

Fauna Bravia do Delta do Rio Zambeze



Paul Funston, PhD.

Department of Nature
Conservation, Tshwane
University of Technology

Situacao da FB nos anos 60

- Abundancia de animais bravios (bufalos,pivas,elefantes,inhalas, kudus, outras especies de antilopes, leão, leopardo,etc.)
- Periodo em que comecam a intensificar-se as teorias de proteccão e conservacão da FB. (Criacao de Parques e Reservas em Mocambique)



...outrora sustentou a maior concentrações de búfalos no mundo...

Situação da FB no Período Pos-Guerra

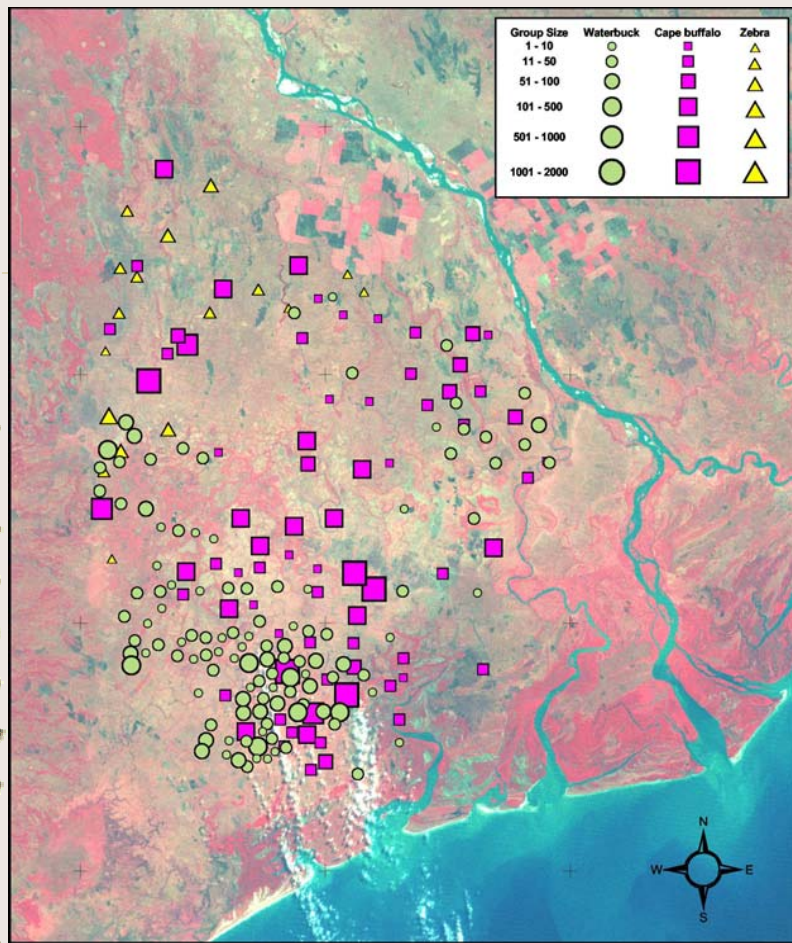
- Desaparecimento de vários números de animais bravios (bufalos, pivas, hipopotamos, kudus, nyalas, zebras, etc.)
- Aumento da caça furtiva
- Incapacidade de controlo de abates indiscriminados de animais por falta de meios e segurança no Delta.



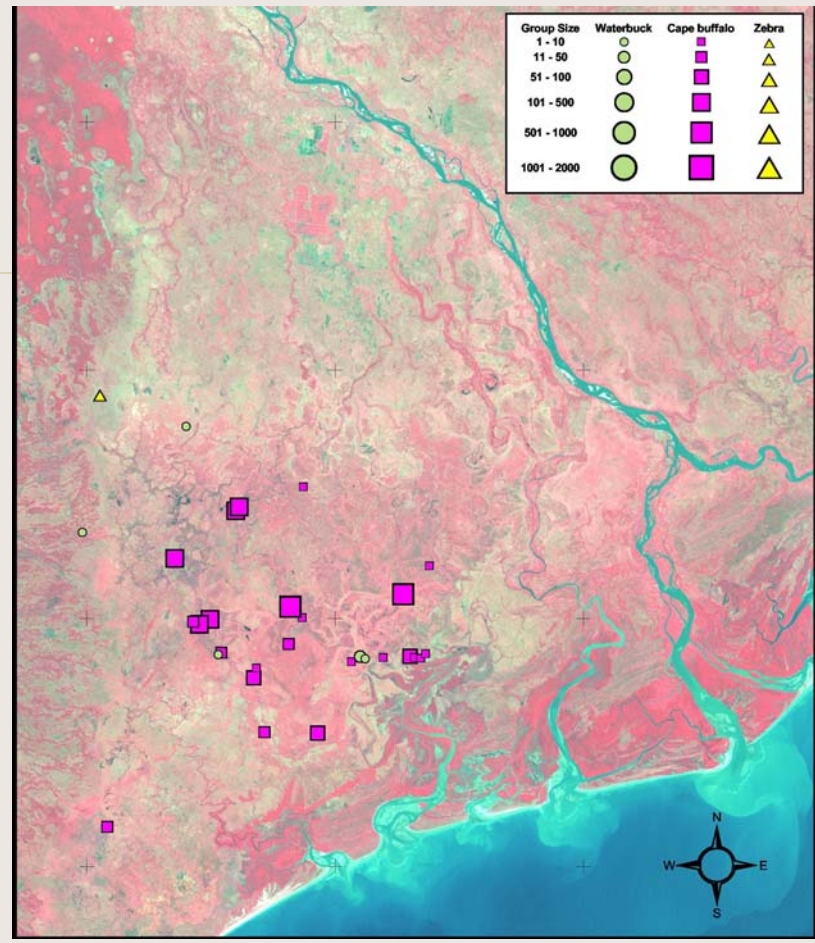
A seca do Delta permitiu um caça furtiva intensa especialmente durante a guerra.

