

# Comanche-Faith Study

- “Searching for the Sweet Spot”



# The Instigators



# Sweet Spot

- The best combination of deer density and supplemental feed that will maximize antler production without damage to the habitat

# Two Study Sites

- Comanche Ranch
- Faith Ranch



# Comanche Enclosures



# Faith Enclosures



# Enclosure Treatments

## Methods

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Constructed in 2003  
6 enclosures (81 ha)  
2.5 m tall net-wire fences



# Deer Density Conversion

- ACTUAL DENSITY      HELICOPTER  
   DENSITY

10 Deer/200 Acres = 50 Acres/Deer = LOW

25 Deer/200 Acres = 20 Acres/Deer = MEDIUM

40 Deer/200 Acres = 12 Acres/Deer = HIGH



# Water in Center of All Enclosures



# Two Feeders in Center of each Fed Enclosure



# Population Estimates from Cameras

- Used combination of number of unique bucks from antler characteristics
- And resightings of individually ear-tagged deer

# Camera Census

- Continuous for four weeks per period
  - Unfed enclosures
    - Two weeks of baiting in unfed enclosures
    - 4 cameras per enclosure
    - 1 on water, 3 on trails
  - Fed enclosure
    - 1 on water
    - 1 on feeder
    - 2 on trails



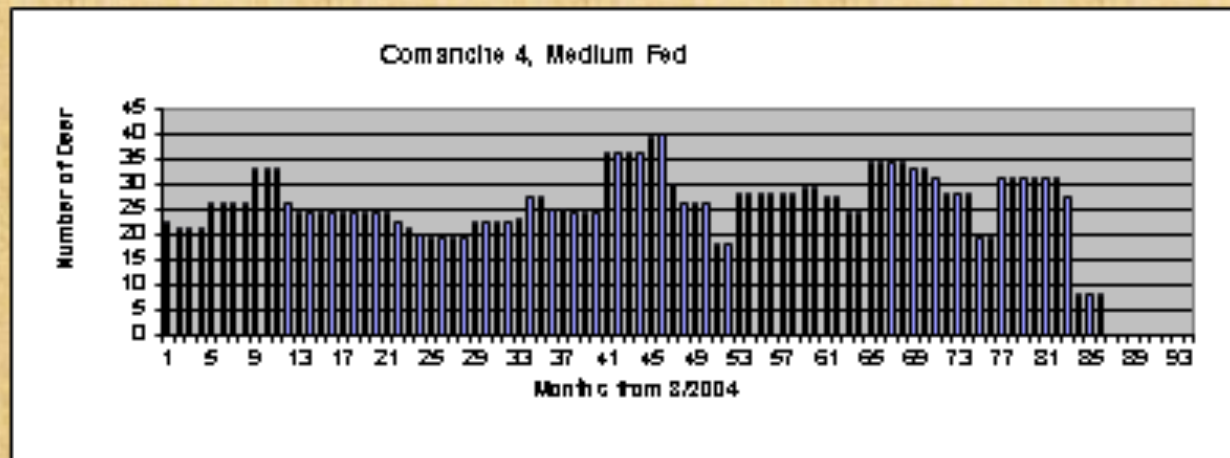
# Reconstruction Population Estimates

- From camera data and other sources
- Determine how long every deer is in an enclosure based on its age at capture/harvest, mortalities, and appearance on cameras during surveys

# Example Reconstruction

## Comanche-Faith

- Constant Densities
  - Camera Census performed in September and January
  - Capture and Harvest in December and April
  - Reconstruction technique



