

Cooperative Community Collaboration

A Model for Systemic Conflict Management
in the Urban Environment



PRESENTED:

November 9, 2009

TO:

Fairfax County

RESPONSE TO:

Community-Deer Conflicts in Fairfax County

WITH CONTRIBUTIONS FROM:

Fairfax County Park Authority
Fairfax County Wildlife Biology Services
Wildlife Rescue League
Fairfax County Community Advocates

Cooperative Community Collaboration

A Model for Systemic Conflict Management in the Urban Environment

1. INTRODUCTION

In response to the continued existence of community conflicts between citizens and deer, Fairfax County has routinely employed managed hunts conducted in county parks. This practice was proposed as one management technique in the 2003 Fairfax County Integrated Deer Management Plan. The premise of managed hunting is based on the supposition that culling deer herds in public parks will reduce the deer population and consequently result in a reduction of community-deer conflicts.

The predominant number of incidents of community-deer conflicts and complaints can be categorized as follows:

Damage to Private Landowners' Property

Deer-Vehicle Collisions

Damage to Parkland Understory and Forest Regeneration

Lyme Disease Risk and Exposure

Traditional thought and wildlife management techniques supported the proposition that by artificially controlling, reducing and managing the deer population, a positive resolution to the conflicts would be experienced. Statistical data and historical experience now reveals that at most, managed hunting and efforts of artificial population control produce, at best, short-term, localized reduction in deer herds and have resulted in no measurable resolution to the four primary sources of conflict. Additionally, short-term gains are off-set by naturally occurring deer population dynamics as an artificial reduction in deer population stimulates a rise in fawn birthrates in the breeding cycle that follows.

While managed hunting does produce a short-term reduction in the Cultural Carrying Capacity measurement (the number of deer the community perceives to be tolerable) of deer populations, because the Biologic Carrying Capacity (the number of deer the environment can sustain) of deer populations has yet to be exceeded, efforts to achieve a favorable Cultural Carrying Capacity figure by culling deer have proven to be immeasurable, ineffective and have offered no resolution to the four conflicts that play the greatest role in the community's frustration.

In response to increased pressure to both "do something about the deer" and the current economic constraints on the county budget, it has been proposed that bow hunting in public parks be sanctioned by the county as a means to augment the effectiveness of deer culling. While this is not a new idea, it is one that has been tested in other states, with less than positive results. For example, in Texas, which has more deer than any other state, Parks and Wildlife biologist Horace Gore comments: "You cannot call bow hunting a population control measure, it is a recreational pursuit." In fact, he adds: "We do not advocate bow hunting when the objective is controlling the population."

Perhaps the city of Eagan best illustrates both the minimal expected return and more importantly, the risk to public safety. The Eagan City Council decided in 1993 not to allow bow hunting. An article in Bowhunter's Hotline (Sept. 1993) regarding Eagan's decision reported that the Mayor of Eagan had supported bow hunting in the past; however, his mind was changed about the sport.

The Mayor of Eagan, Tom Egan was quoted in the article as saying: "FATE provided me with a lot of valuable information, and I have always supported bow hunting, but I no longer feel the rationale that it's an efficient management tool outweighs the safety and cruelty aspects." Also, the Mayor was reported as saying, "I think if we set loose every bow hunter in Eagan, we still wouldn't reduce the deer population, and the city would be less safe." He added, "It isn't feasible for every bow hunter to shoot and retrieve five deer. They might each shoot and wound five, but not shoot and recover five."

This proposal outlines a cooperative, systemic strategy to achieve successful, long-term resolutions to the four primary areas of community-deer conflicts. By identifying the cause of each conflict and utilizing the natural habits and behavior of deer, both county and community significantly increase the probability of a future state that enjoys a sustainable, well-balanced urban environment.

2. COMMUNITY-DEER CONFLICTS

There are four primary categories of community-deer complaints and conflict. They are as follows:

1. Damage to Private Landowners' Property

Private landowners, home-owner associations and corporate headquarters frequently report significant damage to gardens, landscaping efforts and privately owned woodlands due to deer grazing. The level of damage and measurement of conflict can most often be correlated to the financial investment in developing and maintaining the property's landscape as well as the amount of effort put forth privately to prevent deer damage.

