

**Deer Remediation Advisory Committee (DRAC)**  
**Village of Cayuga Heights**  
**Information packet: March 2009**

Dear Villagers:

If you are interested in the current study of deer management in Cayuga Heights, we encourage you to check our website at [vchdeercommittee.com](http://vchdeercommittee.com). But, for a more condensed version, read this packet which includes:

- 1) Our 4-page summary of deer management options
- 2) Statistics about Lyme Disease and Deer/vehicle Accidents and Incidents
- 4) Frequently Asked Questions

**A brief history of deer management in Cayuga Heights**

The question of deer management has a long history, here and in many communities where deer overpopulation is seen as a hazard. After two years of study in 1999-2001, a Village committee recommended the sterilization of female deer which led to a two-year research trial which successfully helped reduce the local herd. Then, due to reduced funds, that study morphed into a year of contraception which failed in 2005 due to a faulty vaccine. As the herd repopulated and a revised fencing ordinance was proposed and withdrawn, a new Village government formed DRAC in 2008 to review the current situation and recommend a course of action to the Village government.

**Is deer management needed?**

When white tailed deer are not curbed by natural predators and when they have access to a rich variety of vegetation, the deer population grows. While people still enjoy watching and photographing them, the consequences of deer overpopulation are significant:

- vehicle-deer collisions
- destruction of cultivated vegetation
- damage to ecosystem
- human and deer health issues.

According to the NYS Dept of Environmental Conservation (NYS DEC) “the most basic deer management decision is whether or not to control deer numbers. If deer numbers are not controlled, people must accept problems or try to reduce them by other means. If a decision is made to control deer, an acceptable method must be chosen.” DEC and Cornell University counted 147 deer in Cayuga Heights in 2006.

**Public Forums**

DRAC has scheduled two Public Forums to better inform the public and gauge public opinion about the extent of the problem, eg, have we reached cultural carrying capacity, and if so what are acceptable options for dealing with this? The Board of Trustees and DRAC have been and remain committed to listening to all points of view. Please read the enclosed materials, write DRAC c/o Village of Cayuga Heights, 836 Hanshaw Road, Ithaca, NY 14850, and/or join us for at least one of the sessions. Dave Riehlman, DEC biologist; James Milewski, Environmental Conservation Police Officer; Tom Boyce, Cayuga Heights Police Chief, and Paul Curtis, Cornell Wildlife Specialist, will be there on March 12 to address your concerns. The program for March 31 is TBA.

**Thursday, March 12, 7:15 pm, Dewitt Middle School**

**Tuesday, March 31, 7:30 pm, Kendal**

**DRAC Members**

Tom Boyce, Cayuga Heights Police Chief  
Jim Gilmore, Cayuga Heights Mayor and Village resident  
John Hermanson, Village resident  
Mike Mangione, Village resident  
Elizabeth Mount, Village resident  
Kate Supron, DRAC Chair, Village resident.

# CAYUGA HEIGHTS POLICE DEPARTMENT

## MEMORANDUM

**Police Chief Thomas L. Boyce:**

**Statistics on Deer Accidents and Incidents in Cayuga Heights\***

**Reported\*\* VCH Car/Deer Accidents and Deer Incidents By Year:**

**YEAR Accidents/Incidents**

<b>2003 –</b>	<b>2</b>	<b>10</b>
<b>2004 –</b>	<b>10</b>	<b>14</b>
<b>2005 –</b>	<b>8</b>	<b>9</b>
<b>2006 –</b>	<b>11</b>	<b>8</b>
<b>2007 –</b>	<b>12</b>	<b>13</b>
<b>2008 –</b>	<b>6</b>	<b>15 (as of Dec. 3, 2008)</b>

\* The difference between an accident and an incident is as follows: A car/ deer **accident** is investigated and there is proof that a car collided with a deer. A deer **incident** is an investigation of some problem involving a deer. For example: an officer is called to the scene of an injured deer and the officer has to shoot the animal to keep it from suffering. Another example: an officer is called to the scene of a dead deer in the roadway and has to remove the deer from the roadway.

\*\*I believe our statistical data for car/deer accidents is probably grossly under reported. Drivers are just dealing with the deer problem on their own, thereby causing several problems:

- 1 - the law requires reporting any accident over \$1,000.00 dollars worth of damage;
- 2 - injured deer could be left to suffer;
- 3 - we can not accurately keep track of car/deer accidents for statistical purposes.

## REPORTED CASES OF LYME DISEASE WITHIN TOMPKINS COUNTY SINCE 2003

What follows are the numbers for reported Lyme Disease cases in Tompkins County since 2003. These cases do not reflect the source of the exposure which could have been Tompkins County, or more likely, elsewhere, for residents who have been traveling. The density of infected ticks even varies from site to site within the county, with the result that reported cases may not be tied to any specific locality.

2003 10

2004 5

2005 4

2006 2

2007 9

2008 35, as of the end of October, understanding that the NYState Health Dept. has changed its definition of a confirmed case of Lyme Disease.

