## 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."

[Excerpt from the vision statement for the Parks and Ecological Resources core service area.]

## **INTRODUCTION**

The Fairfax County Sustainability Initiatives<sup>2</sup> 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<sup>3</sup>) 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

<sup>&</sup>lt;sup>1</sup> 2017 Fairfax County Environmental Vision, Section 2 E, pg. 24, www.fairfaxcounty.gov/environment/sites/environment/files/assets/documents/pdf/environmental-vision-2017.pdf

 <sup>&</sup>lt;sup>2</sup> 2017 Fairfax County Sustainability Initiatives, pg. 69, <a href="https://www.fairfaxcounty.gov/environment-energy-coordination/sites/environment-energy-coordination/files/assets/documents/pdf/fy-2020-sustainability-initiatives.pdf">https://www.fairfaxcounty.gov/environment-energy-coordination/files/assets/documents/pdf/fy-2020-sustainability-initiatives.pdf</a>
 <sup>3</sup> Fairfax County Park Authority Policy Manual
 <a href="https://www.fairfaxcounty.gov/parks/sites/parks/files/assets/documents/administrative/park-policy-manual.pdf">https://www.fairfaxcounty.gov/environment-energy-coordination/files/assets/documents/administrative/park-policy-manual.pdf</a>

Management Program<sup>4</sup> and the Canada Geese Management Program<sup>5</sup>.

## **CURRENT CONCERNS**

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

The Fairfax County Board of Supervisors 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 on FCPA properties, select parks and other open spaces. Given that these public lands constitute less than 20 percent 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**

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. As the county ultimately seeks to update its current Deer Management Plan or a Comprehensive Wildlife Management Plan, data will be a key component in supporting any proposed recommendations.

<sup>&</sup>lt;sup>4</sup> www.fairfaxcounty.gov/wildlife/deer-management-program. Accessed May 19, 2023.

<sup>&</sup>lt;sup>5</sup> www.fairfaxcounty.gov/wildlife/geese-management-program. Accessed May 19, 2023.

The Deer Management Program includes multiple different strategies to assess the current population of whitetail deer in Fairfax County and to manage deer populations. Harvest counts from the archery program is just one method of data collection. Deer Density Camera Surveys is another method utilized by staff to assess deer populations within the County. However, the camera survey method utilizes techniques that will not be permitted in future fiscal years due to the County being added to a Chronic Wasting Disease Management Area 2 (DMA2) by the DWR beginning in the 2023-2024 deer hunting season. More information on the positive identification and Chronic Wasting Disease can be found on the County's website<sup>6</sup>. With diminished opportunity of current methods of data collection, staff must be able to utilize other methods of data collection such as drone surveys like what is being done in Montgomery County, Maryland and Arlington County, Virginia<sup>7</sup>. EQAC supports the exploration of 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.

#### Public Outreach

County staff has established education material to inform County residents of concerns regarding the impacts of over-populated deer populations and Deer Management Program. However, due to resource limitations of dedicated staff, the sharing of that information is limited to individuals who are seeking for that information instead of utilizing an outreach approach. There is 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 94% of the total deer harvested in FY 2023 as shown in Figure VIII-1. 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 2015-2023, 521 volunteers participated in the program in FY 2023, contributing 32,832 hours, which is the lowest hunter effort since FY 2015. 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. EQAC supports the exploration of partnerships with state, federal, military, veteran, or sportsman agencies/organizations to determine opportunities for increasing hunter retention and recruitment and reaching underserved groups. This could include events such as novice deer hunter workshops, hunter skills workshops, field to fork initiatives, Women in the Outdoors, disabled veteran hunts, etc. Implementation of this recruitment strategy would align with the Countywide Strategic Plan through increasing opportunities for participation to a diverse population of residents.

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<sup>&</sup>lt;sup>6</sup> <u>https://www.fairfaxcounty.gov/health/chronic-wasting-disease-confirmed-white-tailed-deer-fairfax-county.</u> Accessed May 30, 2023.

