

Deer Problem Management

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Introduction:

An increasing number of community leaders are grappling with what to do about deer. Complaints abound yet controversy erupts when plans to open up town land for hunting is announced. Protests, angry presentations at town meetings and the pitting of neighbor against neighbor occur. Community leaders want to do something to alleviate complaints, yet a clear solution isn't apparent. Often a hunt is decided upon, ambitious collision and damage reduction goals are announced but no baseline data is collected or monitoring system set up. Community leaders are hard pressed to show what if anything the hunt has achieved and if taxpayer dollars were well spent. The goal of this document is to provide a framework for evaluating community deer issues and taking step-by-step actions which address those deer issues in a comprehensive, holistic, humane, community-supported and defensible manner.

Source of the problem:

- Suburban development created ideal “edge” habitat, suburban landscaping and gardens provide a virtual buffet - there's more food for them in backyards than the deep dark woods where they supposedly “belong”. Thus we are essentially enticing deer in.
- Deer adapt easily to human presence, lose fear
- People have different values and attitudes towards deer – hunters, deer watchers, deer feeders – and those values are influenced by their concerns and upbringing

Unintended consequences of hunting/ culling:

It is also assumed that culling deer will decrease the deer population itself, however:

- Increase in reproductive rate
- Immigration of new deer to area
- Requires more hunter effort to take out same number of deer as numbers go down
- Many areas inaccessible to hunters - deer killed in one area may not be those causing problems in other areas
- Public concerns about/ attitudes towards deer influences their perception of how many deer there are (or how many there “should “be)

Other issues with hunting/culling

- High direct and indirect costs: if use sharpshooters, recurring annual cost, if use public hunters, still costs city in terms of enforcement staff and overtime, etc
- Controversy! A divided and angry public, kids and adults traumatized by sight of wounded deer

- Wounded deer often run off huntable property onto private land – will town ask all adjoining landowners to allow trespass for blood trail tracking purposes?
- Set-back restrictions –local ordinances and state regulations often don't allow hunting or firearm discharge within a certain distance of dwellings
- Doing “something” – ie a cull – is not the answer. It may appease those who want to see action but if the problems aren't solved, then it's a waste of taxpayer money.
- Need for additional liability insurance – need to explore

Issues with particular types of culls/hunts:

- Bow-hunting: considered safer, but inefficient, high wounding rate. Struck deer may run onto adjacent properties
- Shotgun – more efficient yet safety issues, controversial, wounding rate issues remain
- Sharpshooting – more efficient but needs to be repeated on recurring schedule, expensive, controversial

Designing a Deer Problem Mitigation Plan

- Collect site-specific data to indicate scope of problem
- Set clear, achievable and measurable goals
- Tailored to particular problems
- Long term, not “quick fix”
- Create ongoing monitoring program to assess program's level of goal achievement
- Clearly spell out the long term-costs and time-line
- Public education pivotal to success & community support

What We See in Most Communities:

- Hunting is often proposed as the best way to manage deer problems, yet:
- Valid baseline data are not collected – so you have no starting point
- Overly-broad, non-measurable goals are set
- A solid monitoring system is not put in place
- Not clear what cull/hunt has achieved, success measured by anecdote and hearsay.

A Better Approach: Focus on managing conflicts, not numbers – ie create Deer Problem Management Plan

- 1) Define Problem at a Community Level
 - Collect Meaningful Data
 - a. Use of resident surveys, not general arguments
 - b. Set up robust accident reporting system
 - c. Set up robust complaint reporting system
 - d. Collect data on deer attractants in town (ex: town floral islands which attract deer)
 - e. Flag locations of sightline barriers along roadway, and ID collision hotspots

- 2) Give Hands-On Solutions to the Public
 - a. Educational materials on resolving backyard problems , deal with source of problem, correct misconceptions
 - b. Deer-proof gardening workshops, discounts at local garden stores, “Deer Days”, pilot fencing and deer proof garden sites
 - c. Accident reduction program (ex: Rochester Hills template) which has big public education component on defensive driving, ie when one deer crosses road others will follow, don’t veer, etc.

First step: Proper assessment:

- 1) Assess /define scope of deer problems :
 - a. Conduct resident survey
 - b. Assess what kind of damage, severity, number of public complaints and where
 - c. Create accident reporting system (using exact location, time of day, if injuries/ vehicle damage, etc – see Rochester Hills)—assess accident hotspots
 - d. Overlay maps of collisions, deer corridors, areas of high deer density, town green space, where complaints located
 - e. Can do aerial survey to get indices on deer population, but these are just snapshots of one point in time
 - f. Evaluate location and type of deer attractants in town: i.e. public flower exhibits, roadside or roadway divider floral displays, etc – contain deer preferred flower species?

Second step: Create public input channels

- 1) Set up deer advisory committee with balanced composition (not containing one token humane advocate, but rather, a balance --- 2 humane society representatives, 2 advocates for not culling, etc)
- 2) Have open public forums to discuss the deer situation – include speakers on all sides of issue, not just agency rep and hunt proponent
- 3) Present easily accessible information to public: Utilize city website, advertise via local media: be sure any report or information includes long and short term costs (direct, indirect), short and long-term costs, benefits and a specific timeline. (Rochester Hills web site is a great template)

Third step: Create Action Plan: Utilize range of non-lethal options for site-specific application:

One designated person should be in charge of overseeing the deer program – ie serve as the Deer Program Coordinator. The Coordinator could develop a master list of volunteers who, after appropriate training, can speak to those residents who call with complaints, do site visits, and even give samples of repellents for those who are having backyard deer issues. The deer program can and should be promoted as a source of community pride, as something that is achievable with some effort on the part of all residents, and something which can bring about a harmonious relationship between residents and their community wildlife.

