

Memorandum

Joint City of Bloomington-Monroe County Deer Task Force
Wednesday, 10 November 2010, 5:30 PM
McCloskey Room (#135)
City Hall, 401 N. Morton St.

Present:

Task Force Members: Dave Rollo (Acting Chair), Keith Clay, Stefano Fiorini, Bob Foyut, Judy Granbois, Sarah Hayes, Iris Kiesling, Thomas Moore , Laurie Ringquist, Susannah Smith and and Josh Griffin (via conference call).

Staff: Stacy Jane Rhoads (City Council Office), Elliot Englert (Intern) and Dan Sherman (City Council Office)

I. Welcome & Introductions

Rollo welcomed all to the third meeting of the Joint City of Bloomington-Monroe County Deer Task Force. Everyone present introduced themselves.

II. Minutes for Approval – 28 September 2010

The Task Force approved the minutes from the first meeting. Kiesling abstained, explaining that she had not reviewed the notes.

III. New E-mail – deertaskforce@bloomington.in.gov

Rhoads said that she asked IT to set up an e-mail address for the group so members of the public can more easily contact the group.

IV. Follow-up Questions for the Indiana Department of Natural Resources

Task Force members asked IDNR District Wildlife Biologist, Josh Griffin, a number of follow-up questions to the IDNR presentation of 21 October on commonly-followed deer management techniques. Griffin participated by way of conference call.

Fiorini asked if there are other ways to quantify the “deer problem” without engaging in a costly deer census.

- Griffin re-emphasized the difficulties involved in actually counting the deer. He reminded the group that the IDNR does not currently engage in a deer census because of the labor and cost-intensive nature of such counting. Instead, the IDNR relies on other indicators, especially deer harvest to track the State’s population.

In the absence of actually counting the deer, other ways to estimate population

size include: aerial line transect, spotlight counts, pellet counts, bait-and-trap and bait-and-camera methods. All these methods require resources – labor and funding. Ideally, trained scientists would conduct such studies. Using citizen scientists is possible, but use of citizens presents problems of bias. Furthermore, repeating counts at different times through the year would give a better structured study of the deer population and their seasonal and daily movements.

- Griffin offered that a pragmatic way to measure the “deer problem” is to look at where the complaints are coming from.
- Rhoads said that she drafted a first attempt at a public opinion survey to assess residents’ perceptions of deer density. She handed out the survey and encouraged Task Force members to review and send her feedback.

Fiorini asked if we can discern that deer are perceived as problematic in certain areas, and that removal should be explored in such areas, how would we determine how many deer should be removed?

- Griffin responded that this should be done on a case-by-case basis based on the characteristics of specific neighborhoods/areas. Griffin stated that the *social interpretation* of the deer may be more important than the actual number of deer. Also, it is difficult to get a definitive fix on the number of deer in certain areas, because deer are highly mobile animals and their numbers vary by month and season.
- Fiorini and others agreed that the community should be analyzed based on natural features such as corridors and barriers that naturally distribute the deer. Characteristics like corridors, greenspaces, major roadways, and neighborhoods can inhibit or encourage movement of deer.
- Rhoads said that we know that not everyone perceives deer as problematic. We know that many residents never even see a deer in their neighborhood (e.g., Near Westside). She suggested that, rather than engaging in a City and County-wide deer census, perhaps it might make more sense to first measure public perception via a public opinion survey to identify areas where social carrying capacity has been reached – the “hot spots.” Once we identify the “hot spots,” perhaps the group could then work on estimating the number of deer in a hot spot area.
- Rollo added that perhaps IU could help in assessing deer numbers in problem areas. Maybe a class or graduate students would be interested in this sort of

project. Maybe the Task Force should develop a subcommittee to examine this further.

- Moore pointed out that when it comes to pellet counting, a new and relatively inexpensive methodology is commonly used to ID the DNA of scat. Such analysis can pinpoint individual animals and helps to eliminate some “double counting” that inevitably ensues in just engage in a site count of deer pellets.