<sup>&</sup>lt;sup>7</sup> https://www.insidenova.com/headlines/drones-flying-over-arlington-to-measure-deer-population/article\_3d64ce5a-90f3-11eb-86d9-c75323892a60.html. Accessed May 30, 2023

## **RECOMMENDATIONS**

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

- 1. Recommendation: 8PER-2023.1 Expand Survey Methods for Deer Population Data Collection
- 2.Recommendation: 8PER-2023.2 Expand Public Outreach and Education for the County's Deer Management Program through Partnerships and Offer More Equitable Opportunities for Participation

## **REFERENCES**

• Fairfax County Police Department: Emails and data from Katherine Edwards, Fairfax County Wildlife Management Specialist, Ph.D., Certified Wildlife Biologist®, May 2023.

# SCORECARD ELEMENTS

Wildlife Management Two Recommendations in 2023		Comments
1 Recommendation: 8PER-2023.1(NEW)		New in 2023
humane methods of data collection that w	lation Data Collection tive survey methods such as drone surveys to establish ill be a key component in supporting any proposed nagement Plan or Comprehensive Wildlife Management	NEW
2 Recommendation: 8PER-2023.2 (NEW)		New in 2023
through Partnerships and Offer More EQAC supports the exploration of partner agencies/organizations to determine oppo and reaching underserved groups. This co	Equitable Opportunities for Participation ships with state, federal, military, veteran, or sportsman runities for increasing hunter retention and recruitment uld include events such as novice deer hunter to fork initiatives, Women in the Outdoors, disabled	NEW

### **FIGURES**

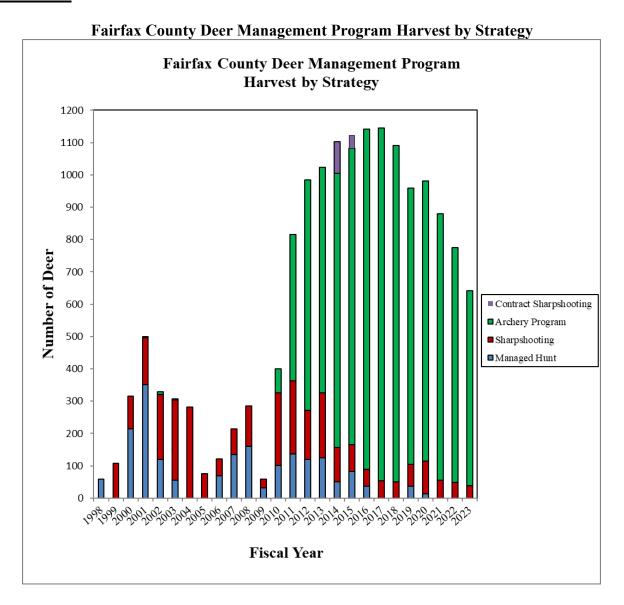


Figure VIII-1: Fairfax County Deer Management Program Harvest by Strategy Source: Dr. Katherine Edwards, Fairfax County Wildlife Biologist, May 2023

Figure VIII-1. Shows the number of deer harvested for each County strategy from 1998 through 2023 ranging from 60 deer in 1998 to 642 deer in 2023, 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 94% of the total harvest numbers (604 of 642 deer harvested in 2023).

# **TABLES**

Table VII-1. Summary Data of Archery Program Per Fiscal Year From 2015-2023

	2015	2016	2017	2018	2019	2020	2021	2022	2023
Total	568	594	627	588	578	596	605	545	521
Volunteers									
Total	31,32	37,07	44,881	43,688	42,735	40,105	47,413	37,778	32,832
Volunteer	9	1							
Hours									
Average	55	62	71	74	74	67	78	69	63
Hours Per									
Volunteer									
Deer	916	1,052	1,092	1,041	854	868	823	726	604
Harvested									
Percent	75%	71%	65%	65%	68%	64%	64%	58%	59%
Female									
Deer									
Harvested				• •					
Average	34	29	41	38	45	42	50	45	47
Hours Per									
Deer									
Total	24	22	18	18	18	18	18	18	18
Archery									
Clusters									
Total	56	81	97	98	99	102	104	103	111
Parks									
Total	13,68	16,08	19,125	19,359	19,385	19,931	21,013	21,236	21,528
Acres	0	4							
Deer per	43	42	37	34	28	28	25	22	18
miles									
squared									
harvest									

Source: Dr. Katherine Edwards, Fairfax County Wildlife Biologist, May 2023