In the Council Chambers of the Showers City Hall on Wednesday, April 9, 2014 at 7:30 pm with Council President Darryl Neher presiding over a Regular Session of the Common Council.

COMMON COUNCIL
REGULAR SESSION
April 9, 2014

Roll Call: Ruff, Sturbaum, Sandberg, Granger, Neher, Mayer, Rollo, Volan, Spechler
Absent: None

ROLL CALL

Council President Neher gave the Agenda Summation.

AGENDA SUMMATION

There were no minutes for approval at this meeting.

APPROVAL OF MINUTES

REPORTS

- COUNCIL MEMBERS

Sturbaum noted that the mayor had declared the week "Ross Lockridge, Jr. Week" in Bloomington. He asked Susan Sandberg, Steve Volan, and Dave Rollo to read excerpts from Lockridge's best-selling book *Raintree County*. Sturbaum read the last paragraph of the novel, adding that he appreciated the opportunity to bring this historic work by a Bloomington native to life.

Marty Spechler stated that he favored the increase of the federal minimum wage from $7.25 to $10.10/hour. He called for every public policy maker to do a pros and cons list regarding raising the minimum wage. Spechler expressed his belief that Bloomington's living wage of $12 was too high because it tended to reduce employment. He also defended that he was unfairly criticized in a published letter to the H-T a few days prior, and he wanted to clarify his stance.

Tim Mayer took a moment to remember Carl Zager who passed away recently. Zager had served on the Bloomington Telecommunications Council and on the Bicycle and Pedestrian Safety Commission, in addition to being an educator and advocate.

Dorothy Granger wanted people to know that domestic violence is a huge contributing factor to homelessness. She also pointed out that the city provides support for the annual Homeward Bound Walk which raises money to combat homelessness.

Andy Ruff read a proclamation from the mayor that designated the week "The Week of the Young Child" in support of quality education for young children.

- The MAYOR AND CITY OFFICES

Byron Bangert, Bloomington Human Rights Commission, presented the Human Rights Award to David Metheny for his work on behalf of low income and disabled persons who were in imminent danger of losing their homes. Bangert said that David Metheny exemplified citizens whose efforts went above and beyond the call of duty to advance civil and human rights.

Kathy Mayer, Community and Family Resources Department, and Beth Rodriguez, Centerstone, noted that the twelfth annual 5K Homeward Bound Walk was being held on Sunday, April 13, 2014. Rodriguez encouraged families (and well behaved pets) to participate to help local nonprofit agencies who worked to end homelessness. Rodriquez thanked the many sponsors of the event and praised the recipient agencies for their efforts toward ending homelessness.

Rebecca Nunley, Area 10 Agency on Aging, highlighted the positive impact of Bloomington's 450 National Service Volunteers. She also thanked the mayor for proclaiming April 9, 2014 "National Service Recognition Day". Nunley encouraged interested persons over age 55

to contact Area 10 Agency on Aging to get involved in the National Service program.

- COUNCIL COMMITTEES
  - Special Committee on Boards and Commissions

President Neher reported on the work of the Special Committee on Boards and Commissions. Based on results of a study by the City Clerk, a new set of terms, with staggered end dates, was proposed in order to bring all city boards and commissions into compliance.

It was moved and seconded to accept the report of the Special Committee on Boards and Commissions. The motion was approved by a voice vote.

- PUBLIC

President Neher called for public comment.

Scott Wells mentioned the problem of pollution occurring from construction runoff in both Indian Creek and Clear Creek water supplies, but he focused primarily on his objection to Section 5 of I-69 and the actions of the Indiana Finance Authority.

Marc Cornett commented on the Unified Development Ordinance and asked councilmembers to preserve the history and charm of the community by returning to the simple premise of one building, one lot.

Joseph Callahan shared some words written by local homeless persons asserting that society was failing them.

Glenn Carter spoke about the seasonal closing of the Interfaith Winter Shelter on April 1st, which left 50 to 100 people without access to shelter and subject to harassment by police. He said people on the streets had myriad reasons for not using high barrier shelters.

Jonathan Jones talked about homeless-related problems that were compounded by the closing of the Interfaith Winter Shelter. He asked the council to support plans for a low barrier summer shelter.

Karen Hemminger read a poem in favor of a year round low barrier homeless shelter.

Kay Bull played guitar and sang about economic injustice in our society.

Dan Young stated that homelessness was a public health disaster and an emergency situation. He believed that city government should make sure there was a low barrier shelter at all times of year.

APPOINTMENTS TO BOARDS AND COMMISSIONS

It was moved and seconded that the following appointments be made:

- David Walter - reappointed to the Redevelopment Commission
- Julie Hill and Sophia Hauserman - reappointed to the Commission on Aging
- Shirley Davies - reappointed to the Animal Control Commission
- Norm Crampton, Andrew Carty, Sean Gorman, Carissa Moncavage and Dedaimia Whitney - reappointed to the Environmental Commission
- Mike Allen - reappointed to the Bloomington Digital Underground Advisory Committee
- Amanda Barge, Beth Kirk and Jacqueline Fernette - reappointed to the Commission on the Status of Women
- Jim Rosenbarger - reappointed to the Bicycle and Pedestrian Safety Commission
- Chris Mosley and Keith Dinga - appointed to the Telecommunications Council
- Sarah Ryderband - reappointed to the Traffic Commission

- Sally Gaskill and Lynn Schwartzberg - reappointed to the Bloomington Arts Commission
- William Morris, Valeri Haughton, Byron Bangert - reappointed to the Bloomington Human Rights Commission
- Mary Balle and Angela Smith-Walgenbach - reappointed to the Commission on the Status of Children and Youth
- Pedro Roman, Jeff Ehman, and Sam Frank - reappointed to the Utilities Service Board
- Andrea Jobe and Claire Cumberland - reappointed to the Commission on Sustainability.

All appointments were approved by a voice vote.

LEGISLATION FOR SECOND READING AND RESOLUTIONS

Ordinance 14-04 To Amend Title 14 of the Bloomington Municipal Code Entitled "Peace and Safety" Re: Amending Chapter 14.20 (Firearms – Deadly Weapons) to Allow for the Discharge of Firearms at the Griffy Lake Nature Preserve for the Purpose of Deer Reduction via Sharpshooting

It was moved and seconded that Ordinance 14-04 be introduced and read by title and synopsis. Clerk Moore read the legislation and synopsis, giving the committee recommendation of Do Pass 5-0-4. It was moved and seconded that Ordinance 14-04 be adopted.

MOTION: It was moved and seconded that the presentation, public comment and materials presented at the Committee of the Whole on Ordinance 14-04 be incorporated into the minutes of this meeting.

ACTION: The motion was approved by voice vote.

MOTION: It was moved and seconded that the council consider Ordinance 14-04 in the following manner:

1- The sponsors of the ordinance would make a brief presentation and ask questions based on the Committee of the Whole deliberations.
2- Council members could ask questions of the sponsors and assembled experts. In order to accommodate members of the public who wished to address the council, the Chair could, with the consent of the council, proceed to public comment before those questions and answers were exhausted.
3- Members of the public could make comment on the ordinance as presented. Those who wished to speak must: A) line up at one of the two podia, B) print their name and whether they are a resident of the city or not on the sign-in sheet and state their name before they addressed the council, and C) speak once for no more than five minutes.
4- Council members could ask further questions as necessary.
5- Council members would make concluding comments and could entertain a motion before adjourning this evening.

ACTION: The motion was approved by a roll call vote of Ayes: 8, Nays: 0, Abstain: 1 (Sturbaum)

Rollo, lead sponsor of the legislation, reviewed the purpose of the ordinance: to restore ecosystem balance at the Griffy Lake Preserve. He pointed out that this legislation came in response to a request by the Board of Park Commissioners, who recognized the severe degradation occurring there and wished to fulfill their charge of proper management by having the appropriate tools to remedy the problem of deer overabundance. He cited letters of support from many community stakeholders, including biologists from IU who contributed to the research establishing that deer overpopulation was severe.
He reviewed scientific data that illustrated alterations in woodland communities caused by deer. He described the adverse effects on forest ecosystems including changed composition of entire plant communities,

declined bird populations, increased success of invasive plants, and decreased tree regeneration. He asserted that the extent of damage found at Griffy Woods meant that we did not have the luxury of time to restore a healthy balance there.

Rollo reported on behalf the Deer Task Force (DTF) that they exhaustively examined options of deer management and advised lethal means of reducing high deer density in Griffy. He stated that the DTF thoroughly examined alternatives and found them either ineffective, prohibitively expensive, or inhumane. He said contraceptives in particular were proven to be ineffective in open systems such as the Griffy Lake Preserve.

Co-sponsor Ruff informed the audience that a very detailed discussion of this ordinance occurred at the council meeting one week prior. Ruff stated that he objected to the distortions and misrepresentations that had "muddied" the community conversation regarding the DTF's report. He called upon Chad Stewart, Deer Biologist with the Indiana Department of Natural Resources (IDNR), to answer questions about lethal and non-lethal methods of deer management. Stewart acknowledged that a slight deer reduction could be achieved with immuno-contraceptives (such as PZP) in closed systems, but that this approach to population control was futile in free-range deer herd environments. With sharpshooting efforts, healthy reproductive females were targeted in order to most significantly influence the reproductive capacity of the herd. According to the "rose petal hypothesis", a void in the ecosystem was created when the core group of matrilineal female deer were removed, which allowed plant life to be restored. Sharp-shooting had proven to be an effective management method in many studies.

Ruff asked Rollo to comment on the openness and transparency of the DTF process. Rollo stated that the DTF held 25 open monthly meetings beginning in September 2010, many of which were televised on CATS. The DTF conducted numerous public outreach activities, and a dedicated website provided opportunity for public comment and communication as well.

Ruff asked Rollo to speak about the involvement of the Humane Society of the United States (HSUS). Rollo referenced a conference call in 2012 with Stephanie Boyles-Griffin of the HSUS to discuss the DTF's report to date. Griffin had no new information to offer the DTF due to the exhaustive examination of research that the DTF had already done. Rollo also met with the state director of the HSUS, Anne Sterling, in 2012, and welcomed the HSUS to come to Bloomington to perform a site inspection of their own. There had been no further communication from the HSUS until the spring of 2014.

Rollo stated that Griffy had a rich ecosystem, including 564 plant varieties and over 150 bird species, many of which were on the conservation concern list. He asserted that this biodiversity was certainly worth protecting.

Volan asked Stewart about deer density per square mile and corresponding effects on the environment. Stewart reported that research had shown that deer numbers between 10 and 30 per square mile allowed for plant regeneration and sustenance of other living organisms in the same environment.

Volan asked for an estimate of deer density in the Griffy area. Stewart could not give an exact number but said that deer in the Griffy Nature Preserve were overly abundant as evidenced by the damage to the biodiversity there.

Volan asked about the feasibility of using trained dogs to scare deer out of certain areas. Stewart responded that it would take a lot of border collies a very long time to make any impact on the Griffy deer.

Ordinance 14-04 *(cont'd)*

Spechler speculated on how to determine how many deer would need to be eliminated for successful population management given the unquantifiable number of deer living in Griffy Woods. He addressed Mick Renneisen, Director of the Parks and Recreations Department, who responded that effectiveness would be judged by the regeneration of biodiversity.

Mayer asked if the general health of the Griffy deer herd had been evaluated. Stewart responded that no one had looked at the health of those deer, but that they appeared healthy enough to have survived the recent harsh winter conditions.

Neher asked Stewart about long term population control in an area with no hunting and minimal natural predators, specifically, he asked if the numbers would surge if the sharpshooting was stopped. Stewart explained that the first year of culling was the most intense when the highest numbers were eliminated. Eventually, there would be a management stage when it would be possible to take a year off; but generally the annual sharpshooting cull would need to be done in perpetuity.

Neher asked how important it was to have a count of the Griffy deer. Stewart said that the State of Indiana did not put emphasis on total deer numbers but rather on effects and results of management. It was also possible that an agency contracted to perform the cull would conduct a count to measure the effectiveness of their removal efforts. He also cautioned that any number would be an estimate and would likely spark debate over its accuracy.

Neher asked if opening up hunting in the Griffy area, as a follow-up measure, would be sufficient to maintain the reduced deer population. Rollo confirmed that Ordinance 14-04 in no way enabled hunting in the Griffy area. He explained that sharpshooting was more humane, efficient, and most likely to yield the best results with minimal hazard.

Neher asked Dan Sherman, Council Attorney /Administrator, if the ordinance passed, would the council retain the authority to undo this legislation at any time. Sherman confirmed that the council would retain such authority.

PUBLIC COMMENT

Neher called for public comment:
Christine Linnemeier, a 62 year old life-long resident of Bloomington, a nature lover and animal lover with a degree in biology, asserted that nature was out of balance at Griffy and that it was up to us, as stewards, to do something about it. She agreed with the conclusion of the DTF that the most humane and ethical approach to managing the problem was with trained sharpshooters. She encouraged council members to support the ordinance.

Jennifer Mickel, professional naturalist and landscaper, agreed that the number of deer should be reduced. She commented that the barking of her big dogs kept the deer out of her garden – a preferable, old-fashioned method of control. She alleged that with sharpshooting, the deer that survived would suffer from PTSD. Mickel preferred a "park management" approach over a massacre-style killing. She suggested that the deer should be driven out to the country and then deterred by a monthly marking pheromone technique, especially the reproductive females. Mickel said that spending $30,000 on killing deer was mean and foolish.

Johnathan Hecht, a graduate student at IU, challenged the factuality of Rollo's presentation. He asserted that there was no statistically significant reduction of flora and fauna at Griffy, and that Rollo was wrong in claiming that a 14% reduction justified the slaughter of

PUBLIC COMMENT *(cont'd)*

woodland animals. Hecht believed that sterilization offered an effective and humane method of control, especially if supplemented by hunting. He compared killing annoying puppies to killing innocent deer, saying that both were horrible offenses.

Timothy Baer, Near Westside resident, said there was nothing humane about massacring healthy wild animals. He referred to the proposal as divisive, violent and mean spirited. He said that passing the ordinance would be a huge, regretful mistake with negative repercussions. He urged the council to vote against the legislation.

David Rupp, president of Sassafras Audubon Society, relayed that the organization was strongly supportive of Ordinance 14-04. He stated that many environmental issues were symptoms of human population growth, development, and globalization. It was because of humans that the natural order had been disrupted. He believed that the people proposing this ordinance wanted what was best for the deer, the ecosystem, and the residents of our city and county.

Kay Bull opined that the real reason behind wanting to kill the deer – like the buffalo before them - was that they were in the way of humans, not that they were negatively impacting the environment. She said that the real threat was human fear.

Dan Young, environmental journalist with a biologist wife, was concerned that deer culls would need to be done on an ongoing basis and that, as a consequence, Griffy Park would be closed to users like himself for significant periods of time. He referred to the premise of the main study, that if deer were taken away, things would change. He asserted that these changes would include a 30 times higher growth rate of invasive shrubs; and higher density of white foot mice and more parasitic dog ticks meant higher risk of lyme disease. He questioned whether these changes were signs of a more balanced ecosystem or not.

Bruce Bundy, Bloomington resident, thanked the council for hearing all sides of the debate. He talked about deer being re-introduced to the state in 1934 after being driven to extinction in Indiana by hunters. He believed that sharpshooting was the better option to deal with the current overpopulation problem.

