

Deer Management in Urban, Suburban or Rural Environments: The Need for Intensive Commitment



USDA, APHIS, Wildlife Services
Justin Gansowski
Wildlife Disease Biologist

USDA Wildlife Services

“provide Federal leadership and expertise to resolve wildlife conflicts that threaten public and private resources”

Human Health & Safety

Agriculture

Natural Resources

Property



Protecting People
Protecting Agriculture
Protecting Wildlife



United States Department of Agriculture
Animal and Plant Health Inspection Service

USDA - APHIS - Wildlife Services

Service Agency

Provide recommendations, guidance and services at the request of citizens, organizations, government

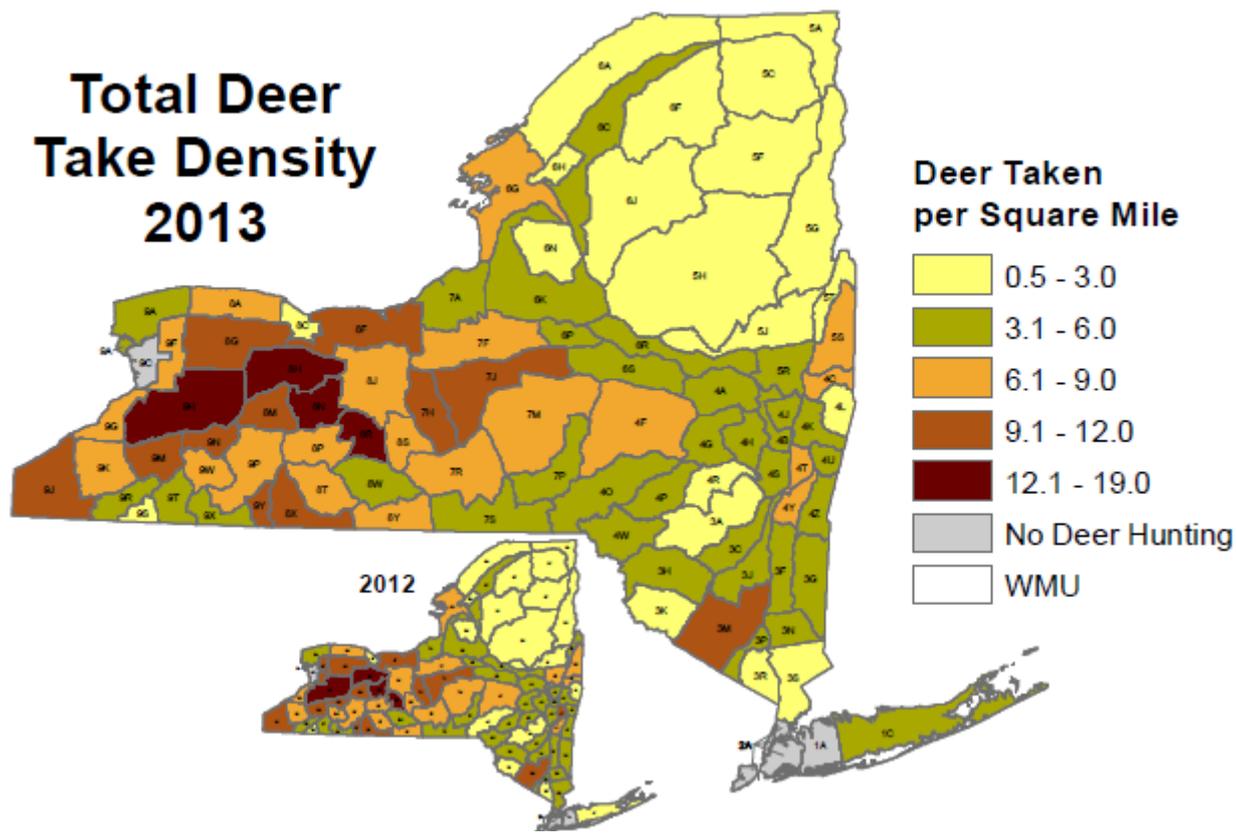
Non-regulatory

We have no enforcement capabilities

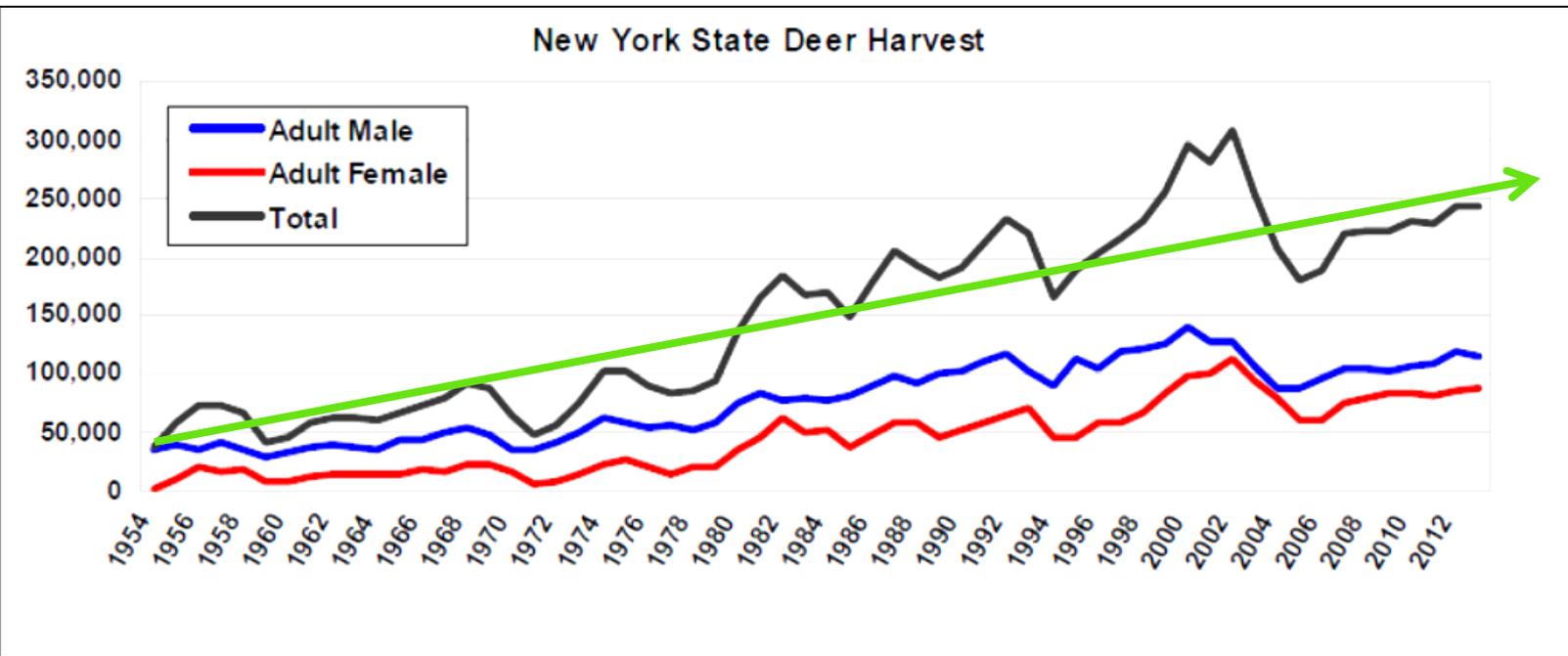
Service-funded

We are a user fee agency

Deer Management: The Need for Intensive Commitment



Deer Management: The Need for Intensive Commitment



2013 NYS Deer Harvest: 243,567

Agricultural Damage

NY received ~ 59 million in agriculture damage in 2002



Environmental Damage

Overbrowsing can

- Decrease plant growth, survivorship, reproduction, and plant diversity
- Increase invasive species



Environmental Damage

Just because it looks nice does not mean it is healthy.



Human Health & Safety

- NY reported 35,000 deer crashes in 2011
- 1,311 people injured
- \$1,500 average per accident



Human Health & Safety

<u>Disease</u>	<u>Vector</u>	<u>Human Exposure</u>
Lyme Disease	Deer tick (<i>Ixodes scapularis</i>)	Tick bite
Ehrlichiosis	Lone star tick (<i>Amblyomma americanum</i>)	Tick bite
Powassan	Deer tick (<i>Ixodes scapularis</i>), woodchuck tick (<i>Ixodes cookei</i>), squirrel tick (<i>Ixodes marxii</i>)	Tick bite
Rocky Mountain Spotted Fever	American dog tick (<i>Dermacentor andersoni</i>), Rocky Mountain wood tick (<i>Dermacentor andersoni</i>), brown dog tick (<i>Rhipicephalus sanguineus</i>)	Tick bite
Babesiosis	Deer tick (<i>Ixodes scapularis</i>)	Tick bite



Property Damage

1.34 million in damage to 6,200 acres
Town of Brookhaven, Suffolk Co. NY



Management Options

- Exclusion
- Fertility Control
- Volunteer Hunters
- Cull

All options require a level of time, money, and commitment.

