

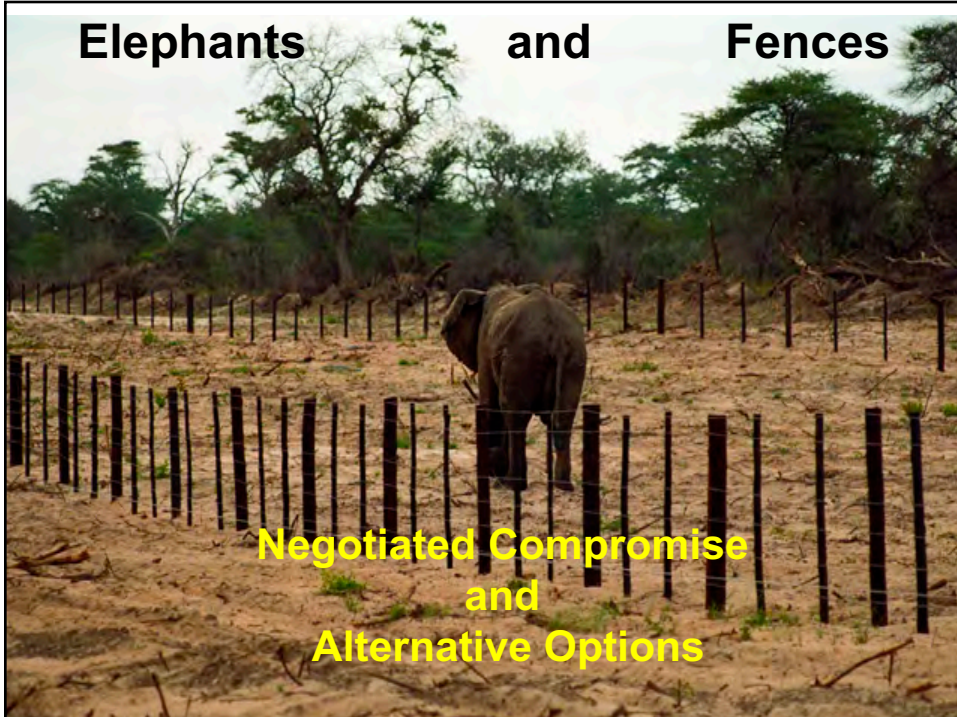
KAZA's Elephants: Impacts of Fences and Other Physical Infrastructure

Russell Taylor
WWF in Namibia

KAZA Animal Health Sub Working Group Meeting
Victoria Falls
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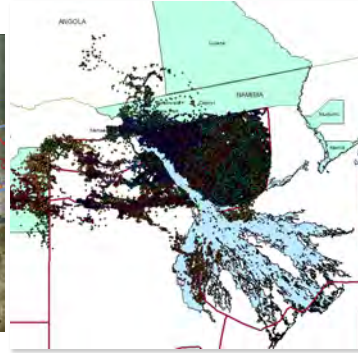
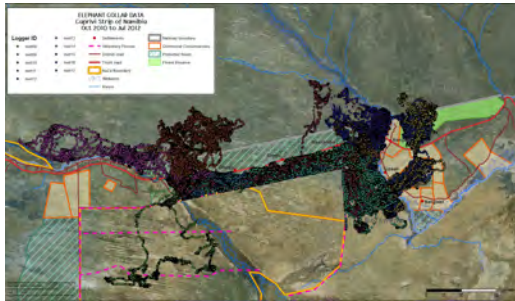
Elephants and Fences



