

# Tools and Techniques for Feral Hog Management

---

## **The View from the Mainland**

Hawai'i Conservation Conference

Michael J. Bodenchuk

Texas Wildlife Services Program





# Domestic Livestock Disease Reduction

---

- ☆ Disease risk involves accurate data on infection rates, exposure probability/Biosecurity
- ☆ Brucella risk reduction likely similar to reduction in breeding hog numbers
- ☆ Pseudorabies reduction more difficult



# Pseudorabies Reduction

---

- ☆ Function of biosecurity
- ☆ Infection rate not equal to Infective rate
- ☆ Expect percentage of the population with antibodies to spike then decline over time
- ☆ Opportunistic sampling only identifies presence- not prevalence



# Human Health Risks

---

- Feral hogs carriers of leptospirosis
- Brucella infections of hunters
- Feral hogs spread E. coli in watersheds
- E. coli management requires reduction in both numbers and range of hogs



# Agricultural Damage

---

- Grain crops- rice, wheat, sorghum, corn
- Pasture and alfalfa
- Vegetable crops and E. coli
- Specialty crops, nuts, melons

# Property Damage

---





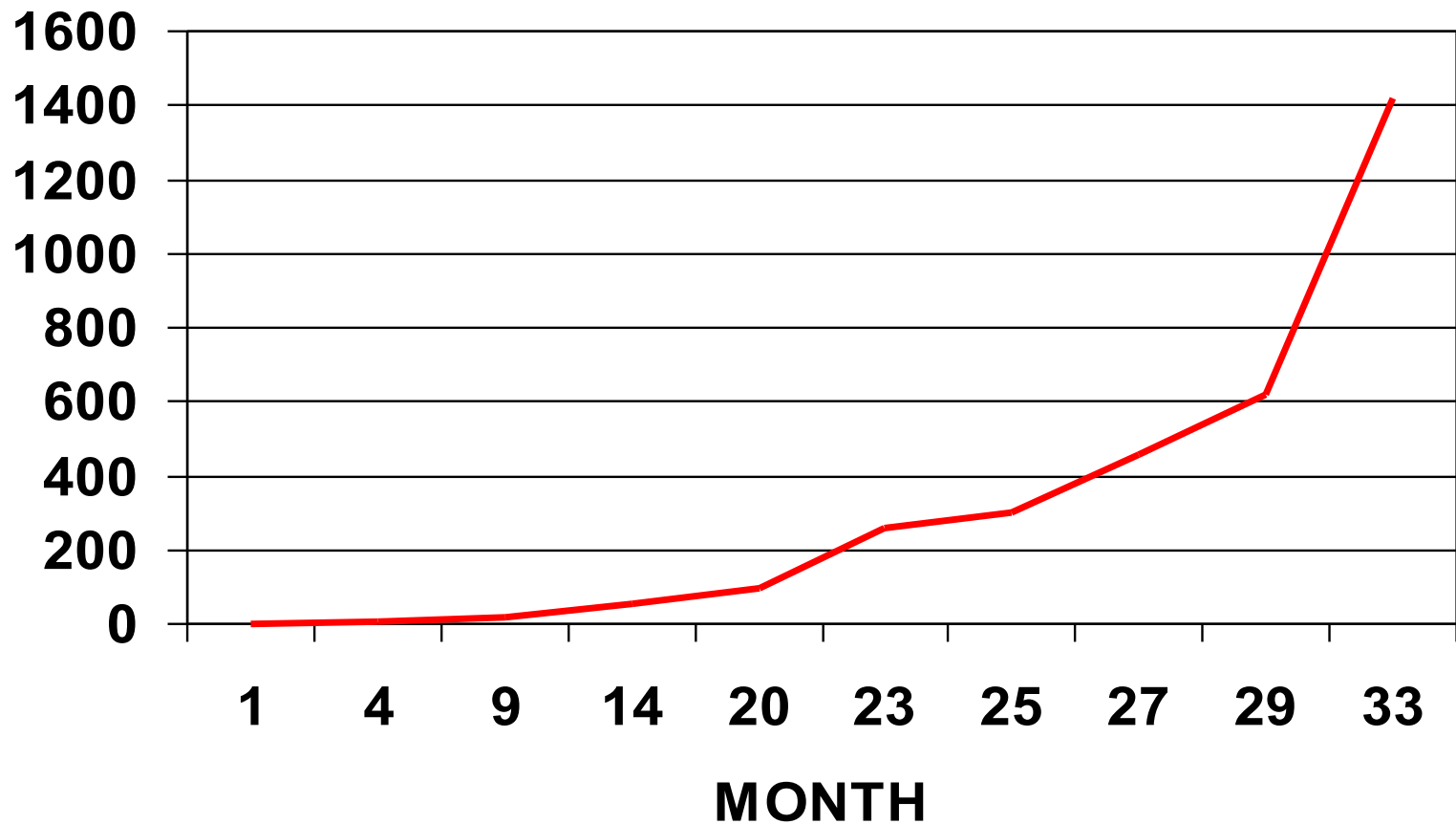
# Ecological Damage

---

- ❑ Predation on ground nesting species- turtles, herps and birds
- ❑ Spread invasive plants through rooting and droppings
- ❑ Competition with other wildlife- mast, low growing plants
- ❑ Soil disturbance and erosion

# Model Population Growth

---





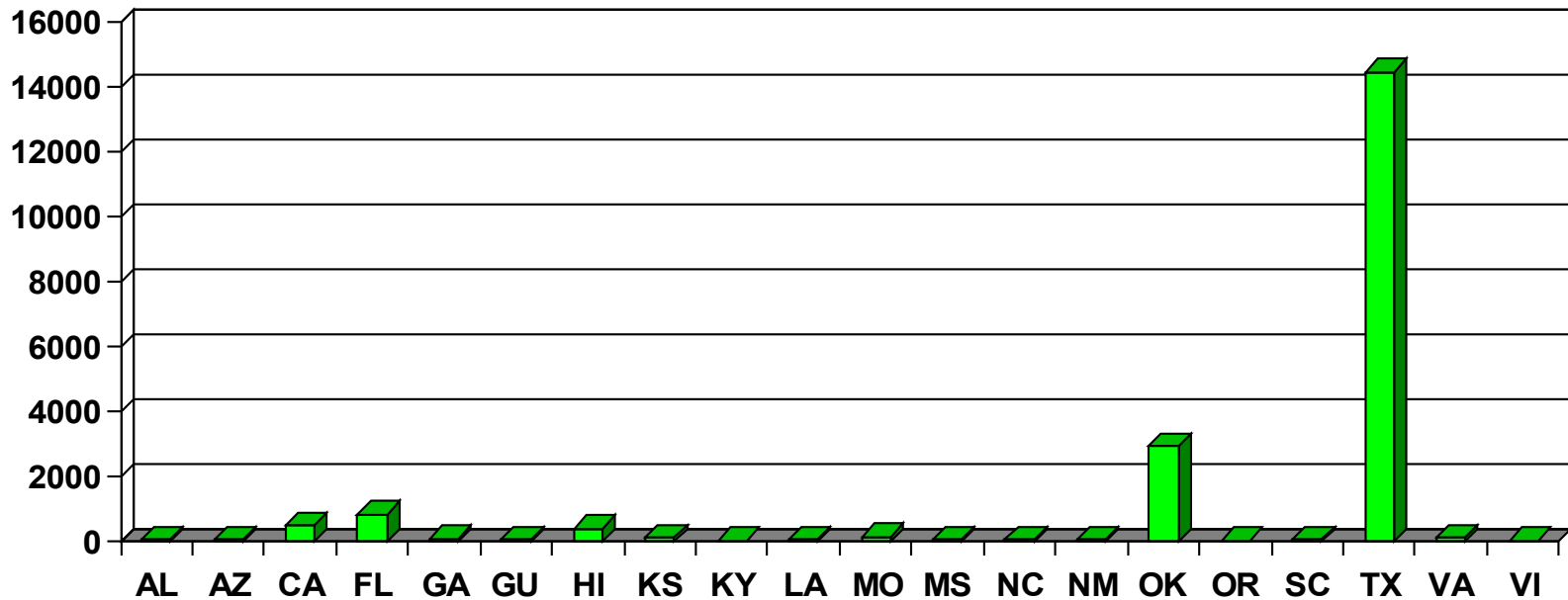
# Limits to Control

---

- Feral hogs viewed as a Resource
- Landowner complacency or outright refusal to allow control
- Agricultural issues with free-ranging livestock
- Cultural Issues
- Legal status