An Evaluation of Deer Management Options



Exclusion

What makes a good fence

- Minimum 8'
- Fencing touches ground, buried if possible
- No gaps, deer will find them
- Gates remained closed
- Dead trees removed



Exclusion

Pros to fencing

- Property and resource protection
- Plant recovery inside the fence
- Security

Cons to fencing

- Costly
- Requires maintenance
- Overbrowsing outside the fence
- Only displaces the deer problem
- Can create deer funneling = motorist concerns



Fertility Control

Types of fertility control

- Surgical Sterilization
- Immunocontraceptive vaccines
 - GonaCon
 - Porcine zona pellucida (PZP)

“Attempting to manage a suburban deer herd using fertility control alone will not likely be successful in areas with high deer densities”

Boulanger et al. 2014

Fertility Control

- Technique still considered experimental
- Need the ideal conditions
- Best suited for closed populations
- \$1,000 to \$2,000 per deer
- Immunocontraceptive vaccines not registered in NY
- Higher stress level on deer



Volunteer Hunters

- Must evaluate goals when considering this option
- Takes substantial amount of time to coordinate
- Hunters must be must be screened, monitored, organized, and motivated
- Volunteer does not mean “No Cost”
- Limited quality control
- Complex to run



Cull

- Provides quick reduction in population
- An option in most situations – especially urban, suburban
- Minimal time requirement for landowner
- Prep time high
- Removal quick and effective
- Meat donated to food banks
 - This year WS donated over 7,500lbs in NY



Cull

- Extremely Safe
- Humane
- WS has trained biologists conducting work
 - Specialized training
 - Thermal imaging
 - Suppressed firearms
 - Vehicles



First Steps

- Start planning early
- Support actions with sound scientific data
- Involve the public and local politicians
- Learn from others
- Make management decisions that can be defended when challenged



Contact Information

Justin Gansowski

USDA-APHIS-Wildlife Services

1930 Route 9

Castleton, NY 12033

(518) 477- 4837

Deer Management: The Need for Intensive Commitment



Protecting People
Protecting Agriculture
Protecting Wildlife



United States Department of Agriculture
Animal and Plant Health Inspection Service