

LESSONS LEARNT FOR THE ADAPTATION OF OF BLACK RHINOS FOR LONG DISTANCE TRANSLOCATION

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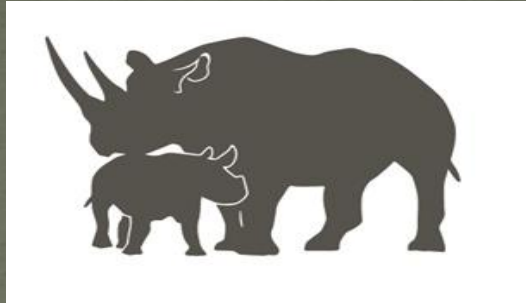
Zambia was once home to the third largest black rhino population on the African continent numbering 12,000, of which 4,000 lived in the Luangwa Valley and 2,000 in North Luangwa National Park. Through the poaching crisis of 1970-1980s the population was decimated and they were ultimately declared nationally extinct in 1998. In 2003, following years of successful conservation and anti-poaching efforts the North Luangwa Conservation Program embarked on an ambitious black rhino project to translocate a founder population of south-central black rhino (*Diceros bicornis minor*) to North Luangwa National Park. From 2003-2010 twenty five black rhinos were airlifted to NLNP from South Africa in a multi-national / multi-agency agreement. Until recently this was the largest translocation of its kind on the African continent. The re-establishment of a free-ranging population of black rhino in Zambia has largely been a success with no poaching losses and successful breeding. But the process has not been without its challenges and many lessons have been learnt. The NLNP black rhino project has repositioned the back drop against which all future translocations have since been undertaken: from the selection of animals, to capture and boma time, the transport used, the release strategy adopted, and above all the monitoring of the adaptation process. Black rhino social structures and the impacts of their disruption on breeding success are now better understood for large scale translocations; none of which were envisaged or understood prior to the North Luangwa translocations.

REPATRIATION OF EASTERN BLACK RHINO INTO THE WESTERN SERENGETI ECOSYSTEM

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After an absence of more than thirty years, the Singita Grumeti Fund, in collaboration with Tanzania Wildlife Division and the Aspinall Foundation, repatriated two eastern black rhino into the western Serengeti in 2006. The two animals were sourced from Port Lympne Zoo in the United Kingdom: a third-generation zoo-bred cow and a fourth-generation zoo-bred bull, named Laikipia and Limpopo. Preceding the translocation of these animals was a massive effort to restore the integrity of the area to which they were to be relocated. Decades of illegal and unscrupulous hunting within the 'protected area' had decimated local wildlife populations. In collaboration with government conservation authorities, a security plan was devised and implemented to safeguard the ecological integrity of the ecosystem, and thus began a remarkable recovery and regeneration of the area.

While the repatriation of Laikipia and Limpopo can be viewed as a minor victory, the fight to establish a viable black rhino population in the western Serengeti is far from over. We have experienced rhino mortalities from natural causes, political interference, budget cuts and omnipresent security challenges, but none of these obstacles is insurmountable. The Singita Grumeti Fund is now looking to play a larger and more active role in black rhino conservation in East Africa through the expansion of the current rhino program at Sasakwa. Engaging with dedicated rhino conservation organizations, both nationally and internationally, is a strategy that the Singita Grumeti Fund believes will enable us to overcome the aforementioned challenges and reinvigorate efforts to establish a viable breeding population of black rhino at Sasakwa. Over and above the obvious short-term goal of bolstering the black rhino population in the western Serengeti, the Singita Grumeti Fund would welcome the opportunity to play a meaningful role in rhino meta-population management in line with the national rhino management strategy for Tanzania.



