Deer Management Options

Collaborative Deer Management Outreach Initiative
Deer Mgmt. Options in NY - Geographic Scale

- Recreational Hunting (DMPs)
- Deer Mgmt. Focus Areas
- Controlled Hunts
- DMAP
- Sharp-shooting/ T&T, T&K
- Fertility Control
- Deer-Vehicle Collisions: Non-lethal methods
- Fencing/ Repellants
- Deer Damage Permits

Geographic Scale:
- State
- WMU
- Town
- Community
- Property

Management Option:
- General
- Targeted
Letting Nature Take its Course

- Left unchecked, deer herds quickly outgrow habitat
- Long-term habitat damage
- High numbers incompatible with human interests
- Deer may be in poor health
- Large population fluctuations

![White-tailed Deer Reproductive Potential](image)

- Year 1: 1 Adult, 1 Fawn
- Year 2: 1 Adult, 2 Young
- Year 3: 1 Adult, 2 Young, 2 Fawns
- Year 4: 1 Adult, 2 Young, 2 Fawns, 2 Yearlings
- Year 5: 1 Adult, 2 Young, 2 Fawns, 2 Yearlings, 2 Adults
- Year 6: 2 Adults, 2 Young, 2 Fawns, 2 Yearlings, 2 Adults
Letting Nature Take its Course

- Many examples of harmful effects of non-management:
  - Great Swamp Nat’l Wildlife Refuge, NJ- starvation
  - Block Island, RI- severe ornamental damage
  - Princeton, NJ- deer/vehicle collisions
  - Monhegan Island MN- increased tick abundance
  - Yale Forest, CT- reduced forest regeneration

- Removing human management does not return things to a “natural” condition.
Repellents and Fencing

• Site-specific problems only
• Repellent effectiveness varies
• Commercial products may be costly
• Fencing better for larger and denser sites
• Many types of fences
• Both methods work best along with population management
Non-Lethal Means of Reducing Deer-Vehicle Collisions

• Much has been tried; conclusive studies often difficult to find

• Wildlife crossings and fencing currently the only methods proven effective
Non-Lethal Means of Reducing Deer-Vehicle Collisions

• Two methods proven ineffective: deer flagging models and whistles

• Many other methods tried, but all either need more research or appear ineffective.
Providing Supplemental Food

• Properly managed deer herds don’t need it
• Artificially raises biological carrying capacity
• Logistically difficult
• Expensive
• Fosters disease transmission, vehicle collisions and predation
• Over-browsing of nearby vegetation
Trap & Transfer

• Logistically complex and expensive
• Not always easy to find relocation sites
• Injury and “capture myopathy”; survival rates may be low
• Possibility of spreading disease
• May have some value, but generally impractical and too expensive for free-ranging deer
Sharpshooting/Trap and Kill

- May be useful in urban and suburban areas
- Quickest reduction method
- Expensive; local taxpayers pay
- Venison usually donated
- Less efficient than controlled hunting
- Can be controversial
- Denies citizens recreation and venison
Fertility Control

Can reproduction be managed?
Immunocontraception

Stopping normal fertilization or ovulation by the introduction of an injected vaccine

Two main types:
- PZP (Porcine Zona Pellucida)
- GnRH (Gonadotropin Releasing Hormone)

Both work by inducing the production of antibodies that attack the doe's own system, preventing fertilization or ovulation.
Immunocontraception

- Both work at individual level
- Other issues with PZP
- Deer must be captured and tagged
- High proportion of deer (90%+) must be treated
- Need annual boosters
- None registered for use in NYS
- Considered experimental; permits needed
- Viable only for small, isolated deer herds.
Surgical Sterilization

- One and done
- Veterinarians only
- Cost about $1,000 each, but rises rapidly
- Experimental only; permits needed
- High proportion of deer (90%+) must be treated
Predator Reintroduction

- Wolves, mountain lions
- Can control a deer herd, but usually only at lower deer densities
- Predator-prey interactions often complex and variable
- Much of New York unsuitable habitat
- Must be biologically feasible and socially acceptable
Regulated Hunting

- Proven effective, efficient and inexpensive
- All state agencies use
- Flexible
- Deer Management Permits (DMPs) main tool
- Controlled hunts an option
- May not be appropriate or desired in all locations (i.e. urban\suburban)
Regulated Hunting

- May be additional options for hunting in future (may need legislative or regulatory changes, though)
- Many societal and ecological benefits of regulated hunting:
Regulated Hunting
Deer Management Focus Areas (DMFAs)

• To assist communities manage overabundant deer
• Additional season and antlerless tags
• In Tompkins Co. around Ithaca
Regulated Hunting
Deer Management Assistance Program (DMAP)

• Antlerless deer only
• Essentially a DMP for individual land parcels
• Site-specific management
• Improves landowner-sportsman relations
• Most issued for agricultural damage, but other categories exist
Deer Damage Permits (DDPs)

• Mainly for farming, when damage can’t wait till season
• Antlerless deer only, with rare exceptions
• Many standard conditions
• Participation in Venison Donation Program strongly encouraged
• Only 2.5% of statewide deer take; 3.6 deer/permit
• DDPs used more and more for suburban deer management; cheaper than sharpshooting
Deer Harvest Management in NY - Geographic Scale

- Recreational Hunting (DMPs)
- Multi-WMU or WMU Aggregate Regulations
- Extended Seasons
- Post-Season Hunts
- Deer Mgmt. Focus Areas
- DMAP
- Damage Permits

Management Intensity
Community-based Deer Management
The Community-based Deer Management Process

Recognition of deer problem
Recognition of a Deer Problem

- High awareness of the issue within the community
- Clarification of the “problem”
- Belief within the community that a “problem” exists and something should be done
The Community-based Deer Management Process

- Recognition of deer problem
- Define management objectives
Define Management Objectives

- Should relate to the “problem” (i.e., impacts)
- Does not require knowing how many deer live in the community
- Easily measured
The Community-based Deer Management Process

1. Recognition of deer problem
2. Define management objectives
3. Identify acceptable management methods
Identify Management Methods

- Acceptable to the community
- Reasonable cost
- Time to results
- Potential for success
The Community-based Deer Management Process

Recognition of deer problem

Define management objectives

Select management actions

Identify acceptable management methods
The Community-based Deer Management Process

1. Recognition of deer problem
2. Define management objectives
3. Identify acceptable management methods
4. Select management actions
5. Implementation
The Community-based Deer Management Process

1. Recognition of deer problem
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6. Evaluation
The Community-based Deer Management Process

1. Recognition of deer problem
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We can build capacity. . .

- in institutions
- in communities
- in individuals

Success is Possible!
Help is Available