Situação Presente

- Reaparecimento de algumas espécies bravias no delta.
- Maior controlo sobre a caça furtiva
- Caça controlada pelas estruturas competentes e os Concessionarios das Coutadas Oficiais.
- Melhoramento das vias de acesso ao longo do delta.
- Uso das aguas dos riachos que cortam a reserva e as areas de caça.



1969



2000

Mudanças na densidade e distribuição da piva, bufalo, e zebra a Sul do Delta do Zambeze, 1969 à 2000.

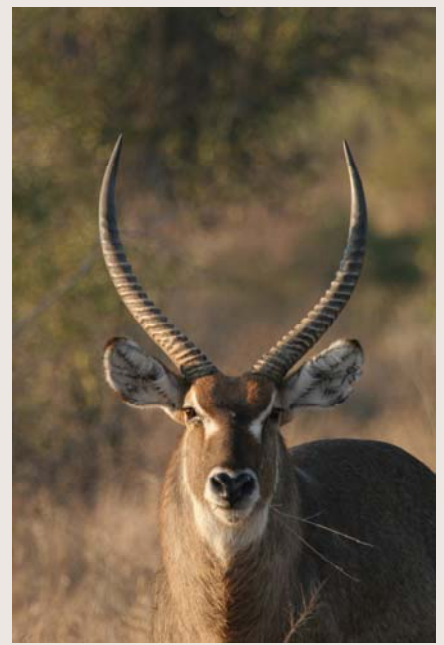
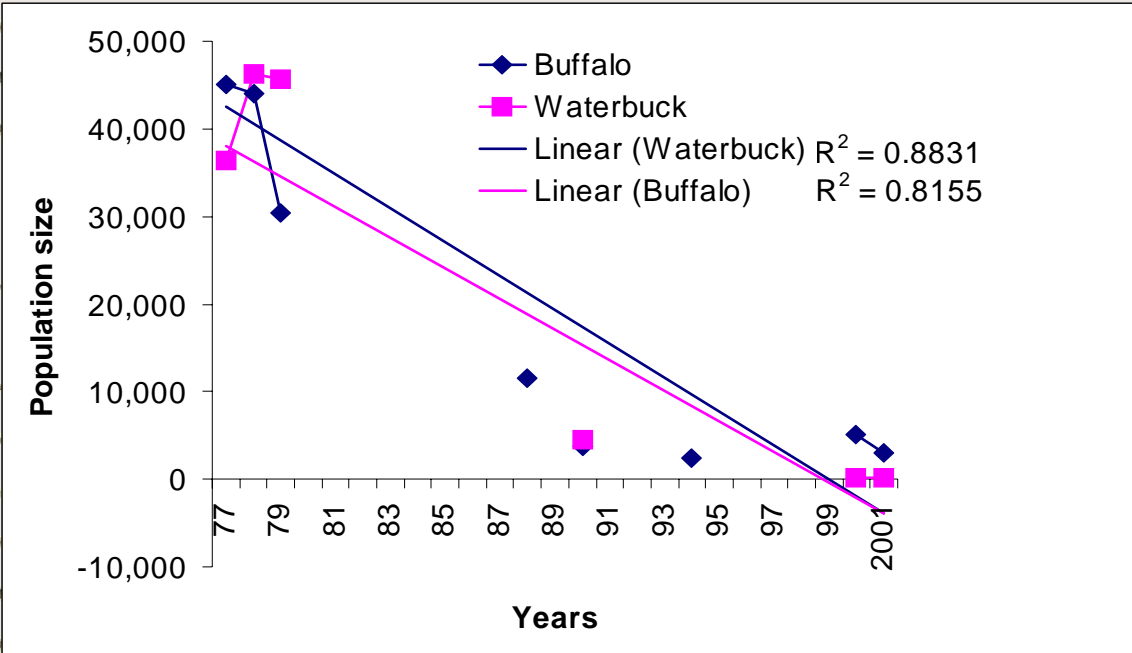
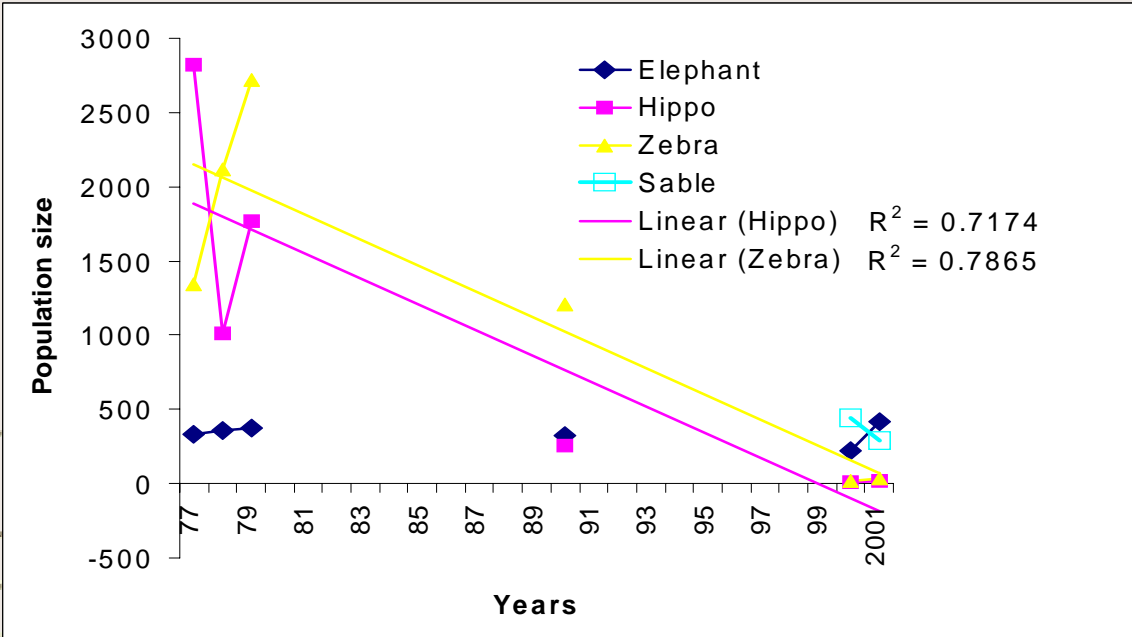
Fonte: Beilfuss e Bento 2001



Os números de animais outrora registados não poderão voltar devido a redução da capacidade de carga do Delta.

Conclusões e Recomendações

- **O Numero de animais outrora existente ja não voltara devido a redução da capacidade de carga do delta.**
- **A vegetação típica do delta (terras húmidas) foi substituída pela das zonas altas do delta.**
- **A seca facilita a actividade furtiva**
- **Os animais não usam o potencial das águas do Zambeze limitando-se a usar a dos riachos que passam pela zona onde coabitam.**
- **O controle das águas do Zambeze poderá manter a vegetação típica, diminuir a actividade furtiva, garantir água para os animais, aumentar a população de peixes e favorecer a alimentação das comunidades que ali vivem.**



SELECTION OF KEY SUB-COMPONENTS

- When considering which key sub-components to select the feeding type and relative body-size of the respective herbivorous large mammals known to exist in the Zambezi Delta was reviewed.
- More than four species thus some degree of clumping was necessary, especially for antelope ungulates.

1. Mixed-bulk mega-herbivores – elephant population trends

- Number would seem to have always been relatively low in the Zambezi Delta (< 500 individuals post the 1960).

