

How
many
deer
does
Grand
Haven
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November 21

2008

How
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Additional Facts for City Council to Base their Recommendation for the 2008/09 Deer Herd

- A. The City has received the new numbers for our Deer Management Unit population goal. The approved goal for all of Ottawa County remains approximately 17 deer per square mile. Deer populations in the State are measured by the DMU (deer management unit) level. In our area, the DMUs are set on county boundaries.

If you averaged the deer population estimates for the last 5 years (including the 2008 estimate prior to this year's deer season harvest), the Ottawa County 5-year average is approximately 31 deer per square mile. There is not an even distribution across the county, some areas have considerably more deer per square mile, as well as less, based on habitat and mortality pressures on the local deer population. If you isolated the 2008 pre-season deer population estimate for Ottawa, it is closer to 38 deer per square mile. A single year estimate can be influenced by factors that can cause greater variability, but a rolling average of several years tends to reduce these factors and produce a more reasonable population estimate. However, despite small fluctuations up or down, it is accurate to say that the Ottawa County deer population has shown a steady, increasing trend over the last 20 years.

If this held true for the City's 6.22 sq miles should harbor 106 deer within the City limits. If the city's ample habitat with little to no mortality pressure is taken into account, and conservatively estimate 31 deer per sq mile, the City would have 193 deer. This would be 87 deer over the recommended MDNR population.

- B. Based on citizen reaction, it appears that the Social Carrying Capacity between our public and deer has exceeded its limit. Since May 1, 2008, the City has received over 130 complaints from local citizens regarding the deer population. The objections have included everything from simple landscape and garden damage to being charged by deer. By the time citizens take the time to lodge a concern, they usually have become exasperated. Some of the most recent complaints have included large amounts of deer feces in yards and on sidewalks (Mary A White Elementary), decimation of historic (50+ years) gardens, and deer that won't scare even with rocks thrown at them. Recently a buck charged through a parked car at the American Legion and destroyed the interior before breaking back out through the windshield.

The complaints are no longer isolated to the 5 Mile Hill area, Cemetery, and Highland Park areas. They are now coming from the 400 block of Lafayette, 200 block of 4th, Beechtree Commons, Pennoyer and Arlington.

- C. According to professional opinion, the Biological Carrying Capacity has also been exceeded. There is evidence through our dunes and forested areas that plant and animal species are disappearing and invasive species are taking their place due to the extreme deer browsing. Sarah Schaefer, our Southwestern Management Unit Supervisor of the Wildlife Division, MDNR confirmed there has been ecological damage to the dunes. In her professional opinion, Grand Haven's public spaces had been impacted by Whitetail deer specifically. In many public areas, including Duncan's Woods, the undergrowth has been distorted. Many of the naturally occurring flora is no longer present due to the overfeeding by deer. This does impact the ecology as many species of insects, birds and animals are missing that should normally be present. Ms. Schaefer affirmed that the problem of deer browsing had progressed over the last few years and the ecology had been negatively impacted.

Bill Martinez, an environmental consultant and owner of Martinus & Associates who recently conducted a natural features inventory at Kitchel-Linquist Dunes reported that in his professional opinion, there is an over infestation of deer in the local wooded and grass lands.



See how well our DPW kept our Willows trimmed this summer...

According to Martinez, a natural features inventory was done in 1977 by GVSU, and when compared to his natural features inventory of 2005, there are large differences seen. The coniferous trees were dense into the second tier in 1977; today they are gone unless deer cannot get to them. The ground cover is also decimated. 14 species (mostly woodland) are gone. Martinez stated that if this damage

continues, one of the major environmental jewels in the County will be lost. In 1977 the FQI (an ID rating for plants/animals) for Kitchel-Linquist was 57, anything over 50 is considered a rare environment. Martinez reported that he sees similar findings at Kitchel-Linquist as were found in Hoffmaster in 1983 to 2005.

