
Urban Deer Management in Michigan: First Steps and Options for Communities

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Why Engage in Deer Management?



Characteristics of Urban Deer

■ Reproduction

□ Increased in Urban Areas

- Reported as high as 1.8 fawns/adult doe

■ Survival

□ Higher rates

- Reported as high as 87%

■ Home Range Size

□ Typically smaller



Carrying Capacity

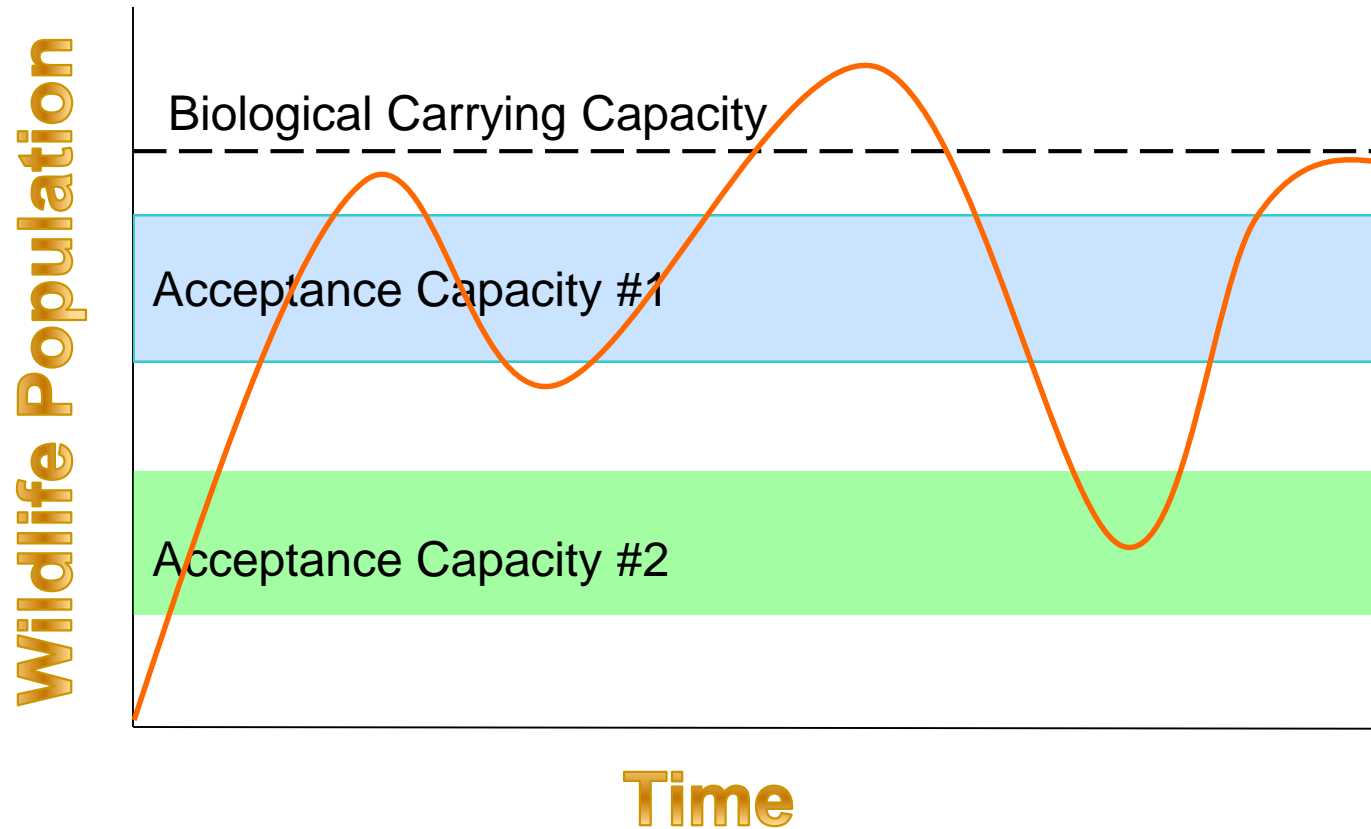
■ Biological



■ Social



Measures of Capacity for Wildlife Populations



Items to Begin Monitoring

- Deer-Vehicle Collisions
- Forest Regeneration
- Landscape Damage
- Complaints
- Residents Opinions
- Deer Numbers



