

Bloomington-Monroe County

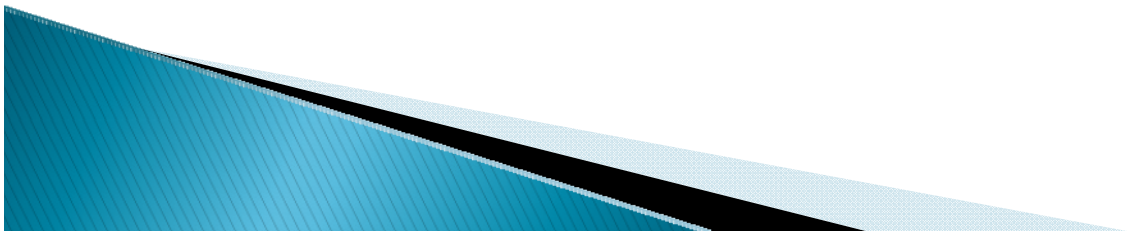
Deer Task Force



Photo: Stacy Weiss

Structure of Today's Meeting

- ▶ PRESENTATION
- ▶ QUESTIONS about PRESENTATION
- ▶ FEEDBACK on TWO SPECIFIC QUESTIONS
- ▶ GENERAL COMMENT PERIOD
- ▶ SURVEY



Purpose of Task Force

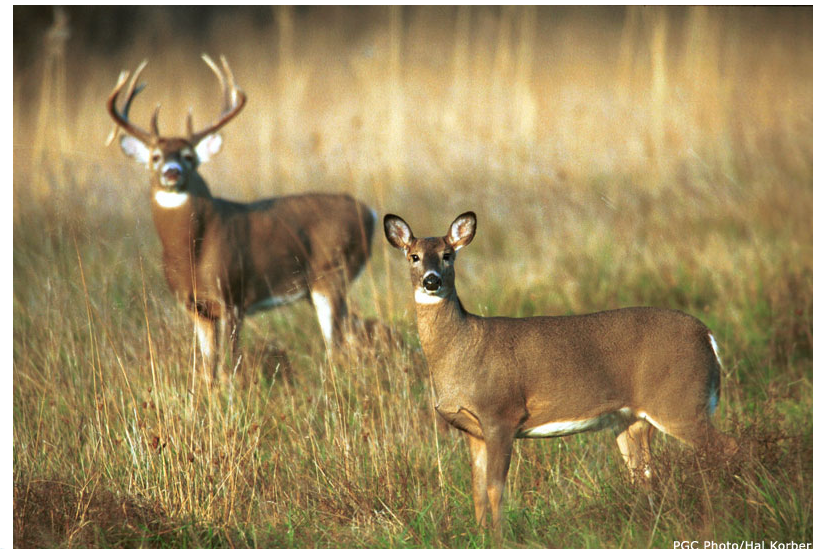
- Explore ways to address deer-human interactions
- Public education
- Solicit feedback on possible approaches
- Draft advisory recommendations for review by local government and the IDNR



Photo: Stacy Weiss

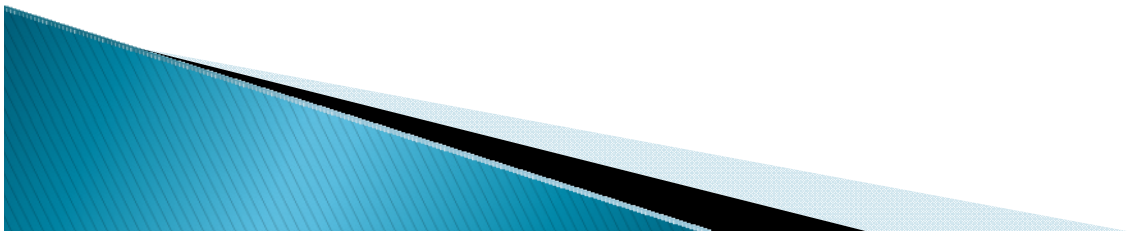
Goal of Community Meetings

- Communicate what Task Force knows
- Communicate the COMPLEXITY of urban deer management – NO SIMPLE FIX
- Solicit feedback on your perception of deer, where deer are perceived to be problematic & management preferences