James Capshew, IU professor of History of Science and Learning and the Environmental Humanities, said that most students were surprised to learn that nearly all life depended upon plants. He asked what should be done to preserve the rich natural resources of Griffy Woods. He said that native trees in particular were an essential part of the food web, and deer were causing serious harm to the forest food web. He believed that our community had a moral responsibility to nurture biodiversity by culling the deer herd, and he favored donating the venison meat to the local food bank.

Ramsay Harik remarked on the opposition's misrepresentation of the DTF. He asserted that the DTF's unbiased conclusions were essential to the decision making process. He was also concerned about the rejection of scientific data over emotional motives.

Richard Linnemeier, lifelong resident of Bloomington and user of Griffy since infancy, compared the deer situation at Griffy to Brown County State Park. At the state park, planned hunting was prescribed and executed, and biodiversity was restored. He believed that using professional sharpshooters to reduce deer numbers at Griffy would minimize the risk to citizens and property and accomplish the goal while maintaining public safety.

PUBLIC COMMENT *(cont'd)*

Marc Haggerty talked about a documentary on a deer kill and said that he did not see justifiable damage in the woods at Griffy. He alleged that having snipers come in to our community was a gun control and a women's issue. He played guitar and sang a song entitled *Cokia's Son.*

Joseph Callahan agreed that while deer were capable of damaging the ecosystem, it was actually human activity that caused the problem because of our destruction of the apex predators. He said that using lethal means to control deer populations reminded him of the wars our country was involved in and of the herbicides and pesticides used on the food we eat.

Scott Wells stated that we needed to cull the herds of deer in order to protect the environment. He showed photos of damage to trees on his personal property near the Hoosier National Forest. He said that because the number of deer had reached the carrying capacity, they were now eating trees – such as spruce and arborvitae – that they used to leave alone. He said that 200 years ago there were many natural predators that kept the deer population in check, eventually hunters became the only predators; and now the number of hunters was dwindling. He supported the use of professional sharpshooters to cull the herds.

Alexis Dreden read a letter she had written to the council asking for a delay on the decision. She said that looking only at the ecosystem damage by deer was a limited view, a partial set of facts, and not a clear and complete picture. She suggested that an urban ecologist be consulted and that a new committee be formed to look into broader landscape and cultural practices and other scientific resources.

Erin Huang, Indiana State Director for the HSUS, shared a pre-recorded statement by Stephanie Boyles-Griffin, a senior director of innovative wildlife management for the HSUS. Griffin referenced a 2012 phone conversation with the DTF about fertility control in which the HSUS offered to come to Bloomington to conduct a site evaluation and to provide a written assessment of the site. She insisted that the HSUS did not receive the requisite invitation from a city leader to initiate the process; but that their offer still stood. Griffin mentioned that the HSUS had recently completed the approval process for launching a research study in Hastings on the Hudson, NY, and she suggested that Bloomington citizens take a look at that program. She also made reference to the polarization that had occurred in Bloomington over the issue of deer population management and acknowledged that divisiveness was an impediment to reaching a harmonious solution.

Deb Terzino stated that the council had been giving her anxiety attacks. She said that no one on the council had a good plan or good idea about what they were going to do. She questioned why the deer would be baited if there truly was a problem with too many of them. She objected to the $30,000 expenditure for sharpshooters when the police could do the job, or volunteers could move the deer for free. She told the council to take the $30,000 and give people jobs in Bloomington. She and her visitors enjoyed seeing deer in her own yard, and she encouraged people to "stay in the city" if they didn't want to deal with deer eating their plants.

Heather Reynolds, ecologist in the IU Department of Biology, identified herself as one of the signers of an open letter from IU's Biology Department to the council in support of the findings of the DTF. She stated that everything in nature was connected; that plants, animals and micro-organisms existed in diverse inter-relationships with one another. When plants were eaten down, many other organisms suffered. The

PUBLIC COMMENT *(cont'd)*

negative impact of over-abundant deer on forest ecosystems had been well documented by researchers. Reynolds asserted that the findings argued for action to reduce the deer herd in Griffy Nature Preserve in an effective, safe and humane way. She concurred with the conclusions of the DTF that called for use of sharpshooters.

Sandra Shapshay stated that public opposition to Ordinance 14-04 was strong. She gave a PowerPoint presentation entitled "An ethical case for pursuing deer contraception". She argued that deer, as sentient higher-order mammals, mattered morally more than plants did. She said that killing deer was not like mowing the grass. Shapsay insisted that the DTF had catastrophized the situation in Griffy and exaggerated the urgency. She said that the question as to whether contraception was feasible in Griffy was still unanswered by experts on the subject. She proposed that the ordinance be tabled until an expert determined whether immuno-contraception would work in Griffy.

Amin Moczek, professor of biology at IU, stated that he supported this legislation as the only choice we had to make a meaningful difference. It was a struggle for him to come to this decision. After reading an enormity of literature on this issue, he came to believe that the choice *not* to eliminate deer meant watching idly while many plant and animal species died or went extinct locally. It was well proven that relocation and birth control would not work, leaving the unfortunate option of sharpshooting as the only effective way to proceed. He despised killing and wished it was otherwise. He said that we must do what is right, not what is easy.

Alyce Miller gave a presentation authored by Dr. Marc Bekoff, professor emeritus of Ecology and Evolutionary Biology at the University of Colorado, Guggenheim Fellow, and Fellow of the Animal Behavior Society. She asserted that Dr Bekoff was precisely the kind of expert who could offer a scientific viewpoint that reflected expertise in animal cognition and behavior. Miller referenced a recent email from Dr Bekoff in which he advised strong resistance to the shooting of the deer, especially in the absence of a well identified problem. He recommended consulting with the HSUS about non-lethal solutions.

Marta Shocket, a fourth year PhD student in the IU Biology Department, felt inspired to speak after listening to other comments. She believed that some criticisms of the literature presented were unfair. She also said that the concept of "stage-structured populations" had not been given enough consideration in studies of plant species in the Griffy area. She explained that an individual was not equal to all other individuals of the same species. The stage of individual units of a species mattered more than just the quantity. Therefore, measuring by counting individual units over-simplified the complexity of the plant life that was studied. Shocket said that, as much as she hated it, sometimes killing was necessary to prevent suffering or to preserve an ecosystem.

Steven Wagschel accused Rollo and Ruff of portraying opponents of the ordinance as "unscientific" and "deniers of global warming". He said that the problem with the DTF report was not the science it included, but the science it excluded. He claimed that council members were not presented with all of the relevant science on which to make judgements. He believed that studies on animal emotions and cognition should have been considered too. He asked the council to table the ordinance.

Andi Haynes read a letter that was sent to the council and the mayor from the Center for Wildlife Ethics which opposed the killing of deer at the Griffy Lake Nature Preserve. She stated that the hunting industry had too strong of a political voice in wildlife management since most

PUBLIC COMMENT *(cont'd)*

wildlife agencies were funded by hunting license sales. She expressed resentment that people who favored a non-lethal approach to deer management were regarded as emotional and/or naïve. Haynes asserted that "kill proponents" deceivingly sanitized and euphemized their message to gain public support. She also predicted that use of lethal methods would result in colossal failure.

Maria Heslin encouraged the council to table or vote no on the ordinance, stating that there were still too many vital questions that remained unanswered. She objected that there were no measurables in place and that habitat manipulation to influence deer movement patterns had not been explored. Heslin insisted that a creative problem solving approach had not been applied to find a novel, innovative and inventive solution. She faulted the DTF for not including an animal welfare expert in their membership and requested that – should the ordinance be approved – the sharpshooting cull be videotaped for the public to see what was really involved.

Eric Ost presented a set of three amendments which addressed the sufficiency and efficacy of the proposed ordinance, the equitable funding for the ordinance, and the transparency of the implementation of the ordinance. After thoroughly reading the DTF report and attending several meetings, he was concerned about the science and the numbers. He questioned if other factors, such as climate change and/or acid rain, had contributed to the degradation of plant life in the Griffy area. He asked the council to table or vote no on the ordinance.

Thea Bransby said that not enough had been done to provide shelter to homeless people in our community and that the $30,000 should be used to promote life instead of promoting death. She stated that the deer were overpopulated because humans had overly controlled the environment.

Michael Enyeart, who lived in the heart of Griffy Woods, stated that the urban deer problem was of more significance to residents of Bloomington than rural deer. He said that shooting rural deer was a "political solution" that didn't address the bigger problem of rampant urban deer in the city. He said it was not true that there was a crisis in Griffy Woods and that sharpshooting Griffy deer would waste taxpayer money with no actual benefit.

Eric Knox, Director of the IU Herbarium and Professor of Botany, agreed that the Griffy deer population needed to be brought into check for the sake of the biodiversity there. He reminded the audience that it was the responsibility of the Board of Park Commissioners to bring the balance back and asked the council to pass the ordinance to give the Parks Board the tools they needed to accomplish the goal.

Dr Jim Mitchell started by saying that he loved deer and had devoted his professional life to deer. He wanted to help clarify the misinformation surrounding the issue of population management. He drew parallels between the Bloomington DTF and the committee that he formed in 1992 to deal with a deer problem in Brown County. Twenty two years ago they were told that a deer contraceptive was on the horizon; but as of 2014, no birth control method had yet been proven to be safe and effective at reducing deer populations, especially in an open system. Contrary to the HSUS, he supported the tried and true method of sharpshooting over a "pie in the sky" contraception approach.

Taylor Rogers, PhD student at IU, asked what would happen if we were to do nothing and instead watch the natural intelligence of the earth, and allow "her miraculous wonder" to bring about recovery. Rogers read a quote by Rachael Carson.

Carole Heslin wished that the council had dedicated two years of effort to find a way for Bloomington to have a no-kill animal shelter instead of focusing on deer.

MOTION

Volan moved and Rollo seconded that Ordinance 14-04 be moved to the next regular session for a third reading.
The motion received a roll call vote of Ayes: 2 (Rollo, Volan), Nays: 7. Motion failed.

COUNCIL QUESTIONS

Council questions:
Ruff asked Erin Huang, HSUS, for documented evidence that the contraceptive PZP had been effective in long term population reduction, as she had stated at the meeting one week prior. Huang said that she needed to refer to materials and wildlife biology experts that were not present before she could answer Ruff's questions about HSUS positions.

MOTION

Volan moved that Amendment #1 to Ordinance 14-04 be considered for adoption, but there was no second.

COUNCIL COMMENTS

Council comments:
Spechler said that sharpshooting was a humane method and that amateur hunting was dangerous and inhumane. He stated he would vote for the one option that was viable.

Sandberg pointed out that this had become a divisive issue, not just a difference of opinion. She asserted that the job of the city council was to make decisions based on public input, experts' testimony and legal guidance, in a non-passionate objective manner. In order to arrive at a sound decision, one first needed to recognize there was a problem, as was the case in the Griffy Woods area. Sandberg regarded stewardship of the woods as an important responsibility and declared that she would vote yes on the ordinance.

Granger, as a researcher, appreciated the science and the facts presented, but cautioned that statistics were open to interpretation. She had concerns about budgetary constraints and the allocation of $30,000 to shoot deer. She stated that this was an issue of the heart and mind, not just of science, and that she would be voting no.

Rollo reiterated that modern deer management was measured by the effects on the ecosystem after a cull. He also reiterated that the Parks Board reviewed the science before asking council to provide them with the legislative tools. Rollo pointed out that managing deer via contraception was still in an experimental stage, not a proven fact. As much as he did not want to kill deer, he did not see any other way to save the Griffy Nature Preserve. He believed that this ordinance was about promoting *all* life in the preserve.

Rollo offered perspective on the $30,000 anticipated cost, equating that amount to 1/10 of the yearly sidewalk budget, and said it should be considered an operational expense of the park which would come from user fees, not tax dollars. He also said that IU's contribution to the DTF study was valued over $100,000 with a pledge of continued support to do a follow-up analysis.

He respectfully criticized the outspoken opponents present for not attending DTF meetings and not being engaged in the DTF process until the very end.

Rollo said that biodiversity was about recognizing that there was an abundance of other organisms that shared the Griffy ecosystem. He defended that the sentience of deer was not ignored by the DTF, but that

not considering the welfare of the other woodland animals was unethical.

COUNCIL COMMENTS *(cont'd)*

Rollo referenced an offer made by Ian Munnoch, Monroe County Coordinator of the national organization Farmers and Hunters Feeding the Hungry (FHFH). If the reduction hunt was approved, FHFH proposed working with the city to process the deer and provide the meat to the Hoosier Hills Food Bank. Rollo was very pleased that many low income community members would benefit from the high quality venison protein.

Rollo repeated that it was irrefutable that lethal control worked as an effective systems approach; evidence existed at Brown County State Park and in many other locations. Rollo expressed alarm at the general lack of ecological awareness and the accelerated loss of biodiversity.

Rollo concluded by praising the diverse and dynamic group of professionals who served on the DTF for two years. He said they did the best they could do on a shoestring budget, and that their 200 page report was not "railroaded through". The report was focused on providing the council with valid information that enabled them to make the proper decision. He asked fellow council members to support the ordinance.

Ruff wanted to clarify that the mayor did not appoint all the DTF members. The mayor had one appointment plus an administration member, Laurie Ringquist, Director of Animal Care and Control. The city council had three appointments, Monroe County Commissioners had three appointments; one council member and one county commissioner served; and a DNR representative served ex-officio.

Ruff refuted the "crazy" criticism that a pre-determined desire to kill deer dominated the DTF process. He explained that the DTF went into this to evaluate all of the information and options before making a recommendation. The HSUS held the formal position that lethal management was never preferable; that policy informed all their communication. Contrastingly, the DTF did not operate with any pre-conceived position.

Ruff appreciated the principle of non-violence that motivated much of the opposition, but he resented Sandra Shapsay's accusation (in a radio interview) that non-lethal methods were not seriously explored by the DTF. He called the statement false, irresponsible and extremely offensive to members of the DTF.

Mayer wished Happy Birthday to councilmember Sandberg.
Mayer mentioned a letter from Rick Wilson, founder and director of Farmers and Hunters Feeding the Hungry, and expressed his support for the proposed use of the venison meat. He understood the science behind what was going on with the explosion of the deer population in the country, and accepted the fact that they must proceed with deer reduction in the Griffy Lake Nature Preserve. He declared that he would be abstaining due to unreconciled issues within his "internal compass".

Neher repeated a comment made earlier: "if you vote to support this ordinance, you will live with your vote". Neher stated that he felt stuck between his personal value / ethical position and his public role as an elected official. He said that many constituents in the 5th District had communicated to him their support of deer reduction in Griffy. He read extensively about deer population management and found that claims of success were largely tied to the chosen metrics for success. He concluded that he would be voting yes, but that it was not without difficulty.

Volan said he intended to cast a no vote because he disagreed profoundly with the way the ordinance had been heard. He had hoped to

discuss the issue one more time at a reasonable hour, not at 1AM. He complained that the lengthiness of the meeting had caused his iPad to run out of energy, forcing him to settle for his iPhone to read his notes.

Volan stated that parking and trash issues bothered his district (downtown) much more than deer did, so this ordinance was not of particular concern to his constituents. He said there were competing ethics that had influenced the discussion, far beyond just the science, and that the process should have better respected a range of ideologies. Volan commended the opponents who brought logic to the argument and not just gut emotions.

VOTE ON ORDINANCE 14-04

Ordinance 14-04 received a roll call vote of Ayes: 6, Nays: 2 (Granger, Volan), Abstain: 1 (Mayer).

LEGISLATION FOR FIRST READING

There was no legislation to be introduced at this meeting.

PUBLIC COMMENT

There was no public comment at this portion of the meeting.

