<u>Avosetta Seminar</u> Southern Africa: case study

Species protection & the role of EU law and the Biodiversity Convention Selective & intensive breeding of wildlife

Professor Jan Glazewski

Institute of Marine & Environmental Law

University of Cape Town

May 2017

Scene of the "crime" Southern Africa

OCEAN CURRENTS OF SOUTH AFRICA





What is: Selective and intensive breeding?

A phenomenon in South Africa and Namibia

KEY TERMS

Captive Breeding
Selective & Intensive Breeding

Captive Breeding

World Wide Fund for Nature definition

"<u>Captive breeding</u>":

"the breeding of animals outside of their natural environment in restricted conditions on farms, zoos and closed facilities...

...individual animals are part of a captive breeding population,

... controlled by humans.

What is Selective Breeding?

• <u>SELECTIVE BREEDING</u>:

"the intentional breeding of an organism with desirable characteristics in an attempt to produce offspring with similar desirable characteristics or with 'improved' traits" OR

- The practice of selectively breeding colour variants through genetic manipulation for commercial purposes
- <u>BECAUSE</u>
- Unique colour variants are commercially attractive



Colour Morphing



Selective and Intensive breeding wildlife Argument For:

- Simply the "replacement" of animals previously hunted in wild;
- Benefits all markets, including hunting, wildlife ranching, meat, conservation and tourism.
- The breeding of <u>colour variants</u> or <u>excessive horn</u> <u>lengths</u> is believed to be essential to fulfil a demand from trophy hunters and to replenish a depleted gene pool as a result of trophy hunting.

Zebra crossing



Argument against Intensive & selective breeding of wildlife Environmental (Genetic) risks:

- Uncontrollable impacts on natural evolutionary processes (breeding patterns/reproductive cycles);
- Decreased genetic integrity of naturally occurring wildlife populations;
- Distortion of natural processes of evolution;
- Uncontainable expansion of exotic and extralimitable wildlife species outside their historical natural habitats;

Argument against Intensive & selective breeding of wildlife Environmental (Policy related) risks

- Predator control; secondary ecosystem impacts;
- Habitat loss and fragmentation;
- Uncontainable expansion of exotic and extralimitable wildlife species outside their historical natural habitats;
- Risk of disease outbreaks and epidemics;
- Reputational damage to wildlife industry;
- Animal welfare

Media Reports



Home > Business > Bottomline > Speaking to Cyril Ramaphosa about bull

Speaking to Cyril Ramaphosa about bulls

Sean Christie 12:21 pm - May 22, 2012 👁 85

As businessman and game breeder, Cyril Ramaphosa focuses on buying the best and cons animals for the future. Sean Christie spoke to him.





some 15 minutes drive away...



Convention on Biodiversity Article 8 (g)

- Each Contracting Party shall, as far as possible and as appropriate: (a)
- (g) Establish or maintain means to regulate, manage or control the risks associated with the use and release of living modified organisms resulting from biotechnology which are likely to have adverse environmental impacts that could affect the conservation and sustainable use of biological diversity, taking also into account the risks to human health:

Article 3: Cartagena Protocol to the Convention on Biodiversity

(g) "<u>Living modified organism</u>" means any living organism that possesses a novel combination of genetic material obtained through the use of modern biotechnology;

(h) "<u>Living organism</u>" means any biological entity capable of transferring or replicating genetic material, including sterile organisms, viruses and viroids;

Art 3 Cartagena Protocol to the Convention on Biodiversity

"<u>Modern biotechnology</u>" means the application of: a. In vitro nucleic acid techniques, including recombinant deoxyribonucleic acid (DNA) and direct injection of nucleic acid into cells or organelles, or

b. Fusion of cells beyond the taxonomic family, that overcome natural physiological reproductive or recombination barriers and that are not techniques used in traditional breeding and selection;

Namib desert



Convention on Biodiversity AICHI Target 13

By 2020, the genetic diversity of cultivated plants and farmed and domesticated animals and of wild relatives, including other socio-economically as well as culturally valuable species, is maintained, and strategies have been developed and implemented for minimizing genetic erosion and safeguarding their genetic diversity./



GOVERNMENT GAZETTE

OF THE REPUBLIC OF NAMIBIA

3.1	0	-	Γ.	0	~	
- N	Э	1		U	U	

WINDHOEK - 30 December 2006

No. 3763

Page

CONTENTS

GOVERNMENT NOTICE

No. 223 Promulgation of Biosafety Act, 2006 (Act No. 7 of 2006), of the Parliament

Government Notice

OFFICE OF THE PRIME MINISTER

No. 223

2006

PROMULGATION OF ACT OF PARLIAMENT

The following Act which has been passed by the Parliament and signed by the President in terms of the Namibian Constitution is hereby published in terms of Article 56 of that Constitution.

Take Home: Discussion Points

- **Ethical considerations**:
 - Colour morphs/long horns!!!!
- **Economic considerations:**
 - Free-market-eers versus welfare economics;
 - South Africa's Gini-co-efficient; who benefits?
- <u>Legal considerations</u>:
 - Precautionary Principle; Biodiversity Convnetion
- Not much from EU Law

Contemplating the future



Future generations: Quo Vadis ? Southern Africa: the wildlife frontier?

