

Date: June 24, 2013
To: Thomas J. Bonfield, City Manager
From: Emily Leik
Subject: Deer Bow Hunting Ordinance

Executive Summary

This item has been prepared to outline and recommend the Council's adoption of an ordinance that permits bow hunting of deer within City limits. This text amendment would remove prohibitions on the discharge of a bow and arrow to hunt deer under defined circumstances.

Recommendation

Staff and a Stakeholder Committee recommends that City Council amend the Code of Ordinances to permit bow hunting of deer within City limits in accordance with State and Local regulations.

Background

Durham's City Council has received several resident requests that deer hunting with bow and arrow be permitted within city limits to combat an overpopulation of deer. These requests cite motor vehicle collisions, spread of disease, and damage to the natural landscape as the detriments of having an overpopulation of deer within City limits. Furthermore, the Urban Archery Organization has issued a petition to the City of Durham to begin participation in North Carolina's Urban Archery Program (UAP).

Chapter 6 of The City of Durham's current ordinances prohibits shooting any wild game or squirrel with any gun, firearm, or bow and arrow. Removing the prohibition on bow hunting would allow hunters to hunt during the State's central deer season, which takes place each fall. Removing the prohibition will also give the City the option to participate in the Urban Archery Program, which is a 5 week extension of the bow hunting season, and begins in January¹.

2013-2014 NC Central Region Hunting Seasons	
Regular Deer Season	September 7-January 1
Urban Archery Program	January 11-February 15

¹ The exact start and end date vary from year to year.

A committee consisting of City/County staff, local hunters, Duke Forest staff, and the NC Wildlife Resources Commission met on March 18th and May 21st to discuss deer management techniques. After considering the issue of deer overpopulation and management options, the committee recommends that the City Council amend its Code of Ordinances to permit bow hunting in City limits during the state's deer season for the central region.

Issues and Analysis

The first issue studied was whether the City is in fact experiencing an overpopulation of deer. According to Jason Allen (District 5 Wildlife Biologist), the NC Wildlife Resources Commission is unsure of whether the City of Durham has reached its *biological* carrying capacity for deer. A density estimate from 2010 indicates that Durham County likely has a density of 30-44 deer per square mile. However, Mr. Allen reports that no standard exists for determining the optimal deer density for a given community.

However, deer interference can still have a negative effect in the daily lives of Durham residents even without reaching the biological limit. And deer management techniques may help mitigate these effects, which include: crop and ornamental damage, spread of Lyme disease carried by deer ticks, and vehicle-deer collisions.

Crop Damage. About 92% of farmers in North Carolina have reported crop damage due to deer and anecdotes of damage abound from homeowners.²

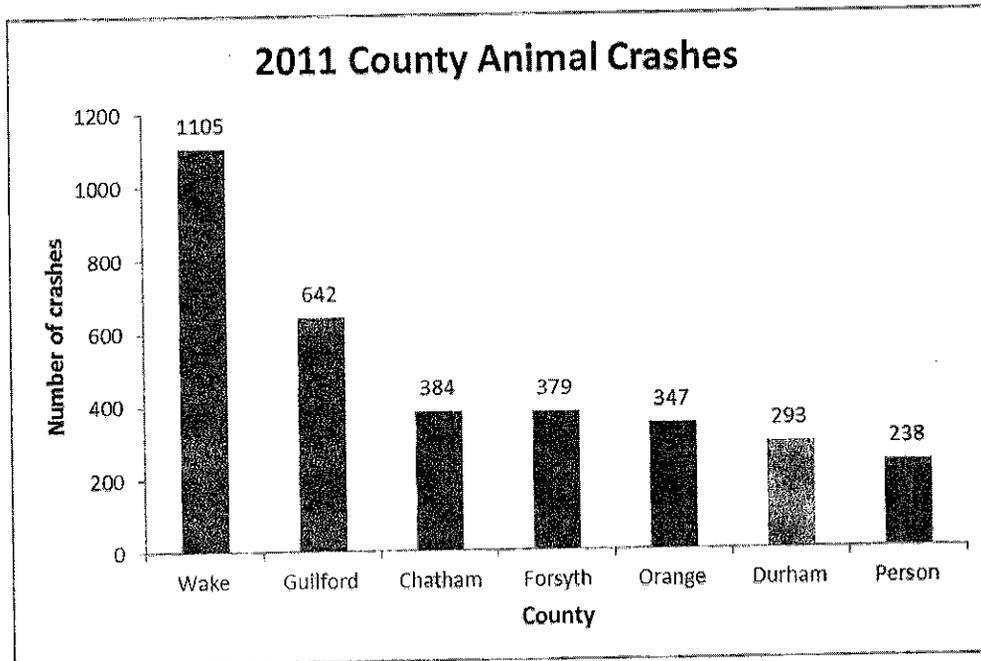
Lyme Disease. Though the incidence of Lyme disease which is spread by deer ticks is relatively small in North Carolina, data from 2006 (the most recently available) indicates that Durham ranks 5th in the state in number of cases.³