# National Feral Hog Take FY 2006

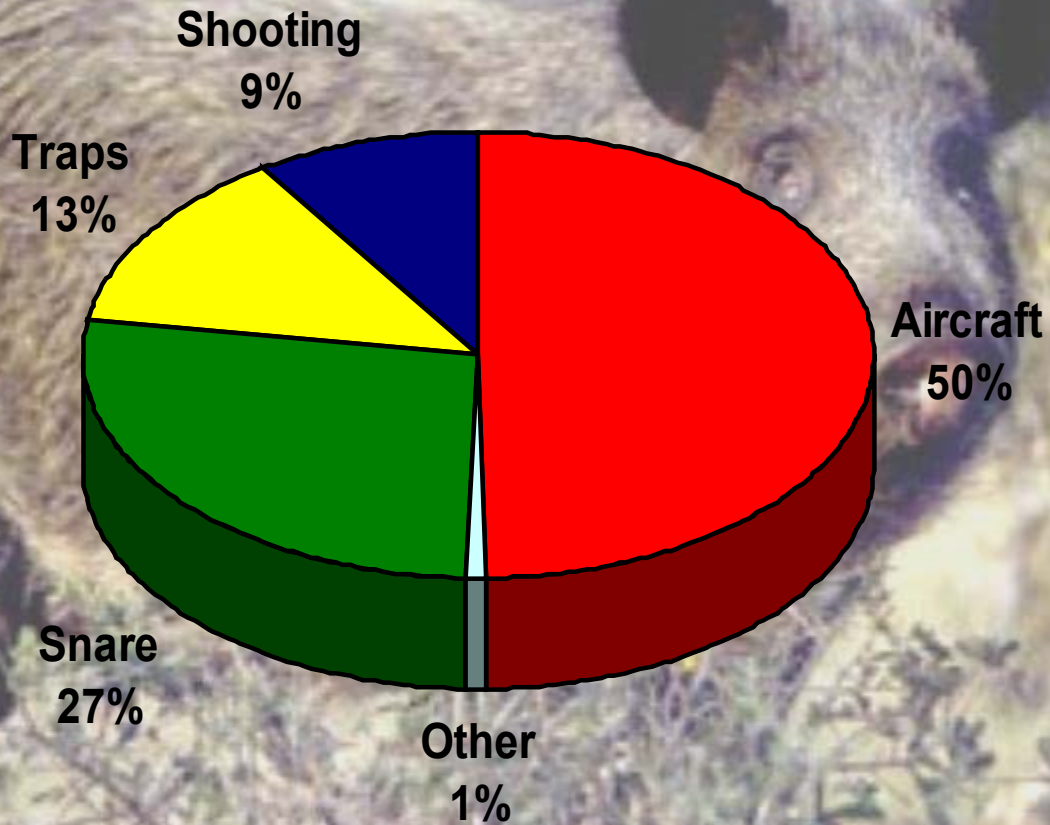
---



**19,752 Total Taken**

**14,441 Texas Take**

# Texas Feral Hog Take FY 2006



**14,650 Feral Hogs Taken**

# Livetrap



# Snare Design

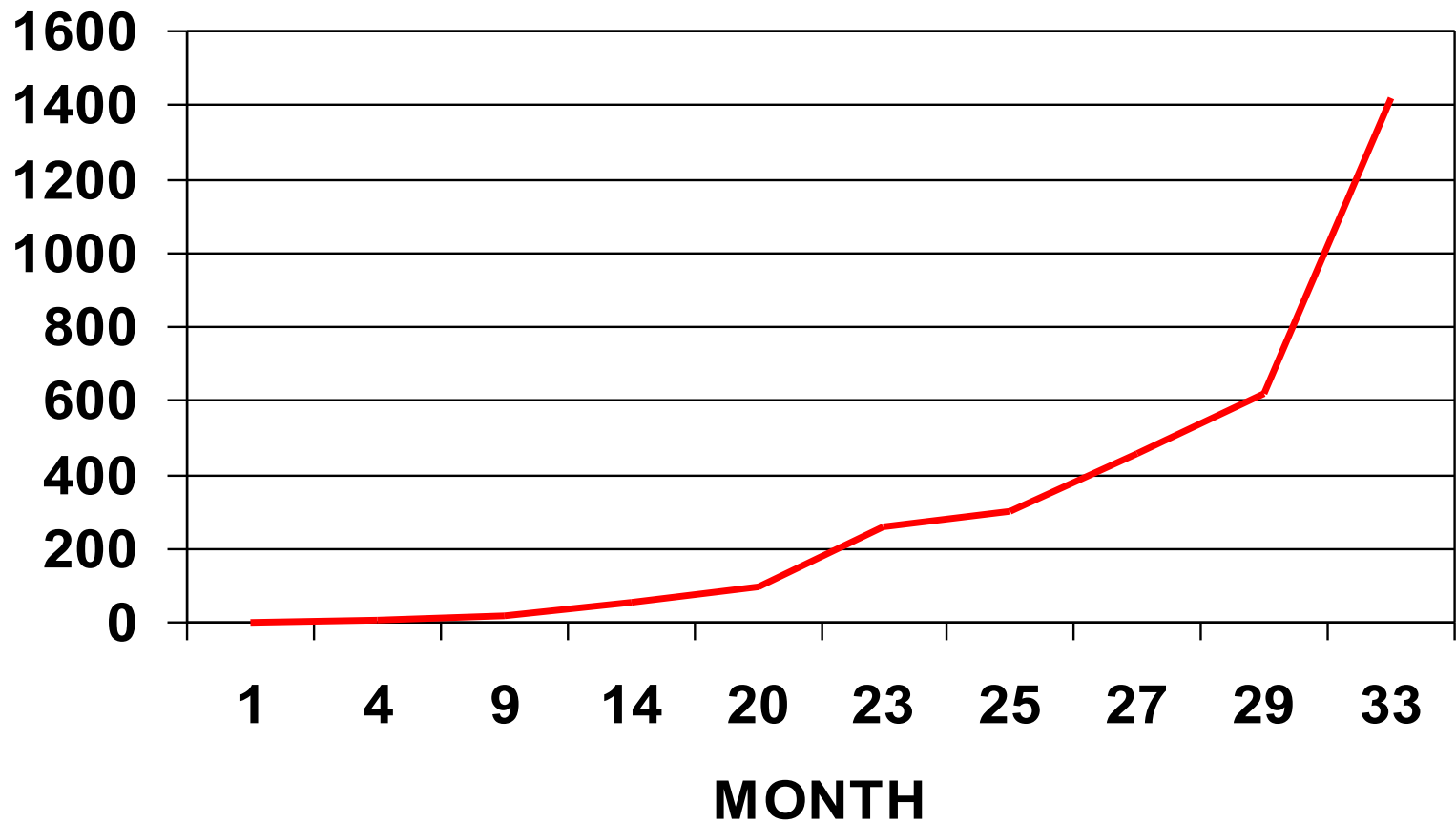
---

- ❑ 1/8 or 3/16 Cable
- ❑ Commercial Locks or  
Homemade from Angle  
Iron
- ❑ Swivel
- ❑ Fence Sets with Drag
- ❑ Neck Catch to be  
humane



# Population Reduction

---



# Population Management

---

Effective Performance Goal needs to include:

- ☆ Numbers Removed
- ☆ Estimates of numbers remaining
- ☆ Relationship to previous or subsequent control





# Biomass v. Numbers

---

- ☆ Crop and Ecological damage relates to Biomass more than numbers
- ☆ Small (<60 lbs) hogs consume 5% body weight daily
- ☆ Large Hogs consume 3% as maintenance diet and 5% of high quality feed
- ☆ Damage relates to the biomass of hogs on the landscape and not just numbers

# Texas Examples

## Site A

- ☆ 80 Sq Mi
- ☆ 7.4 hrs helicopter
- ☆ 365 hogs removed
- ☆ 39 were small hogs, 250 were medium hogs and 76 were large hogs

## Site B

- ☆ 80 Sq Mi
- ☆ 14.7 hrs helicopter
- ☆ 130 hogs removed
- ☆ 88 were small hogs, 38 were medium hogs and 4 were large hogs



# Texas Example

---

<b>UOM</b>	<b>Site A</b>	<b>Site B</b>	<b>B/A</b>
<b>Total Hogs</b>	365	130	.356
<b>Hogs/hr aerial</b>	49.3	8.84	.179
<b>Hogs/sq mi</b>	4.56	1.62	.355
<b>Total Biomass removed</b>	40,390 lbs	6940	.172
<b>Biomass removed/sq mi</b>	505	86.75	.172



# Biomass Reduction

---

- ☆ Impractical to assess on large scale
- ☆ Estimates can be made by experienced personnel
- ☆ New estimates required for subsequent control efforts
- ☆ Biomass estimates may also provide insight as to the status of a population on the population growth curve



# Summary

---

- ☆ Numbers of hogs killed not the only reporting element
- ☆ Biomass reductions are important parts of hog damage control
- ☆ Population Management relies on removal of breeding hogs
- ☆ Damage management is recurring when eradication is not an option

