

8. WILDLIFE MANAGEMENT

Board of Supervisors Environmental Vision:

“Actively manage urban ecological stressors such as overabundant white-tailed deer, non-native invasive vegetation, forest pests, urban stormwater flows, soil compaction and erosion, and others.”

INTRODUCTION

The [Fairfax County Sustainability Initiatives](#)¹ document provides good context about the need for active management of the county’s ecological resources:

“Until a few decades ago, land management consisted of benign neglect, with areas left alone under the assumption that they were self-sustaining. Land management professionals now understand that there are tremendous pressures on remaining natural areas, that their conditions are declining, and that active management is necessary to restore their health.

Today, natural resources are considered natural capital... Natural capital is not self-sustaining; instead, deliberate care and investment are required to enhance, protect and preserve it.”

As with other natural capital, such as land, water, and vegetation, wildlife must also be actively managed to varying degrees to achieve and maintain sustainable population levels within a suburban landscape, which generally presents less suitable habitat that is more fragmented, has fewer natural predators for certain species, and has increased chances of negative human-wildlife interactions. Within the county, the two species that present the most significant challenges to attaining this sustainable balance are white-tailed deer and Canada geese, with uncontrolled deer populations by far posing the greatest risk. While both species are native to our region, the anthropogenic changes within a suburban landscape like Fairfax County result in a situation where each has the potential to cause significant negative impacts on the county’s ecological resources and negatively impact public health and safety as well.

The Fairfax County Park Authority (FCPA) has a progressive, stepwise [Wildlife Conflict Policy \(Policy 202\)](#) used to guide actions in addressing human-wildlife conflicts. EQAC commends the Fairfax County Police Department (FCPD) for continuing to fund and staff the [Deer Management Program](#) and the [Canada Geese Management Program](#). While both programs are equally as important to achieving the Board of Supervisor’s (Board) Environmental Vision, this year’s Wildlife chapter will focus on the needs of the Deer Management Program.

¹ All hyperlinks were accessed/reviewed on August 8, 2024 unless indicated otherwise.

CURRENT STATUS AND CONCERNS

Animal Services Consolidation Proposal

As part of a Board of Supervisors FY2025 budget proposal the Department of Animal Sheltering (DAS) and the Fairfax County Police Department (FCPD) proposed to unite animal care and control functions under DAS. In a March 26, 2024 memo from EQAC to the Board, EQAC was not supportive of this proposal stating that the proposal threatened the county's excellent wildlife services team, as the public outreach conducted by staff did not provide a clear vision of how the wildlife management program would remain unimpacted in relation to this proposed restructure.²

On May 7, 2024, the Board adopted the FY25 Budget with the Animal Service Consolidation plan included. While the Board agreed with the [staff proposal to consolidate animal control services into the Department of Animal Sheltering \(DAS\)](#), they also acknowledged the concerns from the public and staff regarding how this new model would impact service delivery. Given the concerns voiced by residents, the Board requested additional clarification from staff on how this consolidation will be operationalized and a clear timeline of implementation strategies needed to provide further transparency. Furthermore, staff is directed to return to the Board as part of a Safety and Security Committee meeting to provide additional details regarding the roles of DAS staff and police officers under this new structure and any changes to the philosophical approach to wildlife and other services.

EQAC supports the request made by the Board. As part of this effort, EQAC recommends staff conduct a comprehensive analysis on the potential impacts and benefits on wildlife via this new model. This information should be shared with community stakeholders and Fairfax County residents through a robust outreach campaign to solicit public comments. This analysis with public comment should be captured in a report and presented to the Safety and Security Committee meeting to discuss how the new model accomplishes the position of staff claiming the new model supports One Fairfax, results in better outcomes for wildlife in the county, maintains safety for residents, reduces the budget, and provides greater efficiency.

White-tailed Deer Management

The high population of white-tailed deer in Fairfax County adversely affects public safety, public health, and the ecological sustainability of the county's natural resources. Increased habitat modification, loss of natural habitat, reduced hunting pressures, and a loss of natural large predators contribute to this problem. The road to an acceptable deer management solution, however, is not so easily determined. Some of the factors essential to a solution are subject to strenuous debate and attract a wide spectrum of opinion, such as determining the optimum "cultural carrying capacity" (the number of deer a region can support while avoiding unacceptable levels of human-wildlife conflict) and means to control populations, when needed. The sport hunting community, recreational nature lovers, residential property owners, wildlife biologists/managers, environmental preservationists, and animal rights/welfare groups have widely differing

² [Memo](#) from Larry Zaragoza, EQAC Chair, to Fairfax County Board of Supervisors, March 26, 2004.

viewpoints on these issues. However, most residents recognize the need to act due to the numerous and severe impacts of overabundant deer.

