FAIRFAX COUNTY DEER MANAGEMENT PROGRAM



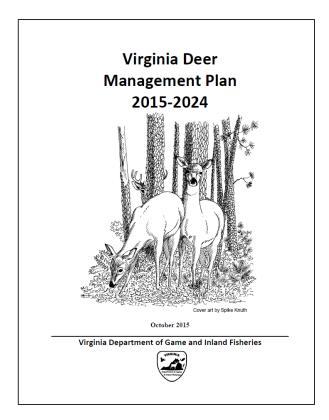
August 2023

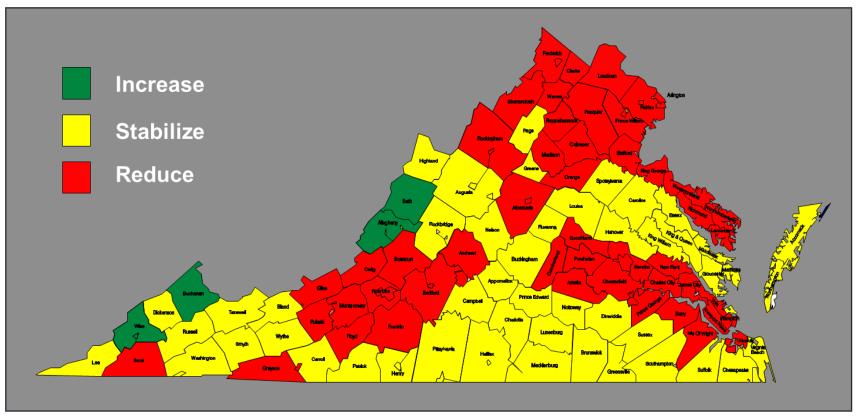
Katherine Edwards, Ph.D., Certified Wildlife Biologist® Wildlife Management Specialist Fairfax County Police Department, Animal Services Division

Sergeant Earit Powell, Animal Protection Police Fairfax County Police Department, Animal Services Division



Virginia Deer Management Plan (2015-2024) Deer Population Objectives





Population Goal: Manage local deer populations to balance the varied needs and reasonable expectations of a diverse human community (cultural carrying capacity), the requirements of a biologically diverse ecosystem, and the anticipated future social/ecosystem demands. Hunting is the preferred population management method, where appropriate and feasible.



Fairfax County Deer Management Program

- Approved by the Fairfax County Board of Supervisors in 1998
- Implemented by the Fairfax County Police Department in collaboration with the Fairfax County Park Authority, NOVA Parks, and other stakeholders
- Safety Concerns
- Health Concerns (public health and herd health)
- Ecological Damage



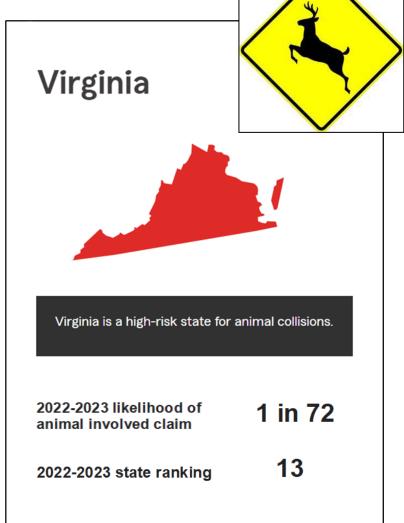






Deer-Vehicle Collisions







Wildlife and Public Health

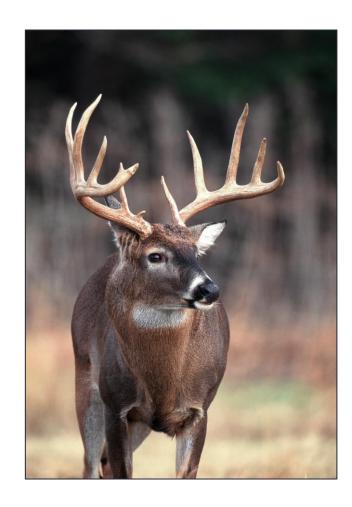
- Dense deer populations are inferred to be one of the principal factors in the increase of ticks in many urban environments leading to public concern over disease transmission.
- Adult ticks feed and mate primarily on deer but the deer themselves do not serve as a source of infection for the Lyme disease bacterium.
- The presence of deer has been correlated with tick populations to variable degrees and some studies have found that reduction of deer populations to very low thresholds may reduce tick abundance; however, the relationship between deer populations and incidence of Lyme disease remains unclear.