COUNCIL SCHEDULE

Dan Sherman, Council Attorney/Administrator, noted that there was an Internal Work Session scheduled for Friday, April 11, 2014 at noon. He noted that there would be no meeting the next Wednesday, April 16, 2014 due to the religious holiday Passover.

ADJOURNMENT

The meeting was adjourned at 1:17 am on the morning of April 10, 2014.

APPROVE:

Darryl Neher, PRESIDENT
Bloomington Common Council

ATTEST:

Regina Moore, CLERK
City of Bloomington

Rollo and Ruff presentation from April 2, 2013 Committee of the Whole to be included in the minutes of April 9, 2013. This includes councilmember presentation, materials presented, and public comment.

Ordinance 14-04 To Amend Title 14 of the Bloomington Municipal Code Entitled "Peace and Safety" Re: Amending Chapter 14.20 (Firearms – Deadly Weapons) to Allow for the Discharge of Firearms at the Griffy Lake Nature Preserve for the Purpose of Deer Reduction via Sharpshooting

Rollo read the ordinance in its entirety. He said the ordinance was meant to give land managers the tools necessary to restore the balance of the Griffy Lake Nature Preserve (GLNP). He said that ecologists and wildlife biologists put more value on biodiversity rather than favoring one species, and he said that a UN panel had indicated that all levels of government would need to act in order to counteract the biodiversity crisis caused by humans. He said that the loss of apex predators caused by humans was the largest factor in ecosystem imbalance, and he said that GLNP could to an alternate stable state that would be difficult or impossible to reverse. He said that deer population growth was unconstrained, and it could double every 3 – 4 years without intervention.

He detailed the biodiversity of the GLNP:

- 564 species of plants
- 157 species of birds
- 38 species of reptiles and amphibians
- 32-41 mammal species

He said that deer overabundance was first reported in the Griffy Lake Master Plan (2008) that showed the effects of deer browse. He said that a study, produced by Dr. Angie Shelton, on the direct and indirect effect of deer in GLNP was published in the Journal of Forest Ecology and Management, and he detailed the loss of biodiversity that the study indicated. He said the study was integral to the work of the Deer Task Force (DTF), who concluded that lethal means was the only effective option to control the deer population. He said that a shift to an alternate stable state would be difficult to restore, waiting would only require more deer to be culled in the future, and that time was not a luxury the city had in protecting the GLNP. He concluded by sharing a list of scientific organizations that supported the ordinance, and he said that professional sharpshooting would be the most humane way to manage the deer population.

Ruff shared a few frequently answered questions and had experts provide answers. He asked if deer were overabundant. Dr. Angie Shelton, Indiana University Research and Teaching Park (IURTP), said that data collected over four years indicated a decrease in vegetation caused by an overabundance of deer.

Ruff asked if the peer review process was meant to determine if conclusions drawn in studies were accurate. Shelton said it was, and she said there were no criticisms by reviewers of the methodology.

Ruff asked if Keith Clay, Professor of Biology at Indiana University, had anything to add. Clay said that he agreed with Shelton's assessment, and he asserted that there was a steady decline of biodiversity in the GLNP over the last 28 years. He listed a few noticeable plants that were no longer in the preserve or difficult to find. He said there was no question that deer overabundance was causing a decline in key species.

Ruff asked Tom Swinford, Assistant Director of the Indiana Division of Nature Preserves, to speak to the Shelton study. Swinford said that the city was the steward of a significant portion of the preserve. He said that it was not a unique problem to have an overabundance of deer, and he agreed with Shelton's peer reviewed study. He said there were three state nature preserves in the county that were hotspots of biological diversity.

Ruff asked Josh Griffin, Private Land Supervisor for the Division of Fish and Wildlife, if contraception or sterilization would address the issue of deer overabundance. Griffin said that extensive studies had proven contraception ineffective in an open environment. He said that sterilization was effective over time, but it was expensive and did not immediately rectify overabundance.

Ruff asked Griffin if sharpshooting could be successfully implemented without knowing the exact number of deer in the preserve. Griffin said that having an exact count would not address the issues at hand and sharpshooting would be effective in addressing ecological carrying capacity. He said that the recovery of plant communities would indicate the success of the efforts.

Ruff asked if changes in deer density at Griffy would encourage deer from the surrounding area to move into the preserve. Griffin said that some studies indicated that there could be a temporary void or a period of time before deer migrated back to the park. He said that assuming that the sharpshooting would be rendered ineffective by deer migration was wrong.

Ruff asked Griffin to explain the sharpshooting requirements. Griffin said that sharpshooting was performed by professional marksmen who would remove a specific number of deer in a safe, baited area. He said that the IDNR would need to assess the damage to ecological life in the preserve and then review the plan of the Parks Department to carry out the sharpshooting. He said that a deer research biologist would be involved in the review process.

Ruff asked about the safety of sharpshooting. Griffin said he did not know of any injury or safety

concern that was caused by sharpshooting. He said that sharpshooters could not afford to have an accident or cause injury as it would cost them their job.

Ruff asked Mick Renneissen, Director of Parks and Recreation, how much the effort would cost. Renneissen said that the project would cost $30,000 dollars and would be funded by user fees in the preserve.

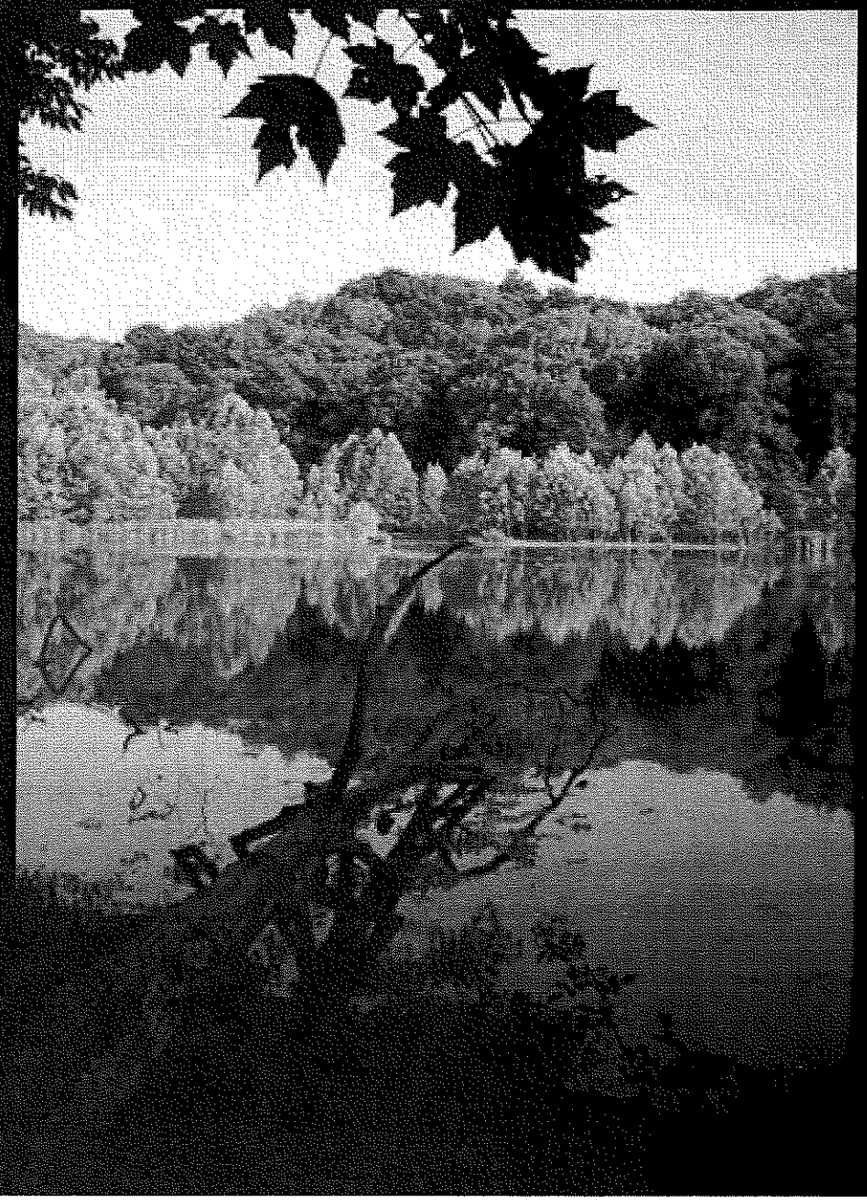
Ruff asked what precautions would be taken to ensure public safety. Renneissen said that a safety plan was required as part of the permitting process. He said that a contractor, police, and IDNR's conservation officers would contribute to the safety plan.

Ruff asked Clay how the success of the cull would be measured. Clay said that the same methodology in the initial study should be used. He said that monitoring plots should established and followed over time in order to determine if the reduced deer population allowed vegetative growth outside of exclosures. He said that the IURTP was committed to carrying out these studies. Swinford said that recovery had been measured through vegetation in similar instances throughout the state.

Ordinance 14-04

Managing deer at Griffy Woods:

Restoring Ecosystem Balance.



Ordinance 14-04

- amends the Bloomington Municipal Code by adding an exception to the general prohibition against the discharge of firearms within the City limits.

- this exception is only for contractors of the City of Bloomington Board of Park Commissioners hired specifically for the purpose of deer reduction via sharpshooting at the Griffy Lake Nature Preserve.

- this legislation comes in concert with a request by the COB Board of Park Commissioners, who recognize the severe degradation occurring at the Griffy Lake Preserve, and wish to fulfill their charge of proper management by having the appropriate tools to remedy the problem of deer overabundance (see letter).

Ordinance 14-04

Is supported by the following community stakeholders:

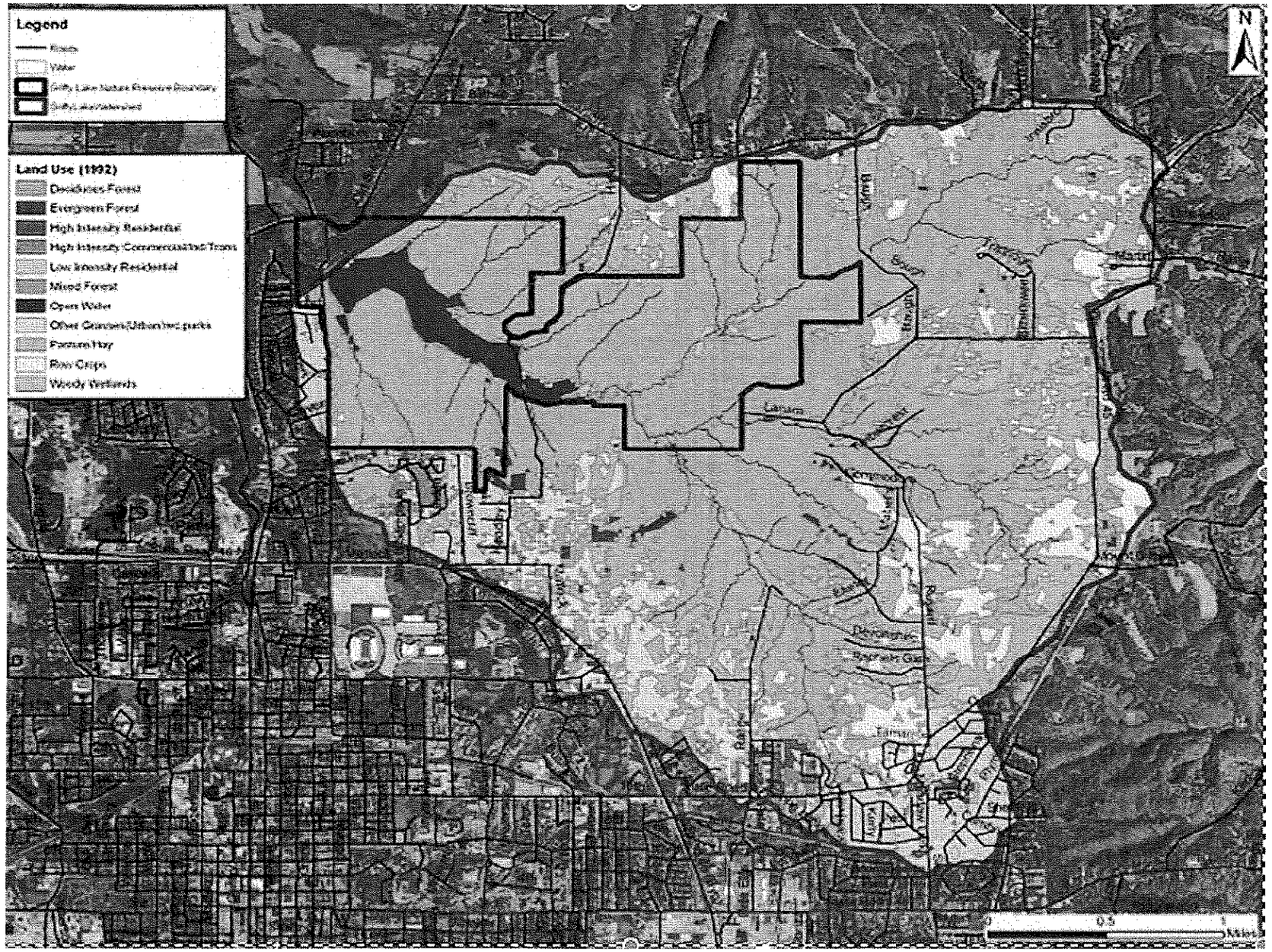
- COB Board of Park Commissioners
- ERAC: Environmental Resource Advisory Council
- COB Environmental Commission
- Bloomington Commission on Sustainability
- 90+ members of the Indiana University Department of Biology
- Members of the Indiana University, Integrated Program in the Environment (SPEA)
- MC-IRIS: Monroe County's Identify and Reduce Invasive Species
- Sassafras Audubon Society

Griffy Woods:

- Over 2000 acres of forest.
- 10 Community Types.
- 564 species of plants.
- 157 species of birds.
- 38 species of reptiles and amphibians.
- 32 -41 mammal species.

Photo: DNR

- Griffy Lake Preserve Master Plan, 2008.


Legend
Water
Land Use (1992)
Deciduous Forest
Evergreen Forest
High Intensity Residential
Low Intensity Residential
Mixed Forest
Open Water
Pasture/Hay
Row Crops
Woody Wetlands
N

Forest Ecology and Management 330 (2014) 39–49

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journal homepage: www.elsevier.com/locate/foreco

Effects of abundant white-tailed deer on vegetation, animals, mycorrhizal fungi, and soils

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ABSTRACT

The last several decades have seen dramatic increases in ungulate populations worldwide, and white-tailed deer in the eastern United States currently exist at unprecedented densities in many areas. Numerous studies have demonstrated the effects of high densities of white-tailed deer on forest communities. However, few studies have simultaneously examined the effects of deer on multiple components of forest communities across trophic levels. Here, we simultaneously examine effects of excluding white-tailed deer on responses of woody and herbaceous vegetation, terrestrial and subterranean animals, mycorrhizal fungi, and soil characteristics. This study was conducted in a forest preserve with high deer densities in the central hardwoods region of the Midwestern US, using a series of replicated deer exclosures (15 × 15 m) and adjacent unfenced controls that ranged in age from two to seven years. Despite significant tree recruitment inside exclosures, we recorded no native tree seedling recruitment in control plots. In addition, the growth rate of existing tree seedlings was significantly greater in exclosures than in controls, and the growth rate of invasive shrubs was approximately 30 times higher inside exclosures. Exclosures also had increased height, species diversity, and abundance of spring plants, and increased vegetation density in summer. We also found differences in terrestrial animals with higher densities of white-footed mice (*Peromyscus leucopus*) and dog ticks (*Dermacentor variabilis*) inside deer exclosures. However, there were no differences in salamanders or earthworms. Soil inside exclosures was significantly less compacted than in control plots despite the short period of deer exclusion, but there were no significant differences in soil nutrients or arbuscular mycorrhizal fungi. These results indicate that there are strong effects of high deer densities on all classes of understory vegetation and indirect effects on animals and soils. However, most belowground effects were nonsignificant, suggesting that responses of belowground communities to deer exclusion are weaker or slower to develop than aboveground effects.

