

Background information and species management guidelines:

Namibia has a population of about 5,000 buffalo in the Caprivi and Kavango regions - well below carrying capacity. The potential range is 10,000km² and it could carry some 15,000 buffalo. The adjacent northern Botswana population numbers about 90,000 buffalo.



BUFFALO

MANAGEMENT

Goal

To realise the full potential of buffalo as a component of wildlife based land use both in areas where the species presently occurs and appropriate areas where it used to occur.

Ecological Objectives

- The range available to buffalo in the Caprivi and Kavango regions will not fall below 10,000km²;
- The range will be maintained as an intact area without fragmentation resulting in isolated subpopulations;
- To the maximum extent possible, key riparian habitats along the Kavango, Kwando, Linyanti, Chobe, and Zambezi River frontages will be secured;
- Linkages with the Botswana buffalo population will be maintained and enhanced;
- The impact of fire will be reduced from its present level so that < 25% of the buffalo range is burnt each year;
- Those parts of the range which are at present inaccessible to buffalo due to lack of surface water will be made available through development of water supplies;
- Research will be undertaken to assess the degree of inter-specific competition between buffalo and other species, particularly the large population of elephants;
- The buffalo population in the Caprivi and Kavango regions will increase to 15,000 animals within 30 years;
- Numbers of buffalo illegally killed will not exceed 1% of the population per year; and
- All practical measures will be taken to minimise the likelihood of buffalo contracting diseases which threaten their well-being from domestic livestock.

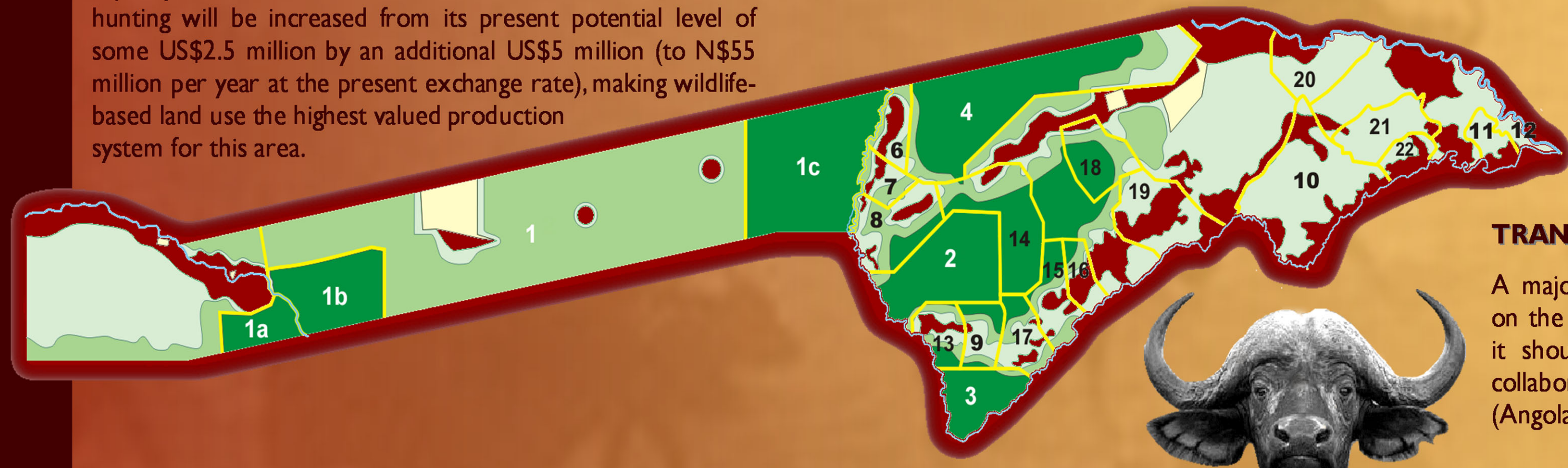
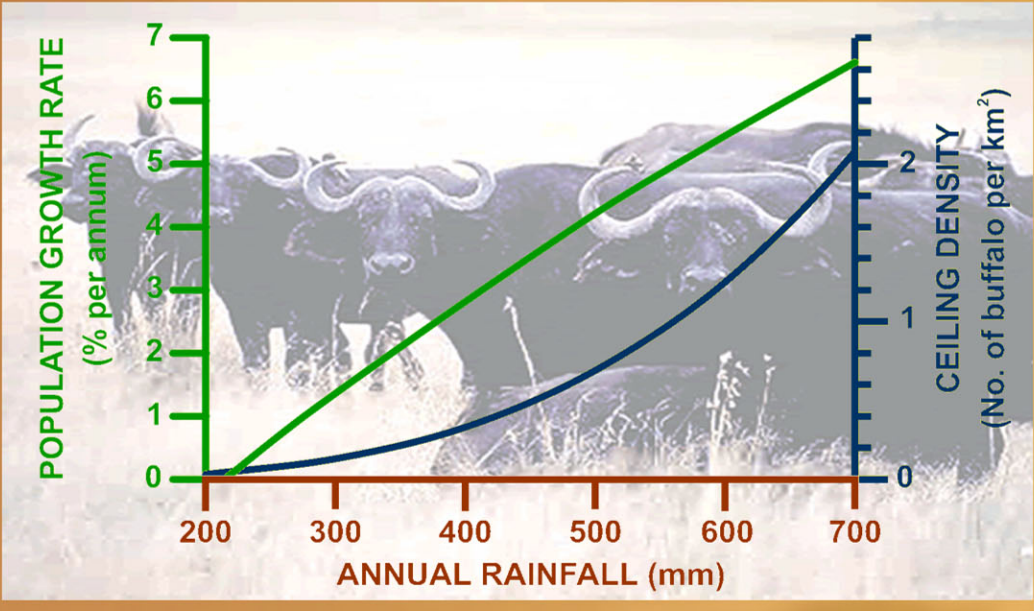
Economic Objectives

