



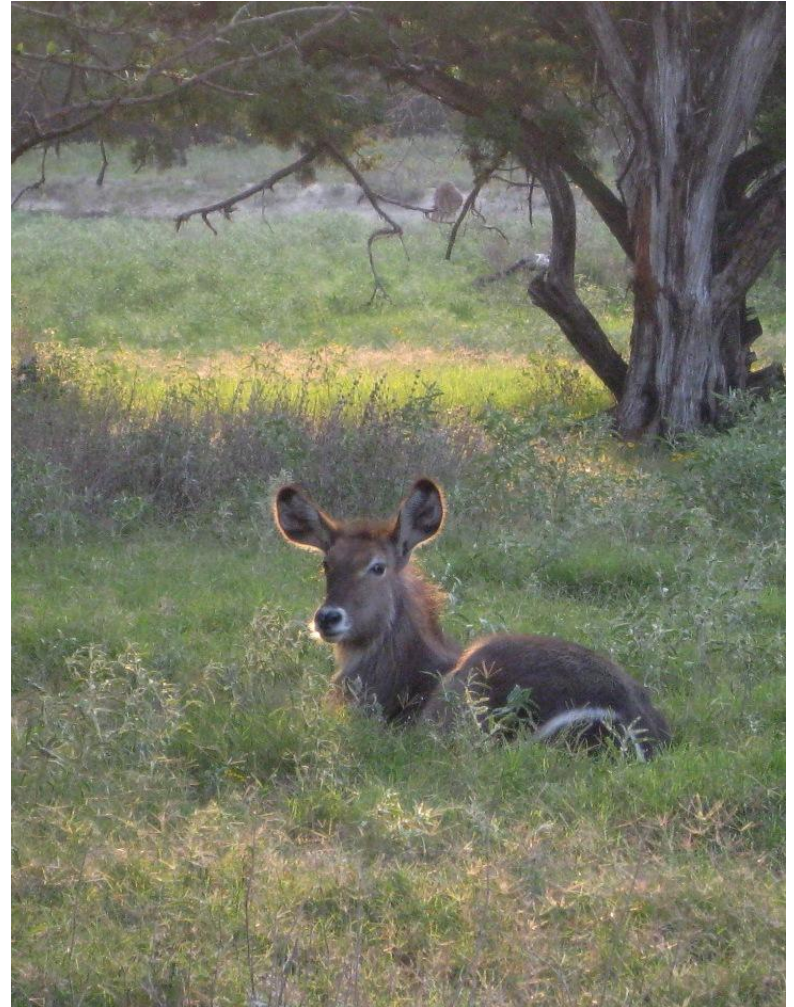
“BIG HERD” SCENARIOS: MALE MANAGEMENT

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Pilot study of waterbuck

What? Manage the herd so....

- Calves are born at a time of year that
 - ▣ Enhances calf survival
 - ▣ Favors female recovery
 - ▣ Reduces stress on pasture
- Maintains genetic diversity and social experience
 - ▣ Avoid inbreeding
 - ▣ Socialize developing males



Why? Sustainable strategy

- Genetic viability
- Herd health
- Socially adept
- Ecosystem health



Where? Main Pasture: Fossil Rim



[More...](#)

How? ABA male scenario

- Vasectomize bull
 - ▣ Genetic output already well represented
 - ▣ Maintain herd structure
- Replace with intact bull
 - ▣ Introduce in best season for conception
 - ▣ Optimal outbreeding
- Return vasectomized bull
 - ▣ Rest cows to regain condition/cycles
 - ▣ Move maturing males to bachelor herd



When? 2008

- Jan – May: Baseline (vasectomized male)
 - 1-week rapid assessment
 - “24-hr” focal samples @ 3-week intervals
- June-July: Treatment (intact male)
 - 1- hr focal @ dawn or dusk “daily”
- Aug- Dec: Post-treatment (vasectomized male)
 - 1- hr focal @ dawn or dusk “daily”
 - “24-hr” focal samples @ 3-week intervals

Outcomes

- ❑ No change in vasectomized male behavior before vs. after treatment
- ❑ Intact male accepted by herd, mounted females
- ❑ Interaction with castrated male



Who?

STAFF

Animal Care
Veterinary
Education
Natural-
resources

TAMU/ULL

Pre-college
Undergrad
Grad class
Faculty



Next steps?

- Outreach activities: blogs.tamu.edu/hoofstock
 - ▣ BLOG, online video archive, observation database
- Proposal for master's research
- 2009 plans
 - ▣ Rapid assessment week (grad class)
 - ▣ master's research project- waterbuck
 - ▣ Proposal for general individual-based model of herd/habitat interactions
- Scale up to metapopulation dynamics

