

# Agenda Agricultural Economic Development Advisory Board Peaks Conference Room at Falling Creek 1257 County Farm Rd. Bedford, VA 24523 Wednesday, November 5, 2025 7:00 p.m.

			~	
(1)		TY	ORDER	D
	( . A   .	,	UNDER	۸

- (2) APPROVAL OF AGENDA
- (3) APPROVAL OF MEETING MINUTES October 1, 2025
- (4) ADMINISTRATION REPORT
- (5) ECONOMIC DEVELOPMENT REPORT
- (6) COOPERATIVE EXTENSION REPORT
- (7) BEDFORD COUNTY FARM BUREAU YOUNG FARMERS REPORT
- (8) COMMITTEE REPORTS
  - a. Education & Events
    - i. Upcoming events
    - ii. School Ag Programs update
  - b. Marketing & Production
    - i. Farmer's Market updates
  - c. Land Protection & Conservation
    - i. The effects of Data Centers on Agriculture
  - d. Public Relations
- (9) OTHER BUSINESS
  - a. Informational items
    - i. State of the Herd 2025 Deer Report Scott
- (10) ADJOURNMENT



# **Minutes**

Agricultural Economic Development Advisory Board Peaks Conference Room at Falling Creek 1257 County Farm Rd. Bedford, VA 24523 Wednesday, October 1, 2025 7:30 p.m.

**Present:** Jeff Powers (District 1; Chairman), Joy Powers (District 2), Don Gardner (District 3; Vice Chairman); Chuck Grove (District 4); Ethan Tanner (District 5); Melody Divers (District 6); Pete Fellers (District 7), Dorothy McIntyre (At-Large); Josh Powers (Guest), Sam Gardner (At-Large), Katelynn Trask (Guest), Matt Baumgardner (At-Large); Johnny Divers (Guest)

**Absent:** Ken Newman (At-Large); Lindsay Tomlinson (At-Large), Mickey Johnson (Guest); Pam Armstrong, (Economic Development Director), Niki Feazell (Administrative Assistant)

**Staff Present**: Justin Stauder (*Deputy County Administrator*), Lauren Thurston (*Business Programs Coordinator*) Scott Baker (*Extension Office Director*)

# (1) CALL TO ORDER

• Chairman Powers called the meeting to order at 7:30 p.m.

# (2) APPROVAL OF AGENDA

• Chairman Powers called for a motion to approve the agenda. Mr. Matt Baumgardner moved, seconded by Mr. Sam Gardner, to approve the agenda. Adopted unanimously by members present.

# (3) APPROVAL OF MEETING MINUTES – September 3, 2025

Chairman Powers called for a motion to approve the September 3, 2025, minutes.
 Mr. Matt Baumgardner moved to approve meeting minute, seconded by Mr. Sam Gardner.

Adopted unanimously by members present.

## (4) ADMINISTRATION REPORT

- The county currently has public comment open for the landfill permit. Bedford County is modifying the current permit; action is tied to correcting overfill and closure of one existing cell within the county landfill. County will apply for a new cell once overfill errors are corrected. Comment is open until October 20th; additional plans for going forward are available at the Public Library currently.
- The government shutdown will not affect Bedford County outside of Social Services and the County Nursing Home due to funding, otherwise the county will remain running accordingly.

# (5) ECONOMIC DEVELOPMENT REPORT

Lots 15 and 16 at the New London Business and Technology Park are coming to completion. Remaining grading due to be completed by Thanksgiving, majority

- of grading is finished along with stormwater. Road has been cut in and graveled. BRWA continues to work on utility extensions still needed and should be wrapped up by month's end.
- The EDA recently held strategic planning discussions and meetings over the past several weeks. There will be a joint meeting with the Board of Supervisors on October 14th where those new ideas and priorities can be discussed and focused on, which will allow open dialogue with the board as far as maintaining course of identifying new project areas for their upcoming year.

# (6) COOPERATIVE EXTENSION REPORT

- VDACS grant portal is now open for farms that were impacted by hurricane Helene. Application portal is open for 45 days and applications can only be submitted through online portal.
- Bedford County Beef Producers Association met again recently. A winter meeting is set for January 20, 2026, at Springlake Stockyard where the Farm Bureau State Planning Specialist will be speaking.