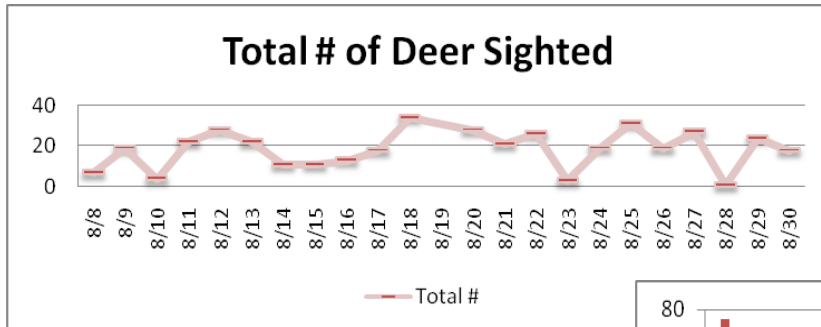
The deer are terracing the hillside, degrading the soil by breaking it down. Alien species are taking place of the understory and affecting the entire environmental chain. The regeneration of cedars is virtually gone throughout the region, causing deer to search out new forests. Similar findings were reported on S. Manitou Island. It was decimated by deer, and after hundreds were removed, the environment and deer now coexist.

Oops... credit to the wrong species... deer browsing was the culprit.

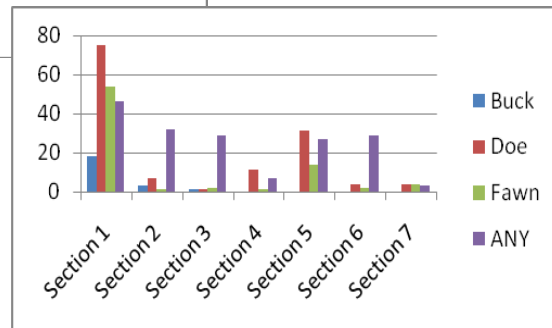


- D. There are growing concerns about the extreme domestication of deer. The deer are no longer frightened by humans, cars or loud noises. They will not move for cars or people. Citizens report that deer climb their deck stairs and one doe has had a fawn 2 years in a row on the same patio. Deer bed down in front yards on major streets to spend the night, and use sidewalks as their own.
- E. To the Task Forces' credit, their education of the public did raise awareness of the importance of not feeding deer. The City has received numerous comments that people have stopped feeding deer, as they were unaware of the negative impact it caused to the deer. Individuals claim that they have tried every trick in the book to protect their plant life and most claim defeat with all trials.

- F. In considering all options, there are many individuals in the community that fear a herd reduction. Their concerns stem from their own safety during a culling activity to not seeing an overabundance of deer. Deer are beautiful creatures and most people do enjoy watching their placid strides as they gently graze in our environment. They are also seen as a tourist attraction. Visitors comment that they love to come to Grand Haven to experience nature up close.
- G. In August, our Public Safety Department conducted a Point in Time census. On 23 separate evenings in August they visited 6 distinct locations in the City to take a count of the deer.



The separation of locations and timing of visits ensured that no double counts would be taken in a single night. In all there were 406



separate sightings, however many of these could have been duplicate sightings on several nights. The highest one day total of sightings was 34. The most alarming part of this study was that when the age of the deer was able to be recorded (buck, doe, fawn) 34% of the population was fawns. From this simple study we can estimate that there was a 34% increase in the deer population this year. Under normal circumstances, does two years old or older produce twins annually, while yearlings typically produce a single fawn. In excellent conditions, adult does can produce triplets, yearlings can produce twins and fawns can be bred and give birth during their first year of life.

- H. As far as traffic accidents go, over the last 5 years the City has averaged 7 accidents per year. This year in the first 10 months we have had 5. The City installed 10 new deer crossing signs where high crash rates occur. The low crash rate is not necessarily due to a decrease in deer, but an increased awareness of their presence and low speed limits.

City Council Available Decisions for 2008/2009 Urban Deer Management

- A. The obvious first choice would be to do nothing. This would appease the individuals that do not feel a herd reduction is warranted, however browsing damage in certain areas of the City would continue.
- B. Another choice would be to decide to authorize a herd reduction. If this decision is made, there are factors that Council needs to be aware of.
- a. If a culling is to take place, it is best for it to occur out of the regular fall hunting season, but before mid February. If a herd reduction takes place in January, the MDNR will grant special permission for the event including an overarching license for all deer taken at no cost, the ability to bait and cull at night. The MDNR works

with communities in situations where the urban deer herd has become unmanageable, and has a goal to assist and make it as easy as possible on the community. The hunt must take place before mid-February when the doe are obviously pregnant, which would cause even more public outcry.