Task Force Membership

- 11 members
Appointed by Mayor, City Council
and County Commissioners
- Diverse backgrounds
Animal welfare, biology, ecology,
anthropology, gardening and hunting



Member List

- ▶ Keith Clay, IU Biology Professor & Director of IU Research and Teaching Preserve
- ▶ Stefano Fiorini – IU Research Analyst; PhD in Environmental Anthropology
- ▶ Robert Foyut – Wildlife Rehabilitator
- ▶ Josh Griffin – IDNR District Wildlife Biologist
- ▶ Judith Granbois – Retired from IU Center for Study of Ethics & American Institutions, Gardener
- ▶ Sarah Hayes – CEO of Monroe County Humane Association
- ▶ Iris Kiesling – Monroe County Commissioner
- ▶ Thomas Moore – IU SPEA PhD Student in Environmental Science
- ▶ Laurie Ringquist – Director of Bloomington Animal Care & Control
- ▶ Dave Rollo – City Council Member
- ▶ Susannah Smith – Competitive Archer & Recreational Hunter



Work of Task Force To Date



- Met monthly since September 2010
- Worked with experts to learn more about deer biology, deer behavior and common management strategies
- Formulated a public outreach plan

Facts About Deer

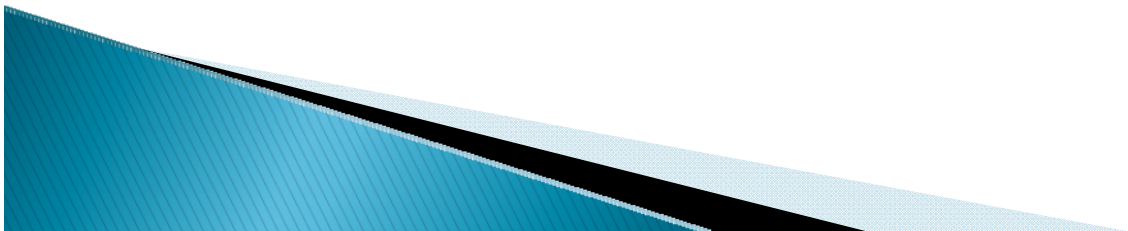
Jurisdiction – IDNR has jurisdiction over deer, but allows communities to take lead

Habitat – transitional spaces between forested areas and open spaces

- Suburban environments tend to provide rich source of food and shelter

Home Range – female-led groups

- Females remain in the general area in which they were born
- Males disperse



Facts About Deer (cont.)

Diet – foragers

- Move around, browsing the best of what is available
- Fertilizer and suburban areas

Reproduction & Lifespan – give birth annually

- In the spring
- 1–3 offspring
- Live 8–12 years



Photo:weatherunderground-
Tomsphotoandmem

Facts About Deer (cont.)

Aggression – not inherently aggressive

- Choose flight over fight unless young are threatened

Lyme Disease –not reservoirs of Lyme Disease

- Serve as hosts for ticks that carry it
- Where deer are scarce, ticks have alternative hosts