2. Deer-Vehicle Collisions

Although there currently exists little reliable data to quantify the number of deer-vehicle collisions (DVCs) and the corresponding financial cost, insurance companies estimate the cost of DVCs to be over one billion dollars annually, nationwide. In Fairfax County, few residents can escape the sight of an overwhelming number of dead deer on our county roads and many also find themselves personally and financially responsible for a dying or dead deer that made it's way from the road to their property. The threat to public safety is irrefutable and the cost of a DVC is often underestimated.

3. Damage to Parkland Understory and Forest Regeneration

Naturalists and wildlife conservationists, though both committed to responsible stewardship of our county's natural resources, often find themselves at odds in their efforts to protect the environment. In their role as land managers for the county, park naturalists report serious concerns about the effects of excessive deer browsing and the implications for forest composition, regeneration and the understory's ability to maintain other wildlife species. As commercial development has continued to rise, the pressure on the remaining park lands and forests shows the effects of rapidly diminishing habitats.

4. Lyme Disease Risk and Exposure

A history of inaccurate information and lack of public education has resulted in wide-spread concern over contracting Lyme Disease. Confusion over the interchangeable names for the tick that carries the disease, the black-legged tick and the deer tick, and a higher reporting of Lyme Disease have led to a public panic and misconception that their risk of contracting Lyme Disease rises exponentially with the number of deer sighting. Although the myth is easily dispelled with a minimum of education, the fact remains that there is a dominating perception that deer equal Lyme Disease.

3. COOPERATIVE STRATEGY

There is, obviously, a common denominator to the four areas of conflict listed above, that is the deer. However, rather than previous and presently held beliefs that culling deer represents a nicely-packaged four-for-one deal, statistics, research and experience point us in a direction that at first may seem counter-intuitive. Achieving successful resolutions to the four major areas of conflict does not lie in reducing or eliminating deer in an urban environment. In fact, as will later be addressed, deer populations actually present the most effective opportunity for virtually eliminating one of the four perceived conflicts.

If it is not the deer population that is creating the community conflicts, what is? The conflicts have arisen out of where the deer are. Fragmented habitats, loss of habitat, inadvertent creation of deer-inviting landscapes and the systematic reduction of deer-appropriate locales have resulted in our county's deer migrating from what was, and would continue to be, perfectly appropriate and acceptable dwellings into areas where their presence is perceived as undesirable, encroaching, damaging and dangerous. That's the bad news. The good news is that our county and community enjoys a statistically high probability of significantly mitigating all four areas of conflict by employing a strategy that focuses its efforts on redistributing the deer.

Easier said than done? Actually, easier done than said in this case. Proposing relatively simple solutions to what is perceived as one of the most complex problems our county faces requires that every stakeholder, from the private homeowner to the agencies tasked with deer management shift their focus from the widely-held idea that this is an unsolvable problem and concentrate their efforts on the four areas of conflict and the readily applicable methodology to resolve them.

Deer are habitual. Their habits and behavior is highly predictable and the behavior we experience as conflict is contrary to their natural instincts. By creating the opportunities for deer to return to what is inherent to their species, we create a model that presents a winning outcome for all of the stakeholders involved.

The following approach is a major departure from that which is currently employed. What will become evident is how, by addressing all four issues concurrently and systemically, the results are exponentially greater than the effort involved. And, rather than endeavoring to achieve the unachievable, eliminating even a significant percentage of the deer population by artificially controlling it, we rely on the nature, habits and behavior of deer to reduce the conflicts the community experiences.

You may have trouble teaching an old dog new tricks but if altering the patterns of deer can be considered a trick, we are in luck. Ask anyone who researches, studies or simply observes the deer, be it for wildlife watching or hunting, and they will all report the same. You can set your clock by the time the deer pass by on their daily trek. Plant your favorite flowers and the deer will show their appreciation by leaving you nibbled notes of thanks. Blaze a trail through the underbrush and they will find it faster than you can say, "I've paved a path". Clear a meadow in the middle of the forest and they will come.