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Tompkins County Health Dept.  
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The following information was summarized from New York State, Department of Environmental Conservation's "A Citizen's Guide to the Management of White-tailed Deer in Urban and Suburban New York." Written by: P. Bishop, J. Glidden, M. Lowery, and D. Riehlman, Revised 2007, and from The New England Chapter of the Wildlife Society and The Northeast Deer Technical Committee's "An Evaluation of Deer Management Options." Additional sources noted when used.

<b>DEER MANAGEMENT OPTIONS</b>	<b>ADVANTAGES</b>	<b>DISADVANTAGES</b>
<b>NO POPULATION CONTROL</b>		
<b>Hands – Off (deer crossing signs)</b>	<ul style="list-style-type: none"> <li>-Inexpensive</li> <li>-More deer sightings</li> </ul>	<ul style="list-style-type: none"> <li>-Growing deer population</li> <li>-Increased vegetation damage</li> <li>-Increased car-deer collisions/deer-human conflict</li> <li>-Increase in disease/malnutrition of herd</li> <li>-Increased public health risk</li> </ul>
<b>Damage Control</b>		
Fencing (8-10' for complete exclusion); or hedges (4' deep of more moderate height)	<ul style="list-style-type: none"> <li>-Complete site protection of fenced area</li> <li>-Reduce available forage, potentially reducing multiple births</li> </ul>	<ul style="list-style-type: none"> <li>-Requires change in Village fence ordinance</li> <li>-Variable costs borne by property owners</li> <li>-Changes aesthetic of neighborhood</li> <li>-Moves deer to unfenced areas;</li> <li>-moves deer to unfenced areas</li> <li>-Deer population continues to grow</li> </ul>
Repellants & Frightening devices	<ul style="list-style-type: none"> <li>-Some protection with low deer population density</li> </ul>	<ul style="list-style-type: none"> <li>-Expensive</li> <li>-Frequent reapplications necessary</li> <li>-Less effective as deer population continues to grow</li> </ul>
Tick Control - 4 Poster Technology <sup>1, 2</sup>	<ul style="list-style-type: none"> <li>-Controls approx 90% of free living tick population around the devices within 2-3 years</li> </ul>	<ul style="list-style-type: none"> <li>-Ongoing</li> <li>-Deer population continues to grow</li> <li>-Cannot be used near homes, b/c children could touch exposed chemical</li> <li>-Cost</li> </ul>
Strieter-Lite Highway Warning Reflector systems <sup>3</sup>	<ul style="list-style-type: none"> <li>-Reduce deer-vehicle collisions</li> </ul>	<ul style="list-style-type: none"> <li>-Deer population continues to grow</li> </ul>
<b>Alternative or Diversion Plantings</b>	<ul style="list-style-type: none"> <li>Less Damage to plant species not attractive to deer</li> </ul>	<ul style="list-style-type: none"> <li>-Deer population continues to grow</li> <li>-Less effective at high population densities</li> </ul>

<b>Feeding</b>	<ul style="list-style-type: none"> <li>-Improve the health of the herd</li> <li>-More deer sightings</li> </ul>	<ul style="list-style-type: none"> <li>-Illegal in NYS to feed wild deer</li> <li>-Increased deer population</li> <li>-Deer continue to eat natural vegetation even w/unlimited food provided</li> <li>-Deer are more tame: increased potential of deer-human conflict</li> </ul>
<b>POPULATION CONTROL METHODS</b>		
<b>Non-Lethal</b>		
Habitat Alteration (removal of all plants used by deer for food and shelter)		<ul style="list-style-type: none"> <li>-Expensive</li> <li>-Impractical (lack of community support, environmental damage)</li> </ul>
Capture and Relocation	<ul style="list-style-type: none"> <li>-Reduces deer population</li> <li>-Deer more wary of humans</li> </ul>	<ul style="list-style-type: none"> <li>-Illegal in NYS</li> <li>-Expensive (\$100-\$800 per deer)</li> <li>-Survival of relocated deer is low (up to 75% mortality rate within 1 year)</li> <li>-Lack of availability of release sites</li> <li>-Ongoing</li> </ul>
<b>Fertility Control</b>		
Contraception	-Gradual population reduction	<ul style="list-style-type: none"> <li>- Expensive (\$1000 per deer)</li> <li>- Experimental – no contraceptives approved by FDA for wildlife except on a research basis</li> <li>- Annual boosters required for contraceptives (recapture of same deer difficult)</li> <li>- Ongoing</li> </ul>
Surgical Sterilization <sup>4</sup>	<ul style="list-style-type: none"> <li>-Gradual population reduction</li> <li>-Successful in Village trials in 2002-2004</li> </ul>	<ul style="list-style-type: none"> <li>-Expensive (just over \$2000/deer when used locally in 2004)</li> <li>-private donors needed</li> <li>-Cornell facilities/surgeons rarely available to outside communities</li> <li>-Ongoing</li> </ul>
Mobile Surgical Sterilization Unit <sup>5</sup>	<ul style="list-style-type: none"> <li>-Gradual population reduction</li> <li>-Single application/ female deer</li> <li>-Facilities/surgeon always available</li> </ul>	<ul style="list-style-type: none"> <li>-Expensive (just over \$1000/ deer when used in Highland Park, Ill, in 2002-2005)</li> <li>-private donors needed</li> </ul>

