

DATE: 5 February 2015
TO: City of Ann Arbor
RE: Deer Management in Ann Arbor
FROM: Washtenaw Citizens for Ecological Balance (wc4eb.org)

The Washtenaw Citizens for Ecological Balance is composed of Ann Arbor area residents who came together a year ago around our interest and experience in public and private land stewardship, in concern for healthy environment for our families, and for assuring safe passage on our streets.

Our group includes, architects, wildlife specialists, parks board members, information specialists, master gardeners, professional landscape gardeners, and community volunteers – many of us with very long and very deep experience with Ann Arbor's natural features.

We have collected, read, analyzed, and made available through our public website 100's of deer management plans, programs, studies and proposals from Michigan and across the country.

We have reached conclusions about what to do.

We are grateful for the invitation from the City to speak here tonight, to present our recommendations.

More than two decades of actual experience in Barton Hills Village, several years of experience on nearby Metro Parks, botanical surveys and studies on Horner Woods beginning in 1970, an aerial survey of County Parks near Horner Woods a couple of years ago – all of these records have told us the problem of deer overabundance is close.

Many of you have told us, and told the City that deer are now overabundant in our neighborhoods, especially forested ones. They have taken up permanent residence. Many of you report to us and to the City that deer herds or large bucks are frequently congregating in your yards and eating in your gardens. This is not a surprise.

White-tail deer are very fertile! Each doe typically produces twin fawns each year, sometimes three. Young does can reproduce the very next Spring after they are born. In great habitat like ours, this fecundity results in exponential growth of their population.

There are now simply too many deer in Ann Arbor.

The growth in their numbers here is unchecked -- as it is in hundreds of other cities, parks, botanical gardens and natural areas around the State and the country.

This happens where hunting is not allowed, where natural predators are no longer present, where forested cover is available, and where highly edible landscapes and natural features abound. It is certainly happening in our wonderful City.

There were 140 deer per square mile on Kensington Metro Park a few years ago, before they began a deer management program.

There were 600 deer in Barton Hills 15 years ago, which meant more than 100 per square mile.

The County counted 64 deer per square mile on McLaughlin Park near Horner Woods a couple of years ago.

The consequences of too many deer are serious and they are truly negative.

What are they?

First -- Deer are increasing their huge damage to landscapes and gardens in the City. The replacement cost of eaten and destroyed plants is now in the hundreds of thousands of dollars, and hundreds of cultivars of plants in many families are favored food for these voracious eaters. Each deer can eat 8 to 20 pounds of plant material a day, including young trees and shrubs. Several deer can do unbelievable damage to a garden in just one night!

Gardens valued highly for their diversity of species and overall beauty are especially hard hit.

Vegetable gardens which support the popular concept of locally grown food are no longer possible in some neighborhoods.

Our Community Gardens need tall fencing and secure gates to keep deer out.

Our rain gardens are heavily browsed, even though we need them to collect and filter runoff, to protect the quality of water in our River.

These are all things we care about! They are key in the sustainability of our community and of our lives!

Many of you have had deer invasions and damage happening to you to one degree or another, for years. You know the problem is getting worse. Deer numbers are way out of balance.

We asking the City for a remedy!

Second -- Deer are extremely damaging to our natural areas, to our native species, to the very functioning of our natural ecosystems.

25 years ago the forested, shrub-free woods along our Huron River valley had huge rafts of one foot tall, happy, flowering Trillium. They were spectacular! No populations like that are out there in the City today! At unsustainable deer numbers many wildflowers in on our natural areas decline, at higher numbers they disappear. Trilliums are gone at deer densities of about 12 deer a square mile.

Deer at high numbers will nearly denude flora on a forest floor, including tree seedlings!

When deer eat the young trees it means the trees above cannot regenerate -- that the very structure of an ecosystem is being completely altered.

As many of you know, a healthy forest is more than just trees – it is a multi-layered web of life comprised of plants, birds, insects, butterflies, bees, soil organisms and much more.

The literature is full of documented evidence that overabundant deer are extremely damaging to the web of life in our natural areas.