With the Caprivi and Kavango buffalo population at carrying capacity, the net annual income from international safari hunting will be increased from its present potential level of some US\$2.5 million by an additional US\$5 million (to N\$55 million per year at the present exchange rate), making wildlife-based land use the highest valued production system for this area.

Longevity	18 years (in the wild)
Gestation period	330 - 346 days
Age at first conception	3 - 6 years
Breeding lifetime	Cows breed until about 14 years old with peak fecundity at about 10 years
Age-specific fecundity	Females produce a calf about every two years
Age-specific mortality	Mortality is about 20% for juveniles, decreasing to some 3% at 3 years old. Mortality increases progressively above 11 years as animals approach old age.
Sex ratio	Very close to 1:1

Typical measurements	Males	Females
Maximum body weight (kg)	800	750
Average adult body weight (kg)	700	500
Age to reach full adult weight (years)	7	5
Shoulder height for adults (cm)	155	145
Weight of a buffalo calf at birth (kg)	40	

Buffalo require a year-round supply of grass, adequate water and shade. Suitable habitat includes Mopane, Miombo, Acacia and Teak woodlands, riparian fringes and 'omurambas'. Buffalo normally drink twice a day, about 30 litres per day. They do not occur where annual rainfall is less than 250 mm and their maximum densities are almost linearly related to rainfall above this. In higher rainfall areas (500 mm+), density might reach 2 buffalo per km².