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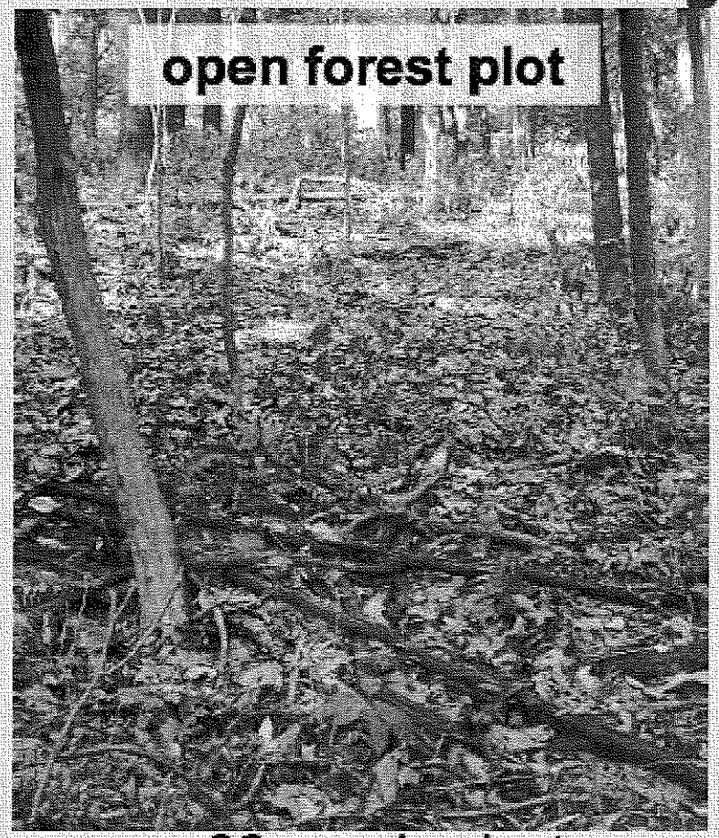
Observed "strong effects of high deer densities on all classes of understory vegetation and indirect effects on animals and soils".

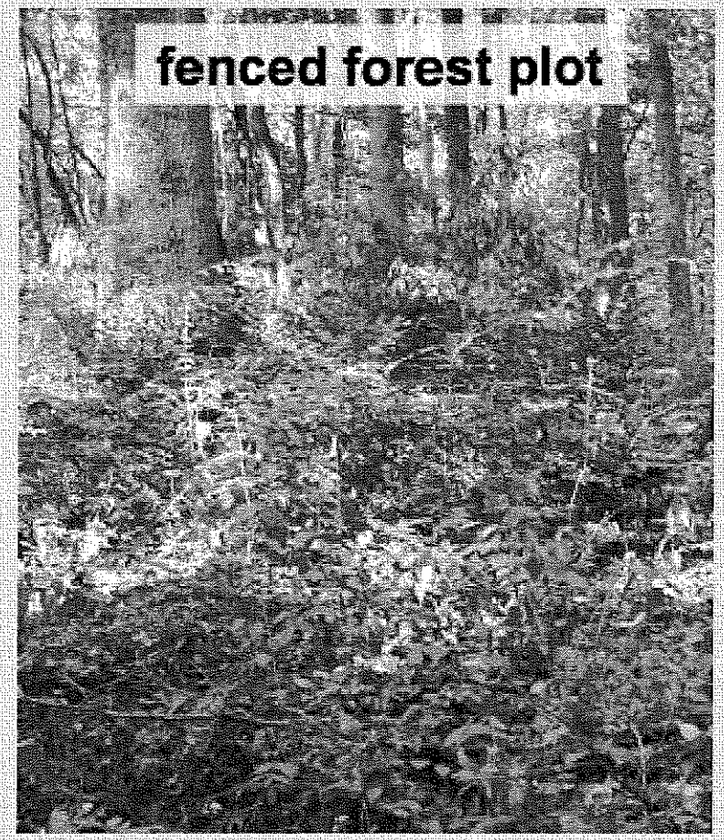
"Despite significant tree recruitment inside exclosures, we recorded NO native tree seedling recruitment in control plots".

A. L. Shelton et.al., *Forest Ecology and Management* 320(2014):39-49.

Effects of Excluding Deer on Woody Plants

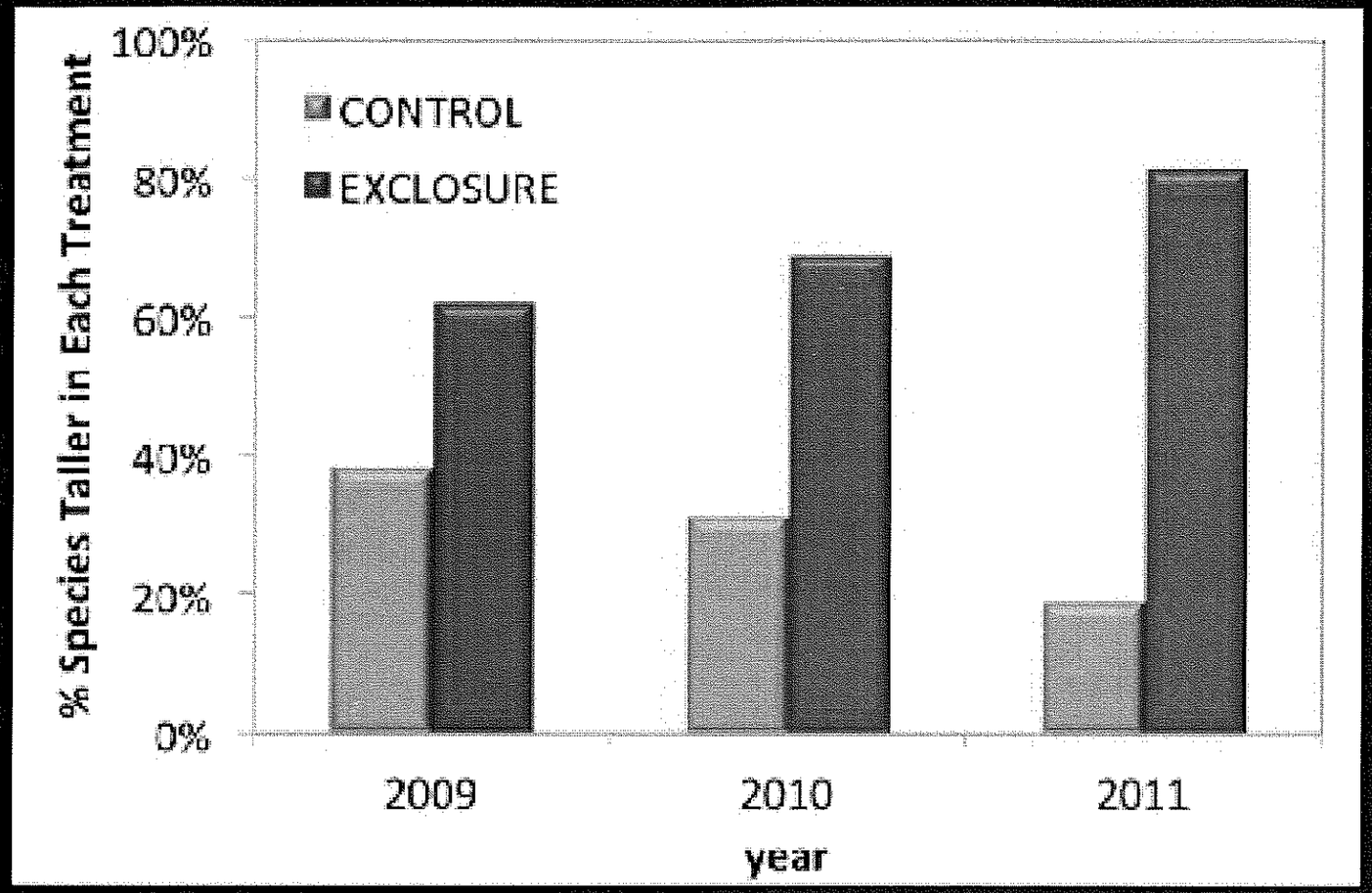


28 woody plants
7 species



204 woody plants
21 species

Source: Angie Shelton

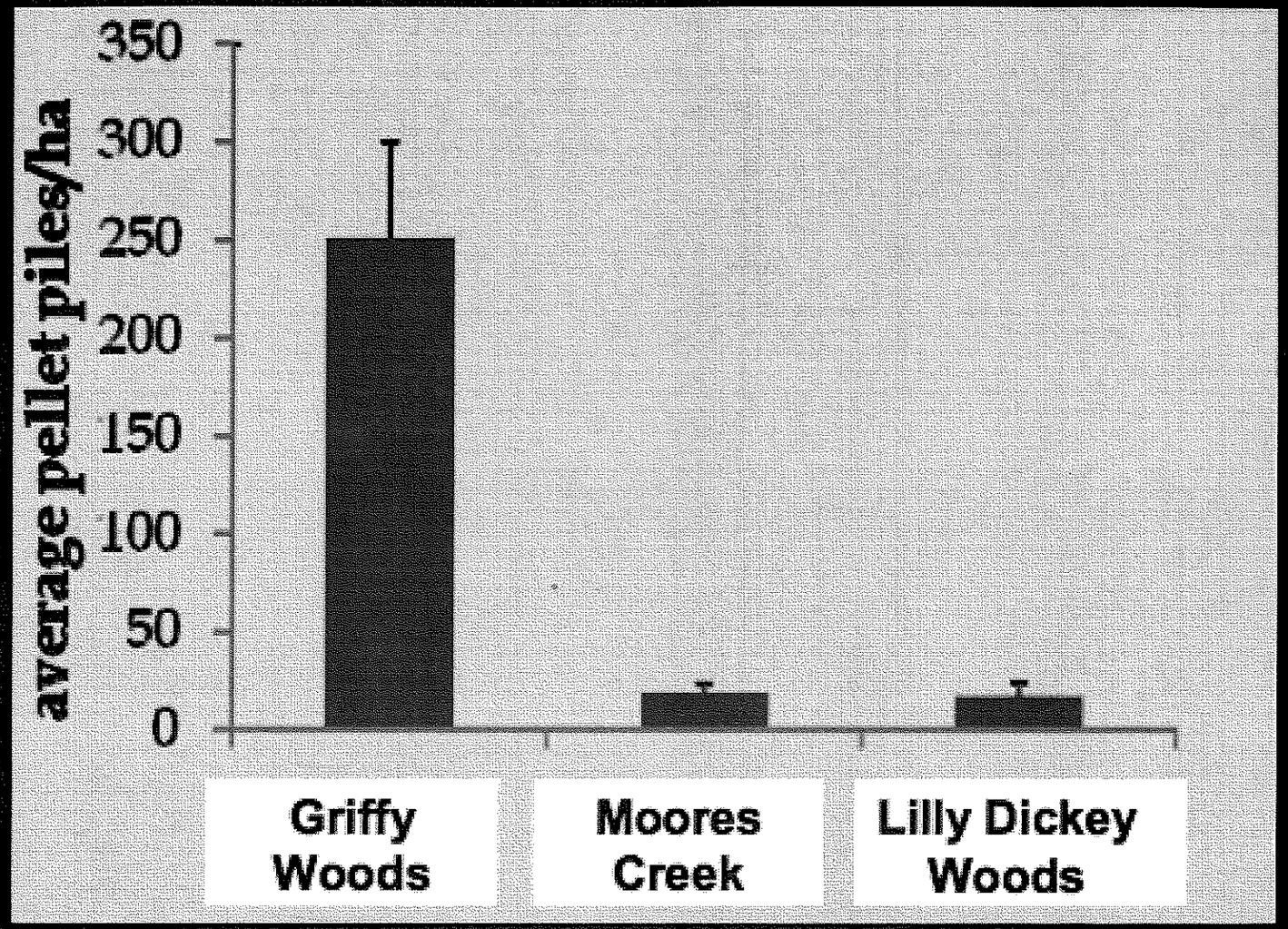


Wildflower size effects.

Source: Angie Shelton

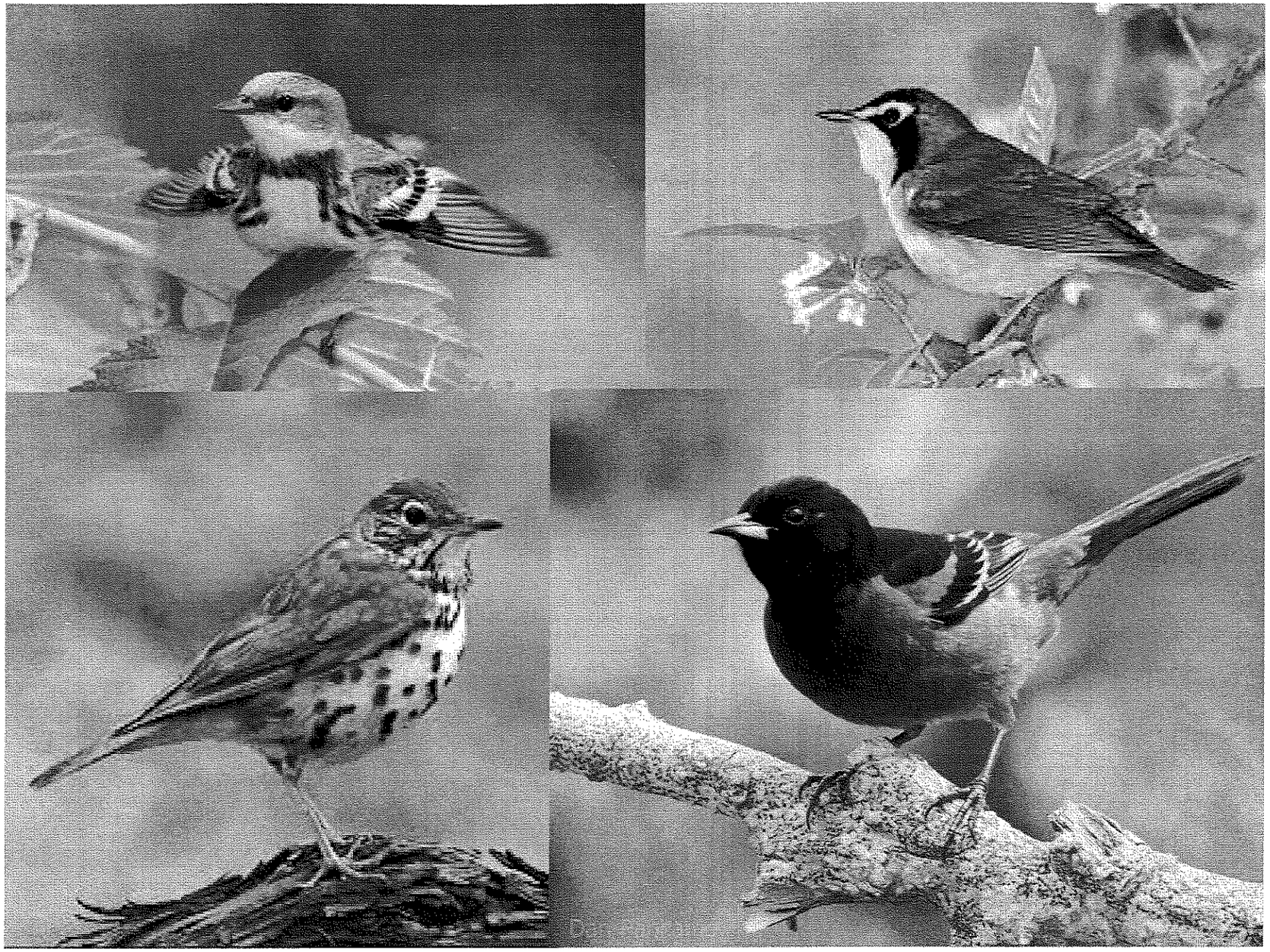
Alice Van Zoeren

Source: Angie Shelton



Deer density: pellet counts

© 2006 Lloyd Spitalnik



COB/MC Deer Taskforce met in 2010/11 exhaustively examined options of deer management.

http://bloomington.in.gov/deertaskforce

Common Ground:
Toward balance and stewardship

Recommendations of the Joint City of Bloomington-Monroe County Deer Task Force

October 2012

Deer adverse effects on forest ecosystems:

- Deer change composition of entire plant communities.
  T.P. Rooney, D.M. Waller. Forest Ecology and Management.
- Local bird populations declined in past 40 years with rising deer numbers. Simon Chollet, Jean-Louis Martin. Diversity and Distributions.
- Deer facilitate invasive plant success.
  Tiffany Knight, et. al. Natural Areas Journal 29. 2009.
- Deer decrease tree regeneration.
  D.M. Waller, W. S. Alverson. Wildlife Society Bulletin 25. 1997.

