok	9	springbok	47
hartebeest	13	steenbok	1
gemsbok	40	zebra	6

It is statistically correct to assume that similar numbers for these species were seen by the port side. However, erring on the side of conservatism these numbers have not been added to the NO3 total.

Totals for most species were up on those in 1995. Of particular interest was the high number of bateared fox and jackal counted compared to 1995. The higher totals in 1996 for most species is probably attributable to the extra hour counting in the Koppies. Of concern was the low numbers of eland recorded which were some 200 less than the extrapolated post-birth estimate. It is thought that one herd of +/- 100 seen in the distance in the Koppies was not counted. Still this only accounts for half the missing eland.

A summary of the census totals since 1982 and the annual harvests is included in the tables.

### CONCLUSION

In conclusion, I think it was one of the best counts to date. Flying was extremely accurate and the high numbers of the smaller species recorded reflects the good conditions and observer alertness.

Once again thanks to all who contributed to the success of this the count and especially Nicky Oppenheimer who generously gave of his time and helicopter.



MPSB  
17.04.96

	WKLKTOT	TATSTOT	ROOIPOORT AERIAL CENSUS 1996				1996 TOT	1995 TOT
			SVLDTOT	KOPTOT	NO3TOT	PAN		
BATEARED	5	6	4	17	27	59	19	BATEARED
BABOON	1	1	1	4	1	8	6	BABOON
BLESBOK	60	0	1	113	47	307	198	BLESBOK
BLUEWBST	86	31	91	472	5	685	423	BLUEWBST
DUIKER	11	6	11	19	5	52	54	DUIKER
ELAND	108	15	16	136	54	329	767	ELAND
GEMSBOK	136	157	166	616	244	1319	964	GEMSBOK
GIRAFFE		5	3	36	8	52	34	GIRAFFE
GUINEAFOWL			2	5		7	7	GUINEAFOWL
HARTEBEEST	155	202	214	200	103	874	961	HARTEBEEST
IMPALA		29				29	18	IMPALA
JACKAL	15	10	11	59	13	108	66	JACKAL
KORI	4	1	1	10		16	7	KORI
MTN REED				7		7	4	MTN REED
KUDU	31	46	11	243	30	393	251	KUDU
NOO		1	2	54	4	208	226	NOO
OSTRICH		30	40	171	96	337	287	OSTRICH
ROAN			5			5		ROAN
SABLE		17				17	20	SABLE
SPRBOK	255	45	82	1094	470	1958	1948	SPRBOK
STEENBOK	12	19	8	8	1	48	32	STEENBOK
TSESSEBE		12				12	15	TSESSEBE
WARTHOG	58	43	35	82	30	248	153	WARTHOG
ZEBRA	0	82	20	175	178	459	408	ZEBRA
	937	758	724	3514	1316	7530	6868	



Rooiport 96

	Eland	Gemsbok	Hartebeest	Kudu	Ostrich	Springbok	Warthog	Wildebeest	Zebra
LCL	335	1341	886	426	343	1527	260	697	486
MEAN	335	1341	886	598	343	2135	377	697	486
UCL	335	1341	886	769	343	2743	495	697	486
ESW	370	370	370	239	370	238	233	370	370
			65%			64%	63%		

Graham,

Herewith estimates of Rooiport census

It appears to have been a particularly good count. All those spp with an effective strip width of 370 indicates that we counted all animals. For other spp we counted 63-65% of what is there.

Of interest is that I can't copy them that there are at best around 300 eland. - & that we did not miss any large herds. - Senekou Rooiport has lost 300 eland!!



2/9/00.