
Urban Deer Management: Characteristics, Options, and Studies?

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Why Engage in Deer Management?



Characteristics of Urban Deer

- **Reproduction**
 - Increased in Urban Areas
 - Reported as high as 1.8 fawns/adult doe
- **Survival**
 - Higher rates
 - Reported as high as 87%
- **Home Range Size**
 - Typically smaller



Carrying Capacity

- Biological



- Social



Considerations for Starting a Deer Management Program



- Authority
- Background
- Objectives
- Recommendations
- Alternatives
- Logistics
- Evaluate
- Communicate



Management Options

Management Options

- Hunting (open or controlled hunts)
 - Pros
 - Inexpensive to communities
 - Provides economic stimulus
 - Largely favored by many people
 - Cons
 - Some types of hunting (i.e. trophy) not appealing to many
 - Lethal, which is a negative to some



Management Options

■ Sharpshooting

□ Pros

- Reduces deer population quickly

□ Cons

- Often expensive
- Controversial
- Lethal, which is negative to some



Management Options

■ Trap and Remove

□ Pros

- No projectile
- Removes deer from difficult areas

□ Cons

- High stress to deer
- Expensive
- Transfers the problem?
- Transfer not typically allowed by state agencies



Management Options

■ Contraception

□ Pros

- Doesn't fire lethal projectile
- Prevents future fawns from being born

□ Cons

- Expensive
- Doesn't remove deer which may be the problem
- Requires maintenance
- Difficult to achieve results



Management Options

■ Sterilization

□ Pros

- Doesn't fire a lethal projectile
- Prevents fawns from being born permanently

□ Cons

- Expensive
- Doesn't remove deer which may be problem
- Difficult to achieve results



Management Options

■ Reintroduce Predators

□ Pros

- Opportunity to return historical species

□ Cons

- Socially unacceptable
- Expensive
- Complicated interactions requires study



Management Options

■ Fencing and Repellants

□ Pros

- Can exclude deer from problem areas
- Relatively inexpensive

□ Cons

- Requires maintenance
- Does not solve community wide problem



Management Options

- Let Nature Take it's Course

- Pros

- Seem like a compromise
 - Inexpensive

- Cons

- Doesn't solve any problems that are occurring
 - Continued degradation of habitat and conflicts



Case Studies

Hunting

- Upper Makefield, PA
- Bernards Twp, NJ
- Princeton Twp, NJ
- Duke Farms, NJ
 - Reduced population by 47-85%
 - Failed to get deer to levels appropriate for ecological recovery



Sharpshooting

- Iowa City, IA
- Princeton, NJ
- Solon, OH
 - Reduced populations by 54-76%
 - Reduced deer-vehicle collisions by 49-78%



Contraception

- Fire Island, NY
- Fripp Island, SC
- NIST, MD
 - Have shown marked reductions in populations
 - Deer densities around 100/square mile or greater



Rutberg and Naugle 2008
Rutberg et al 2013

Conclusions

Urban Deer Management Conclusions

- Incorporate both biological and social input
- Appropriate management strategies should align with the objectives of the deer program
- Consensus on deer management is impossible
- All management actions need to be maintained over time
- DNR can provide technical assistance



Questions?