# (7) BEDFORD COUNTY FARM BUREAU YOUNG FARMERS REPORT

- No new Young Farmers report
- Bedford County Farm Bureau's next scheduled annual meeting is happening October 7<sup>th</sup> at 6:00, with dinner at 7:00 and the business meeting following at 8:00 to discuss new resolutions to present to legislators and local government.

# (8) COMMITTEE REPORTS

- a. Education & Events
  - i. Upcoming events
  - a) Bedford County Fair Report
    - The Bedford County Fair/Carnival held recently at Liberty Lake Park, along with the Horse & Livestock Show held at Tom's farm, were all great successes this year.
    - The Ken Palmer memorial scholarship contest was held on September 17<sup>th</sup> at the Bedford Boys Tribute Center, where the local youth FFA turnout was very well.
    - The first Contest Hall partnership with Centerfest, organized by Carolyn Fellers, was held at the warming center in September, with several local participants having great success.

#### ii. School Ag Programs update

- The fulltime Ag teacher position at Staunton River High school has been filled.
- Liberty High School and FFA sent several students to participate in this year's State Fair.
- Beginning next year, the state will require 100% participation among each FFA Chapter. Dues are set at 3 levels national, state and local but not all dues were previously required. With the new requirement, all students will have to be FFA members at 100% of each chapter. For example, if there are 250 students enrolled in Ag classes and only 80 are actual due-paying members, an additional 170 students will be required to pay dues, which could affect smaller chapters negatively. Community participation will be needed.

#### b. Marketing & Production

# . Farmer's Market updates

- No new farmers market report. Participation was limited in recent markets due to weather.
- Dr. Gardner presented information for the 2025-2026 Hunters for the Hungry deer management project raffle.
- The coyote lottery is on hold for the time being.

#### c. Land Protection & Conservation

• Nothing new to report.

#### d. Public Relations

- Last month's podcast was about All Things Bee. The local Blue Ridge Bee
  Festival was held on September 13<sup>th</sup> as well. Layman's Farm will be the guest for
  next month's podcast.
- Facebook activity continues to grow with 898 followers with a lot of page engagement.

# (9) OTHER BUSINESS

# . Informational items

# a) Data Center Information - Time Permitting

 Data Centers were discussed, along with the potential negative affects those centers have on local counties. Additionally, the strain of local water and power systems. The biggest impact of rural agriculture. Different options for updating current resolutions and zoning were mentioned. The board plans to continue ongoing discussion at future meetings.

# (10) ADJOURNMENT

8:20 pm

# Data Centers & Agriculture in Virginia: Key Facts for Bedford

# 1. Virginia Is a National Hotspot for Data Centers

 Virginia hosts 35% of the world's hyperscale data centers, and the industry is expanding beyond Northern Virginia into rural counties.

# Surrounding examples:

- Google in Botetourt County, Virginia 312 acres. Will require 2–8 million gallons of water daily for cooling. County is planning up to \$300M in water infrastructure to support the site.
- Amazon Web Services in Louisa County, Virginia \$11B investment.
   Massive rural opposition over land and water use forced the county to tighten its zoning rules.
- Prince William County, Virginia "Digital Gateway" rezoning on 2,100 acres of farmland overturned by the courts after public pushback.
- Campbell County, Virginia A proposal on 57 acres was denied in 2025 after citizen concern over 1 million gallons/day of water use.

Takeaway: This is no longer just a Northern Virginia issue. Companies are seeking affordable land and access to utilities in rural counties.

# 2. Farmland Conversion Is Permanent

- Data centers need large, flat, stable parcels exactly the same kind of land used for high-value crop and livestock farming.
- Virginia has already lost ~400,000 acres of farmland (2015–2022) to development pressures.
- Typical projects remove hundreds to thousands of acres from agriculture:
  - Louisa AWS proposal: 1,370 acres.
  - o Prince William: 2,100 acres.
- Developers often offer **\$15,000–\$20,000** per acre, inflating surrounding land prices and making it harder for farms to expand or for new farmers to enter.

Once farmland is rezoned and developed, it's gone forever. This can shift entire rural economies away from agriculture.

# 3. Water and Power Strain Local Systems

• Water: Large facilities can use as much water as a small city. In Botetourt, Google's daily draw could outstrip residential use.

- This can lower water tables, stress municipal systems, or require major new infrastructure — often funded in part by local taxpayers.
- Power: Data centers already consume 24% of Dominion Energy's electricity in Virginia.
  - In rural areas, grid capacity is limited. New data centers typically need new substations and transmission lines.
  - Those costs are often passed to **ratepayers**, including farms and households.