COB/MC Deer Taskforce met in 2010/12 exhaustively examined options of deer management.

- Advised lethal means of reducing high deer density in Griffy.

- Examined alternatives and found them either ineffective, prohibitively expensive or inhumane (or a combination).

COB/MC Deer Taskforce met in 2010/12

Contraceptives not suitable for Griffy Lake Preserve:

- Preserve does not meet criteria since it is an open system.
- Contraceptives are considered experimental.
- They are unproven.
- They may present a hazard for other wildlife and humans.
- They do not provide an immediate reduction in deer numbers.
- They are not endorsed by the IDNR.

"As of 2012, the Indiana Department of Natural Resources has not identified a suitable location to recommend the use of fertility control." - IDNR's Urban Deer Technical Guide (2013)

COB/MC Deer Taskforce met in 2010/11

Humane Policy Statement:

The Task Force intends that priority be given to non-lethal mitigation strategies and that lethal means be employed when a determination is made that a problem exists that is unlikely to be solved using non-lethal means. Further, the Task Force recommends lethal management methods be employed where necessary to alleviate suffering, protect human life, prevent damage to the rest of the ecosystem or for the overall health of the deer population.

Saving Griffy Woods:

Deer have reached overabundance at Griffy:

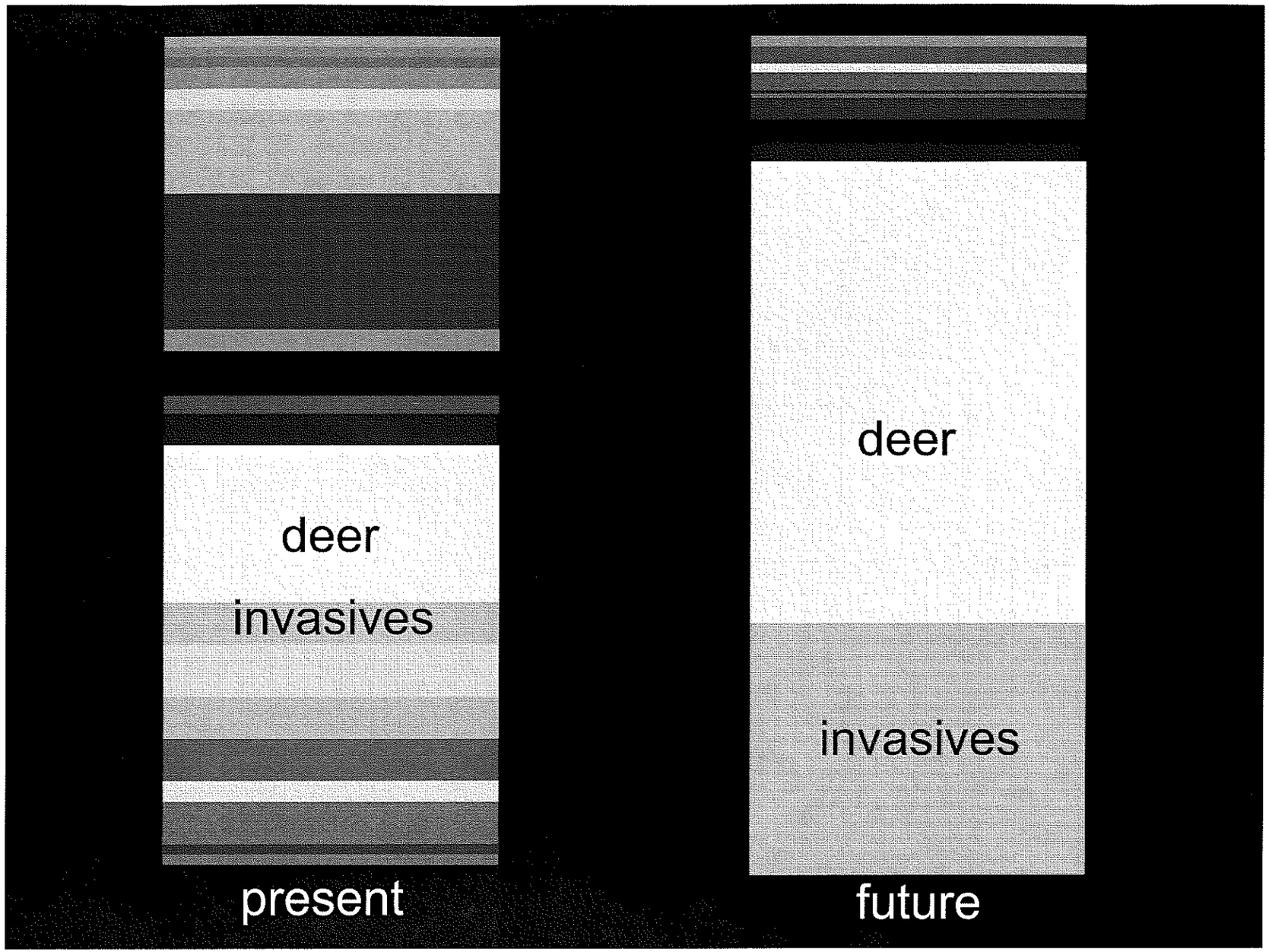
- Many organisms are negatively impacted at Griffy Woods by deer.
- In the absence of apex predators, we must fill this role.
- Failure to act increases likelihood of local extirpation of many organisms in the forest, and the development of an alternate stable state that will be dramatically reduced in biodiversity.

A failure to act:

Creation of an “alternate stable state.”

May be irreversible.

We do not have the luxury of time to restore Griffy Woods.


deer
invasives
present
deer
invasives
future

"In our opinion, no other threat to forested habitats is greater at this point in time (than deer overabundance) — not lack of fire, not habitat conversion, not climate change".

- Allen Pursell, Southern Indiana Program Director, The Nature Conservancy in Indiana; Troy Weldy, Director of Ecological Management, The Nature Conservancy in New York; Mark White, Forest Ecologist, The Nature Conservancy in Minnesota and the Dakotas

Transcription of comments from 4-2-14 COW on Ord. 14-04

Public Comment – 9:10 pm.

James Goodson, Professor in the Biology Department at IU, also on the Board of Directors of the Sassafras Audubon Society. However, I am here tonight as just a citizen who loves birds, who loves nature, who has two little girls who are budding birders. I'm going to give you a very simple presentation of what's at risk at Griffy Lake, and I want to show you some birds that – 20 years from now – I would like to be able to walk in the woods and show my girls that are really at risk. And the question I want to ask here is: do we not really have an ethical mandate when species that are in danger or rare or threatened are placed at risk because of the way we've altered the habitat, the way we've set deer up to dominate the habitat? And the stats are sobering even if we just focus on song birds. I'm taking a few things from the master plan and, as presented in that master plan, there are 9 species of birds that depend almost entirely upon the understory; so the habitat is virtually gone there now due to deer destruction. There are 9 species that breed at Griffy, or likely breed at Griffy, or at least have in the past, that are listed as species of special concern by National Audubon or Partners in Flight or are listed as state endangered, threatened or rare by Indiana DNR. The worm eating warbler, solely a ground species, nests on the ground, feeds on the ground… it's in continent wide decline and, as with a lot of song bird species in the United States, very serious declines. Black and white warbler is state listed ETR - another ground nester that requires good understory for foraging. Prothonotary warbler, this is a home nester, does not nest on the ground, but virtually all of its foraging occurs underneath the deer browse line. A gorgeous bird that should be at Griffy; but I bet you've never seen it there. Louisiana water thrush, it's also in continent wide decline; another understory nester. Another ground nester – Kentucky warbler – a beautiful bird; there are still some of them around but not nearly as many of them as there should be. They are in continent wide decline and in trouble. Hooded warbler, one that Dave mentioned earlier, a gorgeous bird, state listed ETR and very low numbers relative to what they should be there. And then the wood thrush…This is a bird that used to dominate eastern woodlands. This is a very very common bird, it's in massive continent wide decline. Thoreau said of the thrush: "the thrush alone declares the immortal wealth and vigor that is in the forest." Numbers collected from breeding bird atlases 1960-1990 showed 1.7% decline per year. You don't need to do much math on that to see that these birds are hurdling toward extinction. You can still find them, but species can't withstand those kind of population declines. And all the species that I'm talking about right here are suffering because of habitat destruction and loss.

Who is going to save these birds? I don't know how many acres of eastern deciduous forest is in suburban areas, is managed by cities - hundreds of millions of acres? Billions of acres? I don't know. But the federal government isn't going to come in and buy that. It comes down to bodies like this taking responsibility for what's in their back yard and saying: we're going to be ethical and responsible in how we manage our properties. And opposition to deer cull… I understand it doesn't sit well with some people. But you can't oppose it and look at yourself and say that this is an ethical or responsible decision. You're throwing too much else away – too many other plants and animals.

Michael Ellinwood. I come to this from a different perspective. I've hunted deer for most of my life, but I also grew up in Monroe County, New York where we have a real deer problem. I understand the biology of the park, but there are a lot of unintended consequences that I haven't heard anyone address. What a real deer problem is is kicking deer out of Route 37 because you can't pass it, which is where I grew up. Four lane road, 200 deer sitting in the road. Who wants to go to a barbeque and have your German shepherd bark at the doe asleep in the flowers 6 feet away from you? That's a deer problem. We really do not have a deer problem here; but we will create a deer problem. Councilman Spechler, if you think you have seen deer in your neighborhood, you have no idea.

Based on all my years of hunting deer, I will tell you this: as soon as you start shooting them, they move. I've never heard of territorial deer that will fight each other for territory. I will tell you that they will spread out and they will spread out fast. So, one thing that I've heard…we talk about excluding deer, but what about including them and moving them? Because about 30 miles south of here there's plenty of people with enough

land that love to hunt deer. Where I work – I work down at Crane – they will take all the deer you can send them. That's one solution.
Another problem – if it's $30,000 a year, just put it in the yearly budget. It's going to be there forever. When I was a kid, we did not have a deer problem as bad, but we do now. It is to the point where town leaders adopted bow hunting in the late 1990's, specifically in areas outside Durand Eastman Park; that means the neighborhoods. The primary reason was public safety. And they go on to explain that in one year there were 70 deer killed, 27 reported deer/car accidents, 31 reported last month, 50 reported in 2012 … public safety. Deer jumping through plate glass windows when they are chased by dogs. That's a problem. We really need to think about the unintended consequences and the real possibility of authorizing bow hunting at Bachelor [School] or in the Clear Creek area. Because if we push the deer out of that area, and we don't think about all the unintended consequences and how the better ways to mitigate the population, in accepted ways… how many people have left this area or called somebody from places with real experiences like Syracuse, like Buffalo, like Rochester, that live with humongous deer populations and have shot hundreds of deer a year, inside the parks, all for nothing? Because they are going to figure out where to go. If Lake Monroe is not experiencing this amount of deforestation, what is happening around Lake Monroe that isn't happening up here? Is there hunting? I've heard gunshots down there when I used to live there. But I really heard a lot of coyotes. I know there's bobcats and there's cougars down at Crane. But I'm sure not many people want to go traipsing through the park with the possibility of a 150 lb cougar taking them out. Bobcats we can deal with. Coyotes we can deal with. I strongly recommend to the council that you consider the unintended consequences and look outside Monroe County, Indiana to places that are living through the real hell of an explosive deer population. Thank you very much.

David Parkhurst – My graduate training was in plant ecology. I retired from IU 8 years ago. And I'd like to address two points.
First, I've attended several presentations by IU researchers on the effects of deer on vegetation and on other animals at Griffy Woods. Destruction of native vegetation outside of the research exclosures removes the habitat needed by ground nesting birds… it has removed all tree seedlings that would otherwise provide habitat for birds that don't ground nest, 50 to 100 years from now, and it removes the wildflowers that many of us like to see when we walk in the woods. I don't understand what's so precious about deer that makes them so much more important than many species of birds, other wildlife and plants whose habitats they're destroying. I'd rather keep the birds around.
Secondly, I went to all but one of the DTF meetings and learned some of these things. A lot of people who oppose shooting deer seem to think that contraceptives would be a better way to control deer numbers. But use of contraceptives is not allowed by the IDNR and there are several reasons for that. If a female deer is to be injected with a contraceptive, she needs to be trapped so she can be marked with an ear tag or something like that, so that if a deer is killed by a hunter, it won't be fed to a human female. Trapping causes great stress to deer; some deer actually die when they're trapped. A contraceptive would have to be injected year after year into the same does, and if a treated doe died a natural death, then the scavengers that might eat her body would have reduced birth rates, and we need all the natural scavengers we have to clean up dead deer and other animals. The city/county task force met monthly for about two years and considered lots of possibilities for controlling the local deer population. They concluded that shooting them was the only allowable option that would be effective.
I hope this ordinance to allow sharpshooting in Griffy Park will pass. Thank you.

Ramsay Harik, lifelong Bloomington resident. I want to thank all of you for listening carefully to this debate and these difficult issues. I want in particular to urge the city council to put priority – as you seem to be doing – on the science involved in this issue. Not speculative science, not anecdotal, but the real science. That's not to say that science alone can make this decision for us. Policy decisions like this require wisdom and judgement that science alone cannot provide. But science very often provides the relevant information necessary for making the right decision. In the cases of global warming and evolution, we've seen what happens when people blinded by ideology deny or ignore science.

This is a much smaller issue of course, but the science is just as relevant and clear and unambiguous. And it is unbiased. Nobody on the DTF or the IU Biology Dept hates deer or has a vested interest in shooting deer. Their concern is for the health and sustainability of Griffy Woods. What the science tells us is clear. Deer population in Griffy is causing a badly damage ecosystem with degraded habitat and biodiversity. It is the city's and the parks department's responsibility to address this, no matter how squeamish it makes the rest of us feel.