Vehicle Crashes. According to the NC Department of Transportation (DOT), Durham County experienced 293 total animal related collisions in 2011.⁴ Though the DOT does not distinguish collisions by animal type, they state that approximately 90% of all reported animal related collisions involve deer.

² Source: <http://www.ncagr.gov/stats/environmental/2009WildlifeBrochure.pdf>

³ Source: CDC Lyme Disease Data (<http://www.cdc.gov/lyme/stats/index.html>)

⁴ Source: NC DOT (<https://connect.ncdot.gov/resources/safety/Pages/Crash-Data.aspx>)



Controlled hunting is the most cost effective and efficient method for controlling the deer population. Archery in particular has the advantage of being a relatively silent and discreet activity. Furthermore, the limited shooting range for archery equipment, coupled with the tendency of archers to hunt from tree stands (which ensures a backdrop for shots), makes archery hunting a safer and less disruptive removal technique than firearm hunting.

The main disadvantage to archery hunting is that it has a lower success rate than firearm hunting, making it a less effective tool for reducing deer density. Furthermore, evaluating the exact effectiveness of bow and arrow hunting requires onsite surveys, which are costly and time consuming.

The NC Wildlife Resources Commission is responsible for regulating and enforcing both the archery only season and the UAP. The Commission's provisions are the same for both seasons. These provisions cover:

- Days and hours in which hunting is allowed
- Retrieving taken deer
- Lawful bows and arrows
- Using dogs during the hunt
- Using artificial light during the hunt
- Lawful hunting apparel
- Sale of taken animals or their parts
- Hunting on private property

Should Durham decide to permit archery in City limits, the NCWRC will be responsible for all enforcement associated with bow hunting and will bear the financial cost of doing so. However, the City of Durham would be responsible for enforcing and funding any additional regulations it places on deer hunting. The Committee recommends placing two additional regulations on bow hunting to increase safety.

1. *Elevated Platforms.* Requiring bow hunters to hunt from an elevated platform of at least 10 feet helps to reduce the likelihood of stray arrows.
2. *Minimum Acreage.* Imposing a minimum acreage requirement limits bow hunting to only those private parcels that exceed a given size. This requirement keeps neighborhoods with smaller parcels of land free from hunting activity. An acreage requirement of at least 2 acres is recommended.

Alternatives

The Deer Management Committee also discussed other options to manage deer, including:

- Habitat modification
- Bans on deer feeding
- Repellents
- Supplemental feeding
- Fencing
- Trap and translocation
- Sharpshooting
- Trap and euthanasia

However, research indicates that no alternative method has proven to be as effective or cost efficient as hunting.

Financial Impact

The impact of permitting hunting during the State's central region deer season is likely to be minimal because the State's Wildlife Resources Commission bears responsibility for all enforcement. The City of Durham's only costs associated with participation in the archery season are the costs to enforce any additional regulations it chooses to impose, as well as staff time for answering citizen questions.

Attachments

North Carolina Wildlife Resources Commission's hunting regulations and information.

Draft Hunting Ordinance for City of Durham

Peer City Hunting Ordinances

Deer Management Committee Meeting Notes