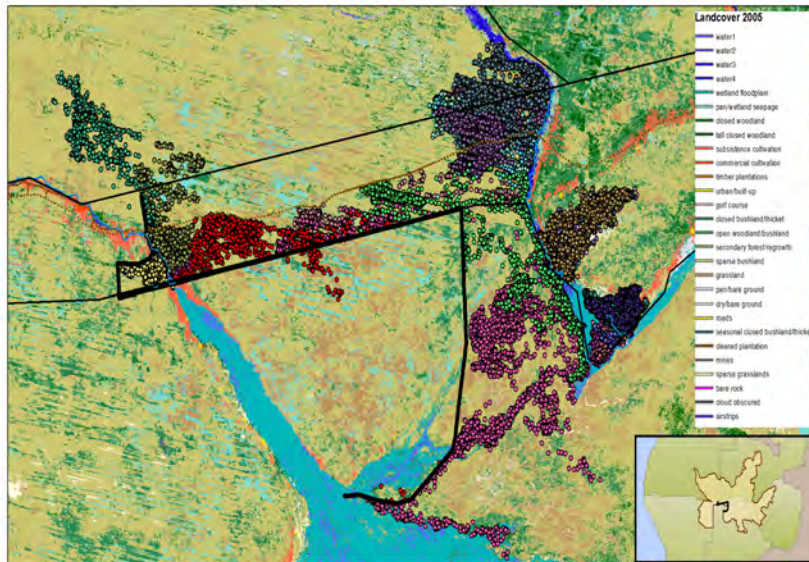
Elephant Movements and Fences

Elephant Collar Data: Zambezi Region (MET-WWF 2010-2012)

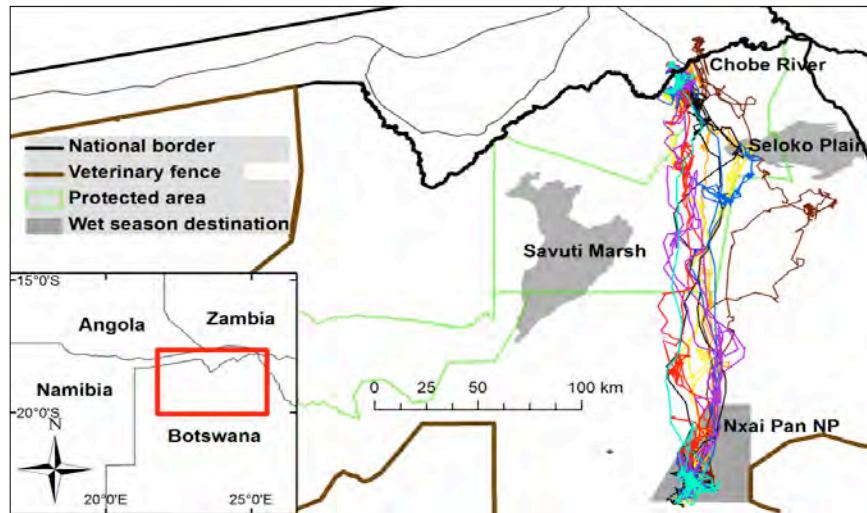
Elephant Collar Data: Ngamiland (Songhurst 2014-2016)