Much has been made of the situation at Brown County. They faced a similar situation in the 90's, and after regular hunting culls, both the park ecosystem and the deer population are dramatically healthier. This teaches us that life is full of paradox. The deer that are living there now are living happier healthier lives because there is hunting. It's difficult to get your head around it but it's a basic fact of nature. And it also teaches us that the best solution for the greatest number requires difficult and painful measures. That's where strong leadership comes in. Good leaders face up to painful necessities no matter how distasteful the repercussions. And we are counting on city council to be those leaders. Thank you.

Michael Enyeart. I live in the heart of Griffy Woods. I hiked Griffy Nature Preserve almost every day for the last 20 years. Although I'm not a citizen of Bloomington, I appreciate the opportunity to address the council.

I hunted in my younger days, beginning at age 12, and I'm not opposed to hunting in Griffy Nature Preserve. But I am opposed to a bunch of outside hired guns running roughshod in the woods, wasting meat and receiving big values. There's plenty of local hunters that would do the job if the city and the DNR simply got out of the way. Griffy Nature Preserve is hunted now. It has been for many years. I say make it legal and be done with it. In the longer term, Indiana law should be modified to permit more liberal subsistence hunting. Landowners should contract if they wish with a pool of skilled and pre-qualified hunters to harvest deer. I've read the legislative packet that proposes sharpshooting in Griffy Nature Preserve, along with other documents such as the 2008 Griffy Lake Master Plan and the 2012 DTF report. And I oppose this ordinance on the following basis: first, the proposed policy will not be effective in achieving its stated goals. The city property known as Griffy Nature Preserve (GNP) represents only 22.8% of Griffy Woods. 56% is privately owned. Hunting 22% of the land will do little to effect the deer population. The deer will respond to hunting pressure by moving to adjacent lands until the hunt ends. Every hunter knows this is true. Moreover, GNP is connected by habitat corridors to Illinois by Bean Blossom Creek, to Morgan County by the state forest and private forest tracks, to Brown County by Yellowwood and Morgan Monroe tracks, and to Kentucky by Hoosier National Forest. Killed deer will quickly be replaced via these habitat corridors.

The rationale for the ordinance is based on several major and many minor falsehoods, including flawed scientific data. Your packet contains claims that Griffy Woods is dying, and that deer density may be 10 fold higher than surrounding areas. The science that estimated the Griffy Woods deer population is deeply flawed. This is because the SCAT sampling was weighted to the Indiana Creek – or the southern fork of Griffy Creek – ravine area and virtually all Griffy Woods deer graze on the gourmet IU Golf Course grass. Common sense informs us that similar adjoining habitats should have similar deer density. It is laughably absurd to state, as the DTF report did, that the deer population is 13 times greater than similar properties. Moreover, it gives the appearance that reputable scientists in our community are beholding special interestwhen they sign a letter that makes such obviously false and unbelievable assertions as no native hardwood trees are re-generating outside of the deer exclosures. These very scientists have vested interests in reducing the deer because they have stewardship of a large track of Griffy Woods adjacent to the GNP. It's reasonable to assume that these biology department scientists and faculty want the deer population minimized to maximize the research value of the land that they manage. That's fine. So why are they not culling the deer on their land rather than baiting the city to shoot animals in the GNP? It doesn't escape notice that Mr Rollo is employed by the Biology Department. How is that not a conflict of interest? Sharpshooting is not sustainable and it's economic nonsense. The DTF report states "any deer reduction at Griffy requires maintenance to keep up with annual recruitment of deer and the immigration from surrounding areas". Is the city prepared to fund sharpshooting in perpetuity? Even a state agency which manages Brown County understood the folly

of hiring sharpshooters when hunters do a fine job for free. The DTF report clearly states that hunting is safe and is the most cost effective means of deer removal.
Mr Enyeart gave a copy of his letter to the council.

Ruff corrected the comment that stated Mr Rollo worked in the IU Biology Department and clarified that he is not connected with the university in any way.

Richard Martin. Has lived in Griffy Woods since 1968, on Hinkle Road. When we first moved out there, we could grow hosta around the house; we could take walks in the woods and it was hard to get through in many areas because of the understory that was there. We had large dogs that roamed the woods. Occasionally we'd see a deer, but very rarely. Now, I see deer almost every day driving into town. We have a tenth of an acre fenced with 7 foot high fence that we call a garden. We can't grow anything that's juicy and tender unless we put a 7 foot fence above it or around it. This winter, they started eating needles off the lower pine trees in our yard. They take our four foot fence in stride, even when it's electrified. They are up high enough that by the time they hit the wire they're not grounded so they just don't care. This winter we found it quite unusual that the does decided that it was safer to sleep inside the fence next to a shed that we have than to stay outside the fence where the dogs and the coyotes could bother them. So every night they would come in to the yard and bed down next to the shed.
To say that there is not a problem with the deer out there is, at this point in time … and the effect they are having on the woods is noticeable. I would invite any of you to come out and talk with Jane and I about the impact the deer have had, particularly in the last 10 years. It has gotten noticeably worse in the last 10 years. I don't know if this is a product of the cycle; I think it's probably has more to do with the changing nature of the neighborhood. There are fewer large dogs to chase the deer. One good thing that has happened as a result of the deer is that they eat the multi-flora. And so the multi-flora has not been spreading in the woods because the deer have been reducing it. It's the only positive thing I know of that they have done. But I'll invite any of you to come and chat with Jane and I about our experiences with the deer and our continuing attempts to keep them out of the garden areas and the flower beds we have around the house. I don't know if there's a good solution to this problem. But I can tell you that it is a problem that needs to be solved if you are to have a viable ecosystem out there for the long term. You have to remember that area was completely cleared of trees at one point because of its proximity to areas in the community. Certainly all the timber was taken off to make furniture. The home site we live on now was first homesteaded in the 1830's. And there has been somebody living there continuously for that amount of time. So I know the deer would not have been a problem back then because they all would have been shot if they had come near those buildings. But this has gotten to be a real problem these last 10 years. I can tell you that it is very expensive to build the fences and maintain the fences. That's the only thing we've been able to do to keep them out of the areas that we've got which is what you've been doing a study on. I can show you some areas in our yard that are probably like your study areas where you can see the differences between them. Thank you very much.

Richard Darling – lives at 400 Glendora Drive. First I want to thank the council for voting to make our neighborhood a conservation district. But tonight we're talking about something else.
Several weeks ago I gave some pictures to Mr Rollo and to Mr Ruff. After I did that I realized I was preaching to the choir. So tonight I would like to share them with all of you. The first picture was taken about 6:30 in the evening last fall. My son turned south onto Barbara Drive off of Glendora Drive. He shot the picture with this cell phone. If you look carefully, you can see that there are 8 deer in the picture. Also only 1 of the 8 has any concern at all for the approaching car; and she only was concerned because she was about to cross the street.
The second picture is of our front yard at 400 Glendora after a snowfall last winter. It dramatically illustrates the number of deer that are crossing our yard every night.
The third picture is a holly bush in our front yard. It should be covered with green leaves with thorns all around the edges. Instead it's stripped bare and we don't think it's gonna leaf out this year. The effort under discussion is aimed at the Griffy area itself, but I

would suggest it will have benefits well outside of that area. Living on Glendora Drive, I can tell you in fact that Glendora is a deer highway between Griffy Lake and Cascades Park. I wasn't fast enough with my camera to get a photo, but at 2pm on a sunny summer afternoon, there were 3 bucks with big racks of antlers just strolling right up the middle of the street. I believe that reducing the number of deer in the Griffy area will make for a more healthy woodland, more healthy deer herd and less pressure from the deer on the surrounding neighborhoods.
There is an analogy that I think is applicable here. Bambi is a very interesting movie. It's fun to watch and kids love it. Ratatouille is also an entertaining movie that's fun to watch and kids love it. However, I still don't want a rat in my kitchen preparing my dinner and I also don't want herds of deer, skunks and rabbits ravaging my front yard.
Thank you.

Richard Linnemeier. A lifetime resident of Bloomington and I have enjoyed Griffy Woods since my infancy. So we're talking about fishing, boating, swimming, dog walking, and other activities I've spent out there. I can tell you I consider myself to be somewhat of an amateur naturalist, and if you want to see migratory species of warblers you can go to Griffy. If you want to see unusual and early spring flowers, you can go to Griffy. But if you want to see them, you better get there quickly because the biologists and the professionals have told us that the number of these species is declining precipitously because of over grazing of deer. One of the things that wasn't mentioned quite early is the number of species of plants that deer won't eat, which is a surprisingly small number.
Basically, the way I see it, there's got to be some method of controlling the deer and the most humane method is through professional sharpshooting – the only method allowed by IDNR who have authority over wildlife management. So if you don't like that you need to talk to your state legislator because the DNR essentially has control over what happens to the deer.
Alternatives: basically to do nothing and allow auto collisions, coyotes, feral dogs and ultimately starvation and disease to take its toll. Is this humane? It's an illusion to imaging that the wilderness begins outside our doors. We've created this environment and it's conducive to great numbers of deer. So we can either deal with that problem and relate to it, or we can just let it go and let consequences occur.

Art Oehmich – Has 9 acres of a block of land that joins Griffy Park and also includes parts of Griffy valley and Griffy creek. So I do see a lot of the animals that come in that area. I think this…whatever you're using for the estimate of the number, it's way out of line, I think it's blown out of proportion. On the graph you put on the screen, you made it look like there's absolutely herds of deer in Griffy Park. I would walk that trail almost every day, sometimes twice a day, all around Griffy because I'm right next to it, a part of it. Many times I could go through the whole thing and never see a deer. I've seen coyotes and everything else. Sometimes I do see a deer, they do stop by my property, they are welcome on my property. But I also know that they are plant eaters. So if I want to have something blooming, I'll put a fence around it or cover it somehow. But remember, we invited them here. At one time they were gone, extinct in Indiana. So we invited them back here. But as far as the numbers you guys think are out there, I think that's way off. The most I've ever seen at one time is 8. I see the same deer on a regular basis. It seems they don't stay in one spot, they travel. I see a few singles sometimes but mostly they travel in pairs or maybe a herd of 7 or 8. The most I've ever seen in a day, maybe 18 or 19, that's it. When I first moved there 40 years ago, there were no deer. We were pleased as punch when they started showing up. And yes, they became more and more common. But in the past 10 years or so it seems that the number has stayed constant. Hasn't increased, hasn't decreased. I think the way you make it sound, you'll be trampled by deer as soon as you walk into Griffy. That's not the case at all. You may kill whatever is around there now, but they'll come back.
As far as not having a natural predator, there is a natural predator: it's man. You come by my area during hunting season, there's a natural predator for deer. So I want to let you know that I am there, I walk the park probably more than anybody in here. Maybe it's just a handful of deer causing that problem. I don't know anything about that. But I do

know as far as the amount of deer, you guys have it overestimated. Walk the trail sometime. Come out to my house.
Anyway, Thank you.

Sandra Shapshay. I respectfully recommend that you vote no or at the least table this ordinance pending a thorough and open-minded exploration of non-lethal options to the perceived over population of deer in Griffy Woods. I have two main reasons for this recommendation. First, the DTF's humane deer management position statement claims that priority will be given to non-lethal mitigation strategies, and that lethal weapons would be used only as a last resort. Councilmember Rollo quoted that in his presentation. But this ordinance pursues lethal methods as a first resort, thus violating the DTF's own deer management position statement.
In a letter dated Dec 5, 2012, Laura Simon of the Humane Society of the US reiterated an offer to have Dr Alan Rutberg from Tufts University School of Veterinary Medicine, who is an expert in the field of immuno-contraception and project leader for PZP programs in various states, to come to Bloomington at no cost to the city so that he could do a site evaluation of Bloomington and Lake Griffy to determine if and what sites might be viable for an immune-contraception project. No response was ever received from this offer. In light of this fact, it is clear that an open-minded exploration of the use of contraception was not seriously undertaken by the DTF or the city council. But it is not too late to do so.
In the DTF meeting minutes from March 2011, Josh Griffin with the DNR specifically stated that the IDNR's position on contraceptives is that they do not endorse it but may be willing to try it in a research capacity. If I-69 has shown us anything, it's that this is not a community adverse to advocating alternatives to state agencies. So why is the city not even attempting to advocate for non-violent methods of deer population reduction when it comes to the IDNR?
Further, there have been tremendous advances in the field of immune-contraceptives. And in Hasting on the Hudson, which is an open system, a PZP study has gotten underway just this February. At the very least, the city council should agree to a free site visit from Dr Rutberg to evaluate the feasibility of non-lethal methods before passing this ordinance and going down this blood stained route. I would think that Mr Rollo would likely reply that there is no time to employ contraceptive methods in Griffy. There is – in his words – an ecological catastrophe in Griffy right now and its primary cause is the deer.
This leads to my second reason for opposing this ordinance. Mr Rollo is catastrophizing the situation. And the reality of the situation in Griffy Woods as shown by Dr Shelton's recent article is far from being catastrophic. So first, with respect to deer impact on other animals, Dr Shelton's paper studied the impact on four animal species: white footed mice, dog ticks, lungless salamanders and earthworms. The research showed that there was no difference in earthworms or salamanders inside and outside the exclosures. So half of the animals studied were found not to have been impacted by the perceived over-abundance of deer. With respect to mice, Dr Shelton's study says "significantly more mice were captured inside exclosures in 2011", but it also reports that "while the numbers were higher inside exclosures than in controls in 2012, the difference was not statistically significant". With respect to dog ticks, "exclosures had more ticks than control plots although the difference was not statistically significant." What about the impact on soil nutrients? Shelton's article reports "there were no significant differences in soil nutrients in and outside of exclosures." What about plant species diversity? "We recorded a total of 123 to 144 plant species each spring between 2009 and 2012. In each year exclosure plots averaged 2 to 3 more species than control plots. But differences in species richness was statistically significant only in 2009 and 2011. The total cover of spring vegetation did not differ between exclosures and controls in any year".

Jennifer Mickel, running for District 2 County Council, and I live in the bounds of the city. I own some property in the county near Monroe Lake. What Mr Griffin describes is what I call "canned hunting". I just wish the deer had guns.
My profession is landscaping. I've had fine professors; I've studied in college biology, botany. I did a project on it and compared the flora of the time. I've lived here since I was 8, so I'm gonna compare Griffy when I went there at 16 to skinny dip with my friends, and to what it was when I came back 14 years ago, and to what it is now. We have a

bigger forest now, which means we have less light to get down to those flowers. That's going to create a smaller flower. I want to review the history of our area; we used to be sheep herders here, sheep pastures here. So most of the area before I was here was all clear cut all the way out to T.C. Steele. Then we started to allow people to have trees, and after I was 5 years old, more trees were made. But up until then, out past the mall, past 446, there weren't any trees. They were just starting to grow there. That's the true history. Griffy Lake has not always had a forest. It's sort of recent really.
There's graphics I want to point out, they go to 2012. The study is pre-2012. We drained the lake so why would we spend $30,000 on something that probably the deer have left, and have gone someplace else like Hoosier Acres. We've got a lot of them out there and I don't have a problem with them. But I suggest that anybody who does have a problem with them, get some stuff called milorganite, and it will help you with your hostas and everything. Or I suggest that what we do out in Griffy is we drive the deer elsewhere, so that they can be hunted. Most of those guys out there where I have my property are really good shots. And at least they will be able to use the meat for their families. Which in this economic environment is a very great idea if we must do it.
The biggest predator for them now is cars. I see it all the time in the spring. And that leaves babies; so whatever it is, please don't do it now because you will have a whole bunch of dead fawns. You need to do it before winter, which at least would help these deer not starve to death in a winter such as we're having this year. One of the radical things we could do is to get all these college men who have been to a sports game after they have had a night like that, be taken in by the careful botanists and be allowed to pee on the trees. I'm absolutely serious because milorganite is exactly that. The deer will go away and stay away from that area. The other things will not be bothered by them at all. It's an odd suggestion, but it would work.
Thank you.