2. Short-grass mega-herbivores – hippo population trends

- **Hippos are a very important component of any wetland system.**
- **As short-grass bulk grazer they are also very important architects of short grass grazing meadows for other ungulates (e.g. zebra).**
- **Currently nearing extinction in the delta.**
- **Substantive habitat restoration will be required to re-instate their populations to former levels.**
- **Utilization and illegal hunting of the species should be curtailed until reasonable numbers have been re-established**



3. Bulk-grazing ungulates - buffalo population trends

- **Buffalo are almost unique in their bulk grazing nature amongst the antelope ungulates.**
- **Also due to their importance in the ecosystem are dealt with as a individual sub-component here.**
- **Buffalo seem to be stable but at relatively low numbers. An increased flooding regime and reduced floodplain burning would probably create better habitat for the buffalo, but at this stage it seems as if illegal meat hunting could be having as much effect as habitat on curtailing population growth.**





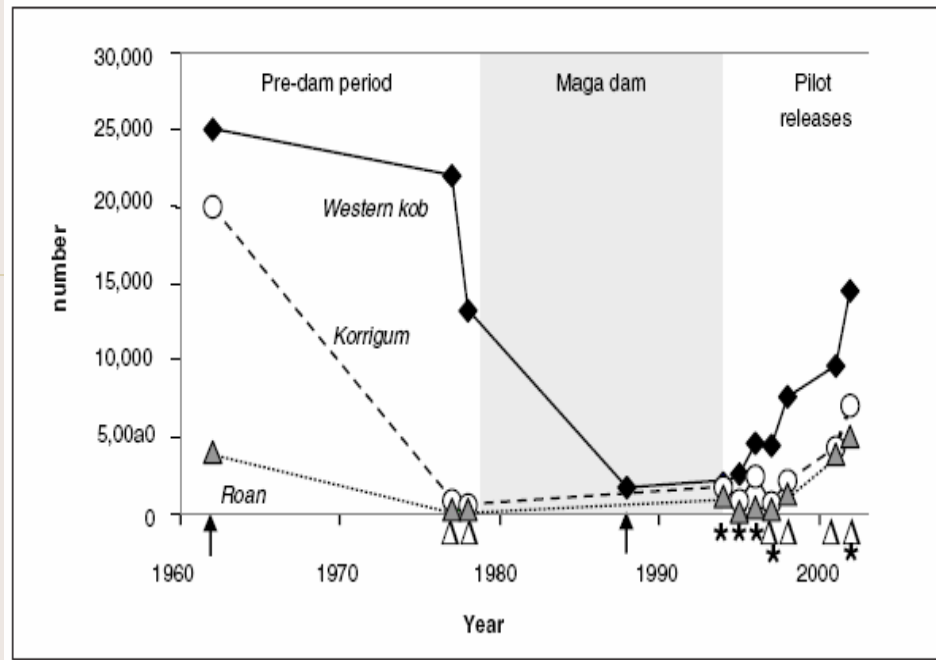
4. Medium- to short-grass ungulates ***– sable, waterbuck and zebra population trends***

- **This sub-component includes several antelope species**
- **The most important of which include sable antelope (especially because of its commercial value), waterbuck (because of their historical abundance in the delta), and zebra (a specific subspecies that was historically well represented in the delta).**
- **Other antelope species of interest could also include eland (hunting value), duikers, impala (populations decimated by the flood), kudu, Lichtenstein's hartebeest (gondonga), nyala, oribi and reedbuck (both of which favour moist grassland).**
- **Without detailed knowledge regarding the reasons for this meat poaching could be a major factor restricting or even decimating these populations**



Table 1. Status prior to river regulation, present-day status, and the desired target condition for the various wildlife populations in the Zambezi delta.

Species	Status prior to river regulation			Present-day status		Current trajectory	Desired target condition
	1977*	1978*	1979*	2000	2001		
Elephant	331	361	373	219	421	Stable	500
Hippo	2,820	1,010	1,770	12	17	Near extinction	2,000
Buffalo	45,000	43,992	30,394	5,125	3,056	Low stable	20,000
Waterbuck	36,380	46,227	45,653	131	168	Low stable	15,000
Zebra	1,340	2,120	2,720	15	34	Near extinction	1,500
Sable				446	294	Moderate stable	1,000



- A similar situation of reduced down-stream flooding in Waza Logone floodplain, Cameroon resulted in severe declines of several species of ungulates.
- Once flooding was reinstated there were major positive impacts on wildlife populations within Waza National Park, clearly demonstrating the value of artificial flooding
- Based upon the positive results from pilot artificial flooding, a number of scenarios were developed to expand flooding of the Waza Logone floodplain without negatively impacting the SEMRY rice schemes.

Conclusions

- **With a re-instated flood regime access for poaching might become more restricted.**
- **It would be that flooding of the delta is not the only solution to the crumbling wildlife populations of the Zambezi Delta, and that to be effective it would have to be coupled with sustainable or conservative trophy harvesting and effective protection of the important breeding segments of each population.**
- **For each sub-component it is estimated that the most important hydrological component would be a re-instated annual flood, although this might possibly be less important for species in sub-component 4 (zebra, sable, and waterbuck).**