The Board is ultimately responsible for determining the county's policy on deer management and should work with staff and stakeholders to create and implement a safe, effective, and humane deer management program. The county's Deer Management Program is only operated in a small subset of FCPA properties, select parks and other open spaces. Given that deer management only occurs on a small portion of the total acreage within the county, it is acknowledged that the coordination of hunting on both public and private lands will be necessary to effectively reduce overall deer densities to more sustainable levels and to minimize instances of negative human-deer interactions.

Data Collection to Strengthen the Program

EQAC encourages the FCPA and FCPD to continue to collect and integrate data into discussions about wildlife management. While estimates of population sizes and goals for deer reduction may be challenging to define, both the magnitude of the problem being addressed, and the effectiveness of the applied solutions can be better understood and communicated with data. Being able to present a strong base of information will be a benefit in bringing along stakeholders in the effort to grow various management programs, both in staffing and funding. Data will be a key component in supporting any proposed recommendations to strengthen its current Deer Management Plan or a Comprehensive Wildlife Management Plan program.

The Deer Management Program currently includes multiple different strategies to assess and manage Fairfax County's current population of white-tailed deer. Harvest counts from the archery program is just one method of data collection. Deer browse surveys is a method used in assessing deer management within park properties, but has been utilized to evaluate level of impact from over population of deer not in assessing deer population. Deer Density Camera Surveys is another method that has been utilized by staff to assess deer populations within the county. However, the camera survey method, which utilizes bait, is no longer permitted due to the county being added to a Chronic Wasting Disease (CWD) Management Area 2 (DMA2) by the Department of Wildlife Resources (DWR). [More information on the positive identification and Chronic Wasting Disease can be found on the county's website.](#) With diminished opportunity of current methods of data collection, staff must be able to utilize other methods of data collection such as drone surveys such as is being done in Montgomery County, Maryland and [Arlington County, Virginia](#). Staff report that research on preliminary estimates for drone surveys indicate a minimum of \$10,000 as a baseline cost (includes equipment, labor, authorizations, data collection, analysis, and reporting) and cost would increase as more parks are included. EQAC recommends that consistent, dedicated funding be allocated to the wildlife biologist program to support alternative survey methods such as drone surveys to establish humane methods of data collection that will be a key component in supporting any proposed recommendations to an updated Deer Management Plan or Comprehensive Wildlife Management Plan.

County Zoning Ordinance update to provide processing

With the inclusion of Fairfax County within the CWD DMA2, restrictions on transporting deer carcasses, in particular brain and spinal cord parts, outside of the CWD management area present a new challenge for participants in the program. For residents of Fairfax County participating in the deer management program, this presents an issue of finding local meat processing establishments that are willing to process deer. During FY 2024, the Wildlife Management Specialist contacted the county's Zoning Administration Division and requested an interpretation to determine how deer processing (either commercial or non-profit) affiliated with the Deer Management Program could be permitted, or [where it could take place](#)³. This type of operation had been considered a heavy industrial, production or processing use, but following changes to the zoning ordinance in 2023, it would now be most similar to small scale production. Additionally, it could also potentially be considered a public use if it was a function of the Deer Management Program. However, a formal determination would need to be made based on a detailed business proposal and would likely require a 2232 application to establish a new public use on County owned property.

Proactive Public Education and Outreach

County staff has established education material to inform county residents of concerns regarding the impacts of over-populated deer populations and the Deer Management Program. However, due to resource limitations of dedicated staff, the sharing of that information is limited to individuals who are seeking that information instead of utilizing an outreach approach. There is an opportunity to increase this outreach to focus on all areas of the county, including areas with less access to natural resources.

The archery program is the largest contributor to managing the deer population in Fairfax County, accounting for approximately 91% of the total deer harvested in FY 2024 as shown in Figure 8-1.

Fairfax County Deer Management Program Harvest by Strategy

³ Once on this site, you will need to select the *Record Info* tab and then select *Attachments* in the drop-down menu to view the dialogue/documents submitted on the matter.