Steven Wagschel, resident of Bloomington and concerned citizen. I've read through the ordinance and found it problematic and misleading in several ways. In my short time here, I'll focus on just one of these problems.
The ordinance mistakenly takes what should be considered a last resort – guns, violence and death – and pretends that it's something humane and well thought out. More specifically, I refer to the way in which the ordinance alleges the shooting of deer is humane. Citing the American Veterinary Medical Association (AVMA) - I quote from the ordinance itself - the use of an accurately delivered gunshot has been determined to be humane euthanasia by the American Veterinary Medical Association". You might note that there is no page number given for that. For one, as the actual 2013 AVMA guidelines for euthanasia point out on pages 6 and 7 that euthanasia comes from Greek and means "good death". The AVMA defines it as "a humane disposition occurs when death is a welcome event and continued existence is not an attractive option for the animal as perceived by the owner and the veterinarian". The example given for when euthanasia is called upon is "when plagued by diseases that produce insurmountable suffering. Euthanasia relieves the animal's suffering." The term euthanasia should be applied only to the mercy killing of wounded or dying animals. If an animal was wounded or dying, then shooting it would be humane if it could otherwise not be helped or restored to health. But the AVMA does not support killing healthy deer in the wild and mislabeling it euthanasia. Furthermore, if the authors of the ordinance or other elected city council members want to know what is considered humane, wouldn't it be appropriate to consult the HSUS? If anyone would care to consult, they would learn that the HSUS does not consider killing the deer in this manner as humane. Instead, the HSUS calls lethal measures a last resort and calls for serious consideration of all non-lethal methods first. So, why were no HSUS representatives consulted in the DTF report? Additionally, when the HSUS offered to bring in a specialist in non-lethal methods from the Boston area at their own expense to make a presentation to the city, why did Rollo and Ruff not avail themselves of this information? That's never really been answered. But the opportunity is still there. City councilors, you can postpone a vote on this ordinance for a few months, or table it, and in the meantime call in an expert scientist, Dr Ruthberg of Tufts University, who was never allowed to offer his expertise, and see whether non-lethal options would be viable. There is much lip service to science in what Rollo and Ruff presented. But science comes from the Latin word for knowledge, and if you have already made your decision, or if you plan to vote in favor of the ordinance, your decision will be based on ignorance of critical information. The ecosystem at Griffy is not going to

be irreversibly changed by the deer in a few more months, and if someone says it is, where is the science to back that up? Such words are nowhere to be found in Dr Shelton's published results. And interpreting that study as if it forebodes an imminent irreversible environmental change is emotional catastrophizing, not careful reasoned thinking.
In closing, I would like to call on Rollo and Ruff to state for the record your longer term intentions about what will happen after the sharpshooting? Do you intend to support an annual managed hunt at Griffy? After that, do you intend to pursue the killing of deer in neighborhoods? I ask rhetorically, but please do let us voters know for the record.
All of these shootings and killings of animals are not forms of euthanasia, they are not good deaths. Enshrining the violence in our city's laws by passing this ordinance now may not even improve the ecosystem. But it will surely worsen our community character in Bloomington; they are called deadly weapons for a reason.

Clay Fuqua Professor and Chair of the Department of Biology at IU. I am going to read the letter that was sent to the council on March 14, 2014 from the Dept of Biology and signed by myself and over 90 members of the department, both faculty, students and staff.
"We the undersigned biologists strongly support the city's efforts following the DTF recommendation for scientifically based, ecologically informed and humane management of the city's deer population in the Griffy Lake area. As herbivores, deer eat plants and are in turn eaten by predatory animals including humans. Wild populations are normally kept in check by natural ecological factors such as predation, disease and competition. As the DTF details, human activities have disturbed the ecological balance of deer within the environment through an interrelated combination of factors, including extirpation of large native predators, alteration of habitat via suburban sprawl, fragmentation of woodlands and agriculture. Hunting is not currently allowed in the Griffy area; limiting it is a form of population control. Deer numbers have risen accordingly, rebounding from the late 1800's when deer were driven to local extinction, to levels of extreme abundance. Patterns of abundance have also shifted such that deer have now become common in urban and suburban settings. High numbers of deer mean high herbivore pressure on plants including native woodland vegetation, as well as landscaping plants and urban and rural crops. The impact of deer is particularly acute in Griffy Woods, where data collected by IU biologists suggests the deer densities may be tenfold higher than comparable surrounding areas. Plants are the base of terrestrial food chains, converting the sun's energy into food that either directly or indirectly nourishes all other life, including humans. Plants also provide critical shelter and nesting habitat for other organisms, thus when deer numbers rise to levels high enough to deplete the forest understory of vegetation, as has been documented in Griffy and other Indiana woodlands, many other life forms suffer. This domino effect has been demonstrated for songbirds such as wood thrush and oven bird. IU biologists have recently reported in the scientific literature, Shelton et al 2014 Forest Ecology and Management, cascading negative effects of over abundant deer on plant and animal life in Griffy Woods as well as on the a-biotic environment. Most concerning is that they are finding that no native hardwood trees are re-generating outside of deer exclosures, suggesting that the current forest will not persist. Furthermore, high deer grazing pressure exacerbates losses of species, diversity by opening up space for the invasion of the aggressive exotic plant species that outgrow native plants and are often of lesser value to wildlife.
We therefore agree with the DTF conclusions and support the city's initiative to reduce the deer numbers in Griffy. We appreciate the DTF's and the common council's thorough evidence-based deliberations on the ecologically, socially and ethically sensitive suite of management strategies they recommend. This includes using humane lethal methods for reducing the overabundant deer herd in Griffy Woods, followed by comprehensive monitoring of the results. We also appreciate the need for sustained investment in managing the deer herd in Griffy Woods such as the IDNR deer herd management in Indiana state parks. So long as land development and other human activities continue to skew the ecological balance in favor of high deer numbers, there will be a need for human investment in managing the deer herd. Just as we are willing to invest in the infrastructure of our built environment, we should be willing to invest in the infrastructure of our remaining wild ecosystems. It is these ecosystems on which we depend for clean water, clean air, recreation, renewal and many other life supporting services."

Again, this is signed by over 90 members of the Biology Dept. As shown on the overheads, we have a listing of the individuals who were signatories on this letter. This includes distinguished professors, faculty of all ranks, students and staff in the biology department.
A personal comment: it's useful to hear anecdotal evidence and experiences in Griffy and say that the deer herd is lower than measured. But in the biology department and in most science-based departments, you trust data. And the data in this paper is sound, whether it reflects local pockets or more distributed populations, it's still to be determined. But the data is very sound and gives us a clear picture of what's going on in Griffy Woods. So I would encourage the council to heed that data and take it seriously.
Thank you.

Ryan Giles, lives on Rock Creek Drive in south Bloomington. Unfortunately, I don't have any data. I don't doubt that the deer are impacting the diversity of plants, and I have noticed an impact with songbirds, but it mostly seems to be due to feral housecats in the area where I live. But I don't think anyone is proposing sharpshooting them.
Based on the report published on the city website, I want to voice my concern about how this plan negatively reflects on the community of Bloomington, in my opinion. I'm speaking not from the standpoint of animal rights or environmentalism but as someone who actually grew up going on deer hunts every fall. This was in remote, federally managed lands in the Rocky Mountains in my case. My family members who took part in these hunts were sportsmen who would never think to carry any weapon other than a traditional deer rifle without clips, much less silencers, and had serious respect for the game they were hunting and the ethics of hunting. They only shot mature bucks and they never took more than they could hike out of the mountains. What's being proposed here would be shameful to them and I have to say would be shameful for me to share this plan with my own children. The plan is to have shooters firing weapons fitted with silencers, using motor vehicles and also hiding in stands, using military-style night vision and thermal imaging – at least these were possibilities mentioned in the report – so they can bait and kill does, prioritizing does and fawns, that is "non-antler" deer, avoiding bucks with antlers. The hunters I grew up with were excellent shots, but I think they would be uncomfortable calling themselves sharpshooters in the context of killing deer. Sharpshooter is a term that reminds me of when I was enlisted in the military and we were trained to shoot at targets using an M-16 to prepare for combat, measuring accuracy to be awarded marksmanship ribbons.
Citizens of Bloomington should keep in mind that this sniper-style shooting of deer being proposed here would be taking place inside the corporate boundaries of a university town, and it just is not befitting of this town and this place. I'm concerned about what are being called inherent risks and unforeseen liabilities. The plan could result in accidents caused by people shooting high powered weapons in winter conditions and climbing in and out of tree stands at night. So as a concerned citizen and voter, I would urge the council to vote against sharpshooting, to keep traditional hunting restricted to lands that are further from populated areas and reconsider non-lethal alternatives for deer that live in Bloomington.

Scott Wells. I feel honored to follow the biology professor because I too got a degree from IU in biology and also biochemistry. Things are based on science and data; that's how you come up with a good decision. I must say, you all know me – I'm an environmentalist. Some might say I'm a hardcore environmentalist. And for that very reason, we must cull the deer herd. And that's an unfortunate thing because I love Bambi, everybody loves Bambi, but there's a point where Bambi's eating everything and the carrying capacity is being breached. If we don't do something, you can see that the forest, and all the things that use the forest to survive, are going to have problems maintaining their own little species surviving. So is this the best plan? I don't know but something has to be done. It's a beginning, a start, and a step, and I think the last time I was here talking about this – it was over a year ago and there had been no activity as far as where we are now - but an initial step had been passed. And I showed you the picture of my property that borders the Hoosier National Forest. I have these arborvitae trees; I planted every one of them. I've got more property value in my trees than in my house. And I have 50 yards on both the north and south of my property, and these beautiful arborvitae trees are now 20 feet tall. I got a kick out of one of these cyclists who came out to my property; he

stopped as I was working on my hosta bed, which the deer had already eaten. He said, you've got these beautiful trees here. Why are you trimming these trees 6 feet down, like a buzz saw, right to the trunk? I said, I'm not trimming them, the deer are doing it for me. They've trimmed all my hostas and everything. So, we've got a problem, Houston. I tried to explain to him about the deer problem. For example, this was just a few years ago when I talked to this guy, but this year they're back. I'm not in the city; we need to take this out further into the county actually if we want to get control of this. There's places I go by, and there will be 40 or 50 deer in these fields when I drive by going to my house at night. They usually are cyclical; they go around, they eat here, then all of a sudden they move. But the deer are this tall, there are no big ones anymore. That tells you there's a problem. When you get all juvenile deer and there's no adults hardly, you have a serious population problem. It needs to be culled.
Last thing I'll leave you with is this: how did we get in this problem? Well, in 1996 is when the first attack on my trees happened. I never noticed it in the previous 6 years. What has happened is, a lot of the people that used to hunt don't hunt anymore. I remember a lot of the high school kids where I lived, as soon as the first day of gun season, they'd be coming down the road with shot guns on their backs or their shoulder and they'd be going down to check in to the station. But now I don't see them. There's no kids hunting anymore. And so the natural predators like wolves are gone, so the only predator we have is hunting season. The funny thing is, here's what kids and students are doing now [*texting*] with their thumbs, instead of doing this [*pointing a rifle*] during hunting season. There has to be something done because every year it just keeps getting worse and worse. The deer aren't going away and we've got to get the carrying capacity back in order. The only way to do it is this one option. Contraception is not really viable; they still got the same number of deer; they can't reproduce but they can still eat. So that's the problem. God bless all of you!

Erin Huang, Indiana State Director for the HSUS. I'm here tonight to speak on behalf of our members and constituents here in Bloomington and Monroe County. We are firmly opposed to the deer cull for many reasons. As shown in Dr Shelton's research, the impact of deer on forest is complex. She noted for example that invasive shrubs grew 30 times faster and tick abundance was far greater inside the deer exclosures. In other words, when you remove deer, you may get more undesirable ticks and invasive shrubs. This kind of impact should not be overlooked. Secondly, the deer-free exclosures show you what a forest might look like without any deer. It's not socially acceptable or possible to eliminate all the deer; what you see in the exclosures is not necessarily what you'll get after killing some of the deer. So we want to get straight any false expectations.
One of the main problems with trying to manage the deer through lethal means is that the deer's high reproductive rate quickly compensates for any decline in their numbers. After culling there's more food for the remaining deer, and they respond by having more fawns at a younger age who have a higher survival rate, all of which results in a quick bounce back in numbers. This is why deer kills can be expensive, and there's no end in sight. Once the deer numbers bounce back, the kill has to be repeated again and again. It's extremely difficult to keep deer at artificially low numbers because they compensate reproductively. In contrast, the major benefit of using fertility control, such as immuno-contraception and surgical sterilization, is that it prevents a high proportion of fawns from being born, so that you don't get the quick bounce back in numbers you get after a kill. In fact, in one immuno-contraceptive project on Fripp Island in South Carolina, the deer population was reduced 50% over a 6 year period. Likewise, long term population decline has been documented at Fire Island, National Seashore in New York, and National Institutes and Standards in Technology in Maryland. Our offer still stands.to have the leading immuno-contraceptive experts in the field, Dr Alan Ruthberg and Rick Noggle, travel to Bloomington to conduct a site evaluation at Griffy Woods and other parts of Bloomington to determine if an immuno-contraception project would be feasible and to clear up any misconceptions about this methodology, if the council was willing to seriously consider this option and extend an invitation. The site visit would be done at absolutely no cost to the city. However, for fertility control to be a viable option, a cull cannot take place first because remaining deer become weary and too difficult for our staff to effectively vaccinate. From the perspective of HSUS, if the city chooses to kill deer at Griffy, fertility control options are permanently off the table, and there's no going back.

We disagree with any decision not to even explore contraception due to the IDNR opposition. Advances have been made in the field of immuno-contraception, and therefore we highly recommend further discussion with both the USDA wildlife services and IDNR in terms of exploring what conditions would need to be met in order for Bloomington to utilize PZP under an experimental permit.
It's easy to point the finger at deer and blame them for our forest re-generation but the reality is that our ecosystem issues are fraught with complexity and subject to human aesthetic preferences which may not be grounded in any sort of biological reality. Nature is not static. We urge the city to take plans for a deer cull of any kind off the table and carefully consider non-lethal options such as immuno-contraception and sterilization before resorting to lethal options.