Some may be accustomed to hearing about habitat modification and the plethora of methods this encompasses, primarily to keep the deer away. And again, while we know you can teach a deer a new trick, we are the old dogs that have trouble with new tricks. In this section, habitat modification is a two-part approach employed to keep the deer away from where we don't want them but more importantly, drawing them to where we do want them.

4. SYSTEMIC SOLUTIONS

What follows is the vetted list of viable, applicable and cost-effective methods that comprise the Cooperative Community Collaboration and cumulatively create a Model for Systemic Conflict Management in the Urban Environment.

1. Habitat Modification—If you build it, they will come.

Already used successfully by private landowners in Fairfax County, habitat modification is often applied on a small scale to relocate the grazing area of deer from a prized garden to a more desirable location elsewhere on the property with relative ease. It does not require fencing, repellents or complicated inventions to scare the deer away. All that is necessary is a willingness to use common sense. Deer are going to graze. You will not change the fact that they have to eat. What you can change is where and what they eat. After surveying the property for an area that satisfies the land owner, which in almost every case is actually a more desirable location for the deer, usually away from the home and garden and back along the edge, or fringe of the property, sites are developed that provide the deer with preferred feeding vegetation. With a minimum of effort and time, deer are introduced to the preferred site, either by making the garden unattractive for a short period of time and/or supplementing the pathway to the new site with feed and corn or treats. Once the deer have discovered this unexpected buffet, that discovery, combined with the fact that it is more in tune with the natural preferences of deer to be farther from the noise, activity and unpredictably of residents, in short order, residents find it takes effort to see the same herd of deer that once frequented their back patio.

The same experience may be replicated in county park lands. To relieve pressure on the understory in county woodlands, deer can be drawn to the interior of the park lands and away from the forested areas that typically form the perimeter. Creating new, or transforming existing open spaces into deer-friendly habitats is accomplished in the same way we have drawn the deer away from John Doe's prized azaleas. Once the park is surveyed for appropriate deer habitats, trails can be treated to attract the deer to follow them to the newly established browsing area. Our county naturalists, biologists and citizens have a vast body of knowledge that, if directed toward this intention, already have the requisite experience and resources to produce of dramatic alteration of where one can expect to find the deer in the future. This simple but critical solution results in an immediate reduction of two of the four community conflicts, damage to private landowners' property and damage to the understory. At the same time, it sets the stage to address the conflict concerning Lyme Disease and lays the foundation for the crucial reduction of deer-vehicle collisions.

One question most likely to be posed with respect to habitat modification is the expected behavior of the deer should they deplete the resources made available in these new locality. To answer this, we look back to the well-researched habits of deer herds. The study referenced in *American Wildlife and Plants, A guide to Wildlife Food Habit, The Use of Trees, Shrubs, Wheats and Herbs by Birds and Mammals of the United States*, published by agreement with the US Dept of the Interior, Fish and Wildlife Service, and Bureau of Sport Fisheries and Wildlife reports the following:

Food Hunting: Whitetail Deer offer an unusual exception in regard to winter movements. In the North, they return instinctively to the same circumscribed area each winter and, as the snow piles up, remain there feeding on whatever plants are available. They refuse to move out of this area even when starving, though adequate plant food may be available at only a short distance. These places of congregation, known as deer yards, are readily recognized by the way they have been overbrowsed by the deer. After use by an excessive concentration of deer, the locality may need many years to regain its normal plant cover.

Recognizing the frustration and futility of previous attempts to create and sustain understory regeneration in the presence of deer, once relocation efforts have been accomplished, park naturalists will be well suited to monitor the sustainability of new deer habitats and simultaneously begin to undertake efforts to rebuild woodland understory with great anticipated success.

Of equal benefit, using this method of integrated deer management positions the county to begin compiling real and accurate data about deer population numbers, herd health and deer behavior in urban environments. It also prepares Fairfax County to be well-prepared and suited to implement new technologies such as contraception as they become available.