A single data center can use as much electricity as tens of thousands of homes — and require infrastructure rural communities don't currently have.

# 4. Revenue vs. Reality

- Data centers bring **high local tax revenue** (e.g., Prince William's existing centers generate ~\$79M annually).
- But:
  - They receive **state sales tax exemptions** worth ~\$750M/year statewide.
  - **Few permanent jobs** typically 50–100 per site. Often transplanted talent brought in from out of the area.
  - Taxable equipment depreciates quickly; revenue can decline if upgrades slow.
- Agriculture in Bedford contributes \$26–29M annually in production value, sustains over 180,000 acres of working land, and demands very little public infrastructure.

Revenue is real but not guaranteed. Agriculture provides steady, long-term value without the hidden infrastructure costs.

# 5. No Statewide Oversight

- Virginia has **no statewide rules** for siting, permitting, or reviewing data centers.
- Local governments decide everything land use, zoning, water, noise, setbacks.
- 2023 legislation to require statewide impact studies was **vetoed**.
- Counties like Loudoun, York, and Fairfax have responded by tightening local rules; others (like Campbell and Chesapeake) have rejected projects outright.

# 6. Long-Term Utility Burden: Hidden Costs to Rural Communities

- Data centers use massive, constant power and water far exceeding traditional rural infrastructure capacity.
- Projects in Botetourt and Louisa have already triggered hundreds of millions in new infrastructure spending on water lines, substations, and transmission projects.
- Those costs do not stay with the companies alone they ripple into rate hikes for homes, farms, and small businesses.

- In several Virginia localities, residents have seen **utility bills double or triple** after large industrial loads came online.
- Upgrading infrastructure to support one data center can **set the stage for others to follow**, multiplying costs over time.

Once the grid and utility lines are expanded to accommodate one facility, rural counties often face a flood of new proposals — locking in a cycle of industrialization.

#### STATE OF THE HERD

#### THE 2025 DEER REPORT

#### Introduction

Welcome to the first annual Deer Report, a recap of the previous year's deer season and commentary on hot topics in deer management in the Old Dominion. While DWR publishes annual harvest numbers, the Deer Report dives deeper into the numbers and other topics that all deer enthusiasts will find interesting.

In this issue:

2024-2025 Deer Harvest Summary

Current deer population status

Disease Updates

Management Spotlight – Bedford County

# 2024-2025 Deer Harvest Summary

During the 2024–25 deer hunting season, hunters reported harvesting 205,759 deer in Virginia, down just 0.4% from the 206,586 deer taken during the same time frame the previous season. This year's total included 101,238 antlered bucks, 665 bucks that had shed their antlers, 13,019 button bucks, and 90,837 does (44.1%). The youth and apprentice deer-hunting weekend resulted in a harvest of 2,443 deer. The 2024–25 deer harvest was up approximately 4% from the last ten-year average of 198,398 (Figure 2). These data do not include deer taken on out-of-season deer kill permits or those deer hit and killed by vehicles. The special late antlerless seasons (including urban archery) added 2,613 antlerless deer to the total harvest, bringing the final total to 208,372 (44.6 female, Figure 1).

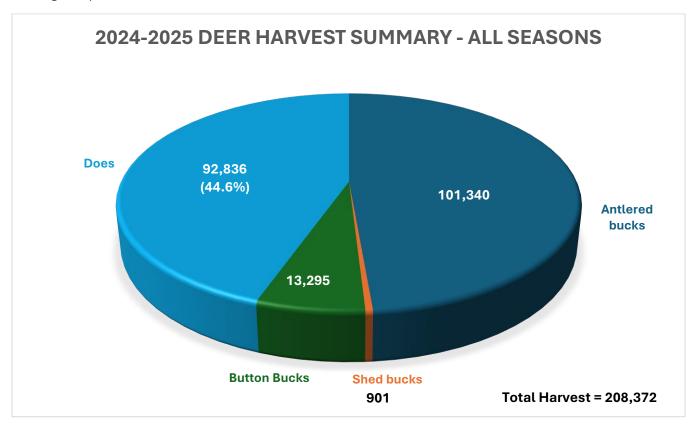


Figure 1. 2024-2025 deer season harvest summary. These totals include the September antlerless only firearms and urban archery seasons (late seasons and kill permit totals are not included in this summary). The late seasons added 2,613 antlerless deer to the final total.