Clay inquired about agents of deer mortality: disease, predation and humans all have some effect on reducing the numbers of deer, but to what extent?

Predators

- Griffin responded that humans are the primary agents of deer mortality *via* hunting and car accidents. Coyotes are another occasional predator, but they usually won't take full-grown or healthy deer. At one time, large non-human predators such as wolves and mountain lions helped keep the deer population in check. The idea of reintroducing such large predators is not really viable. The lack of suitable habitat, the mobility of such predators, the close proximity to humans, and the potential for these predators to kill non-target species all present substantial problems. Griffin clarified that, despite all the media coverage, the IDNR has only confirmed the presence of one mountain lion in Indiana. The lion is in Greene County; it may be wild, but may also be a captive lion that either escaped or was released. Griffin further relayed that it would take decades for a predator species to re-colonize the area before they would have a significant effect on the deer population.
- Fiorini provided a map from the Indiana Transportation Research Center, *Traffic Safety Facts 2010*. The map tracks deer-vehicle accidents relative to other types of auto collisions. IN 2009, Monroe County deer-auto collisions constituted 3.3% of all crashes. The map indicates that the figure in some counties is as high as almost 48%. Clay pointed out that this data may be misleading as each county differs in variables such as: miles of roads, speed limits and reporting practices. Rhoads said that she is working on getting location-specific data on deer-auto collisions in Monroe County. Mapping such accidents might provide the Task Force with an additional lens through which to identify “problem” areas.

Disease

- Griffin said that the deer population is not anywhere near biological carrying capacity for disease to control the population. Studies in deer herds on the order of 150 deer per sq. mi. haven't even shown signs of disease. Griffin added that in Bloomington it seems that the social carrying capacity exceeds the biological capacity. The human-induced changes to the landscape have actually augmented the biological carrying capacity for deer.
- Clay said that while we have a sense of how other communities such as Ithaca and Iowa City are addressing deer: human conflicts, it would be instructive to look specifically at what other Indiana communities are doing. Griffin cautioned that the circumstances of conflict vary with each community. Some areas have extended the hunting season *via* urban deer zones, some homeowners' associations have hired sharpshooters; others have made use of bow hunters. Others have taken integrated approaches. Rhoads mentioned that it might be useful for the Task Force to come up with a number of questions which they wish to pose to communities (Indiana or otherwise) who are engaging in deer management.
- Griffin confirmed that sterilization or contraception techniques have never been used successfully on a free ranging herd in Indiana. Moore knew of a case where contraceptives were used unsuccessfully on a university on the eastern coast. They then resorted to sharpshooting.
- Moore commented that the most effective method seems to be the lethal techniques, and asks how it is possible to employ hunters in these efforts. Griffin adds that hunting seems appealing and cheap, one of the problems is that some hunters are only interested in bucks, and they likely only shoot one or a few deer. Removing bucks does not control the population as much as removing does. Griffin stated that the IDNR has considered implementing an *Earn-a-Buck* program in urban deer zones. However, this proposal has been withdrawn. *Earn-a-Buck* would require that a doe be taken before a buck. Another problem presented by hunting in urban areas is the need for continuous greenspace. Griffin advised that 5 acres of continuous greenspace tends to be best practice for archery hunting in urban areas.
- Moore asked if Monroe County could pass an *Earn-a-Buck* County-wide rule on its own. Griffin responded that such a rule would have to be approved by the Indiana Natural Resources Commission (NRC). (Griffin later clarified that if individual property owners wanted to require does be taken before bucks on

private property, they could do so.)