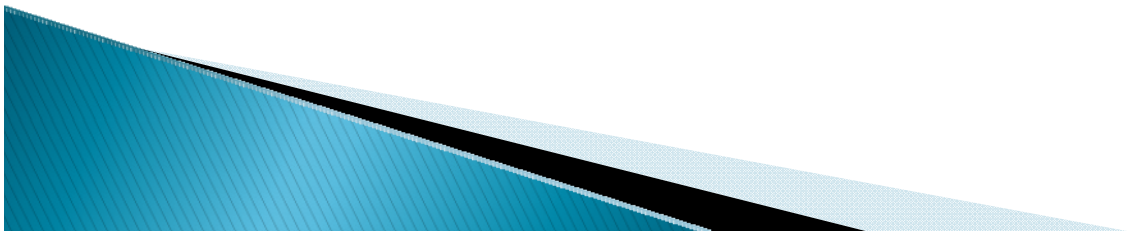
Deer Tick

Photo: Scott Bauer

Deer Population: A Brief History

- ▶ Deer are native to Indiana.
- ▶ From 1893–1934
 - Indiana virtually “deer free” due to hunting and habitat destruction.
- ▶ Mid–1930s
 - Deer reintroduced
- ▶ Since then, the deer population has increased dramatically
 - human encroachment, intentional feeding and the elimination of predators.

TTM1



Slide 11

TTM1

how has this led to deer population increasing?

Thomas T Moore, 5/19/2011

Deer Population

- ▶ IDNR does not conduct a deer census
 - Monitors population using trends such as hunter harvest and deer-vehicle collisions
- ▶ IDNR advises that instead of the actual number of deer in the community, the more relevant measurement is:
 - “social carrying capacity” –
the community’s capacity to tolerate deer



Photo: www.swf-wc.usace.army.mil

Social vs. Biological Carrying Capacity

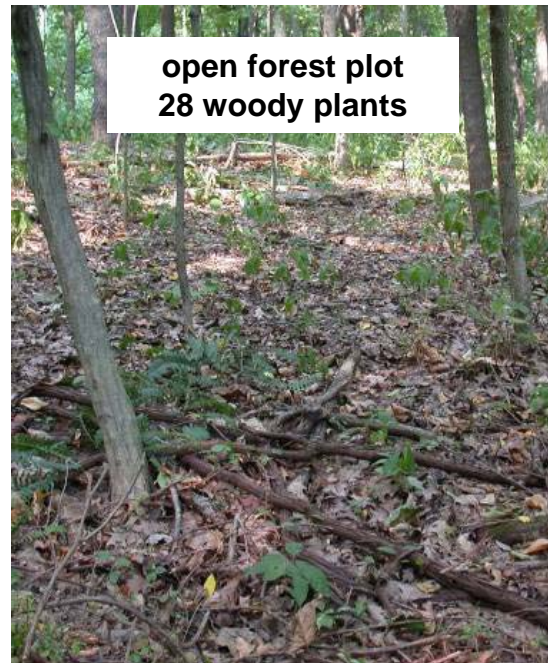
- ▶ Biological Carrying Capacity is a measure of the maximum deer population that an area can physically support (i.e. food, habitat).
- ▶ Social Carrying Capacity is a measure of the capacity of people to tolerate the presence of deer.



Photo: Stacy Weiss

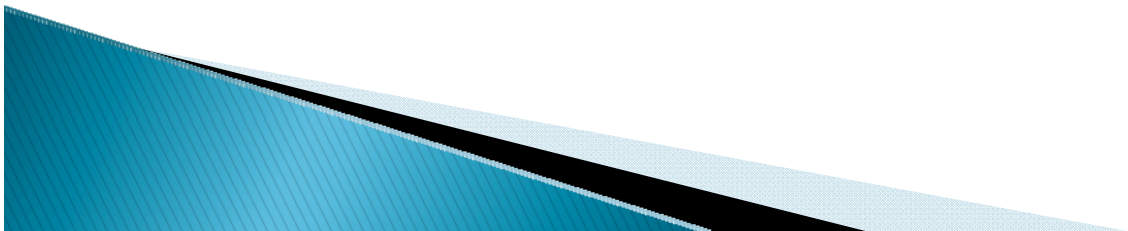
Deer Population Trends

- ▶ IDNR – trends show “healthy and abundant” but stable deer harvest in Monroe county
 - No trend data for City of Bloomington
- ▶ Research at Griffy Lake shows high population
 - Reduced species diversity & regeneration of understory