Management Options

- Let Nature Take it's Course
 - Pros
 - Seems like a compromise
 - Inexpensive
 - Cons
 - No solutions
 - Continued degradation of habitat and conflicts



Management Options

■ Hunting

□ Pros

- Inexpensive to communities
- Provides economic stimulus
- Largely favored by many people

□ Cons

- Some types of hunting (i.e. trophy) not appealing to many
- Controversial
- Access



Management Options

■ Sharpshooting

□ Pros

- Reduces deer population quickly

□ Cons

- Often expensive
- Controversial
- Access



Management Options

■ Trap and Remove

□ Pros

- No projectile
- Removes deer from difficult areas

□ Cons

- High stress to deer
- Expensive
- Transfer will not be allowed



Management Options

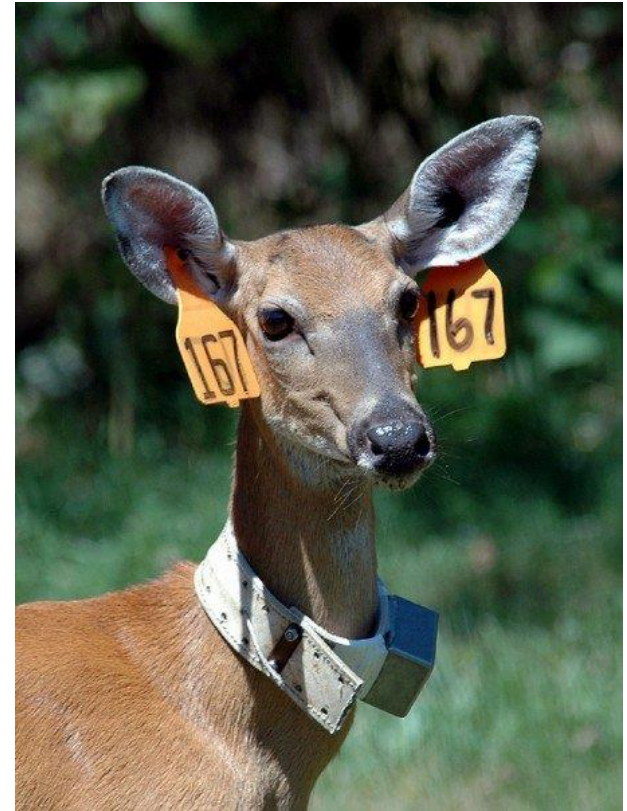
■ Contraception

□ Pros

- Doesn't fire lethal projectile
- Prevents fawns from being born for several years

□ Cons

- Expensive
- Doesn't remove deer
- Difficult to achieve long-term success



Management Options

■ Sterilization

□ Pros

- Doesn't fire a lethal projectile
- Prevents fawns from being born permanently

□ Cons

- Expensive
- Doesn't remove deer
- Difficult to achieve long-term success



Management Options

■ Reintroduce Predators

□ Pros

- Opportunity to return historical species

□ Cons

- Socially unacceptable
- Expensive
- Complicated interactions requires study



Management Options

■ Fencing and Repellants

□ Pros

- Exclusion
- Relatively inexpensive

□ Cons

- Requires maintenance
- Unsightly?
- Does not solve community wide problem



Considerations for Starting a Deer Management Program



- Authority
- Background
- Objectives
- Recommendations
- Alternatives
- Logistics
- Communicate
- Evaluate



First Steps to Consider

- Consult local DNR biologists
- Identify problem areas in the community
- Recommend fencing/repellents/hunting
- Review local ordinances
 - Feeding deer
 - Projectile ordinances
- Public meetings



Urban Deer Management Conclusions

- Consensus on deer management is impossible
- Incorporate both biological and social input
- Management strategies should align with the objectives of the deer program
- Management actions need to be maintained over time



Urban Deer Management Resources

- <https://deeradvisor.dnr.cornell.edu/>

Cornell University The Nature Conservancy

Search

Community Deer Advisor Cornell

Community Deer Advisor

Decision support for communities managing deer

[About](#) [What is CBDM?](#) [Community Examples](#) [Resource Library](#) [Assistance](#) [Free Online Course](#) [FAQs](#)