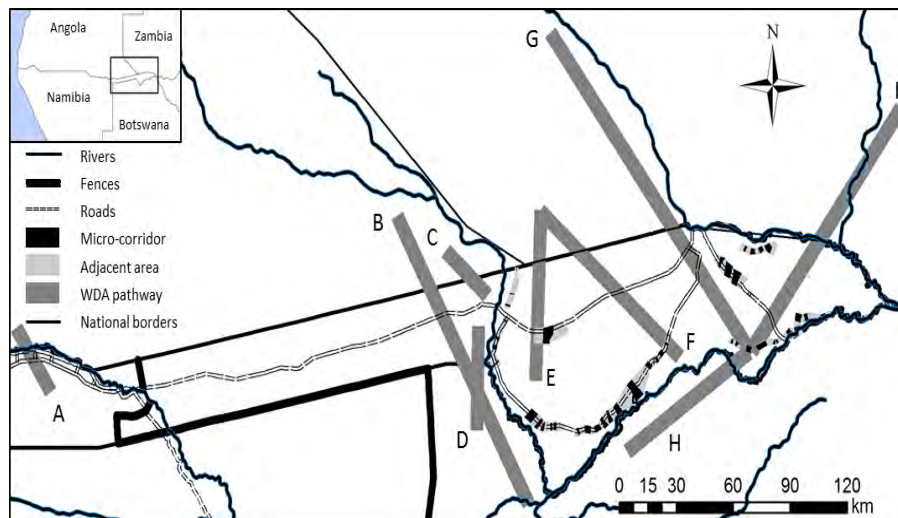
The same is true for buffalo

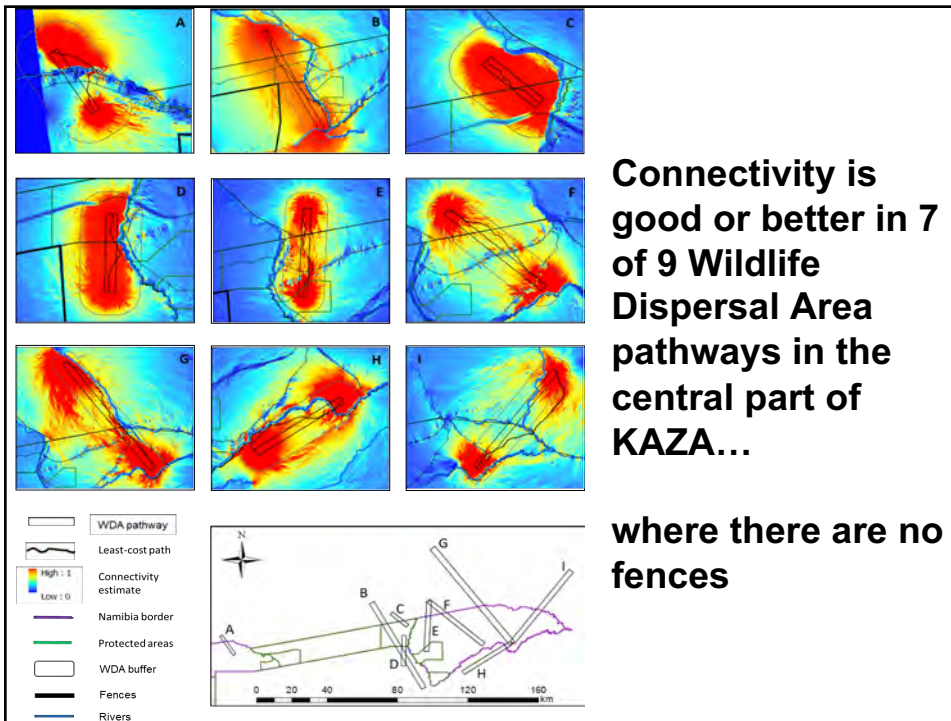


But remove a fence...or where there is no fence...and see what happens to zebra...

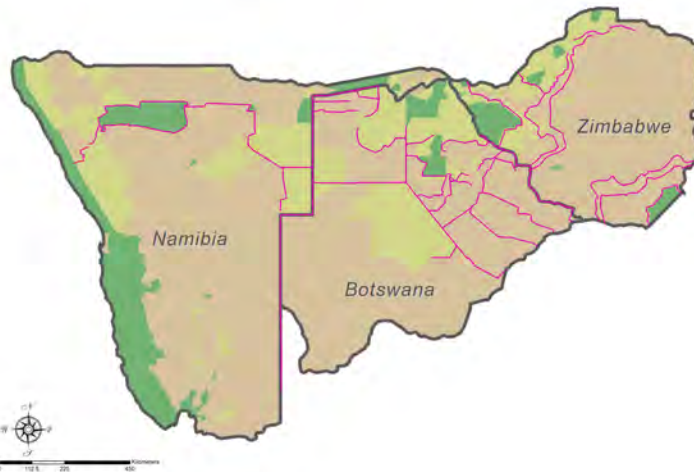


Location of Wildlife Dispersal Area pathways and local community-mapped micro-corridors in Kwando & Chobe-Zambezi WDAs





Veterinary disease (FMD) control fences linked to beef exports to the EU across 3 KAZA countries c. 1974-2010



Veterinary Cordon Fences

- Established to control diseases strongly associated with wildlife and affecting livestock production and beef exports from southern Africa
- Around **10,000 km** of fences erected for control purposes, separating cattle and wildlife
- Led to the loss directly through shooting, and indirectly through restricting seasonal wildlife movement c.**1,4 million** large mammals since the 1930s to the present

Removing Barriers to Wildlife Movement: Problems & Solutions

Future desired state:

- Widespread expansion of wildlife populations and long-term success of the KAZA TFCA are contingent upon the ability of large wild herbivores to move freely within and between countries

Current existing state:

- The monitoring of elephant and buffalo movements between Namibia and Botswana since 2007 has demonstrated the effectiveness of fences in preventing the movement of these species

