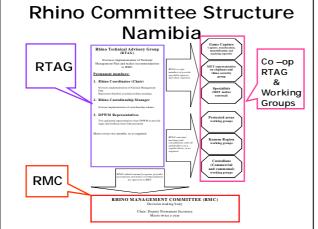
2.2 SADC RMG Countries

2.2.1 Namibia (Pierre du Preez)



THE NAMIBIAN VISION FOR BLACK RHINO

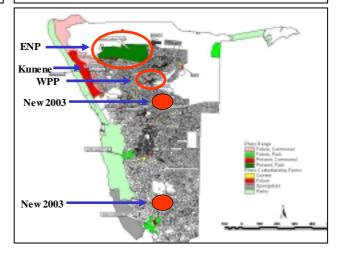
By 2030, the subspecies D.b.bicornis is reestablished in viable, healthy breeding populations throughout its former range, and is sustainably utilized



Rhino Population Estimates

• Area	Css	Dbb
ENPWPPHardapNauteKuneneCustodian So	30 + 52 heme	700 36 7 2 140 112
• Total	82	997

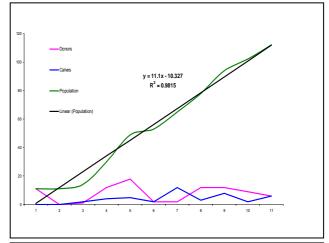
- Major donor populations in Namibia (Kunene, ENP and WPP)
- Two new sites for rhino introductions in 2003 (Naute GR and Custodian farm Oorlogsdeel)



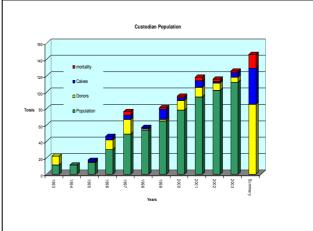
Custodianship Scheme

Custodian Scheme				
• Farm	Size (ha)	Dbb Population		
 Okonjati 	14 000	10		
 Okosongoro 	7 000	8		
 Nomtsas 	20 000	10		
 Omateva 	9 000	10		
• Eden	28 000	15		
 Kuzikus 	11 000	7		
• Erindi	65 000	15		
 Schönfeld 	11 000	5		
 Ongava 	30 000	13		
 Okatumba 	23 600	6		
 Onguma 	10 000	7		
 Oorlogsdeel 	6 000	6		
 Total 	234 600	112		

- Birth spurts small populations still big effect on overall meta population growth
- Influence of introductions
- 13 Animals ready for translocation in 2004
- Exponential increase in population 26%



Indicates Introductions, births and mortalities



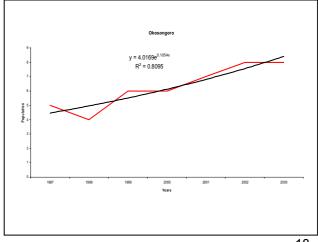
Small custodianship populations

Okosongoro

- One of the best performing populations (+11% per annum)
- Step wise growing effect of small populations birth pulses
- Intensive managing 7000 ha

Oorlogsdeel

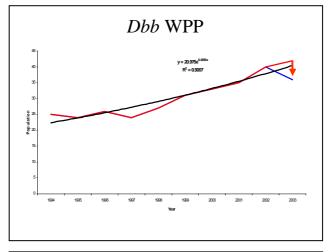
- Will expand
- Some of the best habitat in Namibia 6000 ha



Waterberg Plateau Park

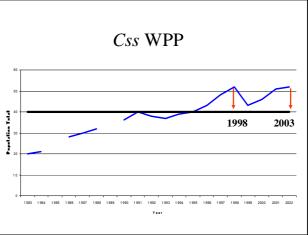
Black rhino

- 2003 capture increase male aggression.
- Poor habitat
- Density dependant
- Intensive management
- Still above 6% per annum



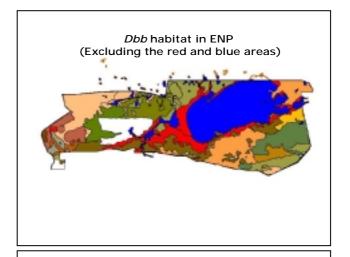
White Rhino

- Grow at +7% if population above minimum of 40.
- Need to capture 12 animals ENP 2003 due to drought in ENP will not take place.
- Population levels of at 50+