- Rollo asked about other ways to incentivize hunting. Griffin stated that IDNR Research Biologist Chad Stewart is in the midst of working with numerous stakeholders to draft new hunting rules on a State-wide level.
- Smith surmised that possible obstacles might be the perceived safety threat of hunting and the landowner property access issues Griffin mentioned previously.
- Moore commented that if hunting is allowed around the city (in the county), then it might not be necessary to hunt within the city.
- Griffin stated that if deer have plenty of food, shelter, water within an urban environment, they may not have a reason to migrate out. He added that deer density within the city could possibly be affected by hunting the surrounding areas of Griffy Woods, but he can't give a definitive answer. Griffin pointed out that deer home ranges are highly variable. If hunting is employed only in certain areas, a refuge for the deer might emerge in non-hunted areas and deer may migrate to those areas.
- Moore asked about the public reaction to the *Earn-a-Buck* system. Griffin said that different people have different perspectives, but there tend to be differences between those who hunt for meat and trophy hunters seeking antlered bucks.
- Smith commented that meat hunters usually only take what they need and will not hunt if they cannot eat the meat or give it away. Processing costs can approach \$100/deer, depending on how the meat is processed. She speculated that trophy hunters would not be likely to hunt in an urban deer zone.
- The Task Force did not have any further questions for Griffin. Rhoads pointed out to the group that Griffin cannot accrue overtime at the IDNR, so is volunteering his time to the group tonight. Everyone thanked Griffin for going above and beyond.

V. **Measurement**

- Rollo pointed out that it is important to somehow assess where deer are most problematic. He said he likes the idea of a deer count, although he realizes there are feasibility concerns.

- Rhoads offered that there are really two units of analysis at issue: the social problem (social carrying capacity) of deer:human conflicts and the ecological concerns. When it comes to measuring the social aspects of the “deer problem,” she re-iterated that it might make sense to first conduct a public opinion survey. Once problem areas are identified, then the group might engage in the type of counting mentioned by Griffin, although any census requires resources.
- Fiorini cautioned that people’s perception of the problem can be ambiguous. Clay commented that homeowners may react differently than renters, citing that few renters care about or even plant plants in their yard. Socioeconomic variable also shape perception of a “problem.”
- Fiorini said that there is a need to combine *both* the characteristics of the landscape and people’s perception of the problem. A survey should ask about techniques preferred by residents. Rhoads said that, at this point, the community at large does not know about the costs and benefits of each approach in the way that the Task Force does. Asking the public about which technique without having engaged in outreach might not render meaningful information. For example, at first blush, trap and translocation sounds like a good approach. However, most people don’t know about the myopathy, low survival rate and costs involved.
- Smith added that it might be useful to try to get some sort of information that would indicate what people would tolerate on their property or in their neighborhoods in doing either a count or carrying out management techniques.
- Fiorini stated that engaging the community repeatedly on a topic can be effective for assessment of different actions. He stated that this should be an opportunity for education so the community can make informed decisions. Rollo stated that this is true, but it is difficult because people’s naiveté in the topics. Rhoads agreed that even if we post management options on the website and tell people to read it before filling out the survey, many will not. She said she thought it would be premature to survey community acceptance of management techniques.
- Rollo indicated that surveying people’s perception to the problem by section of the City and linking it to a deer population of that area would be beneficial in determining the extent of the problem.
- Clay wondered if it is a goal of the group to merely reduce the number of complaints by just looking at the hotspots, or if this should be looked at as a community-wide problem. Is the problem just the number of complaints, he asks? Rollo felt that a

deer population count may be necessary to develop a depth of information. He questioned if numbers and hard data will be necessary to be effective.