Problems and Solutions

Problem

- Persistence of the prevailing paradigm around animal disease control and beef export markets is manifest in country policy frameworks responding to perverse and outdated economic incentives
- Reliance upon outmoded geographic-based approaches to disease control in response to policy
- Led to placement of an extensive network of VCFs across historical wildlife movement and migration routes both within and between countries

Problems and Solutions

Solutions:

Partner countries must:

- Work to maintain existing and possible future wildlife corridors
- Work to address the prevailing paradigm around animal disease control and beef markets, and introduce policy reform
- Introduce non geographic measures to manage disease and promote CBT of beef
- Agree to re-open and/or establish corridors through the removal of barriers to movement
- Agree that with or without fences, corridors will still be needed to ensure biological and ecological connectivity

Not just Fences... Other infrastructure includes...

- **LARGE SCALE**
- Roads and rail
- Riparian developments
 - Human population growth and settlement expansion
 - Agro-industrial developments
 - Dams
 - Irrigation
- **LOCAL SCALE**
- Rura-urban elephants
- Urban growth
- Rural development hubs

LARGE SCALE ENVIRONMENTAL CHANGE

- **LARGE SCALE**
 - Environmental perturbations
 - Floods and drought
 - Climate change
 - Water scarcity
- **Requires planning for the future**
 - Science-based and Participatory Scenario Planning
 - Across all development sectors
 - Where will elephants still persist in the KAZA landscape in 2050?
- **It is only 30 years away**

Risk diversification

- Diverse ecosystems & greater biodiversity across large landscapes
- reduces risk to natural systems,
- provides greater resilience to natural catastrophes, disease outbreaks and climatic challenges
- Economic diversification spreads risk and imparts resilience to local economies faced with various environmental, economic & socio-political challenges
- Provides for multispecies animal production systems and circumvents the “cattle versus wildlife” dichotomy, avoids option foreclosure and promotes a win-win situation for all

STRATEGIC PLANNING FRAMEWORK FOR THE CONSERVATION AND MANAGEMENT OF ELEPHANTS IN THE KAVANGO ZAMBEZI TRANSFRONTIER CONSERVATION AREA

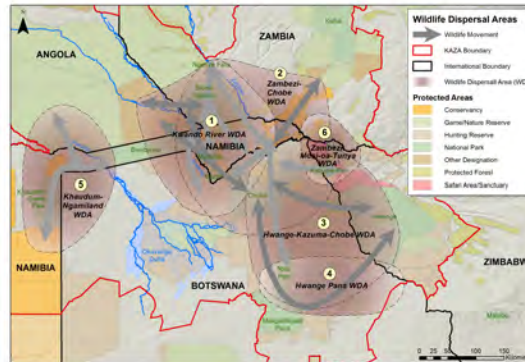


VISION

KAZA's elephants, the largest viable and contiguous population in Africa, are conserved to the benefit of people and nature within a diverse and productive landscape

Objective 1 Facilitate the development of an integrated land use planning process to secure long-term ecosystem integrity and connectivity of KAZA's elephant population

- Provide for integrated land use planning
- Legally secure corridors
- Provide incentives for communities to farm outside wildlife corridors
- Address barriers to movement, e.g. fences



Objective 2 Maintain and manage KAZA's elephants as one contiguous population

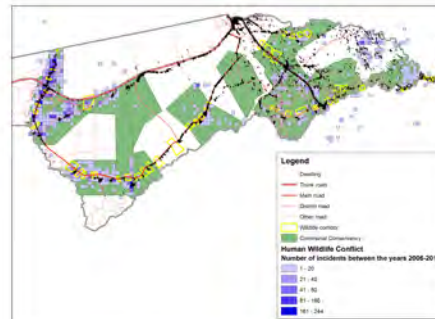
An elephant bull moves between Angola, Namibia and Zambia, a distance of over 1,800 km

- Undertake transboundary coordinated and synchronized aerial surveys of elephant
- Develop, implement and review national elephant action plans
- Align these plans to the KAZA Framework



Objective 3 Promote and support co-existence of humans and elephants for ecological, social and economic benefits

- Build capacity on use of mitigation techniques and safety around elephants
- Provide alternative water sources for people and elephants
- Adopt climate smart conservation agriculture



**THANK YOU
OBRIGADO**