1. Deer Damage to Gardens:

1. Public Education: Put problem-solving information on town website, (which include web links to local resources) put informative flyers in town mailings on where to find deer-resistant plant lists, repellents, and fencing options, etc. Local Cable TV and news media, electric bill inserts, and other information distribution channels should be

considered along with special public presentations given for residents on problem-solving methods.

2. Host deer-resistant gardening workshops for residents which are run in the evening or on weekends by an expert and also include site visits to homes for private consultations (see consultant: <http://www.deerproofyourgarden.com/>)
3. Prioritize deer-resistant flower and ornamental species in all town landscaping and floral displays – Collaborate with garden club and local beautification committees to ensure that all town floral displays contain deer-resistant species and use these to publicize preventative gardening strategies.
4. Set up town study plots: Have a deer resistant garden plot next to a deer attracting garden plot, plus various plots to which certain repellants applied (along with control plots for comparison). Put photos of deer damage (or lack of) on website, use study plots to educate residents how to garden defensively.
5. Host deer-proofing demo days – Utilize boy scouts and other local volunteer groups to put up fencing or tree guards at local parks, have “deer discount days” at local garden stores (ie where deer deterrent products are discounted on certain days, etc)

2. **Deer-Car Collisions:**

Once the local deer collision data has been collected and analyzed, the following solutions can be applied. Coordinate a roadway maintenance plan which is overseen by designated person:

- Do educational outreach – ie a “Don’t Veer for Deer” campaign – get information put on town web site, PSAs, local media. Focus on peak months (Nov-Dec rut and May-July fawn rearing)
 - New driver education: get driving tips and Don’t Veer for Deer campaign literature to all new driver education programs (partner with high school, driving school, programs for the elderly, etc – sample brochure:
http://www.michigandeercrash.com/Deer_Crash_Brochure.pdf
 - Reduce visual barriers on roadways – do vegetative management and brush removal to increase visibility on major roadways, negotiation with private landowners about reducing roadway brush on private property adjacent to major roads or accident hotspots
 - Treat collision hot spots: – utilizing speed bumps, fencing, movable changeable message boards, warning devices (ex: Streiter lites, Deer Deter Wildlife Crossing Guard (<http://strieter-lite.com> ; <http://deerdeter.com>) , evaluate hot spots for possible lower speed limit designation
 - Investigate possible salt replacement alternatives for winter
 - Sets up and maintains accident reporting system and continues mapping accident locations and other details.
 - Use Rochester Hills MI “Don’t Veer for Deer” campaign as a model – see <http://www.rochesterhills.org/index.aspx?NID=569>
- **Deer feeders** – develop educational literature, encourage neighbor-to-neighbor sit-downs and have town personnel conduct diplomatic visits to offenders, publicize (as part of education campaign) how feeding not good *for the deer*. A deer feeding ban ordinance can be passed to discourage this activity, and contact information provided for the reporting of violators.

- **Lyme disease**
 - Public education campaign focusing on personal prevention steps, links on town website to CDC and other expert resources re: disease prevention methods (personal protection measures, landscaping practices, etc), tools and resources
 - Consider community plan for strategic placement of *4-Posters*
- **Biodiversity issues**
 1. Seek out collaboration with local Natural Resource schools / universities to have college students do field survey work to objectively assess deer impacts and browsing levels on local flora and establish baseline data,
 2. Consider use of forestry methods (fertilizing, temporary or permanent fencing, stem protectors, etc to protect valued plant communities
- **Population Management**
 - Do annual aerial surveys to get indices on local deer population and track changes over time
 - Consider site viability for surgical sterilization (ovariectomies) or pilot immunocontraception (PZP) project
- **Aggressive deer**
 - Have designated person evaluate situation
 - Educate resident about temporary and rare nature of aggressive deer situations, importance of keeping dog and people away from fawns, and describe hazing methods they can use if a deer comes too close or becomes threatening.
- **Orphaned fawns**
 - Include in all educational material and in spring-summer media: how 99% of “orphaned” fawns are NOT orphaned and should be left alone
 - How fawns are “parked” in yards and fields by their mother and rely on camouflage for protection. The doe will nurse her fawn twice a day but stays away the rest of the time since her odor will attract predator (fawns are odorless) Once the fawn a month old, she will travel around with mother.
 - Only if the fawn is injured, wandering and crying all day, and/or a dead lactating doe is found in road should the fawn go to a licensed rehabilitator
 - If the fawn is picked up by a well-intentioned resident, the resident needs to be advised to quickly return the fawn to the original site for the mother to reclaim.

4th Step : Program Assessment

1. Set up robust resident complaint and deer-car collision reporting system -- monitor over time so know if goals achieved and if accidents and “nuisance” complaints decline over time
 - a. Resident complaints: record type, extent, duration , location of complaint
 - b. Collision reporting :accident location (exact), time of day, if injuries, damage to car (s), if just dead deer in road, etc
2. Conduct another resident survey to measure resident satisfaction with program

Public education: pivotal to success & community involvement

- Use city web site and all other outreach/media avenues, emphasize ways to deer proof gardens and yards, avoid collisions, why not to feed deer, etc.
- Links to websites such as:

General:

- <http://www.humanesociety.org/animals/deer/tips/>
- <http://wildlifehotline.org/deer.html>

Deer-Vehicle Collisions:

- <http://www.deercrash.com/> - put together by various DOTs with methods and reviews
- http://www.michigandeercrash.com/Deer_Crash_Brochure.pdf - sample brochure

Deer –Resistant Plants:

- <http://www.deerresistantplants.com>
- www.easywildflowers.com – great native flower resource
- <http://wildlifehotline.org/deer.html>
- www.humanesociety.org/deer
- Local garden stores
- Cooperative Extension Service