Timothy Baer, resident of the Near Westside of Bloomington. This deer sharpshooting proposal is very upsetting. I adamantly oppose it and I have spoken out against this proposal and will continue to speak out against this proposal. I spoke on WFHB this evening opposing this plan. It's a sad day in Bloomington when deer are considered the enemy; beautiful deer that are always a joy for me to see. We just saw a presentation that purports that deer have had a hoof in causing global climate change and declining plant and animal species. Deer are not the enemy. We should be having a conversation about how mainly humans have caused global climate change and declining plant and animal species.
Bloomington purports to be a tolerant peaceful community, so why don't we all live that ideal. Stop thinking about killing sentient creatures as a means to solving a perceived "problem". This is what barbarians do: kill, kill, kill. Humankind tend towards thinking that killing is sometimes acceptable in solving a perceived problem. I'm opposed to this way of thinking. Killing people that this country perceives are its enemies is wrong. Killing deer that this city council perceives as enemies to our own ecosystem is wrong. Problem solving by killing is flatly wrong. I believe this deer killing proposal has been railroaded to this point. Sharpshooting deer - this is exactly what Mark Day was proposing 3 or 4 years ago, when I first heard about all this, saying that the deer were starving. The deer were not starving then; they were just eating flowers in people's yards and people weren't happy about that. Today's guest column in the H-T, saying that the deer will eventually destroy Griffy Nature Preserve because the deer will eventually eat all the saplings, therefore no more woods. This idea is ridiculous. The woods are home for the deer; the deer will not eat themselves out of their own home.
The idea that humankind has messed up things again, driving the deer out of their natural environments by over-building and too many roads and other causes, cannot be solved by killing. Humans do not always have all the answers. Nature has her own way of correcting things. And no, the IDNR does not have ultimate jurisdiction over the deer. Deer have their own intrinsic value, not dependent on what humans can do with their flesh and bones and fur. If anyone has final jurisdiction over the deer, it is the deer themselves, and God their creator. Not us. I believe this proposed ordinance is a slippery slope. First killing deer in Griffy and then killing deer anywhere in Bloomington. There are spiritual roots to all things; all things are spiritually good as long as they uphold and honor life. And then there is the spiritual darkness, killing and destroying life. And this city council is about to enter the dark dark realm of blood-letting. All of Bloomington is watching; all the deer are watching; God is watching. Deer just want to live and eat, just like you. Let the deer live.

Anne Sterling, Midwest Regional Director for the HSUS and a Bloomington resident. Tonight I am not here to speak on behalf of the HSUS; I'm here as a Bloomington citizen and a frequent hiker at Griffy. I first of all want to applaud council members Rollo and Ruff for their approach in bringing forth this legislation; your coalition building on this issue has been outstanding. I've spent my career working on animal related legislation at the capitol in Indiana and throughout the Midwest. The way you've approached this is classic and textbook, and it's very impressive. So I definitely applaud you for that. Although I'm not a member of the Biology Department, I'd like to think that I'm also a stakeholder in Griffy, and I also appreciate all the love people have for Griffy. I spend an inordinate amount of time at Griffy; I'm there 3 to 4 times a week. My husband and I trail run with the dogs and I feel like I know Griffy very very well. It's a very precious place

to me. I absolutely don't want to see it killed. It's probably the most precious place to me in Bloomington. Please don't equate my opposition to this legislation as a lack of love and concern for Griffy and/or a lack of support for biodiversity. And I respect the effort spent in bringing forth this legislation. I, as a user of Griffy, have a lot of questions and some serious concerns. I appreciate that Ruff addressed some FAQ's at the beginning. A few of the questions I have that I hope the council considers going forward: is all the damage to the flora and fauna at Griffy being attributed to the deer? How long is Griffy going to be closed to the public, and how do we even go about closing Griffy? There are multiple access points and to think that people are going to be kept out of Griffy during a sharpshooting effort that I've heard anecdotally could be closed as long as November through February. I also wonder whether or not funds for killing Griffy deer were included in the 2014 Parks and Rec budget. If so, was this discussed at the 2014 council budget hearings? I'm also curious about IU; have they been asked if they will allow sharpshooting deer on their property? As we saw from the map earlier, clearly they have a huge parcel of land, and if they're not going to allow shooting deer on their property, then why not? Are they going to allow any deer kills on their property? And isn't having 1000 open acres adjacent to Griffy problematic for reducing the deer population within Griffy? Based on the relative cost /effect in what is suggested in the DTF report, wouldn't using sharpshooters at Griffy now likely lead to hunting at Griffy in a few years? And wouldn't sharpshooting and/or hunting be an annual event? Is it wrong to think that killing deer at Griffy, a city park, is inconsistent with Bloomington's community character? Is it wrong to think that once use of firearms is allowed there, there will be no turning back?

In response to some of the earlier things we heard tonight, we keep hearing about the population doubling every 3 to 4 years, but since there's been no count of the deer, how do we know that the population is doubling? We don't know that, we don't have a count. The current harvest figures from the DNR throughout the state actually show that the deer harvest in Indiana was down by nearly 10%. And as the DTF report showed, deer collisions have actually remained stable in Bloomington.

We've heard about the birds. I work for the Humane Society and have dedicated my life to working on animal issues. I care every bit as much about the birds and the other animals at Griffy as I do about the deer. I'm absolutely not prioritizing the deer over the other animals. I do not think we've seen the science to indicate that the other animals are being impacted. I haven't seen any study about proof of dying birds at Griffy. As Sandy said, we've seen proof of about 4 other animals, nothing about songbirds. Songbird numbers are declining everywhere due to habitat loss. There's more mortality due to cats, weather extremes, and pesticides.

I'm a proud member of this community. I absolutely think we can do better. If there was ever a community in Indiana that could push back and push for something better, to set an example for other communities, I hope it would be Bloomington.

Eric Knox, Director of the IU Herbarium and a professional botanist. I teach two botany courses at IU and I take both of those classes to Griffy for field trips every year. For one of these courses – the summer flowering plants course – we teach people to identify native plants in Indiana. For the past 6 years I've been working with the city of Bloomington Parks and Recreation to eradicate garlic mustard from one area of Griffy Lake. My students approach this with vigor, understanding that human management of our environment is an important element. Nature doesn't take care of itself. Other species like garlic mustard have no moral compass. They don't decide whether or not to overpopulate an area, or to live in harmony with other species. And so we have been using lethal methods – we pull them up by the roots, before they set seed, we haul them off, we dispose of them so that they do not set seed and continue to proliferate. And we've had an amazing impact. This year, I've gotten my spring course, which is much larger with an enrollment of about 70 students, again – on a voluntary basis where I give them a token amount of extra credit – we came out and did over 200 person hours of removal of bush honeysuckle, again from Griffy Park. These were lethal methods, we were using bow saws, using clippers; the city is going to come in, they're going to chip this stuff up because it has chemicals that, if left in site will deter the growth of other plants. So they are going to use in other parts of the park where they want to put down a mulch on paths to keep other plants from growing. So they are going to recycle all of the stems from the bush honeysuckle that we've removed. All of these parts are necessary

management of these amazing habitat that we have on our doorstep. And culling the deer population is part of that same sort of management. I'm very proud that we have systematically killed so many problem plants out at Griffy and unfortunately the deer population is to a point where it's having an obvious impact. The work that Dr Shelton and other people have done serves to document what casual observation by any trained botanist will tell you – you don't see the regeneration, you don't see the populations of the native species at the levels they should be. We're not talking about eradicating the deer, as we are talking about trying to eradicate garlic mustard and to eradicate bush honeysuckle. We are talking about getting the population down to a level where the deer can live in balance with the rest of the diversity that is out there.
I compliment the DTF for taking a very long time to carefully consider all the issues. I think that this step is an obvious and necessary step, and I encourage you to pass this ordinance.
Thank you for your time.

Alyce Miller, Bloomington resident. I have strong ethical feelings about the way we live with and treat animals. But I do want to start with a logistical question. How are people getting access to PowerPoint here? Please clarify the process for future meetings.
The question of numbers is very interesting to me because there are no numbers that have been stated for the deer population, even though the proposed ordinance claims to be based on hard science. So I wonder, wouldn't it be helpful to have a quantified baseline and measurable objectives. Wouldn't that make for better science and better governmental policy?
In 2011 at the DTF meeting when Dave Rollo questioned Keith Clay on whether the relationship between deer and ecosystem damage could be said to be absolutely causal, Dr Clay replied that no, too many other factors such as climate change, flooding and soil compaction are re-shaping Griffy Woods. And this leads me to an observation that deer aren't the only species and events impacting Griffy Lake. Deer didn't repeatedly drain the lake, turning it into a virtual moonscape a year ago, fully effecting plant and animal life alike. Deer didn't build the developments north of Griffy leading to sediment build up, nor did they build the IU golf course right up against the woods. Deer don't boat, they don't picnic, fish, jog, hike, litter, let their dogs run off-leash at the lake. Deer, I don't think, caused the long punishing drought or the infestation of scales that infected the tulip trees. So my question is … why the narrow, single species focus? I'm not saying there's not a deer issue; I'm asking why did deer become demonized and the sole focus here? Diminished biodiversity is being invoked as justification for killing deer in the park. But it's not clear to me still what the biodiversity ideal is and how it's being operationalized. We saw lots of pictures of beautiful birds. I love birds, I love all animals. But I'm not sure how we can extrapolate from a larger, global warming, climate problems and all these other things and somehow say this is what's happening at Griffy Lake too because of the deer. It's just.. it doesn't make sense to me. The ordinance opposes letting nature take its course. So I wonder who or what model of biodiversity is guiding this? And a great deal of this seems to be coming from the IU Biology Department, and I'm wondering about other experts – wildlife biologists and lots of others who would have contributions to make here – seem to be ignored. The IU biologists seem to be relying on one now-published report; and that seems to me to be narrow. It's an interesting report but it's not as full an experience as it might be if we had other reports too.
The image of sharpshooters on tree stands shooting at deer where many of us walk and hike feels extreme. If it's generally believed that deer are ruining Griffy, would not the "Bloomington" thing to do be to ask for numbers first, then thoroughly explore non-lethal methods of population reduction. If the Rollo-Ruff proposal goes through and deer are to be killed at Griffy Lake, will sharpshooting be allowed on IU's property too? If not, why does it make sense to kill deer on city property but not on contiguous IU property? And what about phase 2 of the Rollo-Ruff proposal which recommends following the sharpshooting with managed hunts in the future. I'm wondering if Bloomington is really ready for the annual Griffy Lake deer hunt.
Thank you.

Dave Schleibaum, not a city resident. I have a problem with the fact that we're going to try to use guns to kill deer when if you really want to harvest the venison, the best way to do it is with a cross bow or archery. I appreciate the fact that you want to cull the deer;

the deer need to be culled. But you shoot a gun and it's in the city limits, the only thing it's going to do is warn people that there's people hunting in the woods, and it's going to drive the deer away. Whereas, if you use cross bow or archery, there's no noise. And if you research it, archery is – to me – a humane way to harvest the venison. Then you take the meat, and if the hunter doesn't want it, you can give it to the people, the city, or to the food bank. So we're not wasting the deer, we're harvesting the deer. If we're going to do that, it needs to be with the most effective way. And I really think that if you talk to the people who harvest deer, that the way they do it most effectively is with archery means; and that is something that I would like to see put on the table instead of guns, because anyone can have an accident with a gun and the shot's gonna go up in the air. But if you got a cross bow or an arrow, it's gonna go down, or if it goes up it's not gonna go very far. Maybe hit the guy in the head if he's looking up for his arrow, but that's why they don't do that.

Part of what's frustrating is that you should have done this 5 years ago and you wouldn't be having a problem in Griffy Woods because…well, if we don't do it now, it's gonna be too late. And to do it most effective, you gotta use the most effective ways of doing it. And there's a lot of people out there that, if asked, would say that archers are just as accurate, or more accurate, than gunfire. And it's not nearly as disturbing to people. And you don't even know it's going on. So, thank you.

Andy Minnick, born and raised in Ellettsville. I live next door in Owen County now. I've shot devastation permits the last 10 years in Owen County. The farms that we shoot, there's about 5000 acres that we shoot. When we started over there, we had 25% crop loss; we're now down to about 10% crop loss. So it does work. The deer we've been shooting on over there… When we started out killing, they were small weedy-looking little deer. Now there's record deer coming off these farms because we are particular about what we shoot; we only shoot the does. We try to let the bucks walk because there are hunters who will kill the bucks, who are excited to kill the bucks – it's a big deal. But this is not about hunting, it's about removing the deer from the herd. Last year I killed over 40 personally and I know there was not one deer wasted. That's a big deal to us. We shoot high powered rifles, we're very careful with what we do. I take it very personal, very intent, that if we shoot a deer, if I pull down on it, it does not take another step, and they will fall where they were standing. Boom, it's done, it's over with.

I've seen where they've tried to move deer – tranquilize them, move them, spay /neuter, whatever… you'll probably kill 50% doing that. They will beat themselves to death in a trailer or whatever you try to catch them in. They're beautiful animals, I love them, I enjoy them. But when you try to tame them, handle them, catch them, they'll get crazier than a bedbug.

I have a list of people. The next deer I kill, I know where it's going. There's no problem on getting rid of deer. There's food banks that are waiting for it, churches that are waiting for it, people that are hungry and are needing it. I was in on the first hunts over in Brown County Park and in McCormick's Creek Park, and my wife and I walk over there in McCormick's Park about every day if we can. The little fenced-in areas being talked about earlier, when they first did those over there, it was just unbelievable the difference between what was on the outside of there and what was on the inside of there because the deer just were cleaning it out. You'd look at the fields, at the woods, and it was this high [face level] and it was clean. Now - we were just over there the other day – and there's all kinds of little flowers coming up, we now have undergrowth, and believe it or not, there's still deer in the park. It's a manageable number in the park.

I've never made a dime killing a deer yet. We do the devastation permits for free. What we shoot is – they give us so many permits at a time. We fulfill those permits, they come out and check; they watch us. We are under the microscope. We do not take trophies. We don't take anything. We are required to bury them, or use the meat. So be it. That's the way that plays. I'm not sure how many deer were killed on the farms we shot last year, there might have been 2 or 3 that were lost. That can happen; somebody makes a bad shot; you will lose one occasionally. We are required to use our big guns; it's big, it's brutal and it's bloody, but it's effective and the easiest way you're gonna control your problem.

I've been watching this from over in Owen County and I just thought, man, I wanna come on over here and say something. So, thank you.

Spencer Hall, professor in the IU Biology Deptartment and co-signer of the letter. I want to thank councilmen Rollo and Ruff for their efforts, and before I say what I have to say, I want to indicate that I appreciate the wide views of speakers presented here.

I'm an ecologist and so I just wanted to deal with a couple of issues that have been brought up. I've heard attacks on the Shelton study. I just hope that all you council people can appreciate that ecological studies are complex, ecosystems are complex. They're hard to study. We often don't have the monitoring or the experimental data that we would like to make decisions. I don't envy you for having to deal with imperfect data in making this decision. I want to emphasize that it's very special and precious to have experimental data in which deer have been manipulated on which to base your decision. That seems like it's rare and it's very unique here and I'm grateful for it. But we often don't have definitive answers to these problems, and that's what is beguiling and challenging about ecology.

I've heard an avoidance of discussion of success stories, like the Brown County management which involves non-annual culling of deer. I view the arguments based on invitations, the reasonableness of invitations re: immuno-contraception as a delay tactic. And I think that is what it's being used for here. I urge you to take action now, not wait. I think that a responsible management strategy needs to happen now despite the heartfelt arguments or some of the name calling that's happened here. I'm urging you as the council people to preserve biodiversity in the park now. The ecological science is growing but clear that preserving biodiversity enhances ecosystem functioning. It helps repel invasive species, helps preserve habitat for threatened and rare species and it helps to avoid the catastrophic changes that councilman Rollo was talking about. So I think you have to take responsibility now to avoid irreversible damage and changes later. You have the responsibility to deal with your proximate habitat and what you can control now, and managing deer is within your abilities and your leverage point to deal with. I think an enlightened community should be encouraged to take courageous steps to deal with the problems now. Thank you.