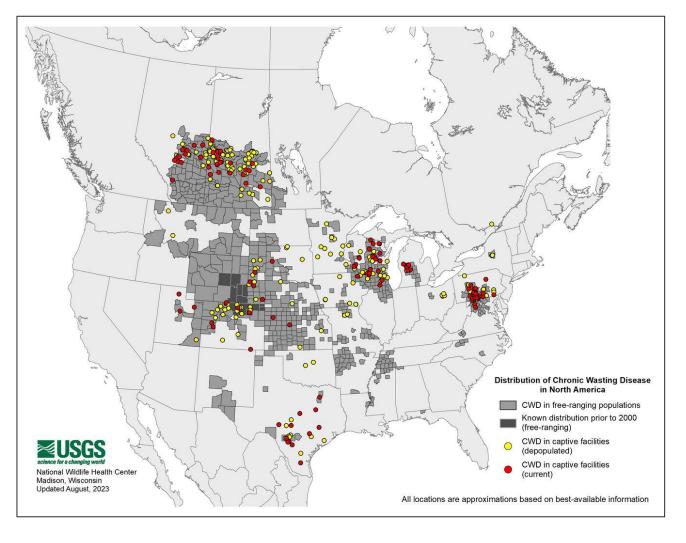






Deer Herd Health - Chronic Wasting Disease







Ecological Impacts

- 1. Consumption of seedlings and saplings hinders forest regeneration
- 2. Forest structure impaired, understory layers removed and overstory simplified
- 3. Forest composition changed for decades
- Loss of Ecosystem Services (clean water, clean air)
- 5. Loss of biodiversity





Fairfax County Deer Management Program

- Based on best practices for deer management, deer census data, environmental impact studies, and peer-reviewed scientific literature
- Utilization of current state-approved deer population control tools:
 - Archery
 - Firearms managed hunts
 - Sharpshooting
- Utilization of currently available deer management tools:
 - Humane Exclusion, Repellency and Habitat Modification
- Collaboration with Private & Public Property Owners



- Operated on public lands Over 100 parks and county properties in the program (>80% of county parkland)
- Upcoming FY 2024 Program Dates:
 September 9, 2023 February 17, 2024
- Hunting is allowed Monday through Saturday (no Sunday hunting in parks)
- Legal hunting hours: 30 minutes prior to sunrise <u>until</u>
 30 minutes past sunset
- Parks remain fully open to the public
- Zero safety incidents since program's inception



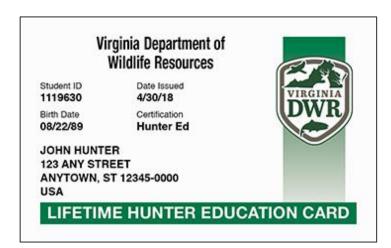


- Archers must pass a criminal background check
- Disqualifying convictions include, but are not limited to
 - Any type of child exploitation violation
 - Domestic violence
 - Weapons charges
 - Game violations
 - Animal cruelty
 - Any felony

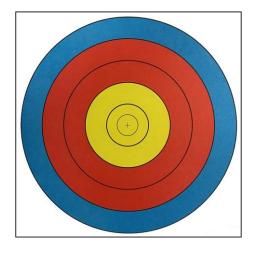




- All participants must comply with state regulations including game licensing and Hunter Safety Education as mandated by the Virginia Department of Wildlife Resources
- Must complete course through the International Bowhunter Education Program
- Must pass archery qualifications with their bow at specified ranges to be eligible









- Archers will harvest deer only in their assigned park(s)
- Responsible for regular communication between archery group members, group leaders, and the Deer Program Manager with Fairfax County Police
- Reporting required:
 - Date, address, hunt times, deer observed, number of shots taken and retrieved, number of deer shot and retrieved, sex & age of deer
 - Data entered into electronic database within 24 hours of each hunt
- Incident Report filed for non-retrieved deer, lost archery tackle, poaching, hunter injury, theft or damage to equipment, hunter harassment or any deviation to protocol



- ALL archery conducted from tree stands:
 - Hang on, climbers, saddles, tripods, and ladder stands are permitted
 - Elevated position
 - Ground used as backdrop
 - Shots taken at motionless target
- Stands are permitted no closer than:
 - 100 feet from park property line
 - 50 feet from park trails
- Ground blinds <u>are not permitted</u>.
- Archers <u>may not</u> enter private property without permission by the owner or tenant.





- Operates under a Deer Population Control Permit (DPOP).
- Earn-A-Buck (EAB) is in effect per DWR Regulations. During a license year, it shall be unlawful to take a second antlered deer in Fairfax County prior to taking at least one antlerless deer in Fairfax County, and it shall be unlawful to take a third antlered deer in Fairfax County prior to taking at least two antlerless deer in Fairfax County.
- Must notch a deer tag (DPOP or Personal Tag) before moving the deer.
- Personal tags will be used for antlered bucks.
- Archers must check their deer and get a DWR confirmation number.
- Deer must be moved from public view before field dressing.
- Archers must cover harvested deer completely while transporting.