2. 4-Poster Bait Stations—taking the bite out of tick-borne disease

The misconception of the relationship between the black-legged tick, also known as the deer tick, deer and Lyme Disease has reached epic proportions. Those in position to influence county efforts to minimize the risk of contracting Lyme Disease have an obligation to both understand the facts about the transmission of Lyme Disease and the relationship of the deer to Lyme Disease as well as to be proactive and vigilant in educating the community. For clarification, the following information explains Lyme Disease as it relates to deer.:

Lyme disease is an illness caused by a spirochete bacterium (*Borrelia burgdorferi*). This disease is transmitted to people and animals primarily by the bite of the tick, *Ixodes scapularis*. Deer may carry small numbers of the spirochete that causes Lyme disease but they are dead-end hosts for the bacterium. Deer cannot infect another animal directly and no deer hunter has acquired the disease from dressing out a deer. Infected ticks that drop from deer present little risk to humans or other animals since the ticks are now at the end of their life cycle and will not feed again. In addition, the risk of picking up ticks from game animals is insignificant compared with that from the environment (meadows, brushland or woods).¹

Deer support high tick intensities, perpetuating tick populations, but they do not support tick-borne pathogen transmission, so are dilution hosts. We propose that localized absence of deer (loss of a dilution host) increases tick feeding on rodents, leading to the potential for tick-borne disease hotspots.²

The one correlation between deer and the *Ixodes scapularis* tick is that deer may carry the ticks to other areas. However, as has just been established, 1) ticks falling off of deer present little if any risk of citizens contracting Lyme Disease and 2) we have shown that the perception of deer migration is greatly exaggerated even under circumstances as dire as potential starvation.

The good news does not stop there. Now that we have established favorable deer localities, and reasonably enjoy the expectation that the deer will congregate in those areas, circumstances are ideal to employ a low-tech, inexpensive, 99% effective method of reducing tick densities by using the very deer thought to pose the threat. In effect, the more deer, the more ticks they attract, the more ticks we are able to eliminate. This treatment is provided via a 4-Poster Bait Treatment Station. The '4-Poster' Deer Treatment Bait Station eliminates ticks by treating the host. As deer feed on corn bait, the device forces them to rub against rollers that apply pesticide to their ears, heads, necks and shoulders where roughly 90 percent of feeding ticks attach. Operating and maintaining the stations throughout the year encourages deer to visit frequently, sometimes daily. Each time a deer feeds at the bait station, it treats itself with enough pesticide to maintain a lethal tick barrier. As treated deer return to the woods they serve as a lethal mop, clearing the forest of ticks.

1 Michigan Department of Natural Resources

2 Sarah E. Perkins, Isabella M. Cattadori, Valentina Tagliapietra, Annapaola P. Rizzoli, Peter J. Hudson (2006) LOCALIZED DEER ABSENCE LEADS TO TICK AMPLIFICATION. *Ecology*: Vol. 87, No. 8, pp. 1981-1986.

The baited treatment station was developed and patented by Agricultural Research Service scientists at the U.S. Department of Agriculture. Treating the host can replace wide-area pesticide broadcast, which kills not only ticks, but also non-target organisms. The new method greatly reduces the use of pesticides within the environment, an Integrated Pest Management goal. When employed, a 92% to 98% reduction of ticks is experienced. Applications of the "4-Poster Bait Station" have favorable indications for treatment on public, park, private and corporate properties.



The 4-Poster Bait Station



Before Treatment



After Treatment

Problem solved. Permanently. Period.

3. Deer-Vehicle Collisions—why did the deer cross the road?

- To get to the water supply no longer available on his side of the street.
- In search of a new habitat after Wegman's held it's grand-opening celebration.
- To flee from being shot at.
- In search of his one true love.
- All of the above.

All of the above. As research has established, by nature, deer are not the road warriors they have been suggested to be. While the rutting season presents an exception, deer are inclined to remain in a relatively small area so long as they are not compelled to seek other alternatives. And while it is imperative to appreciate the elevated risk of deer-vehicle collisions during the rut, it should be noted that a recent Pennsylvania study noted the incidence of deer-vehicle collisions to rise five-fold during hunting season. That said, in implementing the steps already outlined, we have already minimized the number of deer likely to be found in exterior areas adjacent to roads as we have drawn them to the interior.