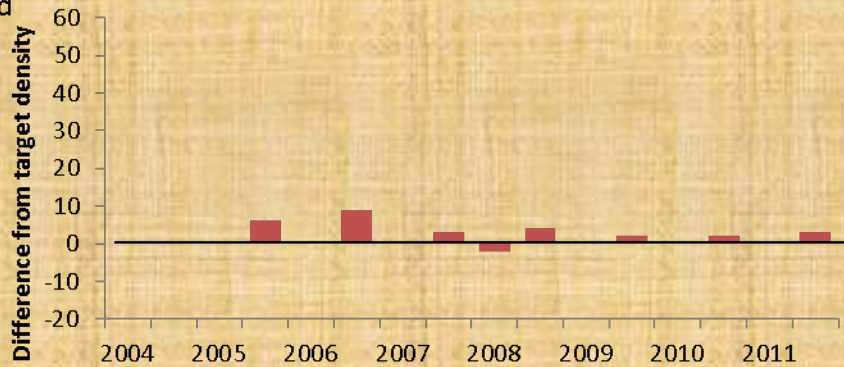
# Two Population Adjustments per Year

Either added or removed deer to maintain target density

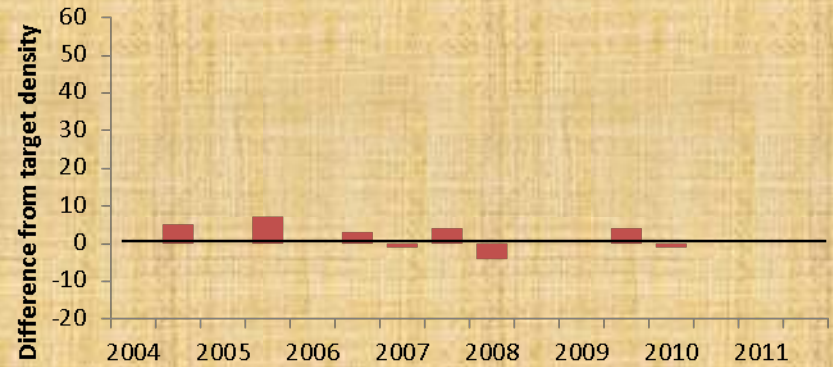


Deer  
Removed

### F2 Low-Feed

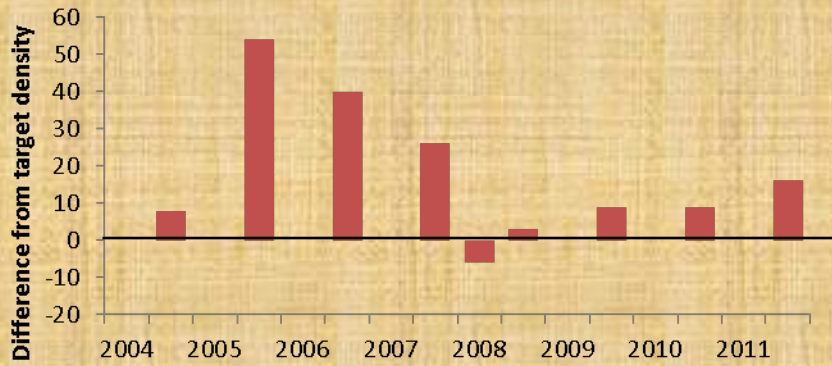


### F3 Low-No feed

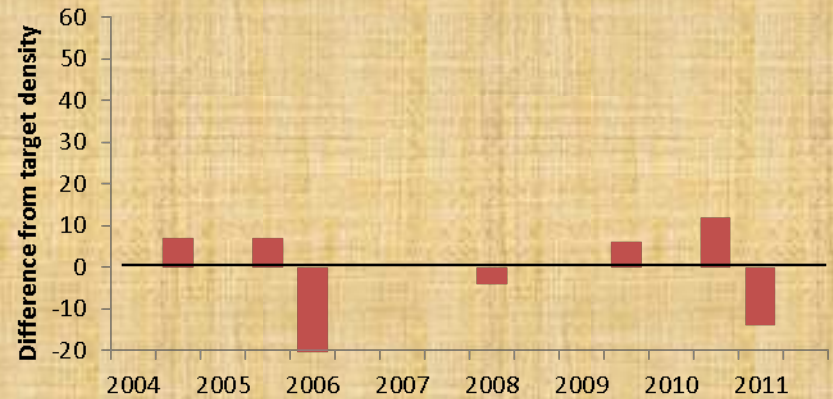


Deer  
Added

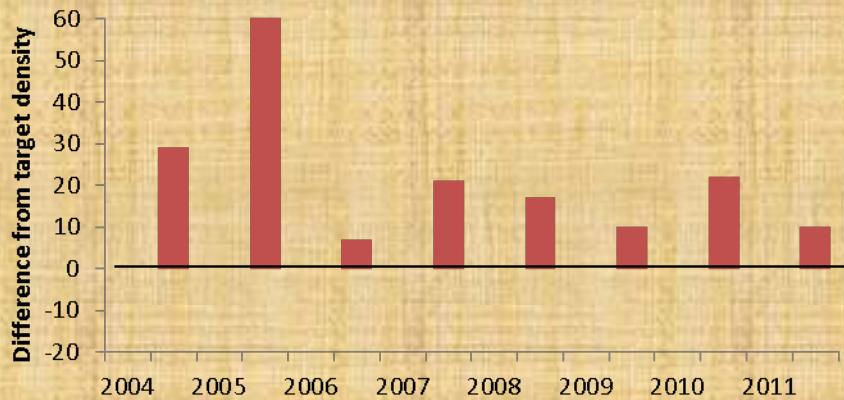
### F1 Med-Feed



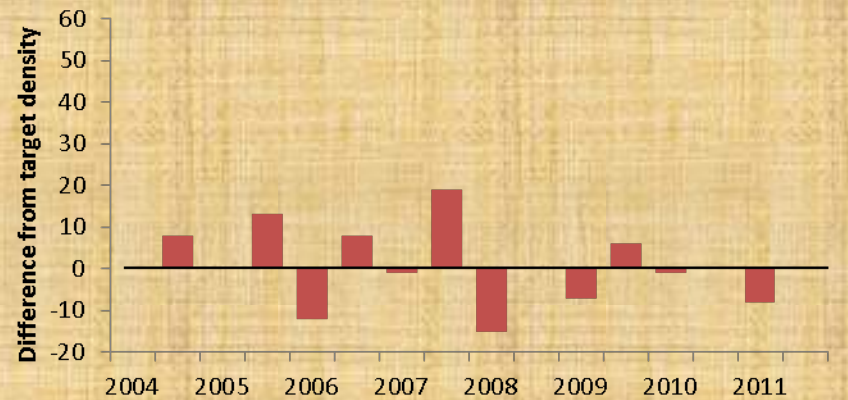
### F6 Med – No feed



### F4 High-Feed



### F5 High – No feed





The End