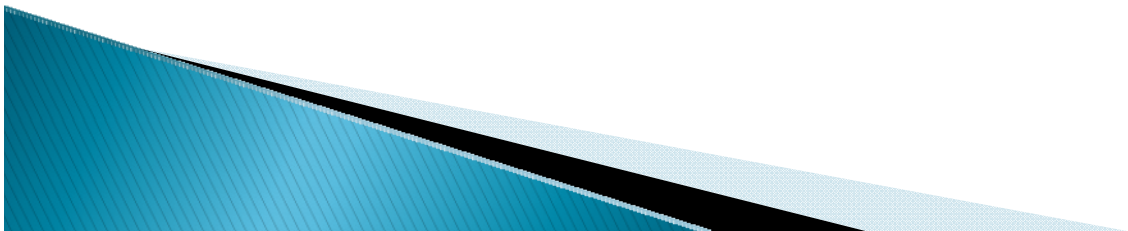
Griffy Woods

- ▶ Biologists have been researching the impact of deer at Griffy Woods
- ▶ Pellet counts at 3 locations, one of which was Griffy, showed 13 x more pellets at Griffy
- ▶ Studies using exclosures show that deer have affected the ecosystem through:
 - Reduced species diversity
 - Reduced regeneration of the understory



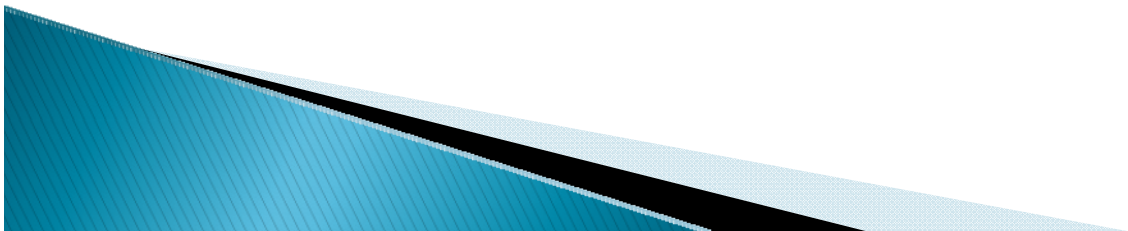
Deer Management

- Community-based “urban deer task forces” have been used throughout the US for at least 20 years
- The Task Force has identified a set of commonly-used management strategies
- No preconceived notion of which approach(es) it will recommend
 - The issue is complex
 - Different approaches may be applied to different locations



Key points when it comes to management of deer in urban and suburban areas

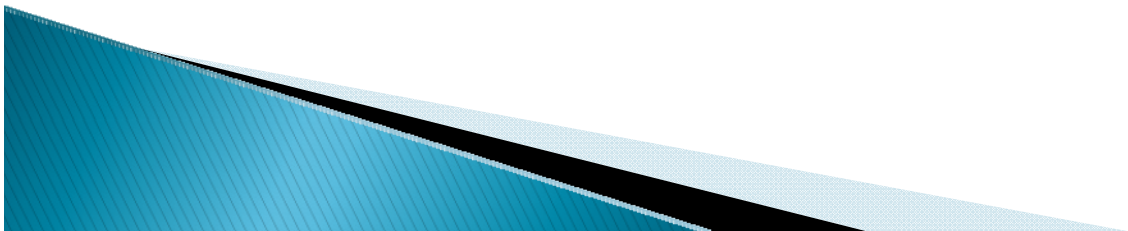
- ▶ Issue is complex
- ▶ No simple fix
- ▶ No “one size fits all” approach for the whole community
- ▶ Any approach must be informed by community feedback (a bottom-up process)



Common Management Strategies

Take no action

- Urban deer have a high survival rate and a high reproductive capacity.
- Taking no action to manage the deer population would mean the local deer herd may grow.