Secondly, minimal adjustments may be made to further ensure roads and shoulders to not attract deer. The use of salt on our roads creates a virtually endless mineral block and is readily remedied by employing a salt substitute to treat our roads. The use of salt is already prohibited in some states, one need not look very far to find such substitutes.

Having minimized the number of deer present on or near roads, efforts should now turn to the most Influential factor in the number of DVCs—the drivers. Currently, the totality of the efforts put forth by the county to educate drivers about deer-vehicle collisions and driver safety equal the rotation of two (2) signs and a public service announcement. Given the county's population of over 1.2 million, the effort is a token at best. In recent campaigns throughout the DMV area where mobile billboards were deployed and rotated, carrying the warning that deer crossings were to be expected, researchers noted an immediate reduction in

driver speed as they approached the signs and a significant effect both when the signs were placed at hot spots and then subsequently removed. In one such instance, citizens reported five DVCs in five days. A sign was transferred to the road. During the seven day period it was deployed, citizens reported no DVCs. The sign was then moved to another road in the county. The next night, A DVC was reported.

The incentive to take aggressive measures to augment public safety through media campaigns, temporary signage, permanent but transient signage and driver education is irrefutable. While efforts have been conducted in the past, the county is positioned to use resources already in inventory as well as partner with VDOT, DMV, driver education programs, schools and corporations such as insurance companies to ensure every effort is made to successfully address the two factors involved in a deer-vehicle collision. The deer and the driver. Minimum cost, maximum savings.

4. Population Control—fact and fiction

People believe what they want to believe. Fact. That makes it true. Fiction. Today, if any of us practiced the same method of birth, or population, control most of us swore by in the foolish days of our youth, we would be sorely disappointed in the outcome. But at the time, in the moment, with little information other than from our peers, the odds seemed perfectly reasonable. And, when an exception to those odds occurred, as long as it didn't happen to us, we explained it away by offering a multitude of extenuating circumstances. We did our best, at the time, with the best information we had. Fact. That meant we were right. Fiction. Just ask the baby-boomers.

The county has relied on what it considers to be the best information available about deer populations, when to manage them, and the best ways to do so. Fact. That information is correct. Fiction. Today, we know better. Our county has 400 parks, this year, we will conduct managed hunts in 12 of them. Fact. These activities will result in any measurable effect on the deer population. Fiction. Thus, at the end of the day, after we have exerted tremendous effort, county resources, and tax payer dollars, what we will have is some number of dead deer. Fact. Those dead deer will result in a reduction of any of the four primary community conflicts. Fiction. We do the best with what we know. Fact. We know better. Fact.

We know how many deer exist in Fairfax County. Fiction. We know how many deer reside in each of our county parks. Fiction. We estimate, using a broad range of perceived indicators and arrive at a number we propose to be a close approximation. Fact. That number is derived from any scientific or quantifiable formula. Fiction. We guess. Fact. We persist in our belief that because of the four primary community conflicts, there must be too many deer. Fact. Because to date, there has been minimal challenge to these presumptions, we must be correct. Fiction. We can do better. Fact.

Modifying our habitats on private, public and corporate lands creates the realistic opportunity to begin to compile data about our deer that is accurate, quantifiable and invaluable to future efforts to maintain a balanced environment between the community, the environment and the wildlife that co-exist in our urban environment. Once this has been achieved, then it becomes appropriate to discuss the deer population, both the Biological Carrying Capacity and the Cultural Carrying Capacity to responsibly determine what level of effort is required to achieve the most desirable, realistic and attainable balance in our community. Once that has been evaluated, our attention may then turn to what are the most effective, appropriate and sustainable methods to apply toward that end. For example, should contraception be a feasible option, our county, as a result of having created the necessary environment for its application by successfully implementing the Cooperative Community Collaboration, is positioned to present and implement a benchmark program for systemic, sustainable community-conflict resolution in the urban environment.

