

17/11/1995

BLACK RHINO PROJECT (ZC 21/5/9): SUMMARY OF RESULTS FROM 1st SURVEY, UMFOLOZI GAME RESERVE

The field conditions in Umfolozi Game Reserve during the first survey have been extremely difficult. The long grass, as a result of the excellent rains last year and the low ungulate biomass has considerably reduced visibility, especially the lowland wooded areas where tall stands of Panicum spp. (1,4 m tall) make walking difficult and at times fairly dangerous.

A total of 188 hours (over 23 days) were spent in the field: all patrol blocks were covered on foot. A total of 505,7 km (map measured) were walked which averaged 18,06 km/day (range 5,4 - 32,0).

BLACK RHINOCEROS

1. Sex and age structure

		West	East	South	Total
Adult	♂	6	1		7
	♀	5		1	6
	unsexed			2	2
Subadult (5-8 years old)	♂	3			3
	♀	1		1	2
Immature (1-2 years old)	♂	2			2
	♀				
Calves (birth -1 yr old)	♂				
	♀	1			1
TOTAL		18	1	4	23

No. identifiable black rhino (adults and subadults) : 18 ✓  
 No. black rhino seen (a female and immature and a male were seen twice) : 26  
 Contact rate of black rhino/day : 0,93

$$26 - 3(\text{seen twice}) - 2 \text{ adults unident}^d = 18 \checkmark$$

↑  
 2 unknown adults not reported here

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2. Physical condition

Of the 21 black rhino sexed and aged:

- 10 in excellent condition
- ♂ adult (upper Goyini) limping badly left foreleg:  
condition fair
- ♂ adult (Thobothi/Msesaneni) condition fair

3. Group structure

Group	group size	n	Number of animals
♂ adult	1	7	7
♂ subadult	1	1	1
♀ adult	1	3	3
♀ adult & immature	2	3	6
♀ adult and calf	2	1	2
♂ subadult	1	1	1
♂ adult & subadult	4	1	4
♀ adult			
unclassified singletons	1	2	2
		19	26

4. Black rhino population estimate based on square-lipped rhino sighting ratio

Area	Square lipped rhinoceros			Black rhinoceros	
	helicopter count 1984	population estimate* 1984	no. seen in sample	no. seen in sample	population estimate 1985
West	308	516	152	20	70
East	55	96	17	2	11
South	76	132	18	4	29
Total	439	764	187	26	106

\* Using correction factor of 1.74

SQUARE LIPPED RHINOCEROS

1. Sex and age structure

Sex and age	♂	♀	Month	TOTAL	Sex ratio ♀ : ♂	age composition %
Adult	♂ 39	♀ 46	7	49	100: 86	62,0
	unsexed 9	1	7	10		
	94	12	10	116		
Subadult (5-7 years)	♂ 3	♀ 1		3	100: 300	2,7
	unsexed 1			1		
	5			5		
immature (1-5 years)	♂ 23	♀ 13	3	25	100: 167	26,7
	unsexed 6	2	2	10		
	42	2	6	50		
Calf (birth - 1 year)	♂ 6	♀ 5	2	9	100: 450	8,5
	unsexed 5	1	1	2		
	11	3	2	16		
TOTAL	152	17	18	187		

64,7

26,7

8,5

2. Group structure

Group structure	Group size					n
	Adult	Subadult	Immature	Calves	TOTAL	
♂ adult	1				1	30
2♂ adult	2				2	1
♂ adult ♂ subadult ♀ subadult 1 immature	1	2	1		4	1
♂ adult ♀ adult	2				2	1
♂ adult 2 ♀ adult	3				3	1
♂ adult ♀ adult 1 immature	2		1		3	7
♂ adult ♀ adult 1 calf	2			1	3	3
♂ adult 2 ♀ adult 2 immature	2		2		5	1
♂ adult 2 ♀ adult 3 immature	3		3		6	2
♂ adult 3 ♀ adult 1 calf	4			1	5	1
♂ adult 2 ♀ adult ♂ subadult 1 calf	3	1		1	5	1
♂ adult 2 immature	1		2		3	1
♀ adult	1				1	1
♀ adult 1 subadult	1	1			2	2
♀ adult 1 immature	1		1		2	17
♀ adult 1 calf	1			1	2	9
♀ adult 2 immature	1		2		3	4
♀ adult 1 immature 1 calf	1		1	1	3	1
2 ♀ adult 2 immature	2		2		4	1
2 immature			2		2	1

86

(179 rhf)

MISCELLANEOUS OBSERVATIONS

(a) Cheetah

1.2.85 1 adult lying in shade of Pappia capensis  
0838 hours: Chibilentungunho (GR 7758 b)

(b) Leopard

2.2.85 1 adult flushed out of shade of Acacia nigrescens  
0885 hours: Madalwani (GR 1973 b)

7.2.85 ♂ adult flushed out of shade of rock overhang on  
river bed 1056 hours: Mdindini (GR 8866a)

27.2.85 ♀ adult lying in shade of Spirostachys africanus  
1403 hours: Mantiyane (GR 8269a).