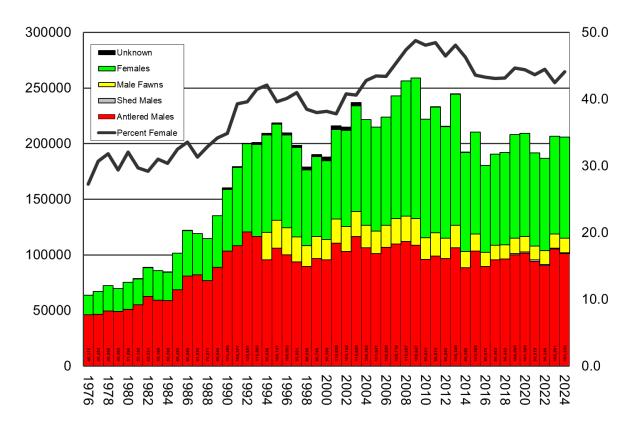


Figure 2. Annual statewide deer harvest by sex and percent females in the harvest, 1976-2024.

Archery hunters took 14% of the total deer harvest while muzzleloading deer hunters and firearms hunters took 24% and 62% of the total harvest, respectively (Figure 3). In counties where dogs could be used to hunt deer, 52% of deer were harvested with the aid of dogs during the general firearms season. Across all seasons in the counties where dogs are legal to hunt deer, dog hunters accounted for 36% of the total deer kill. Kill totals for each county are found in Table 1.

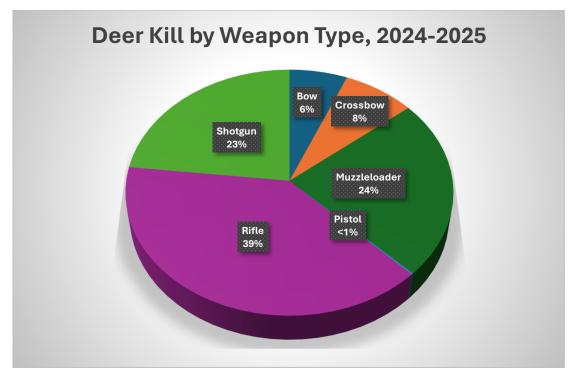


Figure 3. Deer Kill by weapon type for the 2024-2025 deer hunting season.