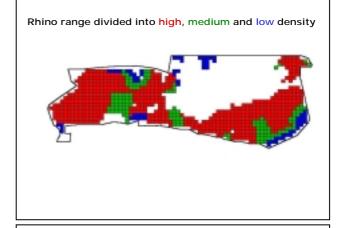


Etosha NP

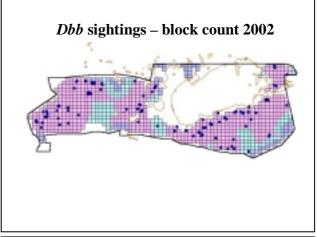
Black rhino habitat, mapped using vegetation and distance from artificial waters



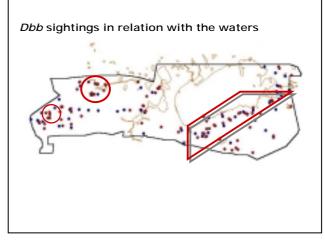
Distribution of all possible blocks in the 2002 block count



All *D.b.bicornis* sightings in blocks counted during the census



Indicating the concentration of rhino relative to the waters in ENP



Some results from the 2002 census

Demography from block count

- < 1 year = 6.4% (8%+)
 < 3.5 years = 26.8% (28%+)
 1< 3.5 years = 20.4% (17%+)
- 73% Adults in population Stable
- 18% Adult cows calved in the last year
- 59% Adult cows with calf (A-E) present

Aerial Census of ENP Black Rhinos

- Positive indications that the ENP population can reliably be estimated through aerial censuses.
- During 2003 if funding is secured block counts will be repeated and the technique will be tested to determine if differences/variations in the estimate is a result of the technique or indicate variations in the population – Dr. R. Emslie (AfRSG)
- Possible to determine sub populations determine harvesting to stimulate growth in those sub populations that have reached CC.

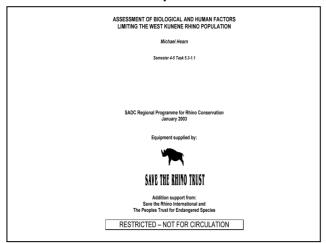
Dbb Population Estimates for ENP

	Estimate	CI 90%
Aerial Census 2002	629	16.9%
Petersen (Mark-Recapture)	986	56%
Blocks (Jolly 3)	596	22%
Blocks (10% undercount)	662	
Blocks (15% undercount)	701	
Zucchini-Channing Bayesian Mark – Recap (15% undercount)	716	14%

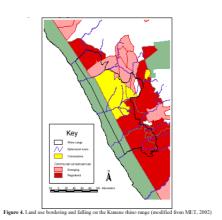
Indications

- The Dbb population of ENP is stable and does not grow at a minimum of 5%
- Reasons for the above could be:
 - » Unreliable water provision in the crucial dry period
 - » Population has reached ecological carrying capacity in the available habitat

Kunene Black Rhino Population



Rhino range and conservancies in Kunene



Demography of Kunene Black Rhino population

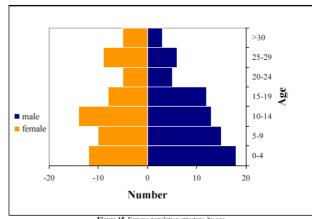
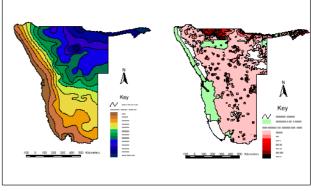


Figure 15. Kunene population structure, by age.

IMPORTANT FINDINGS

- Highest densities Mountainous basalt areas
- Two populations in optimum habitat significantly different
- Off take took place in one poaching and removals - high growth
- Density depended
- Female range increase relative to the decrease of resources
- Recruitment rates reduced



 $\textbf{Figure 3.} \ Mean \ rainfall \ gradient \ and \ population \ concentrations \ across \ Namibia \ (MET, 2002)$

Assistance from SADC RPRC

SADC RHINO PROGRAMME ASSISTANCE

CAPACITY BUILDING (MET)

- Training Needs Assessment R. Blok
- Scene of the Crime Training R. Potter

KUNENE POPULATION (SRT)

• Assessment of the Biological and Human Factors Limiting the West Kunene Rhino Population – M. Hearn Rhino Strategy still needs to be approved by the Minister of Environment & Tourism

Need for Mobile Boma

- Translocations in arid areas boma can be erected in areas with best resources
- Areas not feasible to built bomas.
- Injured or sick animals
- Translocations in future to Iona National Park -Angola

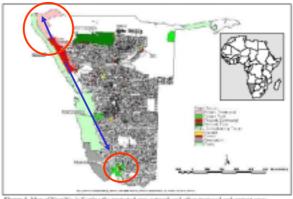


Figure 1. Map of Namibia indicating the protected area network and other proposed and current areas where chine severe, the insert shows Namibia's location in synthese Africa.