When on-site:

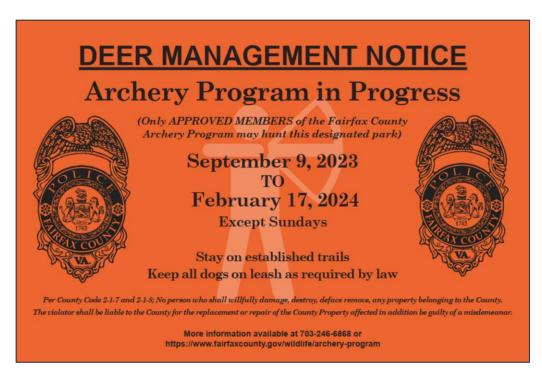
- Archery Program ID
 - Each hunter is issued a unique ID # and lanyard
 - Must be worn on the outside of clothing while:
 - Entering and exiting the park
 - During any scouting, tracking, set-up or take down activities
 - This ID number must be visible on equipment:
 - All arrows
 - Tree stands
 - Game/trail cameras
- Parking tag with ID number hung on rear-view mirror
- DPOP permit copy kept in glove box

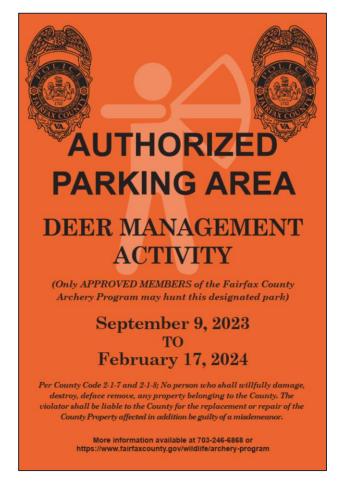












Archery program signs (left/center) are posted at park entrances and trailheads. Hunters can only park at authorized parking areas labeled with signs (right).



Fairfax County Deer Management Program – Managed Hunts

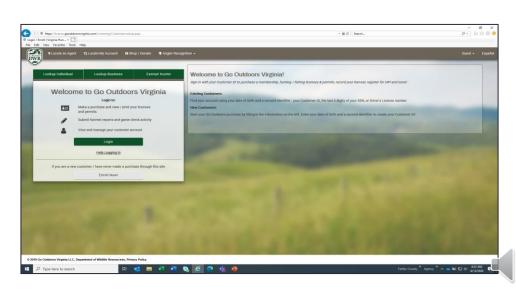
- Managed firearms hunt Qualifications and lottery system
- Area is secured by Fairfax County Police Department personnel
- Hunting is only permitted in designated hunt areas from elevated tree stands (Sully Woodlands - Appendix J area of County)
- Operated under a deer population control permit (DPOP)

All harvested deer must be taken to the designated check station for data

collection (weight, age, sex) and tagging







Fairfax County Deer Management Program - Sharpshooting

- Night-time operations conducted by Fairfax County Police Department
- Park is secured and operation is conducted when parks are closed to the public
- Shooting at static locations over bait from elevated position, such as a ladder stand or lift, using ground as natural backstop
- Thermal imaging and suppressed firearms
- Camera stations set up at each location to monitor deer
- Venison donated to local food banks, including Hunters for the Hungry







Fairfax County Deer Management Program Public Notification

- Notification letters mailed to property owners adjacent to approved park sites (>24,500 letters for FY 2024)
- Public information meetings/webinars
- HOA and Civic Association Meetings
- Press releases, county blogs (FCPD and OPA) and videos (Channel 16, Fairfax County YouTube)
- Fairfax County Deer Management website
- Deer Management Program signs



https://www.fairfaxcounty.gov/wildlife/deer-management-program



Deer Management Data Collection Deer-Vehicle Collisions

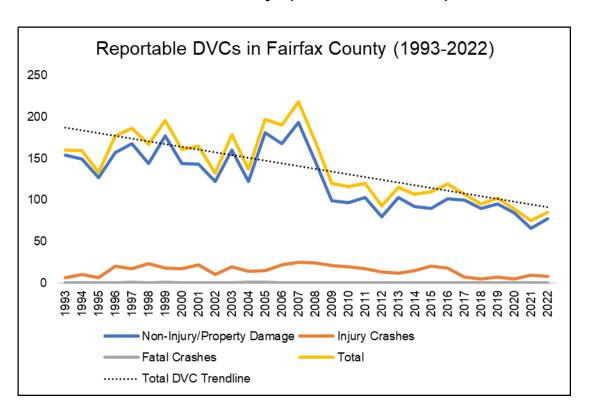
- Deer-vehicle collisions are the primary cause of deer deaths in suburban areas without other lethal control.
- Reportable crashes (TREDS)
 - Not all crashes are "reportable"
 - Includes crashes that result in injury, fatality, or property damage >\$1,500
- Insurance companies
 - Data not accessible to county staff
 - Statewide numbers are available to VDOT but insurance companies do not provide location data for crashes
- VDOT work orders for carcass pickup
- Not all collisions result in deer dying on or near the roadway some survive or may expire elsewhere