CONSERVANCIES

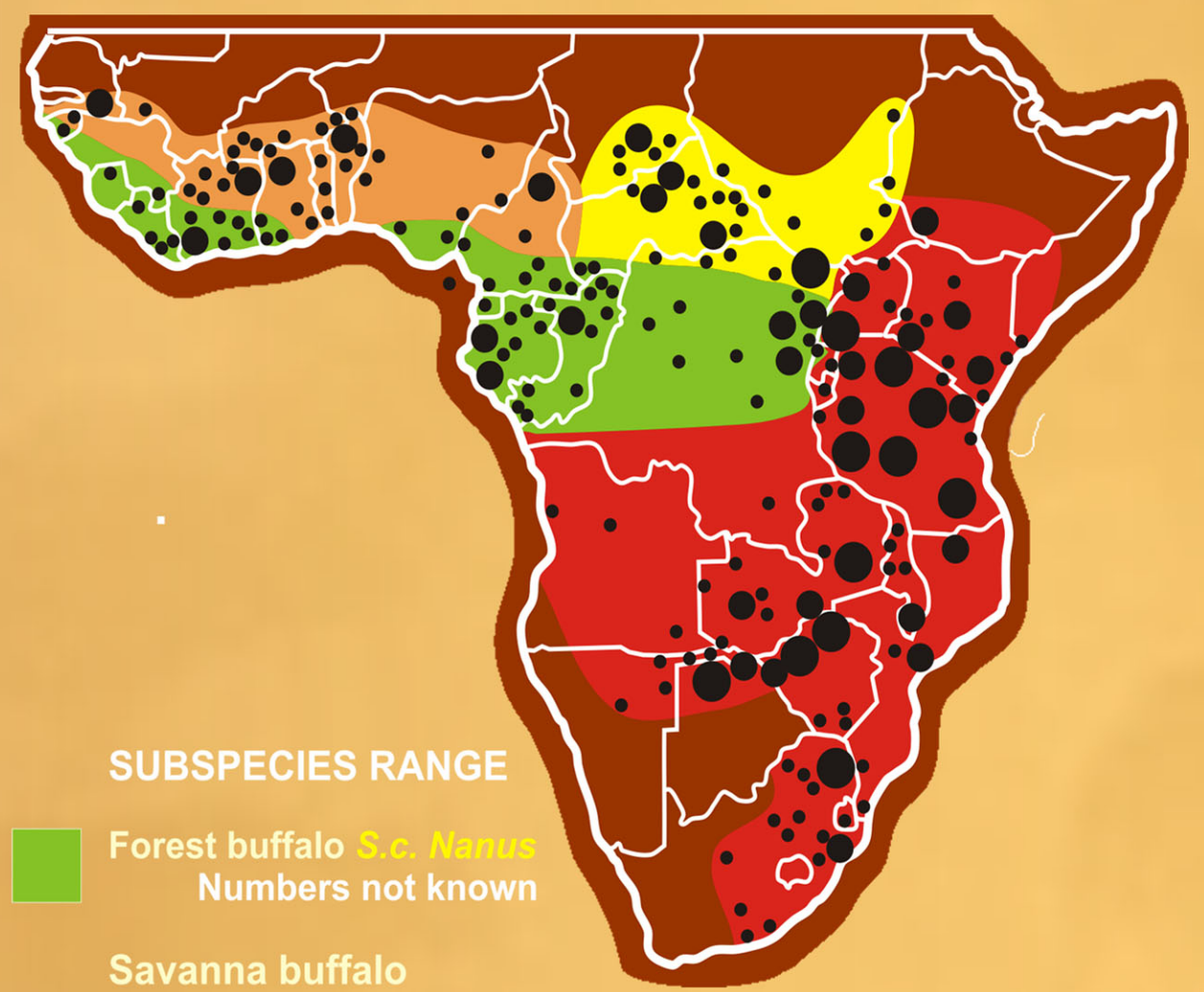
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|-------------------|------------------|
| Registered | Emerging |
| 6. Kwandu | 15. Batubaja |
| 7. Mayuni | 16. Kapani |
| 8. Mashi | 17. Malengalenga |
| 9. Wuparo | 18. Sibinda |
| 10. Salambala | 19. Bamunu |
| 11. Kasika | 20. Sikunga |
| 12. Impalila | 21. Lusese |
| 13. Balyerwa | 22. Nakobolelwa |
| 14. Sobbe | |

STATE PROTECTED AREAS

- Bwabwata National Park
 - Mahango Core Area
 - Western Core Area
 - Eastern Core Area
- Mudumu National Park
- Mamili National Park
- State Forest Reserve