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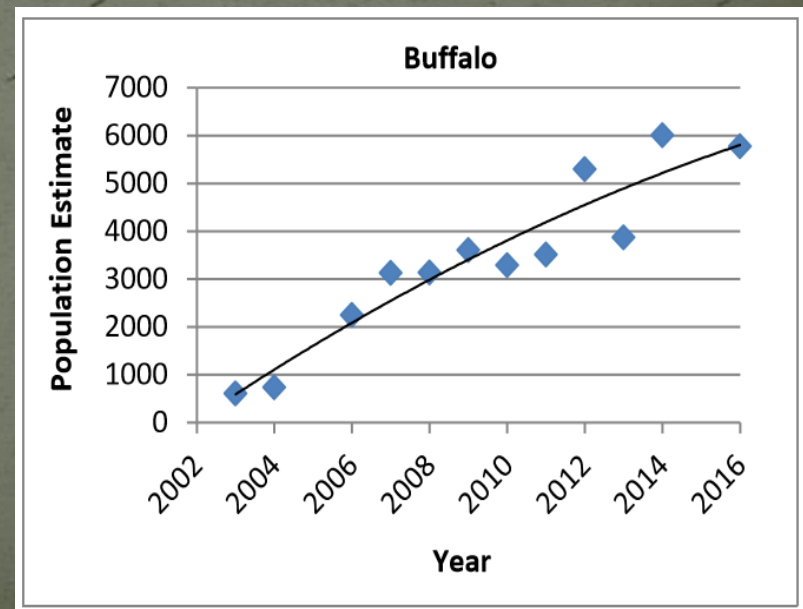
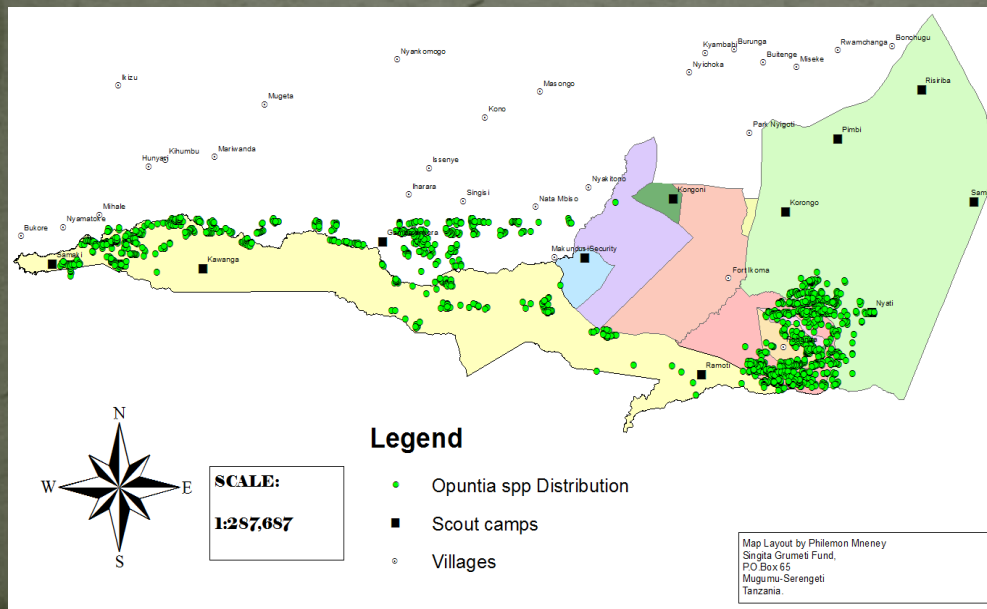
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2003 - 2017



RESEARCH & MONITORING

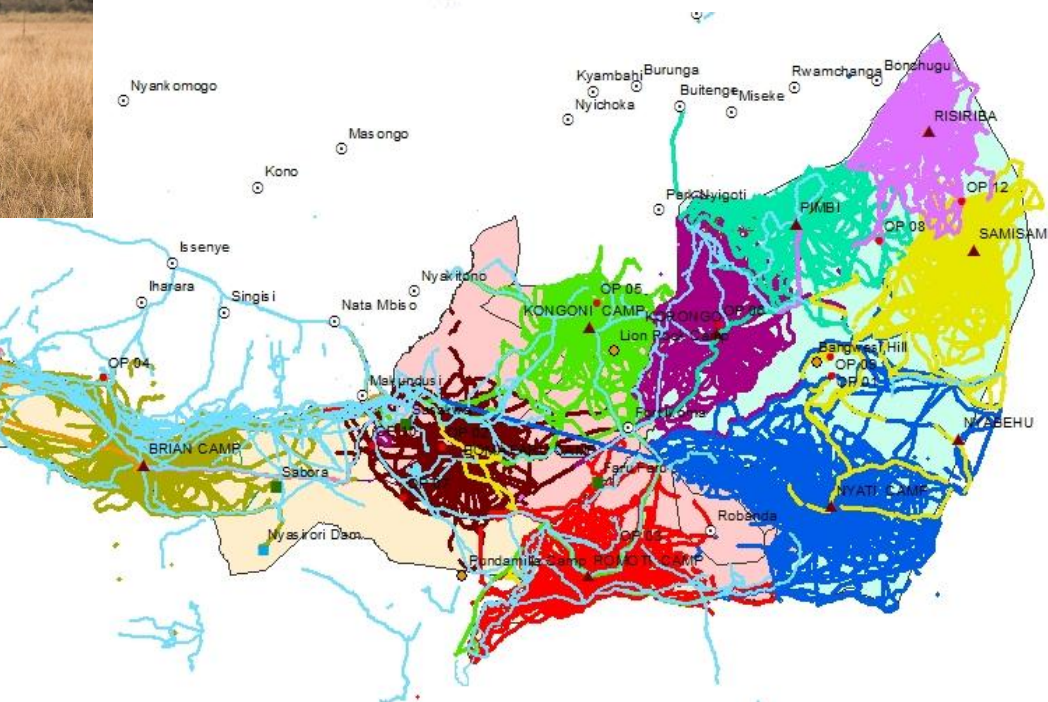
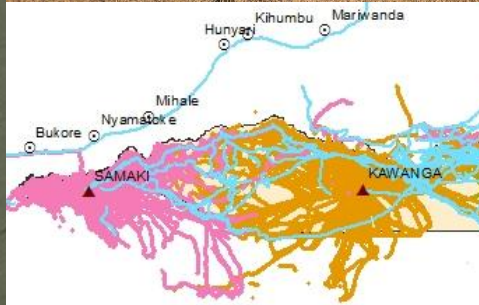
- Census – Large mammal aerial survey & camera trap grid
- Fire mapping and monitoring
- Vegetation biomass and species composition
- Human Wildlife Conflict monitoring