- Smith commented that concentrating resources to alleviate hotspots may be suitable. She stated that for a count with limited resources, counting deer in the hotspots would prove adequate. However, she cautioned the mobility of deer might make a reliable count problematic.
- Moore commented that having an idea of a budget that we can work with, would be helpful in determining what is possible to be done financially. Even establishing the problem may take considerable funds for some methods. Rollo stated that conducting a public opinion survey using an online method, direct e-mail and a press release would incur minimal cost. Similarly, if we can work with students and/or faculty at IU to count the deer, then costs would likely be minimal.
- For a public opinion survey, Fiorini commented that the willingness of people to express their opinions may be a downfall. Rhoads agreed that in public opinion surveys, it is usually those residents who are motivated most strongly (either to cull or protect the deer) who respond. She offered that the Task Force could also work with Neighborhood Associations to encourage residents to participate in the survey.
- Moore stated that the responses may be skewed toward the answers of people that perceive there is a problem, but that may be just what we are looking for.
- Fiorini clarified that we defined the term “hot spots” as neighborhoods with complaints about deer, but there may very well be people in that hot spot that enjoy the company of deer and thus don’t bother with the survey. In these cases, it will be important to work with the neighborhood to get a more sophisticated understanding of the issue and what would be acceptable to the neighborhood.
- Rollo encouraged the group to look at the draft public opinion survey Rhoads distributed. Perhaps the group could discuss other questions to be added at the next meeting.
- Smith commented that if semi-professionals are doing the deer population counts, they would also be able to examine habitat areas as they were counting. These habitats could be tracked throughout the community and might be an unbiased assessment of where deer may be living.
- It was generally agreed that a public opinion survey is a good idea and the details will be worked out at a subsequent meeting.

VI. Deer at Griffy Lake

- Rollo said that in addition to the social carrying capacity for urban deer, there are ecological concerns to consider, such as those at Griffy Lake. Recall, that City's Parks and Recreation Environmental Resources Advisory Council (ERAC) has asked the City Council to consider the effects of deer browsing at the Griffy Nature Preserve. ERAC is concerned that the vegetative diversity in the Griffy Lake Nature Preserve is declining as a result of deer overbrowsing. This results in an unnaturally-open understory that looks very different from nearby areas such as State Forests and State Parks where deer herds are managed. Keith Clay and his postdoctoral student, Angie Shelton, have conducted experiments with deer exclosures at the IU Research and Teaching Preserve at Griffy Lake and have found that there are more species inside deer exclosures than outside the exclosures and that the plants within the exclosures are significantly taller than plants outside.
- Rollo said that it might be useful for the group to hear from Clay and Shelton about their work at Griffy. Rollo also said that a few years ago, the City commissioned a Master Plan for Griffy. The Plan problematized overbrowsing and called for further study. Steve Cotter is the City's Natural Resources Manager and should attend any meeting discussing deer at Griffy.
- Neighborhoods adjacent to the Griffy Lake Nature Preserve are affected by this area.
- Moore offered that in conducting research on flying squirrels at Griffy, he noticed the especially high density of deer. Every trip, he would be within 30' of a deer.
- Granbois added that deer are especially numerous in neighborhoods adjacent to the Griffy Lake Nature Preserve, such as Blue Ridge.
- The group agreed to devote the next meeting to hearing about deer at Griffy Lake and working on refining the public opinion survey.

VII. Public Comment

Dave Parkhurst lives on .8 acres in Ridge Mead sees deer very frequently. He stated that he will begin to record encounters with deer anecdotally and will send the group this information. He commented the deer will eat ground-nesting birds. He is concerned that the presence of deer will impair the community's growing number of community gardens as well as the new community orchard. Fences around community gardens should be reassessed.

Mark Day wanted to point out that there are many examples of how other communities have handled deer. There are good examples on how consensus can be achieved. No need to reinvent the wheel. He said that he wanted some clarification on the lifespan of deer – it must be longer than the 4-6 years discussed by IDNR previously, especially if there are no predators. Additionally, if deer herd populations are known, then growth estimates can be figured out. He asked if there are ways to estimate population growth in this environment. He also wanted to make a point that merely eliminating complaints should not be the intention of the group; the group should be striving to address the underlying problem.

VIII. Adjourn -- The meeting adjourned at 7:22pm.

IX. Next Meeting -- Tuesday, 07 December at 5:30pm in the Hooker Room.