

# Background information and species management guidelines:



## MANAGEMENT

### Goal

To maintain and increase Namibia's population of hippopotamus whilst using them sustainably for the benefit of the Namibian people.

### Economic Objective

To enable the full economic potential of hippos to be realised according to the provisions for sustainable use in Namibia's Constitution.

### Social Objective

To promote local management of hippos in those places where they interact with people in order to reduce conflict and provide benefits.

### Ecological Objective

To create conditions under which hippos can increase.



Longevity	50 years
Gestation period	7.5 - 8 months
Age at first conception	Extremely variable depending on nutritional stress
Age at sexual maturity	8 years
Age at full reproductive capacity	10 years
Fecundity	0.5 calves / female / year
Central mortality	3%
Juvenile mortality (first year)	12%
Mortality (second year)	6%

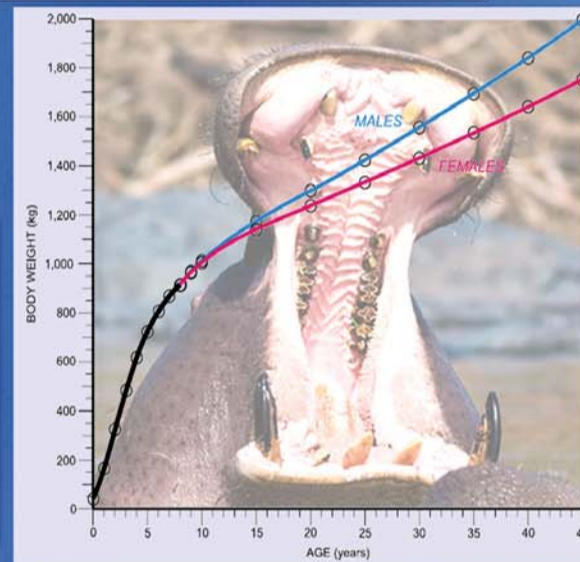
## LIMITING FACTORS

The majority of Namibia is unsuitable for hippo. Only the Caprivi and Kavango have appropriate large wetlands and high enough rainfall to carry a significant hippo population. The main factors limiting hippo here are human settlement and competition with cattle. Illegal hunting is another limiting factor.



The three main actions in the management guidelines are:

- Manage the north-east hippo population for maximum sustainable benefit;
- Protect the remnant populations of the Kunene and upper Okavango rivers *in situ*; and
- Re-introduce hippo to the Orange River.



## ECONOMIC SIGNIFICANCE

Hippo currently provide moderate benefits to the people of Caprivi but they do, at the same time, cause significant crop losses. They could make a significant financial and economic contribution to the wildlife industry in the north-east through:

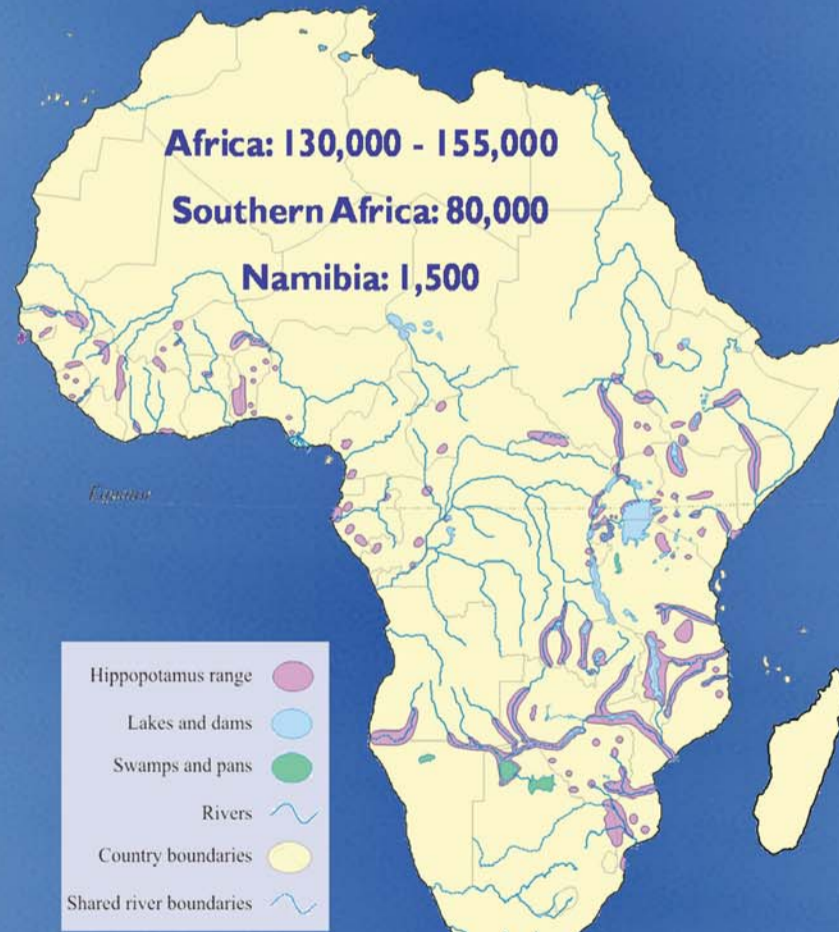
- Further growth in tourism;
- Harvesting of skin and meat;
- International sport hunting for trophies;
- Live capture and sale; and
- Control of problem animals.



