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OF THE UNITED STATES

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Hon. Stephanie A. Miner
Mayor, City of Syracuse
City Hall
Syracuse, NY 13202

Mr. Luke Dougherty
City of Syracuse Bureau of Research
City Hall
Syracuse, NY 13202

Dear County Executive Mahoney, Mayor Miner and Mr. Dougherty:

On behalf of The Humane Society of the United States, I want to thank you for thoughtfully establishing the Syracuse-Onondaga County Urban Deer Task Force, and for considering and reviewing this subject.

While The HSUS is in agreement that there is a need to mitigate real conflicts with deer, we do not support lethal means of achieving these ends for the reasons outlined in this letter. The HSUS would be pleased to advise the City of Syracuse and Onondaga County on effective ways to resolve deer issues.

We support the Urban Deer Task Force's goal of assessing problems that need to be resolved and recommend designing a program which addresses those problems in a site-specific manner.

Preventing Garden and Property Damage

Killing deer will not resolve people's backyard conflicts with deer. Certain plants, like tulips and hostas, are irresistible to deer. Even if the deer population could be brought to a very low level, these top-choice flowers would still be eaten by *any* remaining deer. That's why effective solutions focus on *detering* deer and *protecting* flowers and ornamentals rather than trying to

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eliminate every deer that may come along and eat them.

We don't have a perfect answer but we do have a good toolbox. Options range from effective repellents (rotten egg-based ones like *Liquid Fence* get high ratings) applied on a regular schedule; to woven-wire mesh fencing around gardens and netting over tasty bushes.

The best approach is to plant flower and ornamental varieties which are more deer-resistant. There is a wide variety of less tasty yet equally beautiful flower options, such as daffodils, foxglove, bee balm, snapdragons, to name a few.

Deer-car collisions

It seems counter-intuitive, but reducing the deer population might not necessarily result in fewer deer car collisions. A study was done by the Virginia Department of Transportation (VDOT) which assessed hunting pressure, deer density, and other factors for 228 road segments (each 250 miles in length) to determine which correlated with deer-vehicle collisions. The surprising result was that deer density was a *non-significant* factor and that "there is little evidence that increased deer harvest reduced deer/vehicle collisions (McShea et al. 2007)."

The problem is that many factors contribute to deer car collisions, such as traffic volume and speed, extent to which roads bisect habitat, development patterns, extent of visual barriers, speed limit, etc – which is why merely reducing the deer population does not necessarily result in fewer collisions.

The City of Rochester Hills, Michigan, created a highly successful program to reduce deer-car collisions. They combined highly visible, moveable and changeable message boards at accident hot spots, reduced roadway sightline barriers, along with a very publicized "Don't Veer for Deer" educational campaign.

The result was a 25% decline in deer-vehicle collisions despite a 34% increase in deer numbers over several years. This program can serve as a model. A detailed deer problem management plan can be found on the city's website: <http://www.rochesterhills.org/index.aspx?NID=569>

Hunting will not reduce Lyme disease risk

The Black-legged tick has well over 100 hosts, including all mammals, many popular songbirds, and even lizards. Studies have shown that the removal of one host isn't enough to suppress the Lyme-disease causing tick (Ostfeld, 2011, Jordan et al, 2007). Even when many deer are removed, the ticks switch to other hosts or congregate in higher densities on the remaining deer.

Hunting may also put the public more at risk by creating disease "hot spots" (S. Perkins et al, 2006; Ostfeld, 2011). That is, mature ticks that normally latch onto large hosts (i.e., deer) are more likely to end up on people and dogs after deer have been reduced.

There's a good reason why the Centers for Disease Control (CDC) and health authorities don't recommend hunting to control Lyme disease - because it simply doesn't work.

The confounding effect of hunting and culling

One of the main problems with trying to manage deer through any kind of hunting is that deer are highly prolific, and their high reproductive rate can quickly compensate for declines in their population. Deer exhibit higher productivity (i.e., more twins and triplets are born, higher survival rates and earlier onset of sexual maturity) when there are fewer deer and more food is available. In other words, they “bounce back.”

Any lethal control program must not only significantly reduce the deer herd *but also sustain enough pressure to keep the population at a low level and prevent this bounce-back*, AND prevent deer from the surrounding area from wandering in, all of which usually poses an insurmountable challenge.

Trying to keep deer at a certain number can be a futile, resource-draining battle, and diverts attention from practical solutions which help people reduce both deer presence and browsing.

Economics of sharp-shooting

Sharp-shoots can be expensive as they need to be repeated year after year, or deer numbers bounce back up. Aside from the direct costs of hiring sharp-shooters, there are also other relevant costs such as police overtime, meat transportation and processing, and administration. It would be fiscally prudent for Syracuse/Onondaga County community leaders to do a thorough examination of all costs before proceeding with any kind of cull.

The bottom line is that trying to keep deer at a certain low level can be an expensive and never-ending battle. This is why The HSUS recommends a more problem-oriented approach rather than trying to manage deer by *numbers*.

Immunocontraception: a possibility?

It's hard enough to lower deer numbers, but trying to keep them at artificially low levels would require a huge and sustained killing effort, one which is unlikely to be successful or safe in suburban backyards.

This is why there is so much interest in new, on-the-horizon fertility control options such as surgical sterilization and vaccines such as PZP – which lower the fawning rate dramatically and prevent that “bounce-back” in numbers. There is one contraceptive vaccine EPA-registered for use in deer currently (Gonacon) with another vaccine (PZP) available under an experimental basis.

These contraceptive vaccines and surgical sterilization methodologies show much promise for helping to manage deer numbers in suburban communities, such as in Hastings on Hudson, where a fertility control program for deer is underway using the PZP vaccine. It is also important to note that the Village of Cayuga Heights, after much public outcry and opposition to lethal means of deer population control, implemented a combination of sterilization and immuno-contraception during the period 2012-2014 and is showing successful results. Again, given the growing popularity of non lethal means which is gaining public support, East Hampton, NY just this spring made the decision in favor of non lethal means and will begin a surgical sterilization program this coming winter.

Attached is a 2-page informational piece to clarify the cost and labor associated with application of PZP, an immuno-contraceptive vaccine, which can be applied under an experimental basis.

In closing, the HSUS does not see any evidence that killing deer works over the long-term or that it is an answer for suburban/urban deer conflicts. We are happy to consult with community leaders in Syracuse and Onondaga County to help devise an effective plan for resolving residents' problems with deer.

Thank you kindly for the opportunity to share this information. Please do not hesitate to contact me with questions pertaining to this issue, or for general information about The Humane Society of the United States.

Sincerely,

Brian Shapiro

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