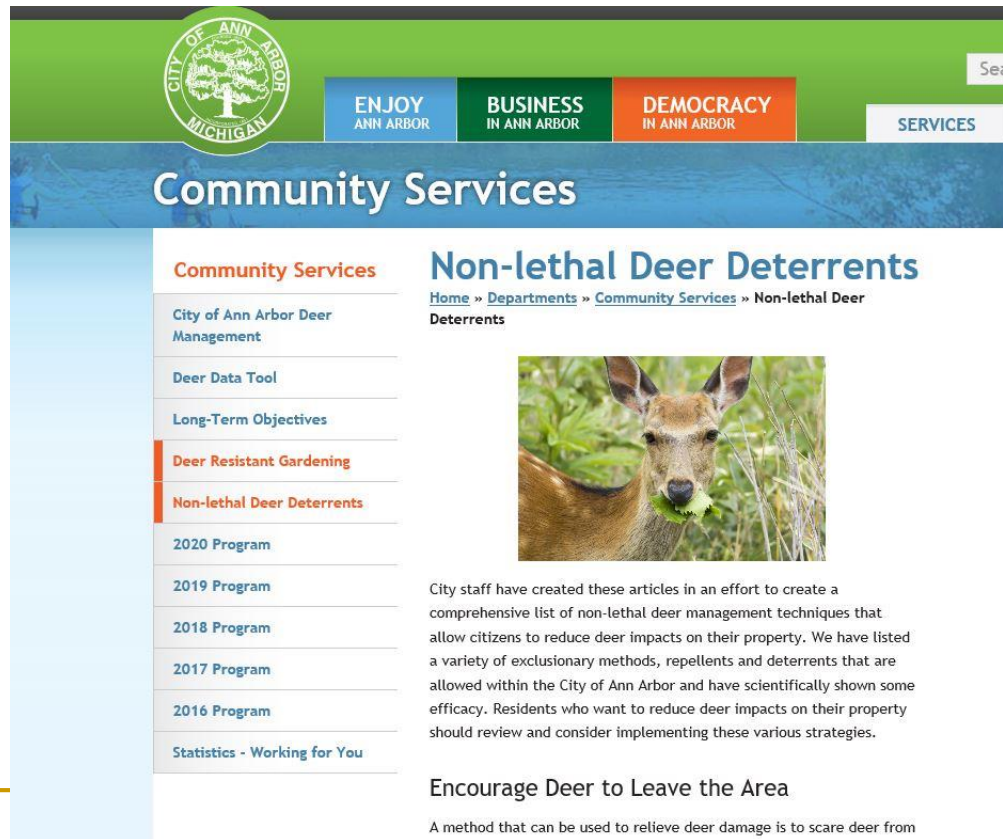
Drive for Data: Roadside Spotlight Surveys Provide Valuable Insights for Deer Management

More than 120 students from Bemidji State University have participated in roadside deer monitoring over the past four years.



Urban Deer Management Resources

- <https://www.a2gov.org/departments/community-services/Pages/Non-lethal-Deer-Management-Options-.aspx>



The screenshot shows the City of Ann Arbor website's 'Community Services' page. The header features the City of Ann Arbor logo and navigation buttons for 'ENJOY ANN ARBOR', 'BUSINESS IN ANN ARBOR', 'DEMOCRACY IN ANN ARBOR', and 'SERVICES'. The main content area is titled 'Community Services' and includes a sidebar with links to 'City of Ann Arbor Deer Management', 'Deer Data Tool', 'Long-Term Objectives', 'Deer Resistant Gardening', 'Non-lethal Deer Deterrents', '2020 Program', '2019 Program', '2018 Program', '2017 Program', '2016 Program', and 'Statistics - Working for You'. The main article is titled 'Non-lethal Deer Deterrents' and includes a breadcrumb trail: 'Home » Departments » Community Services » Non-lethal Deer Deterrents'. A photograph of a deer eating green leaves is shown. The text explains that city staff have created articles to provide a comprehensive list of non-lethal deer management techniques to reduce deer impacts on property. It lists various exclusionary methods, repellents, and deterrents that are allowed within the City of Ann Arbor and have shown some efficacy. Residents are encouraged to review and consider implementing these strategies. The article is titled 'Encourage Deer to Leave the Area' and begins with the sentence: 'A method that can be used to relieve deer damage is to scare deer from'.