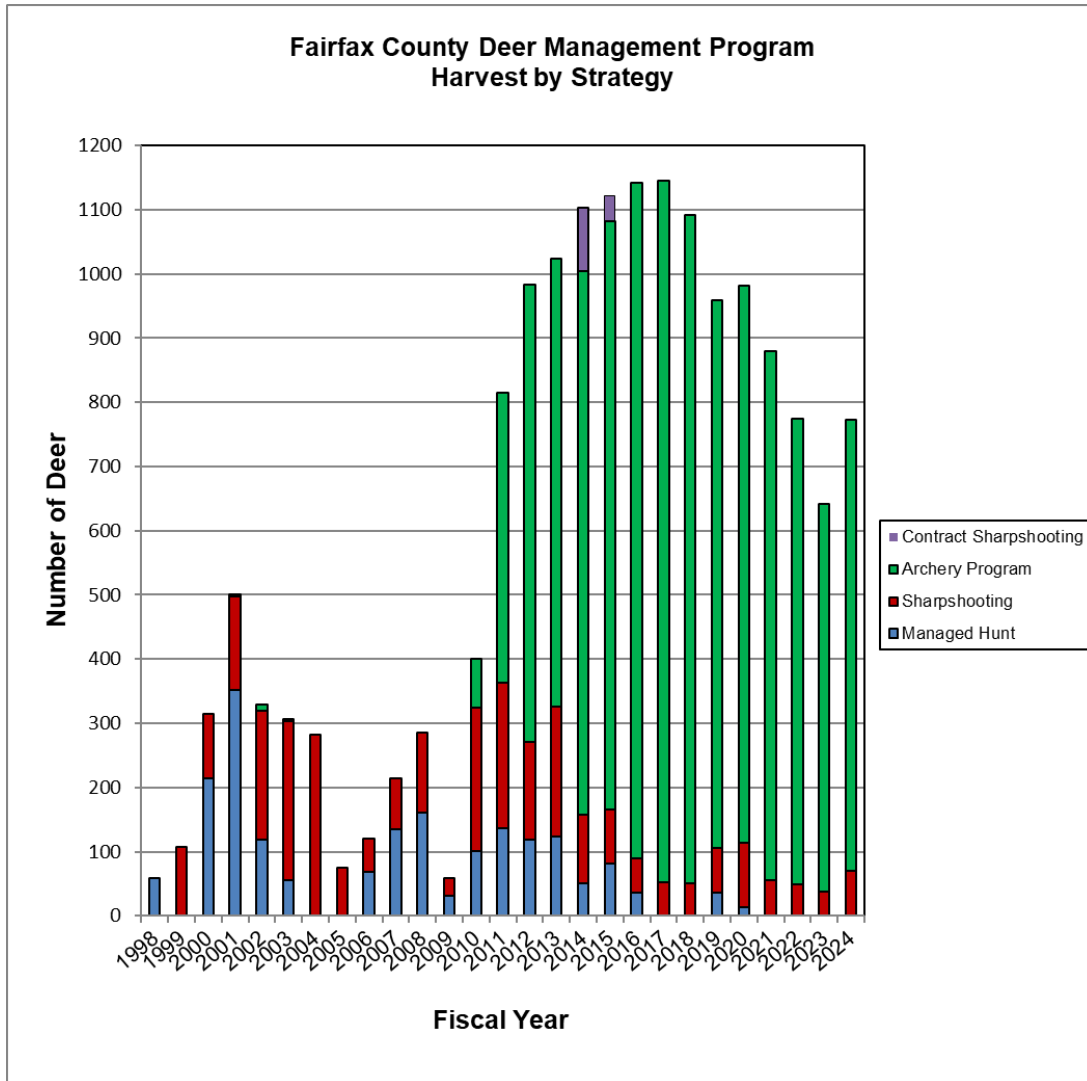


Figure 8-1: Fairfax County Deer Management Program Harvest by Strategy

Source: Dr. Katherine Edwards, Fairfax County Wildlife Biologist, June 2024

Figure 8-1. Shows the number of deer harvested for each County strategy from 1998 through 2024 ranging from 60 deer in 1998 to 773 deer in 2024, with a maximum of 1,145 deer in 2017. The archery program was introduced in 2010 which made a significant impact on the total deer harvested per year nearly doubling the number of deer harvested in its second year of implementation and now accounting for approximately 91% of the total harvest numbers (703 of 773 deer harvested in 2024).

