

**Michelle Poppensiek**

**From:** [REDACTED].com  
**Sent:** Tuesday, December 14, 2010 2:48 PM  
**To:** Mary Mills  
**Cc:** Kate Supron  
**Subject:** Public Comment,DEIS,Cayuga Heights Deer Mgmt Plan  
**Attachments:** Tignanelli\_PublicComment\_DEIS\_C.pdf

December 14, 2010

Memo To: Cayuga Heights Board of Trustees

Subject: Public Comment, DEIS, Cayuga Heights Deer Management Plan

Please accept the following public comment on the subject DEIS dated November 1, 2010. I am against the lethal methods of deer management outlined in the DEIS including, but not limited to, the net-and-bolt process. I ask that the following public comment be included as part of the official record.

- 1) Executive Summary makes connection between lack of food and "wasting disease". It is not clear what exactly is meant by "wasting disease". If Chronic Wasting Disease is meant, it should be noted that CWD is believed to be caused by an infectious protein or prion, not lack of food.
- 2) In Existing Conditions section, statements are made equating reduction of deer with reduction of tick-borne diseases with experts from Connecticut cited. However, Dr. Richard Ostfeld, Senior Scientist, Institute of Ecosystems Studies in Millbrook NY stated "in many Lyme disease zones, reducing the deer herd is unlikely to substantially affect tick abundance. Reducing mice is more likely to be effective" and "several recent studies in New York and New Jersey have found no connection between populations of deer and ticks." See below "Reducing Herds Won't Reduce Risks" by Dr. Richard Ostfeld and Dr. Felicia Keesing, biology professor at Bard College.
- 3) Description of Proposed Action states that 80 percent of people surveyed wish the deer population in Cayuga Heights would decrease. As the actual survey question was not provided, it is not clear if those surveyed were provided with description of proposed net-and-bolt process where deer would be trapped under nets and restrained while a captive-bolt gun was pressed against their heads and a retractable steel rod fired into their brains. Unless the procedure was fully explained to those wishing for a decrease, the 80 percent figure seems questionable.
- 4) Description of Proposed Action states that deer are impacting biodiversity. It should be noted that development results in habitat loss that negatively impacts biodiversity yet restriction of development to protect or restore biodiversity was not discussed in any detail or included as an alternative.
- 5) Potential Impacts states "deer may be shot over bait". It is not clear if the NYSDEC allows this or if NYSDEC requires that bait be removed for a time period before shooting is to occur.

Sincerely,

Doreen Tignanelli  
 [REDACTED]  
 Poughkeepsie NY 12603

**Reducing Herds Won't Reduce Risks**

**Felicia Keesing is a biology professor at Bard College, and Richard S. Ostfeld is senior scientist at the Cary Institute of Ecosystem Studies.**

12/17/2010

Millions of people living in Lyme disease zones, including current patients (who can get infected repeatedly), will benefit from a better understanding of risk. With no vaccine currently available, imperfect diagnostic tests, and controversy over appropriate treatment, prevention is a critically important strategy, and avoidance of infected ticks is the most effective means of prevention. Our research is aimed at understanding where the hordes of infected ticks come from and why. This information is fundamental to prevention.

One theme is the role of deer in determining tick abundance. In the first 15 years after Lyme disease was discovered in coastal New England, several studies showed that many adult ticks feed on deer, and researchers surmised that deer were critical to the tick life cycle. When researchers eradicated deer from New England islands, tick populations crashed.

Unfortunately, nature has a way of being more complex than first thought.

The key to the Lyme disease problem seemed at hand. Unfortunately, nature has a way of being more complex than first thought. One complication is that adult black-legged ticks feed on raccoons, skunks, opossums, and other medium-sized mammals. When deer are scarce, ticks don't necessarily become scarce, because they have alternative hosts. Indeed, several recent studies (e.g., Jordan and Schulze, 2005; Ostfeld et al., 2006; Jordan et al., 2007 — see citations below) on mainland sites in New York and New Jersey found no correlation between deer and ticks.

Second, ticks and Lyme disease are rare or absent in parts of the United States (the Southeast, most of the Midwest) where deer are abundant.

Third, ticks are only dangerous if they are infected, and deer play no role in infecting ticks. Ticks become infected with the Lyme disease bacterium by feeding on small mammals such as white-footed mice, chipmunks, and shrews. And mice play the additional role of increasing tick survival — they are at the opposite extreme from opossums, which kill the vast majority of ticks they encounter. When our group compared the importance of deer, mice, and climate in determining the number of infected ticks over 13 years in southeastern New York State, mice were the winners hands down.

Other compelling reasons exist for controlling deer populations, such as reducing vehicle accidents and increasing forest regeneration. But, in many Lyme disease zones, reducing the deer herd is unlikely to substantially affect tick abundance. Reducing mice is more likely to be effective.

This is best accomplished by allowing natural predators like weasels, coyotes, foxes, and owls to do the job. And the best way to increase their numbers is to maximize the size of forest patches. A number of other ways of reducing risk are currently being tested by our group and others, including the use of natural products such as soil fungi to kill ticks without adverse environmental impacts and the use of vaccines against Lyme disease that can be delivered to wildlife.

Citations:

Jordan RA and TL Schulze. 2005. Deer browsing and the distribution of *Ixodes scapularis* (Acari: Ixodidae) in central New Jersey forests. *Environmental Entomology* 34: 801-806.

Jordan, RA, TL Schulze, and MB Jahn. 2007. Effects of reduced deer density on the abundance of *Ixodes scapularis* (Acari: Ixodidae) and Lyme disease incidence in a northern New Jersey endemic area. *Journal of Medical Entomology* 44: 752-757.

Ostfeld RS, CD Canham, K Oggenfuss, RJ Winchcombe, F Keesing. 2006. Climate, deer, rodents, and acorns as determinants of variation in Lyme-disease risk. *PLoS Biology* 4: 1058-1068.