Integrated White-tailed Deer Research

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Research Objectives

Determine whether a combination of management methods is more effective that a single method approach
Strategy Versus Individual Tools

1. Controlled Hunting
2. Trap and Euthanasia
3. Sharpshooting
4. Fertility Control
Reproductive Control Approaches

- Immunocontraceptives
  - GnRH
  - PZP/SpayVac®
- Surgical Sterilization
  - Tubal ligation
  - Ovariectomy
## Contraception/Sterilization

<table>
<thead>
<tr>
<th>PROS</th>
<th>CONS</th>
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<tr>
<td>• Perceived humane, non-lethal</td>
<td>• State agency resistance</td>
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<td>• Often less legal restrictions</td>
<td>• No immediate reduction</td>
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<td>• Strong public acceptance</td>
<td>• High cost</td>
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Capture Methods – Baiting
Capture Methods – Remote Immobilization
Darted Deer Recovery
Deer Retrieval
Surgical Preparation
Shaved and Scrubbed
Surgical Sterilization – Local Site Adaptation
Incision Site
Immobilization Drug Reversal
Post-Release
Village of Cayuga Heights

- 1.8 mile$^2$ in area
- Population of ~3600
- 850 properties
Capture Summary – Cayuga Heights

- 12/1/2012 – 12/15/2012
- 172 deer captured – 137 does sterilized (98%)
- ~650 person-hours capture (3.4 hours/deer)
- ~185 person-hours surgery (1.4 hours/deer)
- 2 Mortalities and 2 were euthanized
Cost

- ~$1,000-1,200/female with all professional labor

- ~$500/female with volunteer veterinarians and handling personnel
Sharpshooting Phases

- Communication
- Site Preparation
- Baiting
- Sharpshooting
- Reporting
Sharpshooting Methods

- Fixed stand or vehicle
- Day time vs. artificial light
- Shooting priorities
Firearm Safety

• Muzzle always in safe direction
• Unloaded/nonfunctional whenever possible
• Do not rely on firearm safety mechanism
• Always know target and backdrop
• Use proper ammunition
• Know mechanics of firearm
Rifle Caliber and Bullet Selection

- Minimum necessary impact energy
- Maximal precision
Frangible Bullets

- NO exiting fragments of significant size
- NO ricochets
Field Safety Considerations

- Selection of bait sites: safety and deer activity
- Sharpshooting areas are surveyed using digital aerial images and field confirmation
- Conduct field operations in low/controlled human activity areas
- Search intensively for people and non-target animals
Questions?