No less a noteworthy source than the National Audubon Society has declared that “deer populations are laying waste to the vegetation that many native bird species in the United States depend on for their survival.”

Our Natural Areas Program has been working hard with its many volunteers these last 20 years to remove invasive shrubs and garlic mustard from our natural areas.

Confirming the need for us to battle garlic mustard is a study published last year. It established that garlic mustard density “explodes” wherever deer browse openings into native plants. Yet this awful invasive plant from Europe declines, where deer are excluded from the same areas by fencing.

Our long work on protecting natural features and in restoring our natural areas in Ann Arbor are true and genuine models for the State!

That work is simply undone without effective, long-term control of deer numbers.

The third problem -- Deer vehicle collisions are dangerous. They are frightening. And they are expensive. Deer hit by cars are maimed or killed. People are shaken. Sometimes people are injured. Sometimes they have been killed, if they swerved away only to hit another car or tree.

“Don’t vere for a deer!” MDOT admonishes us.

Where deer are abundant in the State vehicle collisions with them are epidemic. They can occur at any speed.

In 2013 Washtenaw County had 1038 of these accidents reported to police, with a typical repair cost of \$4000 per vehicle. There were 50 of these collisions reported in Ann Arbor that year.

Fourth -- Deer have been proven to be a central player in several tick borne diseases. Lyme disease—named after the Connecticut town where it was first identified—is the most common of them, but it is not the most serious.

Ticks use deer as a food host and as transporter. With increased deer numbers and more infected ticks -- walking in fields and woods can mean danger.

Once Lyme disease comes to Ann Arbor, each of you will have to thoroughly inspect yourself, your kids and your pets for adult ticks the size of a sesame seed, and for tick nymphs the size of a poppy seed -- every time you come indoors from your garden or the woods.

With the increase of deer as a key contributor, Lyme disease is now north of Toledo, in Jackson, in Waterloo, on the farms of Saline. It is solidly through Michigan counties and across the states to the east and west of us.

Research now definitively shows a closely parallel relationship between deer numbers, and reported cases of tick borne disease in people. Get deer numbers down 8 – 12 per square mile, and tick borne disease all but disappears in people.

What to do?

We have closely studied what many what other communities, agencies, and natural areas managers in Michigan and across the country have done to solve these problems.

One of these is a report published by Cornell University's faculty and staff, in concert with the State of New York and Cornell's Veterinary School. Covering almost a decade of well-researched work, this study represents a comprehensive, state-of-the-art picture of how to control deer numbers.

Its "Deer Manager's Toolbox" is particularly useful as it gives a synopsis of all methods of addressing the problem of overabundant deer – methods both lethal and nonlethal.

Their key overall conclusion was this: **"...there is no peer-reviewed, published evidence to suggest that use of nonlethal methods alone can reduce deer populations to target levels."**

Indeed, they said: “Sharpshooting deer (with rifles, bows or cross bows) over bait can be very effective in quickly reducing populations in urban areas.”

In the light of the problems we are having with deer densities too high, in light of Cornell’s conclusions, and in light of the reported experience of hundreds of other communities, park agencies, and natural area managers in Michigan and across the country.....

We recommend that Ann Arbor proceed to a safe and effective deer cull, using sharpshooters over bait, beginning next October.

What would this involve?

It will mean the City will contract with the best company or organizations nearby that conduct professional deer culls.

The staff of these organizations are very highly capable marksmen and women. They are courteous, and they are subscribed to codes of conduct and safety.

They would work closely with the City in determining culling locations and procedures.

Culling with specialized firearms would likely occur in specific areas on larger parks, perhaps only at night, likely with silencers, with bait.

Culling with firearms and cross-bows would occur on smaller parks and open spaces, probably either day or night, with bait – where safe shooting zones exist, and deer are present.

Culling would occur on a well-designed assortment of days and evenings, on rotating locations, beginning next Fall and going through next Winter.

Police would be kept closely informed, would help close public access to areas as needed, for safety.

Culling would operate under a special permit that has special permissions and conditions from the MDNR. Open hunting would never be permitted in Ann Arbor.