Deer Management Data Collection - Deer-Vehicle Collisions

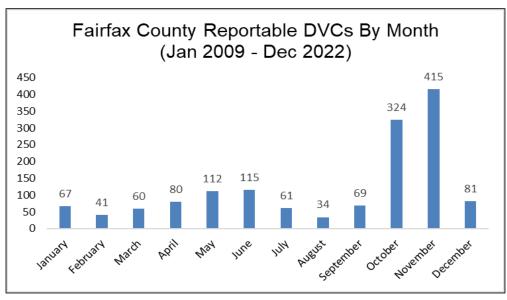
	Fairfax County Reportable Deer-Vehicle Collisions				
Year	Non-Injury/Property Damage	Injury Crashes	Fatal Crashes	Total	
1993	154	6	0	160	
1994	149	10	0	159	
1995	127	6	0	133	
1996	157	20	0	177	
1997	168	17	1	186	
1998	144	23	0	167	
1999	177	18	1	196	
2000	144	17	0	161	
2001	143	22	0	165	
2002	122	10	0	132	
2003	160	19	0	179	
2004	122	14	1	137	
2005	181	15	1	197	
2006	168	22	0	190	
2007	193	25	0	218	
2008	147	24	0	171	
2009	99	21	0	120	
2010	97	19	0	116	
2011	103	17	0	120	
2012	80	13	0	93	
2013	103	12	0	115	
2014	92	15	0	107	
2015	90	20	0	110	
2016	101	18	0	119	
2017	100	7	0	107	
2018	90	5	0	95	
2019	95	7	0	102	
2020	84	5	0	89	
2021	66	9	0	75	
2022	77	8	0	85	

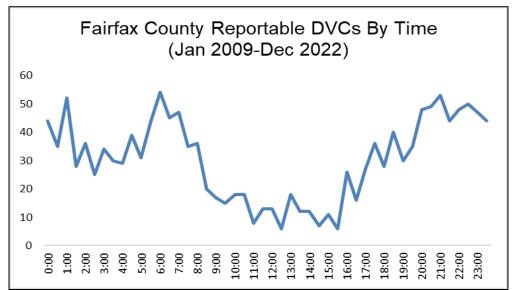
Reportable Deer-Vehicle Collisions Fairfax County (TREDS data)

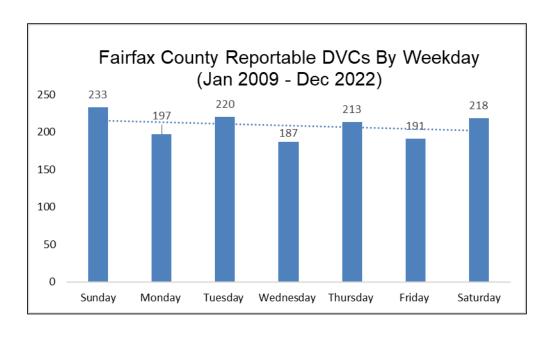




Deer-Vehicle Collision Trends





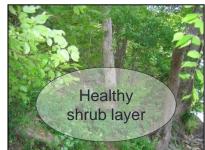


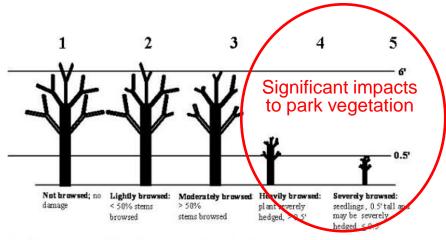
Reportable Deer-Vehicle Collisions Fairfax County (TREDS data)



Deer Management Data Collection - Browse Surveys







Seedlings > 0.5' provide best evidence of browsing damage. Under severe deer browsing, seedlings may never exceed 0.5' tall and will be severely hedged*: deer browsing keeps them suppressed below 0.5'. Small, current year seedlings may never grow above 0.5' under severe deer browsing.

* Severely hedged = seedling browsed repeatedly over years; all stems short, thick, with "bonsai" appearance.