Common Management Strategies

Feeding Ban

- Supplemental feeding may result in:
 - denser concentrations
 - spread of disease
 - habituating deer to the presence of humans
- Winters in Monroe County are not severe enough to warrant supplemental feeding
- No cost to implement (other than enforcement)



Common Management Strategies

Fencing

- Mesh or high-tensile wire at least 8' high
- Deer do not have good depth perception
 - Fencing at 45° or 2 fences a couple feet apart
- Current City regulations:
 - 8' limit in backyard; 4' limit in front yard
 - Electric and barbed wire fences prohibited
- County regulations:
 - No height restriction; fences taller than 6' require a building permit
- Cost paid by individual property owners



Common Management Strategies

Deterrents and Repellants

- Lights, sprinklers, noisemakers & chemical repellants
- Short-term solutions as deer will habituate
- Do not eliminate browsing, only reduce it
- Availability of other food determines effectiveness
- Must comply with City's noise ordinance
- Cost paid by individual property owners



Photo: www.scarecrowsprinker.com; amazon.com; deerrepellentplants.com

Common Management Strategies

Reintroduction of Predators

- Unsuitable in most situations because:
 - Lack of suitable habitat
 - Mobility of many predators
 - Potential to kill non-target species
- IDNR will not approve the reintroduction of predators



Common Management Strategies

Trap and Translocate

- Trap deer in problem areas and move them elsewhere.
- Not approved by IDNR for free-ranging deer:
 - High mortality rates
 - Capture myopathy
 - Low availability of suitable release sites
 - Risk of disease transmission among deer populations
- Cost: \$400/deer plus ongoing maintenance



Photo:<http://www.1adventure.com/archives/000156.html>

Common Management Strategies

Contraception

- Deer population must be “closed” (i.e. not free-ranging) for best results
- High percentage of does must be treated
- Addresses population growth over time
 - But not immediate concerns with human-deer conflicts
- Long term effects (bioaccumulation, human consumption) are unknown
- Cost: \$600–\$800/doe plus ongoing maintenance



Common Management Strategies

Sterilization (tubal ligation or removal of ovaries)

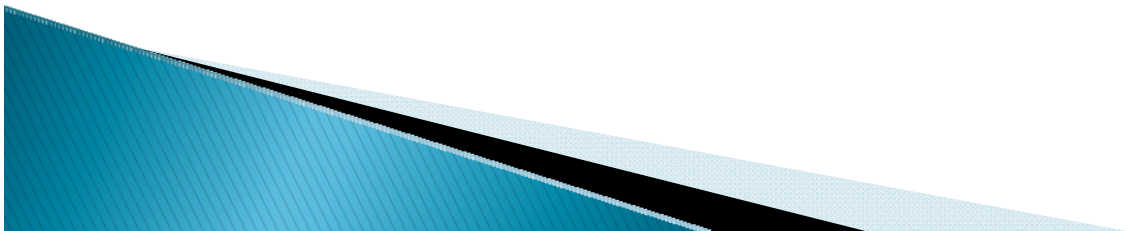
- Capture and surgery are stressful to deer
 - Results in high mortality rates
- Addresses population growth over time
 - But not immediate concerns with human–deer conflicts
- IDNR does not support in free-ranging contexts
- Cost: \$800–\$1,000/doe plus ongoing maintenance



Common Management Strategies

Trap and Euthanize

- Deer are lured into a trap with bait and euthanized via gunshot or chemical by a trained specialist
- Deer are severely stressed
- Estimated cost of \$300/deer plus ongoing maintenance



Common Management Strategies

Sharpshooting

- Conducted by professionals with special permit from IDNR and permission from property owners
- Possible to remove a large number of deer quickly and effectively
- Current prohibition against discharging firearms in City limits
- Meat can be donated to food bank
- Estimated cost of \$200–\$350/deer plus ongoing maintenance



Common Management Strategies

Regulated Hunting

- Requires adequate greenspace. IDNR recommends at least 5 contiguous acres
- Requires permission of landowner
- IDNR can approve creation of special “urban deer zones” to extend archery season bag limits
 - Efficacy hinges on access to land & whether hunters want to harvest more deer
 - Does not allow hunting in spaces otherwise prohibited
- Meat can be donated to food bank
- Cost: \$24/license paid by hunter; no cost to community (except enforcement)