The ability of hippo to maintain stable populations according to resource availability - thereby adjusting to environmental carrying capacity - has important implications for hippo management. The recommendation of the management guidelines is to allocate maximum sustainable quotas to sport hunting, limit the number of problem animals to the minimum, implement a small live capture and sell programme and a harvesting regime which will allow hippo numbers to increase gradually towards carrying capacity. The highest valued use for an adult male hippo lies in the sport hunting industry. A management programme which includes sustainable quotas for trophy hunting, problem animal control, live capture and harvesting could yield a combined net income of US\$100,000 per year.

The species is classified as 'Least Concern' in the IUCN Red Data book. It is classified as Specially Protected Game under Namibian law. Namibia holds about 1% of Africa's hippos.

## NUMBERS AND DISTRIBUTION



## CONTRIBUTION

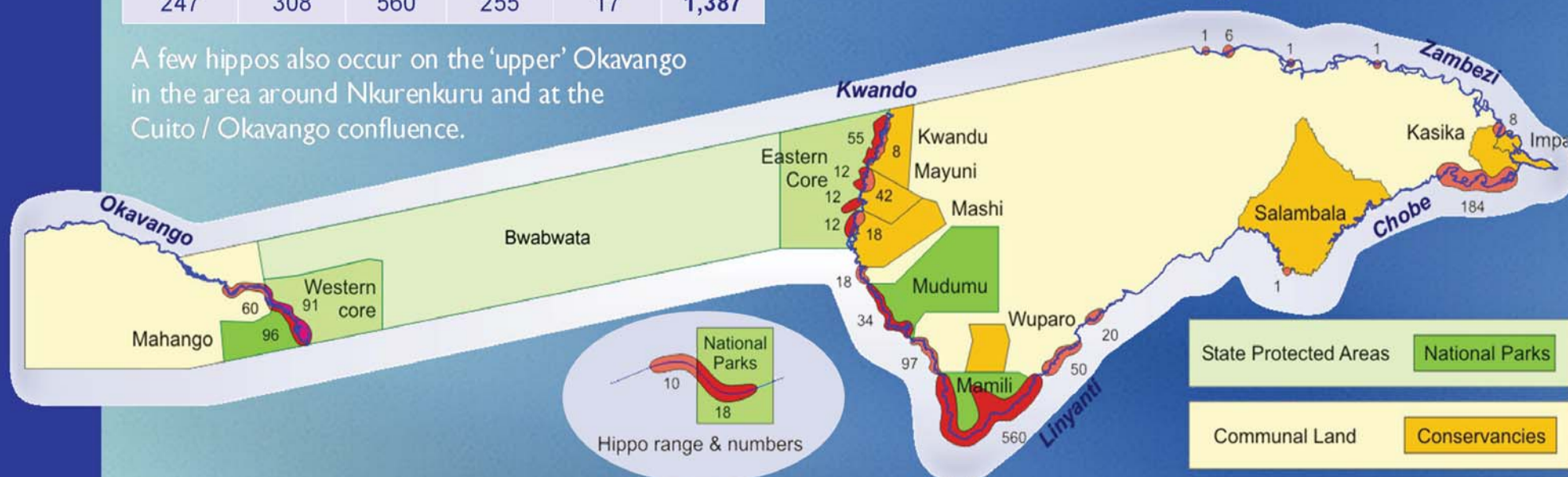
Under Namibia's evolving wildlife legislation, management plans are required for species that are rare and valuable. The hippo is not rare but it is potentially very valuable and - through a mixture of uses - it has the potential to make a significant financial contribution to the people of the Caprivi and Kavango. A management plan which recognises hippos as a valuable resource could become an engine for development in these regions. In light of Namibia's commitment to sustainable and highest valued forms of land use there are, therefore, good reasons for trying to maximise the benefits from the scientific management of Namibia's hippo population.



## Hippo Populations in Namibia

Okavango	Kwando	Mamili NP	Chobe / Linyanti	Zambezi	TOTAL
247	308	560	255	17	1,387

A few hippos also occur on the 'upper' Okavango in the area around Nkurenkuru and at the Cuito / Okavango confluence.



## TRANS-BOUNDARY CO-OPERATION

There is a strong need for trans-boundary co-operation for hippo management. Hippos live in perennial rivers - the Kunene, Kavango, Kwando, Chobe, Linyanti and Zambezi - along international boundaries and in Namibia 35% of the hippo populations can be regarded as shared animals.

The Ministry of Environment and Tourism of Namibia has already taken the initiative to establish cross-boundary links with Botswana on species management. Namibia must seek collaboration on this issue with Angola, Zambia and Zimbabwe as well, which will produce benefits for the local people in each of these countries.