Deer Management Data Collection - Camera Surveys

- Deer density surveys have been conducted annually in select parks using infrared-triggered cameras to estimate the number of deer visiting a bait station based on Jacobson et al. (1997).
- Recent changes related to the detection of Chronic Wasting Disease will affect monitoring efforts going forward. With CWD detected in the county, the use of bait for camera surveys is no longer permitted. Staff are investigating alternative methods to estimate deer population metrics.







Jacobson, H.A., J.C. Kroll, R.W. Browning, B.H. Koerth, and M.H. Conway. 1997. Infrared-triggered cameras for censusing white-tailed deer. Wildlife Society Bulletin 1997, 25(2):547-556.

Fairfax County Deer Management Program Summary Statistics (FY 2023)

	Archery Harvest						
Archery Program Locations	Doe	Button Buck	Antlered Buck	Antierless Buck	Total		
Accotink Stream Valley Cluster	19	1	5	0	25		
Bull Run Marina Cluster	5	0	2	0	7		
Bull Run Regional Park Cluster	15	3	8	0	26		
Clifton Cluster	10	3	7	0	20		
Colvin Run Cluster	18	2	13	0	33		
Cub Run Cluster	33	4	14	0	51		
Elklick Cluster	25	7	18	1	51		
Fairfax Station Cluster	6	1	4	0	11		
Fountainhead Cluster	4	1	3	0	8		
Great Falls Cluster	19	7	17	1	44		
Huntley Meadows Cluster	48	6	13	0	67		
Lake Accotink Cluster	13	1	6	0	20		
Laurel Hill Cluster	35	13	18	2	68		
Pohick Stream Valley Cluster	10	2	7	0	19		
Reston Cluster	33	5	18	0	56		
South Run Cluster	12	3	5	0	20		
Sugarland Cluster	31	3	11	1	46		
Vienna Cluster	19	5	8	0	32		
Sex Ratio & Yearly Total	355	67	177	5	604		

	Sharpshooting Harvest					
Sharpshooting Locations	Doe	Button Buck	Antlered Buck	Antlerless Buck	Total	
Bren Mar Park/Turkeycock Run Stream Valley	5	3	4	0	12	
Grove Point Park	3	2	3	0	8	
Frying Pan Farm Park	2	3	1	0	6	
Huntley Meadows Park	0	1	4	1	6	
Meadowlark Botanical Gardens	3	2	1	0	6	
Sex Ratio & Yearly Total	13	11	13	1	38	

FY23 Deer Management Program Harvest Total: 642 Deer

FY23 Non-Recovery Total: 8.29%



Fairfax County Deer Management Program Summary Statistics (FY 2023)

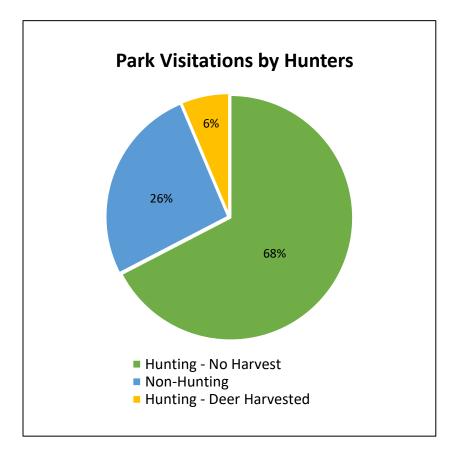
Harvest Method	Harvest	Percent Total Harvest
Archery	604	94.08%
Sharpshooting	38	5.92%
FY23 Total Program Harvest	642	100.00%

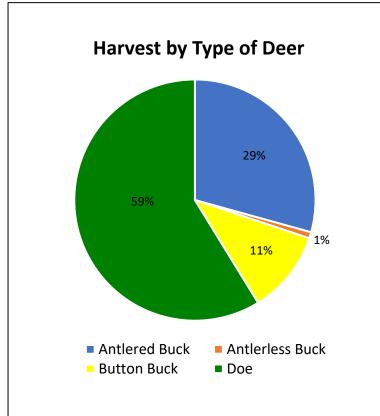
Sex Ratio Percentage by Harvest Method	Doe	Button Buck	Antlered Buck	Antierless Buck
Archery	58.77%	11.09%	29.30%	0.83%
Sharpshooting	34.21%	28.95%	34.21%	2.63%
Sex Ratio Percentage (Total Harvests)	57.32%	12.15%	29.60%	0.93%