Table 1. 2024-2025 Virginia Deer Kill by County

County	Antlered Males	Shed Males	Male Fawns	Females	Percent Female	Total Harvest
Accomack	1207	8	279	1749	53.9%	3243
Albemarle	1775	13	199	2028	50.5%	4015
Alleghany	1031	0 10	31	315	22.9%	1377
Amelia Amherst	1232 1695	13	222 167	1207 1441	45.2% 43.5%	2671 3316
Annerst	744	4	91	488	36.8%	1327
Augusta	2911	7	269	2539	44.3%	5726
Bath	1053	2	34	494	31.2%	1583
Bedford	3356	14	413	3933	51.0%	7716
Bland	827	3	58	476	34.9%	1364
Botetourt	1552	3	130	1323	44.0%	3008
Brunswick	1219	11	237	1036	41.4%	2503
Buchanan	874	0	11	182	17.1%	1067
Buckingham	1380	9	141	753	33.0%	2283
Campbell	1450	3	189	1180	41.8%	2822
Caroline	1222	25	271	1322	46.5%	2840
Carroll	1499	6	123	1312	44.6%	2940
Charles City	520	6	112	555	46.5%	1193
Charlotte	1023	6	145	692	37.1%	1866
Chesapeake	238	0	43	200	41.6%	481
Chesterfield	715 644	4 8	102 72	580	41.4%	1401
Clarke Craig	999	8	65	753 588	51.0% 35.5%	1477 1656
Culpeper	1192	10	162	588 1466	51.8%	2830
Culpeper	1093	7	154	928	42.5%	2830
Dickenson	733	1	9	292	28.2%	1035
Dickenson	971	12	245	1043	45.9%	2271
Essex	565	13	190	831	52.0%	1599
Fairfax	475	13	66	553	50.5%	1095
Fauquier	2067	15	282	2437	50.8%	4801
Floyd	1337	13	107	1318	47.5%	2775
Fluvanna	841	8	87	614	39.6%	1550
Franklin	1981	7	192	1902	46.6%	4082
Frederick	1203	6	118	1240	48.3%	2567
Giles	1035	3	93	843	42.7%	1974
Gloucester	447	14	137	523	46.7%	1121
Goochland	792	7	110	645	41.5%	1554
Grayson	1477	5	127	1434	47.1%	3043
Greene	472	2	65	435	44.7%	974
Greensville	767	6	186	907	48.6%	1866
Halifax	1946	13	240	1553	41.4%	3752
Hanover	815	13	236	1254	54.1%	2318
Henrico	303	1	42	319	48.0%	665
Henry	1004	4	33	436	29.5%	1477
Highland	1069	3	55	563	33.3%	1690
Isle of Wight	961	16	253	1226	49.9%	2456
James City	337	2	50	405	51.0%	794
King & Queen King George	798 429	11	289	1126	50.6%	2224 859
King George King William	714	8	73 156	349 822	40.6% 48.4%	1700
Lancaster	407	9	114	530	50.0%	1060
Lee	846	0	25	323	27.1%	1194
Loudoun	1678	12	237	2165	52.9%	4092
Louisa	1234	13	217	999	40.6%	2463
Lunenburg	868	3	125	638	39.0%	1634
Madison	836	7	140	1004	50.5%	1987
Mathews	213	4	43	254	49.4%	514
Mecklenburg	1272	3	169	1012	41.2%	2456
Middlesex	288	2	72	298	45.2%	660
Montgomery	1347	2	118	1279	46.6%	2746
Nelson	1431	6	95	638	29.4%	2170
New Kent	528	11	116	511	43.8%	1166
Northampton	498	2	111	599	49.5%	1210
Northumberland	484	7	107	599	50.0%	1197
Nottoway	887	6	166	904	46.1%	1963
Orange	835	6	142	1094	52.7%	2077
Page	905	4	67	660	40.3%	1636
Patrick		2	43	392	27.2%	1441
Pittsylvania	1004			40.56	40.1%	4876
	2661	15	244	1956		
Powhatan	2661 903	15 4	124	867	45.7%	1898
Prince Edward	2661 903 890	15 4 5	124 82	867 577	45.7% 37.1%	1898 1554
Prince Edward Prince George	2661 903 890 687	15 4 5 8	124 82 166	867 577 1019	45.7% 37.1% 54.2%	1898 1554 1880
Prince Edward Prince George Prince William	2661 903 890 687 494	15 4 5 8 2	124 82 166 38	867 577 1019 482	45.7% 37.1% 54.2% 47.4%	1898 1554 1880 1016
Prince Edward Prince George Prince William Pulaski	2661 903 890 687 494 1006	15 4 5 8 2 2	124 82 166 38 94	867 577 1019 482 954	45.7% 37.1% 54.2% 47.4% 46.4%	1898 1554 1880 1016 2056
Prince Edward Prince George Prince William Pulaski Rappahannock	2661 903 890 687 494 1006 795	15 4 5 8 2 2 14	124 82 166 38 94 113	867 577 1019 482 954 995	45.7% 37.1% 54.2% 47.4% 46.4% 51.9%	1898 1554 1880 1016 2056 1917
Prince Edward Prince George Prince William Pulaski Rappahannock Richmond	2661 903 890 687 494 1006 795 472	15 4 5 8 2 2 14 10	124 82 166 38 94 113 160	867 577 1019 482 954 995 696	45.7% 37.1% 54.2% 47.4% 46.4% 51.9% 52.0%	1898 1554 1880 1016 2056 1917 1338
Prince Edward Prince George Prince William Pulaski Rappahannock Richmond Roanoke	2661 903 890 687 494 1006 795 472 721	15 4 5 8 2 2 14 10	124 82 166 38 94 113 160 66	867 577 1019 482 954 995 696 641	45.7% 37.1% 54.2% 47.4% 46.4% 51.9% 52.0% 44.9%	1898 1554 1880 1016 2056 1917 1338 1429
Prince Edward Prince George Prince William Pulaski Rappahannock Richmond Roanoke Rockbridge	2661 903 890 687 494 1006 795 472 721 1651	15 4 5 8 2 2 14 10 1	124 82 166 38 94 113 160 66 105	867 577 1019 482 954 995 696 641 970	45.7% 37.1% 54.2% 47.4% 46.4% 51.9% 52.0% 44.9% 35.6%	1898 1554 1880 1016 2056 1917 1338 1429 2727
Prince Edward Prince George Prince William Pulaski Rappahannock Richmond Roanoke Rockbridge Rockingham	2661 903 890 687 494 1006 795 472 721 1651 2485	15 4 5 8 2 2 14 10 1 1 3	124 82 166 38 94 113 160 66 105 188	867 577 1019 482 954 995 696 641 970 1722	45.7% 37.1% 54.2% 47.4% 46.4% 51.9% 52.0% 44.9% 35.6% 39.2%	1898 1554 1880 1016 2056 1917 1338 1429 2727 4398
Prince Edward Prince George Prince William Pulaski Rappahannock Richmond Roanoke Rockbridge	2661 903 890 687 494 1006 795 472 721 1651	15 4 5 8 2 2 14 10 1	124 82 166 38 94 113 160 66 105	867 577 1019 482 954 995 696 641 970	45.7% 37.1% 54.2% 47.4% 46.4% 51.9% 52.0% 44.9% 35.6%	1898 1554 1880 1016 2056 1917 1338 1429 2727