Urban Deer Management Resources

Utah State University

DigitalCommons@USU

Human-Wildlife Interactions Monographs

Berryman Institute

2019

Methods for Managing Human–Deer Conflicts in Urban, Suburban, and Exurban Areas

Geoff D. Westerfield

Ohio Division of Wildlife, Geoffrey.Westerfield@dnr.state.oh.us

Justin M. Shannon

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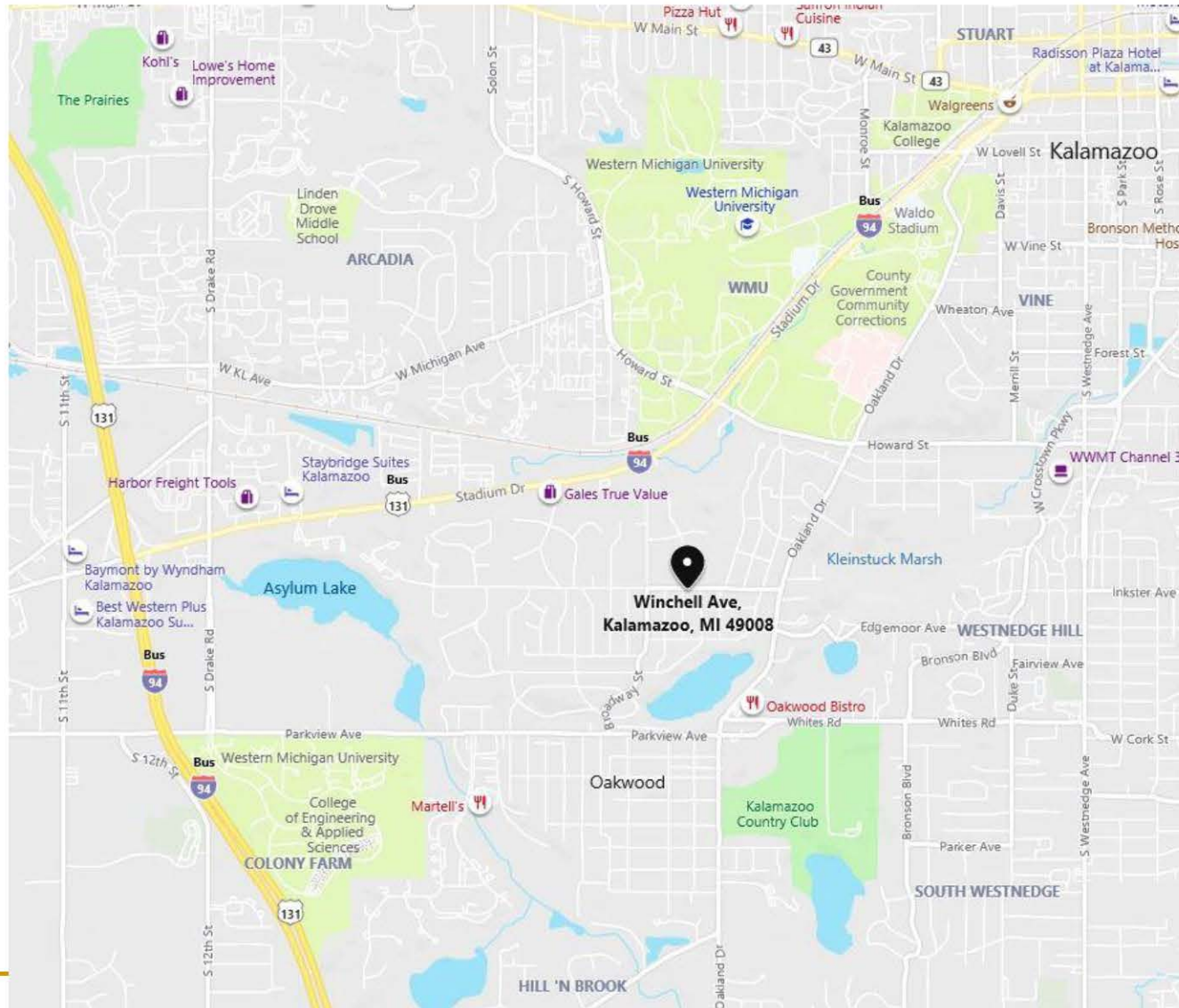
Orrin V. Duvuvuei