LAW ENFORCEMENT

- Integrated Management Approach
 - Tanzania Wildlife Management Authority
 - Zonal Anti-Poaching Unit – Bunda
 - Tanzania Wildlife Division
 - Tanzanian National Parks
 - Ikona Wildlife Management Area
- Operational Strategy
 - 120 Game Scouts – 21/7
 - 12 Game scout Outposts & 12 Permanent Observation Posts
 - S.O.G. - Intelligence Cell, Canine unit – Targeted Ops
 - DAS monitoring platform
 - Technical surveillance
 - Specialized equipment



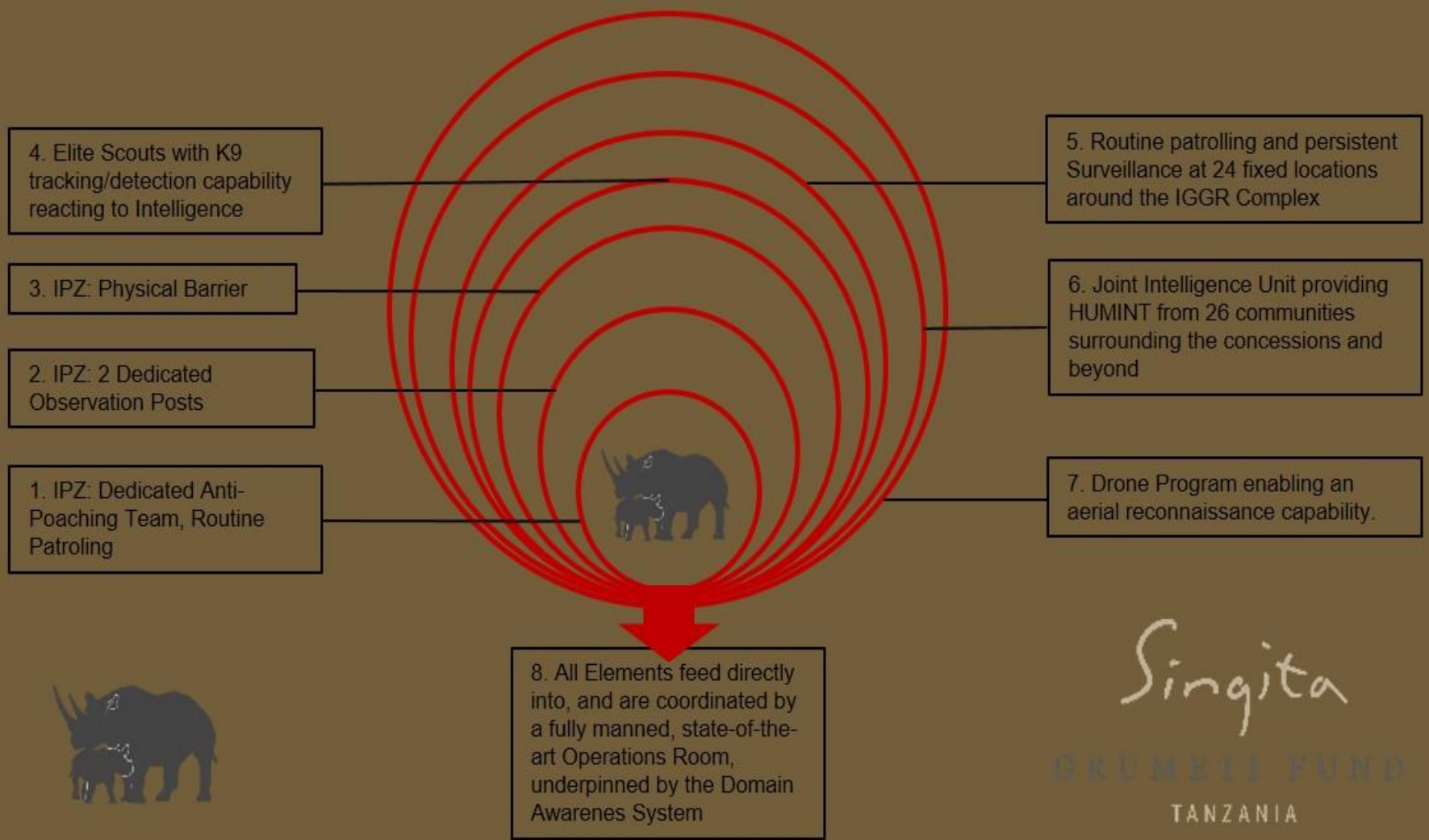


Weekly patrol coverage map

Annual patrol coverage map

Singita Grumeti Fund Law Enforcement Concept

Rhino Security



CONSERVATION MANAGEMENT

- Section management
 - Fire management
 - Alien plant & Tsetse control
 - Injured wildlife
 - Infrastructure management
 - Key species management
 - Sasakwa Rhino Sanctuary
 - Rhino Monitoring
 - Infrastructure management – Fence, water & Boma facility