It should be noted that the City plans to do an aerial survey of deer that are here, soon.

Truly stopping deer population growth and bringing deer numbers down to a sustainable level as soon as possible will mean that culls in each of the first few years of the program would include half the deer that are out there, for several years.

We want you to know that professional culling of deer has been done effectively across the country many, many places.

It has been done on the nearby Metro Parks, in Barton Hills Village, in the middle of great cities like Washington, DC. Handled in a professional manner, by trained people, in well-designed locations -- there is simply not a safety issue. We have never seen a report of someone being injured by a weapon, during these programs.

What we have seen is great effectiveness in reducing deer numbers.

What should our objectives be?

We recommend Ann Arbor set as its overall goal reducing the number of deer to 8 – 12 per square mile, and to do so as quickly as is possible.

We would suggest a tentative target be set of at least 250 antlerless deer, to be culled next Winter, as the program gets going. That target number could be higher, based upon the results of the aerial survey.

We want the City to establish a well-crafted, ongoing, Wildlife Management Program for deer.

It would strive on an ongoing basis to meet the following metrics:

First -- Complaints to the City about deer damage to landscapes and gardens would be substantially reduced. Reports of groups of deer regularly visiting private gardens to eat would finally stop.

To help know where deer problems are, we suggest the City add a “Report a Deer Problem” category to its “What Do You Need” choices, on the City’s A2.gov website.

Second -- Indicator species assembled in test plots on many of our natural areas would begin to thrive, rather than disappear. There are many indicator species that would be used for this purpose, depending upon the natural area and its ecosystem. Trillium growing again in large patches, and Oak seedlings growing unpruned by deer are important measures.

The third metric -- Reports of deer vehicle collisions in Ann Arbor would decline to a low number.

And fourth -- Deer numbers would be kept low enough to make it unlikely that tick borne diseases become established here.

What will the cull cost?

One option is this: Hire the original sharpshooters that worked in Barton Hills, who are now working for the City of Jackson, on Ella Sharp Park. They would charge \$235 per deer taken. If the City did that, it would spend about \$59,000 culling 250 deer, next Winter.

Costs per deer would be reduced if interest that has been expressed in establishing an organization of well-qualified volunteer sharpshooters develops here. Such organizations have worked well elsewhere.

In Michigan we have the benefit of meat processing and donation programs, so the City would not incur additional expense for that. Venison is distributed in these programs to food banks across the State.

Overall costs each year for culling deer would fall, as deer numbers are reduced, especially in later years.

Other Recommendations

We recommend that the City appoint a well-qualified wildlife expert who would have the authority and responsibility to capably lead and coordinate a Wildlife Management Program for deer.

We recommend that a Wildlife Management Advisory Committee be appointed to work with the Coordinator, City staff, and with the Council. The Committee would include City staff and Council representatives, and knowledgeable outside citizens with wildlife management or related outdoor experience.

There are many details to be worked out including ordinance changes, agreements with MDNR, agreements with Sharpshooting organizations, protocols for shooting zones, public education and outreach, and so on. The Committee could help.

We recommend that the City immediately pass an ordinance to prohibit the direct feeding of deer or the placement of salt licks.

We recommend the City work diligently to enlist the cooperation of surrounding township governments, the County, and the University of Michigan in launching similar programs.

We know deer management programs covering all of the urban and suburban areas in and around Ann Arbor will work the best in managing deer numbers here.

So – We Citizens for Ecological Balance strongly recommend that Ann Arbor decide to greatly reduce deer numbers in our fair City. We strongly recommend that a program proceeds as soon as possible.

We strongly recommend that a great Wildlife Management Program is established, that it is staffed to be successful, that deer management gets going promptly, and that it is kept steadily going into the future.

We will never remove all deer from Ann Arbor, and we don't need to.

But we simply must manage their numbers. We must get those numbers down and under careful control.

The joy we can have in our gardens, the success we can have in our restoration efforts on our natural areas, the safety we can have when driving, the insurance we can have that ticks will not bring us great illnesses – all are possible if we reduce deer to low numbers and keep them there.