The success of the program relies on the willingness of qualified volunteers to participate. In the Summary Data of Archery Program Per Fiscal Year From 2015-2024 (Table 8-1), 518 volunteers participated in the program in FY 2024, contributing 34,178 hours.

	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Total Volunteers	568	594	627	588	578	596	605	545	521	518
Total Volunteer Hours	31,329	37,071	44,881	43,688	42,735	40,105	47,413	37,778	32,832	34,178
Average Hours Per Volunteer	55	62	71	74	74	67	78	69	63	66
Deer Harvested	916	1,052	1,092	1,041	854	868	823	726	604	703
Percent Female Deer Harvested	75%	71%	65%	65%	68%	64%	64%	58%	59%	54%
Average Hours Per Deer	34	29	41	38	45	42	50	45	47	42
Total Archery Clusters	24	22	18	18	18	18	18	18	18	18
Total Parks	56	81	97	98	99	102	104	103	111	113
Total Acres	13,680	16,084	19,125	19,359	19,385	19,931	21,013	21,236	21,528	21,569
Deer per mi ² Harvest	43	42	37	34	28	28	25	22	18	21

Table 8-1. Summary Data of Archery Program Per Fiscal Year From 2015-2024

Source: Dr. Katherine Edwards, Fairfax County Wildlife Biologist, May 2024

For the program to remain successful, it must continue to encourage volunteers to participate and offer programs that can educate experienced and novice hunters on best management practices to harvest deer populations safely and humanely. County wildlife staff, who operate the Deer Management Program, have hosted classes for deer processing (field to table) and International Bowhunter Education Program (IBEP) courses. These events are not advertised for the public due to staffing constraints but have only been offered for members of the Deer Management Program and individuals who have contacted staff with interest in joining the county program. EQAC recommends that the wildlife program be funded for an additional position to support public outreach. This position would not only support the deer management program, but the entire wildlife program with creation of outreach materials (brochures, info cards), community presentations, exhibit booths at outreach events, handling media inquiries with FCPD’s Public Affairs Bureau and Office of Public Affairs, social media, etc.

Wildlife Borne Diseases of Concern in Fairfax County

There are a number of zoonotic diseases (those in which wildlife serves as a reservoir) that affect humans. Four such diseases of greatest concern in Fairfax County are West Nile virus, Lyme disease, rabies, and the complex of diseases caused by fecal coliform bacteria. The causative agents, modes of transmission, and means of prevention are briefly discussed below. This year’s chapter will focus solely on Lyme Disease, but for more information on this and other wildlife diseases, visit the [Fairfax County website](#).

Tick-Borne Illnesses

Lyme disease, transmitted via the bite of an infected *Ixodes scapularis* (commonly known as a deer tick or blacklegged tick) is the most commonly reported vector-borne disease in Fairfax County. However, there are several other tick-borne illnesses to be aware of as well, such as Rocky Mountain Spotted Fever and Ehrlichiosis, both

transmitted via an infected *Amblyomma americanum* (commonly known as a lone star tick). The most current information regarding tick-borne illnesses and the tick species that carry them can be found online [here](#).

There are preventative measures that can be taken to reduce the risk of tick-borne illnesses:

- The same repellents recommended for mosquitoes are also highly effective for ticks. See the insect repellent guidance in the [Choose the Right Repellent section](#) on Fairfax County's website.
- When engaged in activities that might result in exposure to ticks, proper clothing is a must, preferably long pants tucked into boot tops or spraying the lower legs, trouser bottoms, and sock tops with insect repellent, since most ticks are encountered close to the ground.
- Do a full-body tick check after returning from potentially tick-infested areas and shower. Use a hand-held or full-length mirror or have someone help you check parts of your body that are hard to see.

According to TickCheck.com which receives data from the Center for Disease Control and Prevention, reported cases of Lyme disease in Fairfax County have gradually decreased in recent years, from an average of 196 cases in the five-year period from 2011 – 2015 to an average of 139 cases over the five-year period from 2016 – 2020.

Figure 8-2 is a graph of reported Lyme disease cases in Fairfax County for the period of 2000 to 2020. Due to the COVID pandemic, there is no additional data available for subsequent years posted.