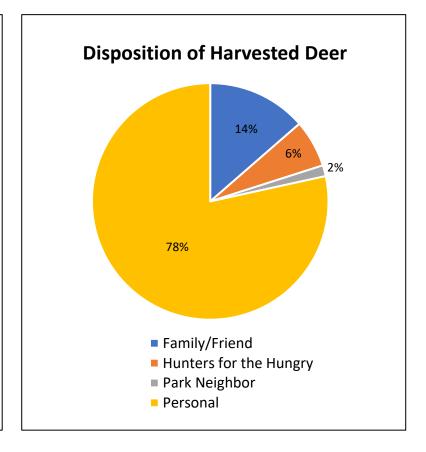
Antlerless vs. Antlered Deer Totals	Harvest		Total	Antlerless
Antieriess vs. Antiered Deer Totals	Antlerless	Antlered	Harvest	Percentage
Archery	427	177	604	70.70%
Sharpshooting	25	13	38	65.79%
Antlerless vs. Antlered (Total Harvests)	452	190	642	70.40%



Fairfax County Deer Management Program Summary Statistics (FY 2023)

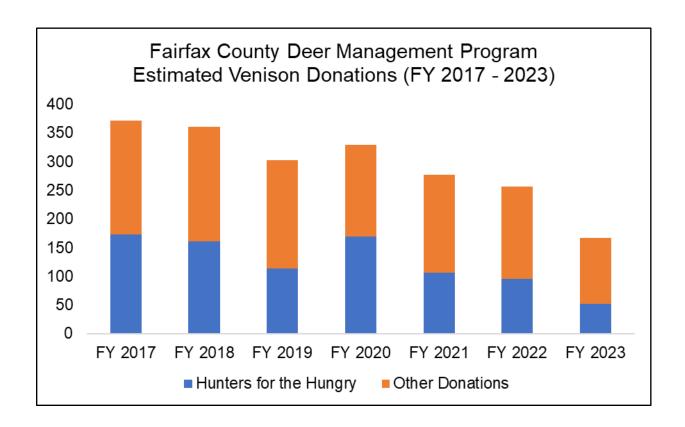








Fairfax County Deer Management Program Venison Donations (FY 2017-2023)



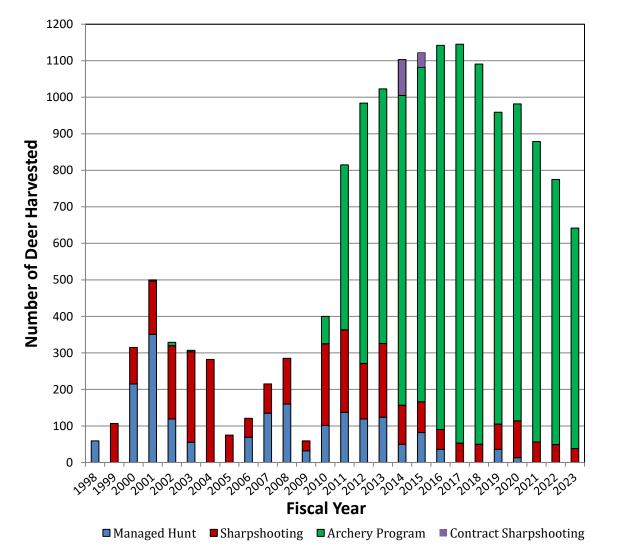
Fiscal Year	Deer Donated	Estimated Pounds of Venison Donated*
FY 2017	372	11,160
FY 2018	361	10,830
FY 2019	303	9,090
FY 2020	329	9,870
FY 2021	277	8,310
FY 2022	257	7,719
FY 2023	167	5,010

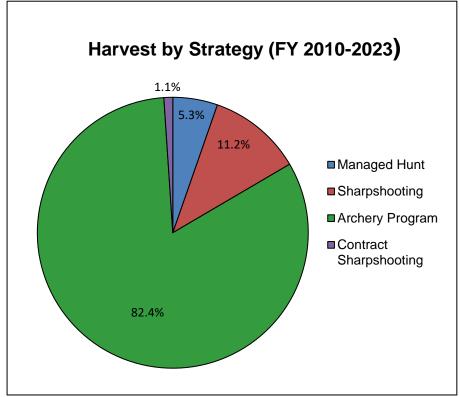
^{*}Conservative estimate based on 30 lbs. of venison per deer harvested

7-Year Total Deer Donations = 2,066 deer Estimated 61,989 lbs. of donated venison*



Fairfax County Deer Management Program Harvest Totals (FY 1998-2023)







Fairfax County Deer Management Program FY 2024 Program Changes

Archery Program Park Additions

Hunter Mill District: Old Courthouse Spring Branch Stream Valley and Raglan Road Park

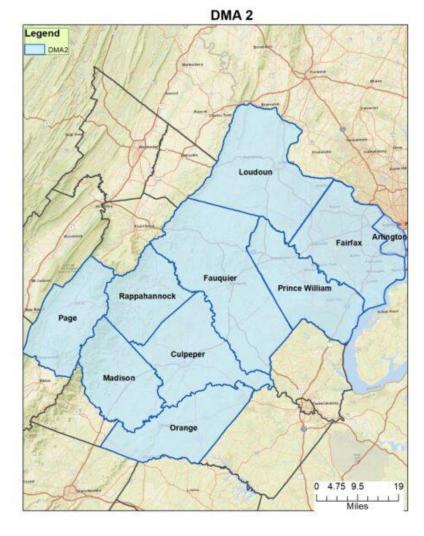
Managed Hunts: Managed shotgun hunts will not be conducted during FY 2024.