- b. Earlier in this document, culling techniques were discussed. The MDNR does not allow any type of transfer of deer to other locations due to the high mortality rates and the possibility of disease spread. Neither does the MDNR allow birth control endeavors. That leaves the City with the options of gun or bow sharpshooters or public bow hunts.
 - i. To initially begin a culling process, both the Task Force and I would recommend the use of sharpshooters in the cemetery, Mulligan's Hollow and Five Mile Hill area. This is the most concentrated area of damage complaints and observed biological dune and forest damage (Duncan's Woods may also be a consideration). I have issued and publicly opened 6 RFP's from licensed Nuisance Animal Control Operators (one additional RFP was opened but was not from an insured Nuisance Animal Control Operators' business). The prices for valid sharp shooting bids ranged from \$110 per deer if we were to have volunteers dress the deer to \$25,000 for 50 deer ready and delivered to the processor. (Franks will do it for \$70 per deer with all of the meat being donated to local food pantries).
 - ii. Alternatively, I have been in contact with the USDA APHIS (Animal and Plant Health Inspection Service) Wildlife Division. APHIS would perform their services based on their personnel costs that total \$4,800 and would include one site visit to set up the project and then four subsequent visits to remove up to 50 deer. Volunteers would be responsible for baiting, retrieval of deer, and processing. Whitetails Unlimited and other members of the community have already committed to this responsibility. While this number is very close to the two lowest estimates (\$5,500 and \$6,904 for the same services), the advantage to using APHIS is that they are Federal agents and allowed to use silencers. Only law enforcement are legally allowed to use silencers on rifles. The two low bidders contend that they would have very low sounding shots, however they could not legally used silencers. Additionally, the APHIS personnel have experience performing culls on large animals (this is their job). Neither of the two low bidders have this specific experience. Whitetails Unlimited are discussing the possibility of donating a portion or all of the processing fees (which would be additional in any of the scenarios).
 - iii. Of the Biologists I have spoken with, they think our urban deer's home range is so small, there are separate herds of deer living north of the river than those in the Cemetery/Mulligan's Hollow/Five Mile Hill area. With this in mind, the second recommendation I would make in order to be cost effective and citizen friendly, would be to hold a public bow hunt on Harbor Island, North Shore, and Kitchel-Lindquist Dunes next fall during the regular bow season. Both Ferrysburg and Ottawa County have indicated a desire to work with the City on such a project. State licences for the hunters would cost \$10 per antlerless deer (no buck permits) and the City could also charge a fee in order to cover any expenses for the operation. The hunters would have the option of either keeping the deer or

donating it to a food pantry. All regular bow season hunting regulations would apply, with the exception that the City should consider making the archers pass a qualifying test that would assure their shooting capacity. Hunters would need to apply for the permits. If too many hunters apply, a lottery would be held.

C. The Final Question Remains...How Many Deer Do We Have, and How Many Should We Have?

- a. If you speak with a Wildlife Management professional, all would agree that the number is subjective and should be based on the (desired or undesired) public interaction. A number is picked based on scouting reports and any other available factors, and a cull occurs. The cull would occur yearly until the balance between human and animal is comfortable. Monitoring must continue, however, as unregulated wildlife propagates steadily.
- b. For some, this elusive number is not dependable enough to make such a immense decision. As we did last year, a helicopter survey is an option. While it would be impossible to get the exact count of deer in an unsecured area, a general estimate can be made. This cost approximately \$2,500. Additionally, infrared cameras are available to sense heat and add to the accuracy, however it also adds to the cost. Another option being used is trail cameras. They cost approximately \$200 per camera. In the areas troubled with deer, one camera would be placed every 100 acres. If we were to do the entire city of 4,000 acres, we would need 40 cameras, however I do not believe we would need to do the entire city. The advantage to this option is that it is an investment that can be used over and over again.