Reported Cases of Lyme Disease in Fairfax County from 2000 to 2022

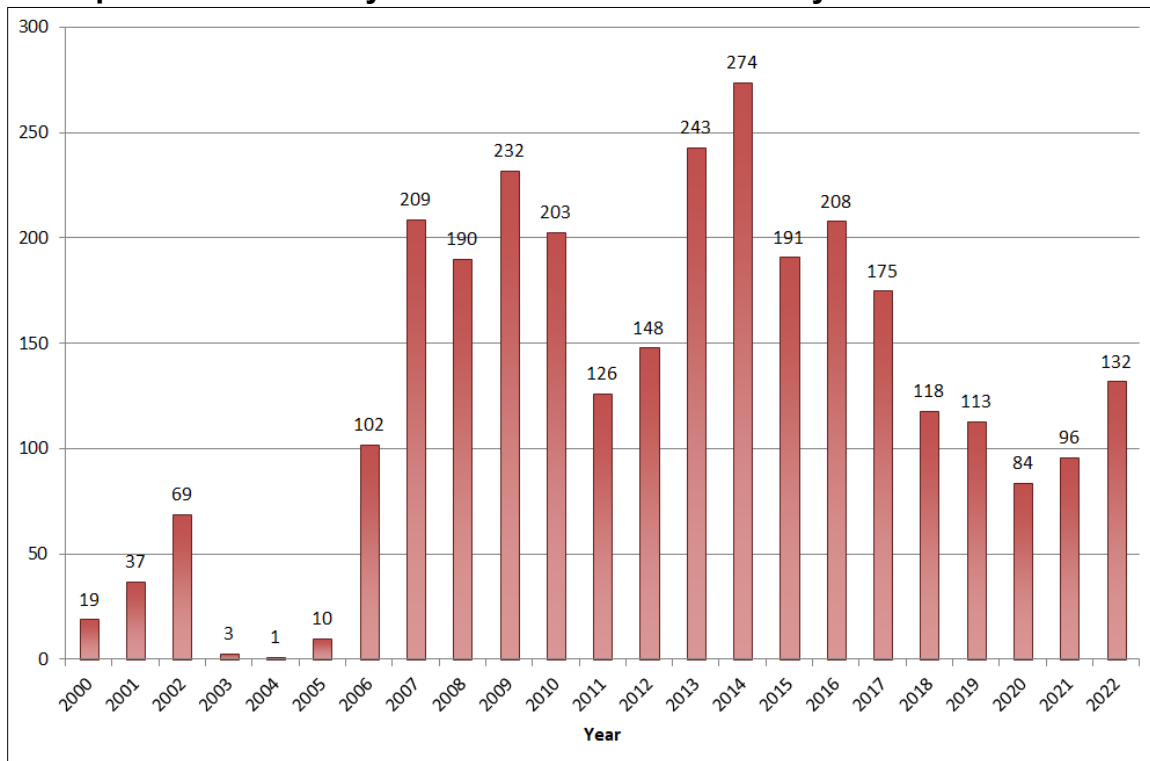


Figure 8-2: Reported Cases of Lyme Disease in Fairfax County from 2000 to 2022

Data Source: CDC.

Figure 8-2. Shows the number of reported cases of Lyme disease in Fairfax County from 2000 through 2020 ranging from 19 cases in 2000 generally trending to a peak of 274 cases in 2014 trending down to 84 cases in 2020. Due to the COVID pandemic, there is no additional data available for Fairfax County for subsequent years posted.

RECOMMENDATIONS

The Scorecard for this ARE contains the following recommendations pertaining to this chapter. Please see the Scorecard for details.

1. Expand survey methods for deer population data collection.

Recommendation: 8WIL-2023.1 | Status: 2nd year

2. Add funding for a position in the wildlife biologist program to focus on expanding public outreach and education, for not just the county's deer management program, but for the entire wildlife program.

Recommendation: 8WIL-2023.2 | Status: 2nd year

3. Conduct a comprehensive analysis on the potential impacts and benefits of the new model as well as robust outreach campaign to solicit comments from Fairfax County residents and other stakeholders. This analysis with public comment should be captured in a report and presented to the Board to demonstrate how the new model supports One Fairfax, results in better

outcomes for wildlife in the county, maintains safety for residents, reduces the budget, and provides greater efficiency.

Recommendation: 8WIL-2024.1 | Status: New this year

This prior recommendation has been completed.

Make changes to zoning codes to grant exceptions for deer processing operations in Fairfax County to minimize impacts on participation in the deer management program.

Recommendation: 8WIL-2023.3