



Integrated White-tailed Deer Research

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Research Objectives

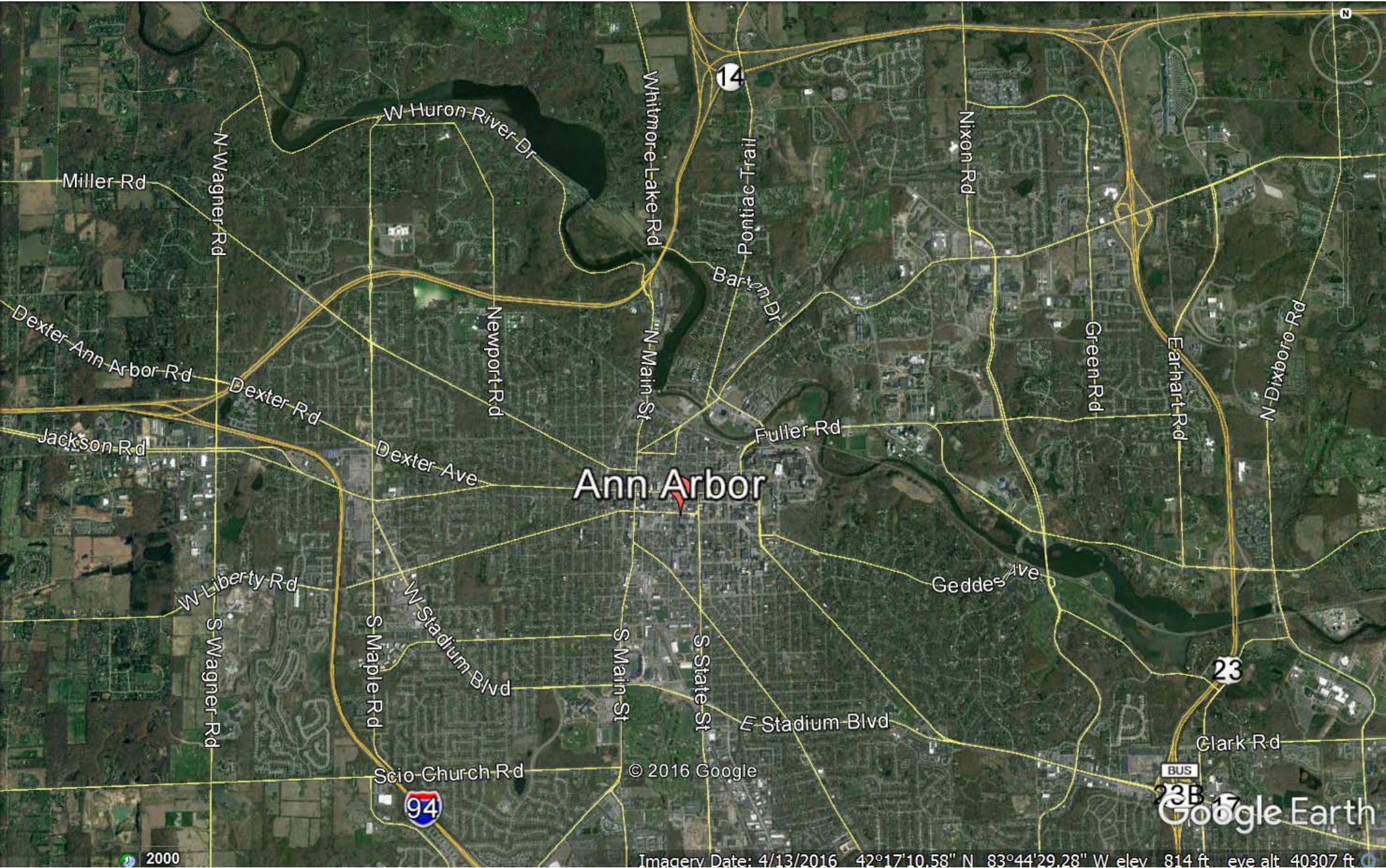
Determine whether a combination of management methods is more effective than a single method approach



Strategy Versus Individual Tools

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





Ann Arbor

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 23B
Google Earth

2000

Imagery Date: 4/13/2016 42°17'10.58" N 83°44'29.28" W elev 814 ft eye alt 40307 ft

Reproductive Control Approaches

- Immunocontraceptives
 - GnRH
 - PZP/SpayVac[®]
- Surgical Sterilization
 - Tubal ligation
 - Ovariectomy



Contraception/Sterilization

PROS

- Perceived humane, non-lethal
- Often less legal restrictions
- Strong public acceptance

CONS

- State agency resistance
- No immediate reduction
- High cost



Capture Methods – Baiting



Capture Methods – Remote Immobilization



Darted Deer Recovery



Deer Retrieval



Surgical Preparation



Shaved and Scrubbed



Surgical Sterilization – Local Site Adaptation



Incision Site



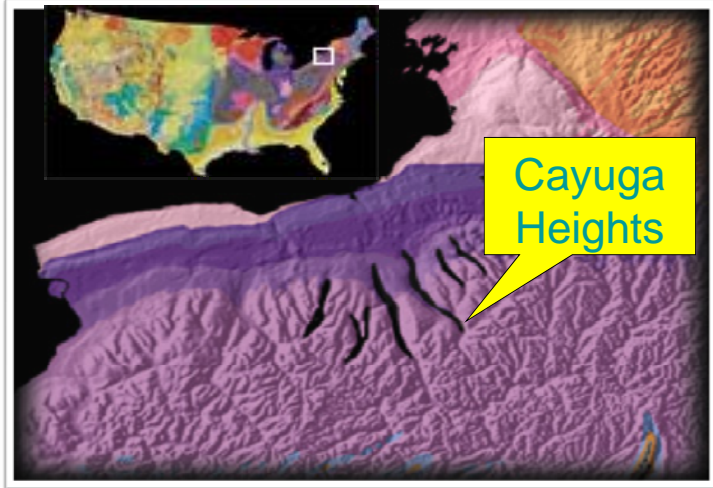
Immobilization Drug Reversal



Post-Release



Village of Cayuga Heights



- 1.8 mile² 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



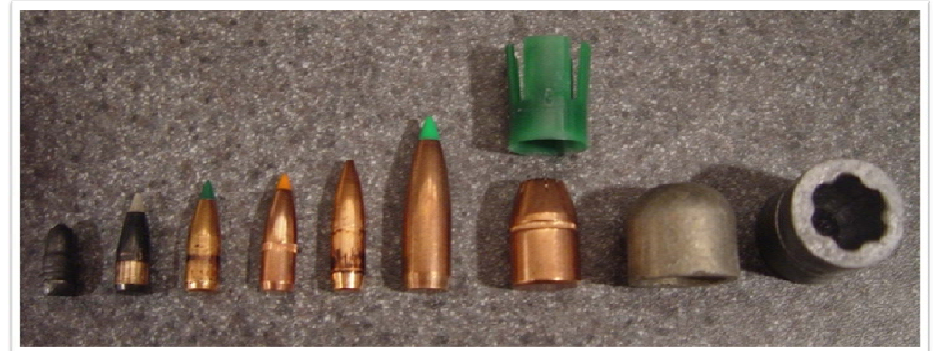
Rifle Caliber and Bullet Selection

- 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



A photograph of a forest path in autumn. The path is covered in fallen leaves and leads through a dense forest of trees with yellow and green foliage. The scene is captured from a low angle, looking down the path. An orange rectangular box is overlaid on the right side of the image, containing the text "Questions?".

Questions?