Sharpshooting Park Additions:

- Hunter Mill District: Fox Stone Park, Waverly Park, Lake Fairfax (Late Season)
- Dranesville District: Bull Neck Stream Valley, Spring Hill District Park, McLean Hunt Estates



- During the 2022-2023 deer hunting season, the DWR has confirmed CWD in an adult male deer legally harvested on private land in Vienna, Fairfax County.
- As a result of this detection, Fairfax County has been added to CWD Disease Management Area 2 (DMA2) by the Virginia Department of Wildlife Resources, which also includes Arlington, Culpeper, Fauquier, Loudoun, Madison, Orange, Page, Prince William, and Rappahannock Counties.
- Increased surveillance and regulatory changes implemented for the 2023-2024 deer season.

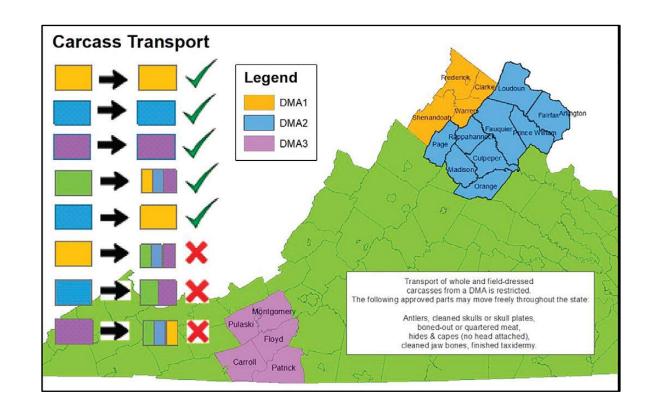


Deer Diseases and Parasites: https://www.fairfaxcounty.gov/wildlife/wildlife-diseases
FCPD Chronic Wasting Disease Video: https://www.youtube.com/watch?v=-SAXF6vuFJw



Carcass Transport Restrictions

- The movement of whole deer carcasses and certain carcass parts can spread CWD to new areas. As such, DWR has restricted deer carcass part movements from higherrisk areas to lower-risk areas.
- Whole deer carcasses and any parts containing brain and/or spinal cord tissues originating from Fairfax County may only be transported to locations within DMA1 and DMA2.





Year-Round Deer Feeding Ban

- Feeding of deer in Fairfax County is now prohibited year-round in accordance with state wildlife regulation (<u>4VAC15-40-285</u>. <u>Unauthorized feeding of cervids</u>.)
- Feeding of deer is prohibited in any county designated by the DWR within 25 miles of a confirmed detection of Chronic Wasting Disease.
- The feeding ban restricts the placement or distribution of any food, salt, mineral or similar substances for any purpose if the placement of these materials results in the attraction of and/or feeding of deer. This does not restrict bona fide agronomic plantings (including wildlife food plots), bona fide distribution of food to livestock or wildlife management activities conducted or authorized by the Virginia Department of Wildlife Resources. The feeding ban applies to both public lands and private properties within Fairfax County.



Fawn Rehabilitation Restrictions

 Due to the spread of Chronic Wasting Disease in Virginia, there are restrictions on fawn rehabilitation within areas designated for disease management by the Virginia Department of Wildlife Resources.



- Fairfax County is included in a CWD Disease Management Area (DMA2). The rehabilitation of deer fawns in Fairfax County is now prohibited in accordance with <u>4VAC15-90-294</u>. Rehabilitation <u>of cervids</u>. In addition, any deer fawns originating from Fairfax County may not be transported to or rehabilitated in any other locality.
- These measures are implemented to protect the health and welfare of the deer population since rehabilitation activities could unknowingly result in translocation and/or release of infected animals.

https://fcpdnews.wordpress.com/2023/04/20/deer-fawning-season-for-their-welfare-leave-them-alone/



Surveillance

- Staff are conducting sampling of white-tailed deer for CWD surveillance from hunter-harvested deer and sharpshooting operations.
- Staff were trained by personnel with the Virginia Department of Wildlife Resources (DWR) and follow state agency guidelines for the sampling of deer and testing for CWD.
- Medial retropharyngeal lymph node samples are collected from yearling and adult deer (no fawns tested).
- Samples are submitted to the Wisconsin Veterinary Diagnostics Laboratory for CWD testing.
- All results to date <u>on county parkland</u> have been "No CWD Prions Detected."
- All test results are reported to the DWR State Wildlife Veterinarian and Wildlife Health Coordinator.