5. RESEARCH, DEVELOPMENT & IMPLEMENTATION

The solutions outlined above embody the extraordinary bank of research already available to the county. Each one of these solutions has been employed, analyzed, refined and established. What is perhaps uncommon about this approach is that it is rooted in common sense. While it is by no means an exhaustive study or heavily cited academic proposal, what it is a reasonable, practical viable outline from which to develop a strategic plan for community conflict resolution that is long-term, sustainable and flexible to accommodate new applications and methods as they become available. You need not spend years researching the benefits of quitting smoking, that has already been done. A better application of time and resources might be to determine, based on specific circumstances, what process offers the strategy most likely to result in a successful effort to quit. That is not to say this proposal diminishes the value of research. Rather, it presents a viable opportunity to conduct research that is measurable, quantifiable and relevant to the needs of our county.

As with any proposal that necessitates a significant departure from the status quo, the potential for its success is directly related to the enrollment of all stakeholders. This proposal acknowledges the tremendous expertise, knowledge, experience and commitment of our county agencies, private corporations, non-profit organizations and each individual in our community. Any problem that involves our entire community requires the commitment of the entire community to ensure its success.

By no means fully developed, what this proposal is fully implementable. When? Now? By who? All of Us? Why? Because we have deemed it to be relevant enough to attract the attention of every group and entity mentioned above. What this proposal does is require every stakeholder involved, from the Director of the Park Authority to the County Supervisor to the homeowner to take off the little hat they traditionally wear, the one that mandates they look out for their interests, or those of their agency, first and instead put on a big hat and focus on how they can productively contribute to a big picture solution. It raises the bar and the expectation that our investment and loyalty to our community is real and that we are willing to do more than talk.

Though the methods are simple and readily employable, the task of creating and maintaining cohesion among such a diverse group of county constituents requires leaders to make the commitment to its success and to seek direction and expertise in creating alignment and driving the strategy. In adopting a progressive approach by committing to solutions, Fairfax County has and will continue to attract the best in the field to participate in the process.

Following the development of a focused and comprehensive strategy, implementation is both imminent and anticipatory. Imagine, after over a decade of struggling with the same cycle of conflicts and experiencing minimal short-term relief and predictable long-term frustration, the reward and satisfaction of achieving a state that has been deemed unachievable.

6. FUNDING AND RESOURCES

Even a brief examination of the innovative nature of this proposal, combined with the accolades of being one of the first of its kind to recognize the potential that exists by employing a cooperative strategy rather than clinging to traditional boundry-laden bureaucracy identifies a multitude of funding sources available. What is most important to appreciate is that they exist and the opportunities to identify sources that surpass traditional expectations such as proffers, budget allocations and untapped federal programs increase exponentially by tasking the stakeholders to focus not on whether or not to undertake this, but simply how to make it happen.

As an example, during the course of developing this proposal, one unexpected potential gain to the county is the possibility to reduce demands on animal services and police officers presently operating on limited budgets, charged with responding to injured deer on our county roads by enjoining local hunters to participate in this community service. Here we have an excellent example of breaking out of the box by recognizing there exists, in our county, a community with an intrinsic body of knowledge as it relates to deer. It seems worth considering the benefit to securing their expertise and resources to address a task currently assigned to personnel who often have neither the time, resources nor training to effectively meet the demands of the county.

The fundamental strength in this proposal is that there is room for everyone at the table. All that it requires is a willingness to take your seat, roll up your sleeves and get to work.

7. THE CHOICE FOR FAIRFAX COUNTY

“Good stewardship and prudent management of our natural environment and resources are not merely “add-ons,” or afterthoughts, but rather are essential and fundamental responsibilities that must be given fullest consideration at all times. Good stewardship doesn’t involve “rescuing” nature from environmental disasters: it involves long-term strategic planning that minimizes any possibilities of such emergencies occurring. Clearly, cooperation between county residents and government leadership and agencies will be required to effect lasting solutions to the environmental challenges we face.” (Fairfax County Environmental Improvement Program Section A: Introduction, Fiscal Year 2010)

How we solve problems is important. Short term “fixes” provide temporary relief at the expense of achieving long term solutions that will be ultimately be less costly while providing a quality environment for all, much sooner.