New Mexico Department of Game and Fish, Orrin.Duvuvuei@state.nm.us

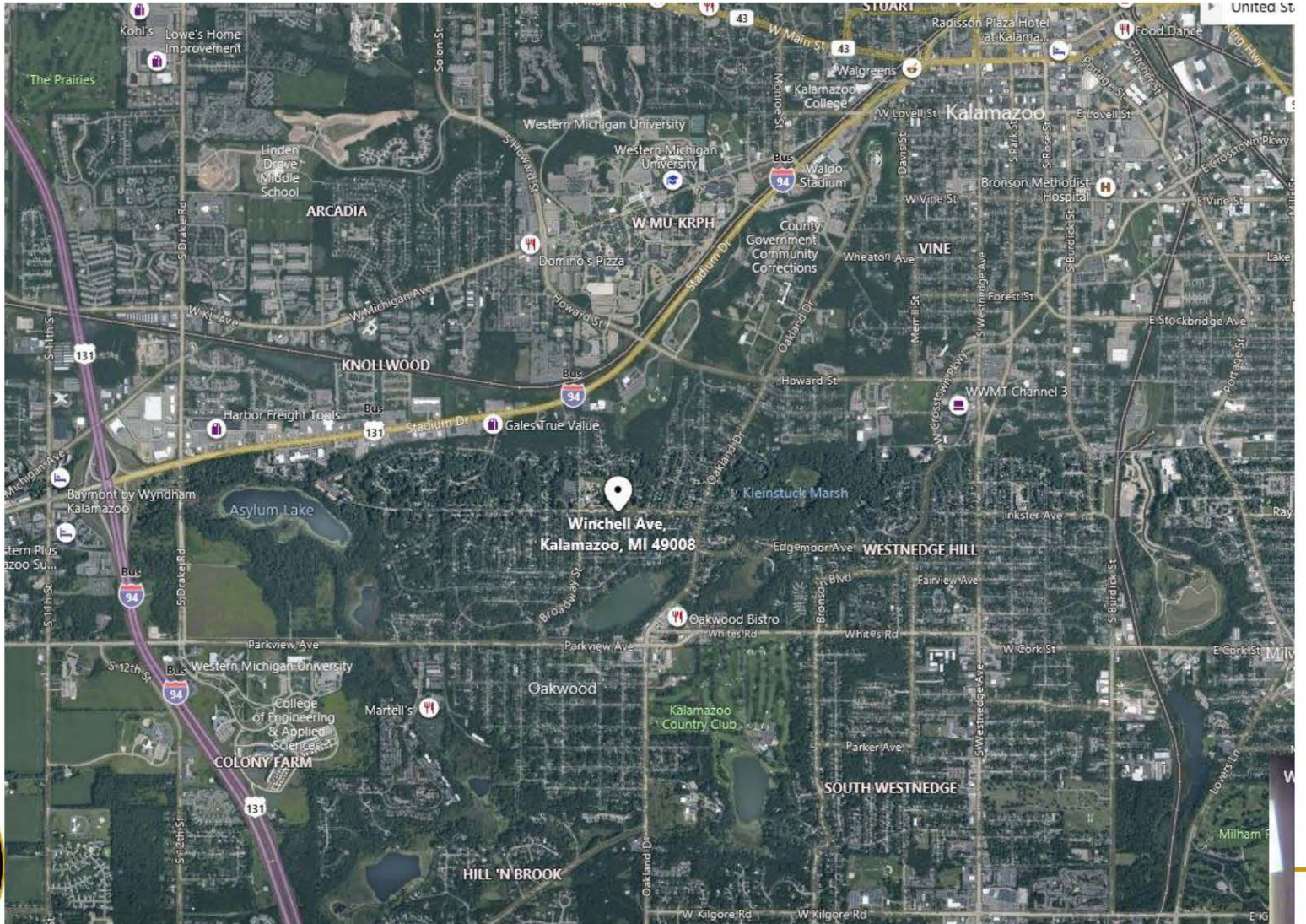
https://digitalcommons.usu.edu/hwi_monographs/3/



Kalamazoo County



Kalamazoo County



Kalamazoo County

- 2018 – 1017 Deer Vehicle Collisions
 - Top 15 of 83 Counties

2020 Crop Damage

Of Allegan, Van Buren, and Kalamazoo

Kalamazoo had fewest requests, most deer killed.



Thank You