Next Steps



The Task Force will:

1. Hold five meetings throughout the community
2. Administer a survey to gather information
3. Issue advisory recommendations that consider:
 - Efficacy
 - Cost
 - Community acceptance
 - Safety
 - Deer welfare

▶ Question and Answer Period on Part I of Presentation



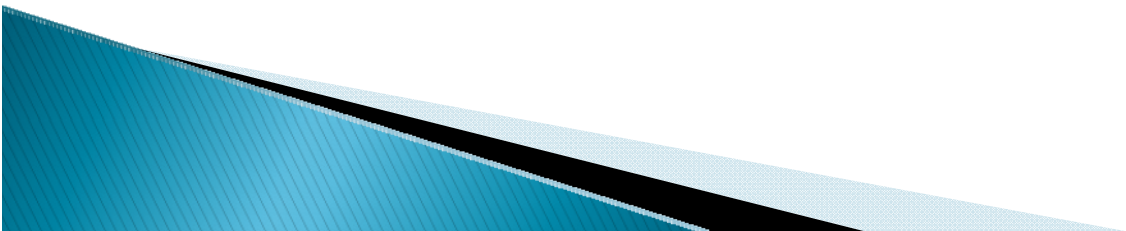
Photo: Joe Weiss

Question #1:

What are your experiences with deer – both positive and negative?

In your neighborhood

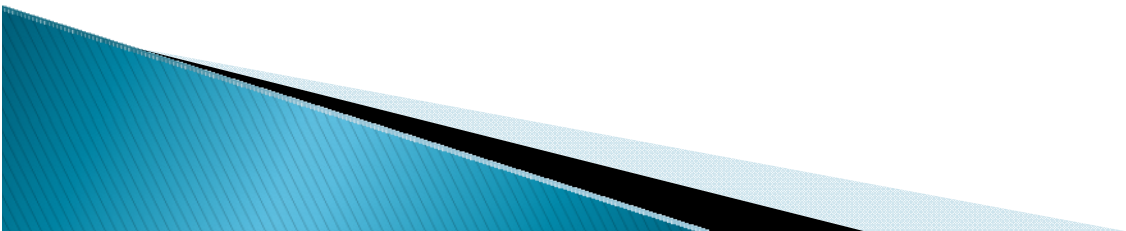
In other parts of the community



Question #2

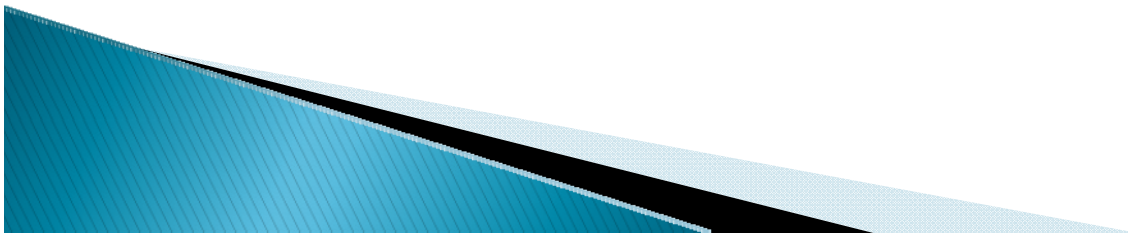
What are the most important criteria the Task Force should consider in making its recommendations?

- Efficacy
- Deer welfare
- Community acceptance
- Safety
- Cost
- Other



Open Discussion

Is there anything you
want to tell us?



Your voice matters!

- ▶ Learn more:
<http://bloomington.in.gov/deertaskforce>
- ▶ Send us an e-mail:
deertaskforce@bloomington.in.gov
- ▶ Send us a letter:
Deer Task Force
c/o Office of the Common Council
City of Bloomington
PO Box 100
Bloomington, IN 47402
- ▶ Give us a call! 349.3409