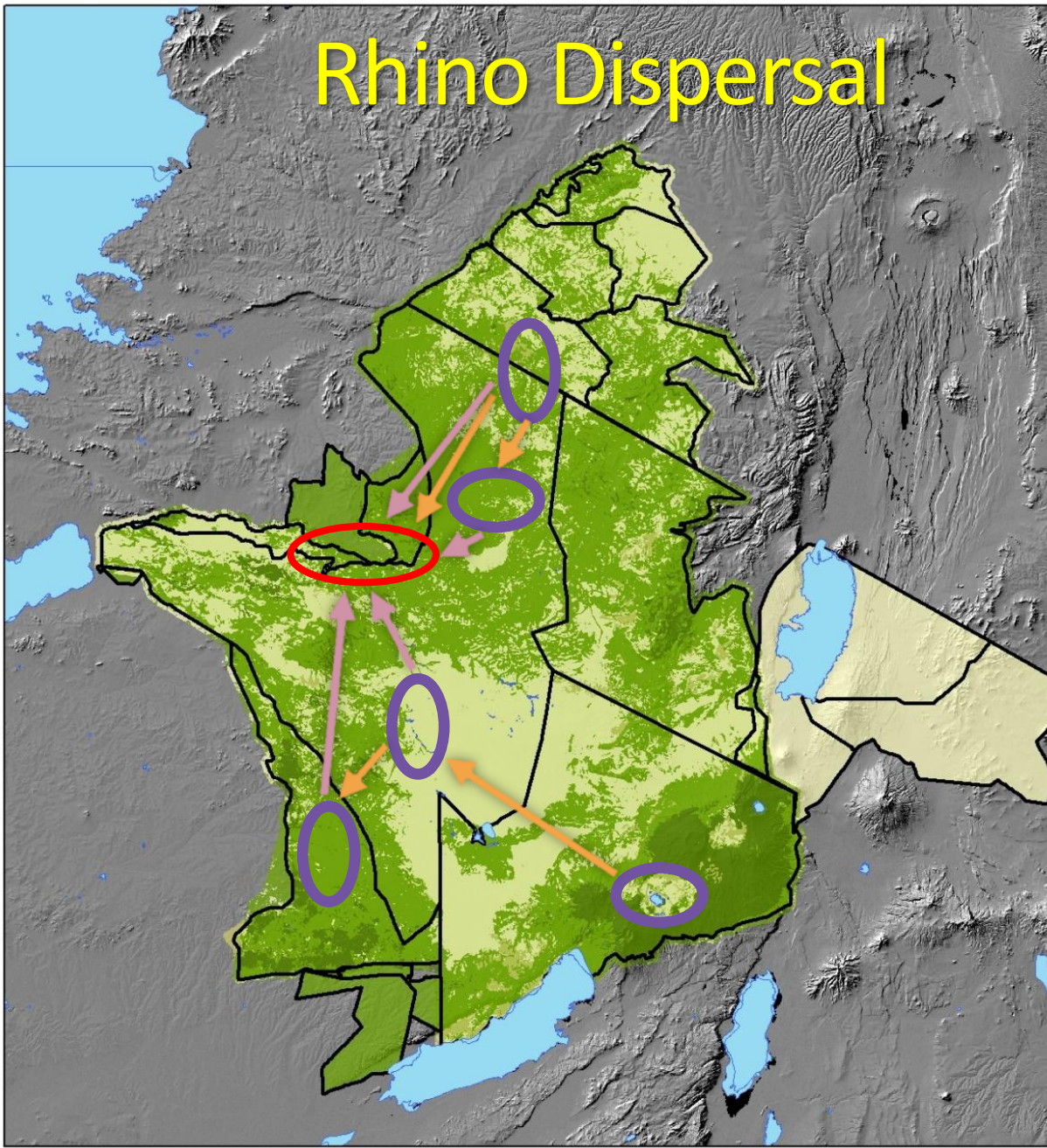


RHINO in the SERENGETI

- 800 – 1000 black rhino roaming Serengeti ecosystem in early 1970's
- SNP – 2 rhino cows survived. NCAA bull, 1994
- NCAA – bottlenecked at 13 rhino in 1995
- Unknown # dispersing between Masaai Mara & SNP
- Five rhino released into central Serengeti in 2010



Rhino Dispersal



Encouraging rhino dispersal through the establishment and protection of healthy satellite populations throughout the Serengeti ecosystem

Rhino translocations to Sasakwa

- U.K. - Port Lympne Zoo - Limpopo & Laikipia
- Relocated to Sasakwa in June 2007
 - Trickle exposure to Tsetse flies *Trypanosomiasis*
 - Exposure to local browse species
 - Elephant – Limpopo altercation, died August 2012



- Ngorongoro Crater Area Authority – Faru John
 - Negatively affecting population performance
- Encouraging stakeholder engagement in meta-population management
- Translocated to Sasakwa in 2015
 - Habituated well to fenced sanctuary & local browse