The Cooperative Community Collaboration (CCC) plan presented in Parts 1 -5 is a plan worthy of Fairfax County leadership and the citizens of Fairfax County.

When the Cooperative Community Collaboration (CCC) plan is implemented.

- Lyme disease will be mostly eradicated in the area in three years.
- Deer will not be crossing roads or drawn to the roadside to feed on residual salt from road deicing.
- Deer will mostly stay in the woodland areas away from neighboring gardens.

- Deer population will be reduced by a cooperative effort of Fairfax County citizens who are expert in wildlife conservation, deer behavior assisting county personnel in a program to reduce birth rates of deer through contraception delivered in darts by hunters who want to use their skills in urban areas with the same respect they have for deer where they practice fair chase hunting
- The community will have solved a difficult problem by working together to implement a solution acceptable to all, and respects deer as wildlife, not pests.

The bow hunt is an ineffective and inappropriate tool of environmental stewardship.

If the Bow Hunt plan is goes on as planned

- The risk of Lyme disease will increase because the ticks that leave the dead deer bodies will still be around next year looking for an alternative host
- The County may inadvertently cause a deer vehicle collision as deer escape the killing fields or are wounded and run across busy route 7 or Hunters mill road.
- Some citizens in the area will witness a dying, wounded deer. Some may not care, many will.
- Children will learn that if you are bothered or annoyed by a pest (or bully) killing is an OK and easy way to get relief and satisfaction.
- Next spring the gardens that were to be protected will again be browsed by other deer that escaped or entered the Colvin Run area from other woodland areas.
- Deer will still be crossing roads
- The woodland understory will be the same as it is now.
- And some neighbors in Colvin Run mill area and Great Falls who were friends last year will not be friends ever again.

The plan to use bows and arrows to kill wildlife, who are just doing what comes naturally, is a failure of leadership, expedient with practically no benefit and increases risk to the County.

The Cooperative Community Collaboration (CCC) plan will begin a long-term replicable process to resolve conflicts with deer and do so without controversy. It will confirm that Fairfax County is the place where innovation, cooperation, resource sharing is the rule and expediency has no home.

APPENDIX: WHAT WE DO NOT KNOW, BUT SHOULD

- What is the population of deer in Fairfax County?
- What is the deer population in the Colvin Mill Park area?
- How many deer would have to be killed in order to have an effect on the conflicts in the park?
- What is the benchmark to indicate the two month bow hunt is a success or failure?
- What are the other efforts taking place in conjunction with this hunt to resolve the damaged understory of the woodlands?
- Why was there no opportunity for the public to respond to the proposed hunt?
- What is the information available regarding the potential impact on neighboring homeowners, park visitors or commuters that travel on Route 7 and/or Hunter Mill Road?
- Will the park be closed or remain open to the public? Why?
- What is the measurement for proficiency of the privately contracted bow hunters who will enjoy the opportunity to use public park lands as a private hunting ground?
- If the satisfaction of private landowners who have allowed private bow hunting on their land is reason to consider bow hunting what about the majority of landowners who have said no to the hunter who comes knocking on their door asking for permission to hunt?
- What are the intrinsic costs to the county and the citizens?
- Has the county considered the experience of other wildlife managers throughout the country regarding bow hunting?
- Is there any concern regarding the widely accepted knowledge that death by bow and arrow is considered inhumane?
- Once an arrow leaves the bow, there is no control over whatever happens next. What are the provisions for wounded animals that run through and off of park lands, either onto private homeowners land and/or into roads - in this case Route 7 and Hunter Mill Road?
- How will hunting during the early morning, the time favorable for hunting, impact prime time rush hour if animals are wounded and running?
- Fairfax County requires a "reasonable" attempt to retrieve a deer. What does that mean?
- A bow hunt drastically increases the chance for a collision. In addition to those wounded and running into the roads, the disruption causes other animals to flee the area. What are the measures in place to warn drivers? (see previously cited study).
- A bow hunter enjoys the right to knock on your door to ask permission to finish killing a wounded deer lying on your front lawn, as a citizen, what actions are you permitted to take?
- If arrows will be marked, will hunters be required to account for their arrows at the end of each day?
- Why or why not?