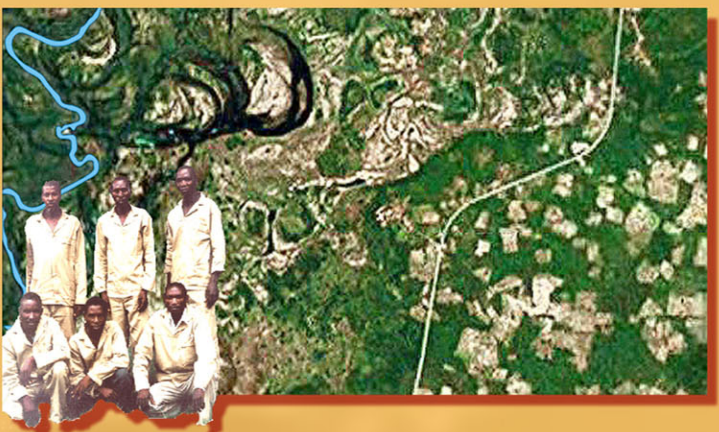
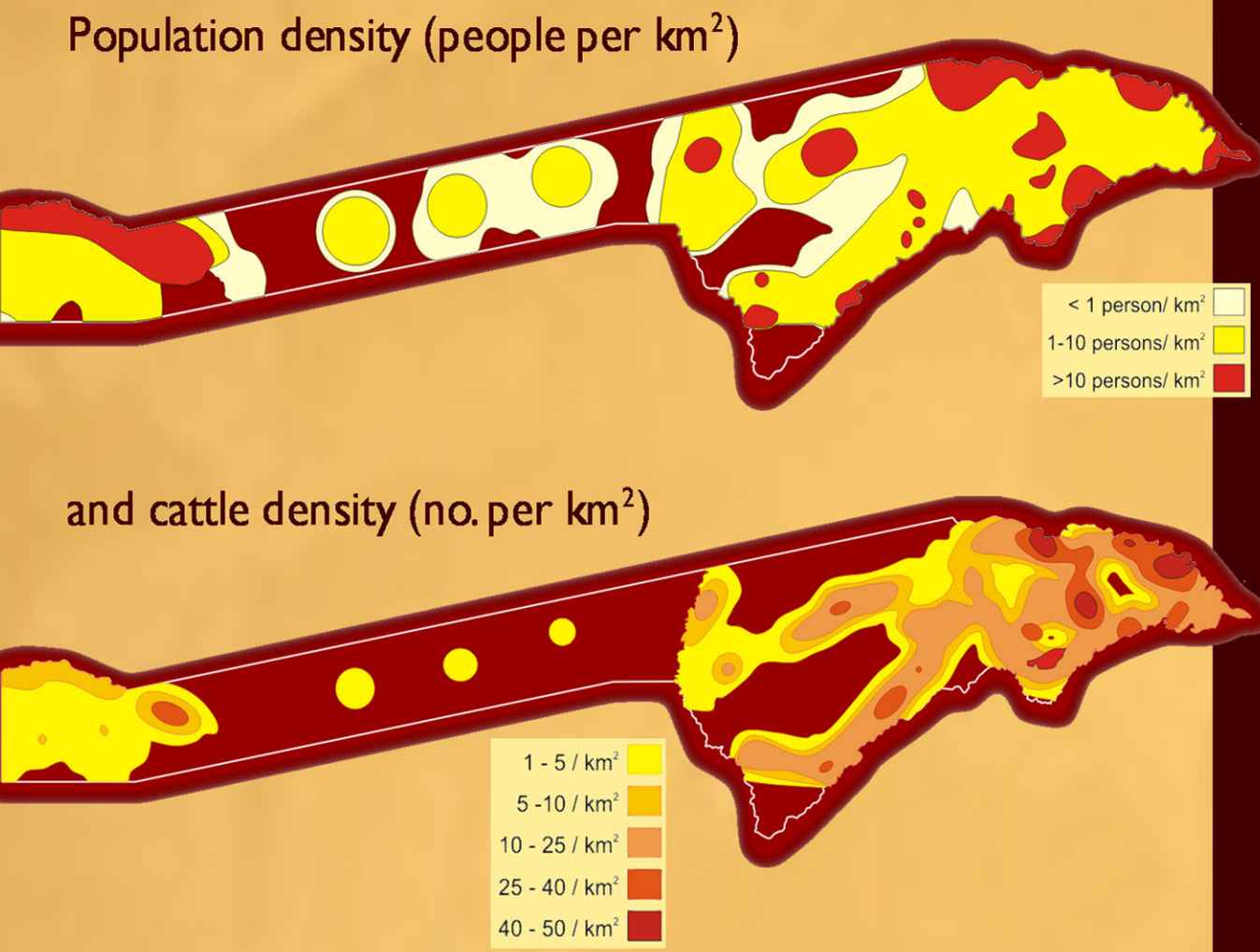
- Core range:** Areas where buffalo should reach full potential
- Medium range:** Additional range which buffalo could colonise if water supplies are developed, conservancies fulfil expectations and illegal hunting is minimised
- Maximum possible range:** Further range which buffalo might occupy under favourable policies with active promotion and major incentives for local communities

NUMBERS AND DISTRIBUTION



- SUBSPECIES RANGE**
- Forest buffalo *S. c. nanus*
Numbers not known
- Savanna buffalo
 - West Africa *S. c. brachycornis*
approximately 20,000
 - Central Africa *S. c. brachycornis*
approximately 60,000
 - Southern savanna *S. c. caffer*
approximately 550,000

The available range for buffalo in Namibia is determined by patterns of human settlement, the amount of land cleared for agriculture and the grazing requirements of cattle. Other factors which limit or influence their distribution are fire, veterinary fences and competition with other species.



TRANSBOUNDARY CO-OPERATION

A major trans-frontier conservation area centered on the Caprivi is an admirable long-term goal – but it should be preceded by initiatives which build collaboration between Namibia and its neighbours (Angola, Botswana, Zambia and Zimbabwe).

The management of buffalo is an appropriate vehicle for beginning to develop such linkages. The primary objective should be to avoid or minimise the fragmentation of buffalo populations through veterinary control measures or the spread of unplanned settlements. To achieve this will require collaborative management at a scale which transcends national boundaries. A start has been made by engaging in dialogue on buffalo management with Botswana.