 - Integrated well with Laikipia
 - Advanced age

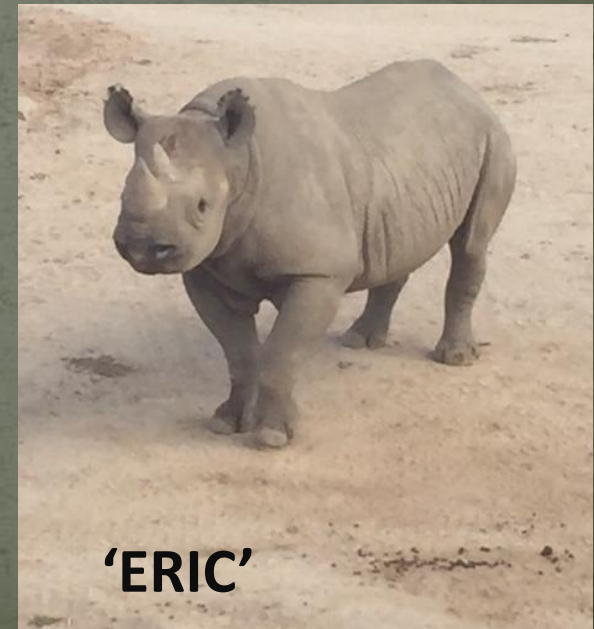


Sasakwa rhino Sanctuary



Serengeti Black rhino range utilisation

- Eastern Black Rhino (*D.b. michaeli*) Sources:
 - Rhino in East Africa
 - Kenya – Conservancies
 - Rwanda – newly established population
 - Tanzanian populations – Low numbers; sex ratios
 - Out of range wild managed populations
 - Thabā Tholo – South Africa
 - Large population
 - Ex-situ populations
 - AZA - San Diego Zoo Global
 - Low numbers & high costs
 - Risk of poor adaptation



Singita Grumeti Fund Rhino Program

Direction

- To ultimately have free-ranging black rhino in the western buffer zone Game Reserves of the Serengeti
 - Positive knock on management effects throughout the greater Serengeti ecosystem
- Become greater role players in the management of rhino within Tanzania
- Initially establishing a well secured and reproducing satellite population within the ecosystem in a currently unoccupied space

Thank you..