	-No need for recapture -Technology/equipment can be shared with nearby communities	- Ongoing
<b>Lethal</b>		
Predator Introduction (such as coyotes)		-Predators rarely control prey population -Potential for predator species – human conflict -Large predator species (wolves, bear..) not suitable to suburban habitats (large home range)
Parasite or Disease Introduction		-Illegal -Inhumane -Affects other wild species
Poison		-Illegal -No safe delivery method -Risk to other wildlife and humans (primary and secondary) -No poisons or lethal baits registered for deer control
Capture and Kill (deer captured with nets or darted with tranquilizers, then killed)	-Reduces deer population -Deer more wary of humans	-Difficult to dispose of carcasses (meat cannot be consumed if tranquilizers are used) -Increasing difficulty over time (deer more wary) -Ongoing
Bait and Shoot (deer are attracted to feeding stations, then shot by sharpshooters with bow or appropriate fire arm from a deer blind)	-Reduces deer population -Meat could be used by charitable organizations -Deer more wary of humans (making repellants and frightening devices more effective)	-Expensive (approximately \$300/deer) -Ongoing (repeated in limited fashion once target pop density is reached)
Traditional Hunting (licensed hunters using legal firearms or long bows, during hunting season)	-Cost effective -Reduces deer population -Deer more wary of humans	-Not suitable for suburban or urban areas
Controlled Hunting (licensed hunters but with additional training, hunting legal firearms or long bows, but with additional restrictions on locations, times, number, age and sex of deer to be shot)	-Cost effective -Reduces deer population -Deer more wary of humans	-Population density can make this impractical or increase public opposition (safety concerns)

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<sup>1</sup> [beyondpesticides.org/news/daily\\_news\\_archive](http://beyondpesticides.org/news/daily_news_archive)

<sup>2</sup> [crdaniels.com/dandux/4post/intro.htm](http://crdaniels.com/dandux/4post/intro.htm)

<sup>3</sup> [strieter-lite.com/images/scientific\\_report.pdf](http://strieter-lite.com/images/scientific_report.pdf)

<sup>4</sup> Dr. Jay Boulanger, CU Deer Coordinator, interview, 1-15-09

<sup>5</sup> \*MacLean, R. A., N. E. Mathews, D. M. Grove, E. S. Frank, and J. Paul-Murphy. 2006. Surgical technique for tubal ligation in white-tailed deer (*Odocoileus virginianus*). *Journal of Zoo and Wildlife Medicine* 37:354–360.

## **ADVICE to Communities Working toward Deer Management**

- Don't begin with deciding on the actions to be taken. Instead, begin by clarifying whether human-deer interactions are a problem for a relatively few individuals or are a "community issue." Let your study group reflect the diverse views of your community. Determine which of the impacts from human-deer interaction are of concern. Prioritize goals and objectives where the community can agree before you consider alternatives. Goals may include as much emphasis on human behavior vis-à-vis deer, as on manipulating deer directly through reductions, repellents, etc.
- Ask experts to provide accurate information. Get a reliable estimate of deer numbers; decide how many deer are acceptable by one or more of the possible standards, namely Biological (incl. people's health and health of herd), Ecological (incl. foliage damage), and Cultural (incl. deer-human conflict); and decide how you can determine whether these standards have been reached.
- An open, fair and credible decision-making process should be developed and carefully documented. Some actions will require State permits, and the NYS DEC will consider the level of public involvement before issuing a special permit for suburban deer management.
- Be prepared for long-term commitment. Any deer management alternative would have to be repeated annually to maintain effectiveness, either lethal or non-lethal. Once a community decides to start a program, it must be continued for many years. Because of this, there needs to be an annual budget line for deer management, or else the initial investment will be lost in just a few years.
- Management of human-deer impacts in a community requires perseverance, patience and discipline. Systems for management need to be institutionalized and preferably relegated to entities that are not subject to vagaries of rapid personnel or leadership change.
- Be braced for controversy. Keep in mind there are two classes of stakeholders in deer management – those impacted by deer and who seek relief, and those impacted by the management response to the first set of problems and who are concerned about the methods and philosophy of deer management.
- Keep in mind that once an intervention is begun, the consequences are someone's responsibility – a community leader, etc. Also remember the deer are wild – they belong to no one and to everyone, and go where they will or can. Deer move across political and property boundaries. Consequently, effective management often requires coordination of activities between public and private agencies, institutions and municipalities. Isolated efforts typically fail.

(Drawn largely from *Deer Management Recommendations for Communities in Tompkins County*, by Paul Curtis, with review by Daniel Decker, Gwen Curtis, and Art Berkey. 9/12/2006.)