Photo: Deer with Chronic Wasting Disease. Missouri Department of Conservation



Surveillance

FY 2020 (2019-2020 deer season)

99 deer sampled from 21 parks

FY 2021 (2020-2021 deer season)

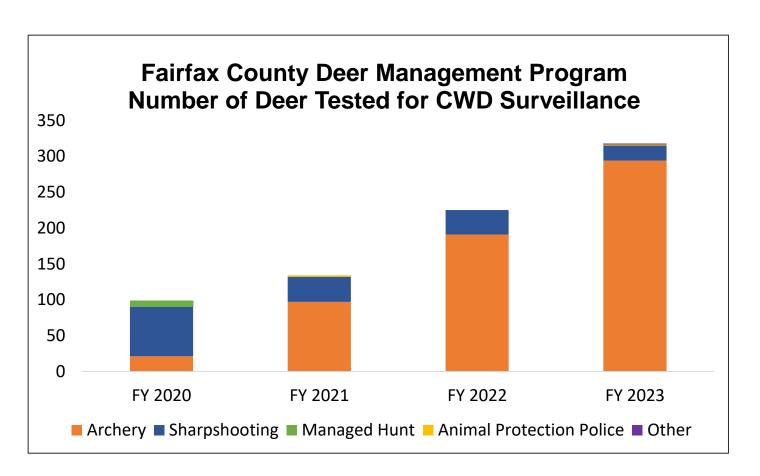
 132 deer sampled from 55 parks, plus 2 deer dispatched by Animal Protection Police

FY 2022 (2021-2022 deer season)

225 deer sampled from 72 parks

FY 2023 (2022-2023 deer season)

318 deer sampled from 82 parks





What Can Hunters Do to Help?

- Deer hunters play a critical role in our efforts to detect and limit the spread of Chronic Wasting Disease in Fairfax County.
- One of the most important things that hunters in CWD-affected areas can do is to submit their harvested deer for testing.
- Testing deer helps wildlife officials monitor the spread of CWD and helps to inform hunters so they can determine if they want to consume the meat they harvest.
- Know and follow the local CWD guidelines where you are hunting and transporting deer, and best management practices for handling, processing, and disposing of harvested deer.

https://dwr.virginia.gov/wildlife/diseases/cwd/cwd-information-for-hunters/



- According to the CDC, to date, there have been no reported cases of CWD infection in people.
- However, some animal studies suggest CWD poses a risk to certain types of non-human primates, which raises concerns that there may also be a risk to people.
- If CWD could spread to people, it would most likely be through eating infected deer and elk.
- In areas where CWD is known to be present, the CDC recommends that hunters strongly consider having those animals tested before eating the meat. If an animal tests positive for CWD, do not eat meat from that animal.
- Tests for CWD are diagnostic screening tools and are not food safety tests intended to certify a
 deer as "safe for consumption." Test results will be either "positive" or "no prions detected."
- According to the CDC, a "no prions detected" test result does not guarantee that an individual animal is not infected with CWD, but it does make it considerably less likely and may reduce risk of exposure.

https://www.cdc.gov/prions/cwd/index.html
https://dwr.virginia.gov/wildlife/diseases/cwd/human-health/



What Can the Public Do to Help?

- **Do not feed deer**. Although it is often well-intentioned, feeding of deer in Fairfax County is illegal and can harm deer by facilitating the spread of CWD. Feed and bait piles, including mineral licks, congregate deer which facilitates disease transmission through direct contact between animals and exposure to contaminated soil and vegetation.
- Report sick deer. If a deer is seen that is showing neurologic signs and extreme emaciation, it should be reported to the Virginia Department of Wildlife Resources through the Wildlife Conflict Helpline at 855-571-9003, or to the Fairfax County Animal Protection Police through the police non-emergency number at 703-691-2131.



FAIRFAX COUNTY DEER MANAGEMENT CONTACTS AND RESOURCES

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Sergeant Earit Powell
Fairfax County Police Department
Animal Protection Police
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earit.powell@fairfaxcounty.gov

Fairfax County Animal Protection Police 703-691-2131

Virginia Wildlife Conflict Helpline (855) 571-9003 Monday – Friday 8:00AM-4:30PM (DWR & USDA Wildlife Services)

Deer Management Program website:

https://www.fairfaxcounty.gov/wildlife/deer-management-program