County	Antlered Males	Shed Males	Male Fawns	Females	Percent Female	Total Harvest
Shenandoah	1412	4	120	1377	47.3%	2913
Smyth	1066	3	64	588	34.2%	1721
Southampton	1855	40	583	2574	51.0%	5052
Spotsylvania	793	7	135	682	42.2%	1617
Stafford	441	6	61	465	47.8%	973
Suffolk	741	8	144	891	49.9%	1784
Surry	925	11	222	1221	51.3%	2379
Sussex	1431	23	406	1807	49.3%	3667
Tazewell	1210	2	56	585	31.6%	1853
Virginia Beach	108	0	13	79	39.5%	200
Warren	618	3	57	575	45.9%	1253
Washington	1529	3	42	654	29.4%	2228
Westmoreland	555	9	167	679	48.2%	1410
Wise	925	0	27	280	22.7%	1232
Wythe	1242	2	91	1247	48.3%	2582
York	306	3	55	306	45.7%	670
TOTALS	101,238	665	13,019	90,837	44.1%	205,759

Virginia deer hunters have been more selective in their harvests in recent years, and are more selective than ever. Over the past decade, hunters are taking more bucks than does (Figure 4), and a similar trend is seen nationwide (Figure 5). This does not bode well for meeting population objectives throughout much of the state, nor elsewhere in the country. In addition to selecting bucks over does, hunters are selecting for bigger bucks as well. The percentage of bucks taken that have 8 points or more is climbing on both private and public lands, and surpassed 50% on private land this past hunting season (Figure 6).

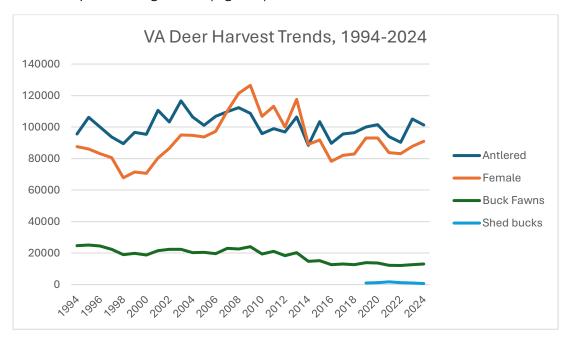


Figure 4. Trends in antlered buck, doe, button buck, and shed buck harvests in Virginia. Aggressive doe harvest regulations helped stabilize deer herds in the early 2000s, but buck harvest has surpassed doe harvest since 2014.

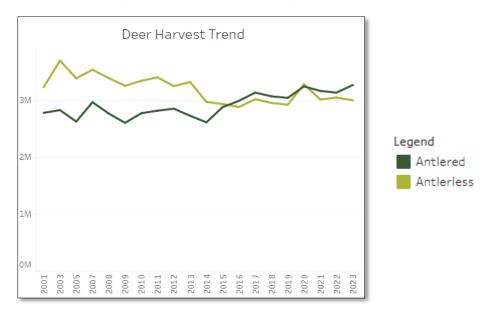


Figure 5. The national trend of antlered and antlerless harvest is similar to that in VA. Graph from the National Deer Association's Interactive Deer Report (<a href="https://deerassociation.com/interactive-deer-report/">https://deerassociation.com/interactive-deer-report/</a>)

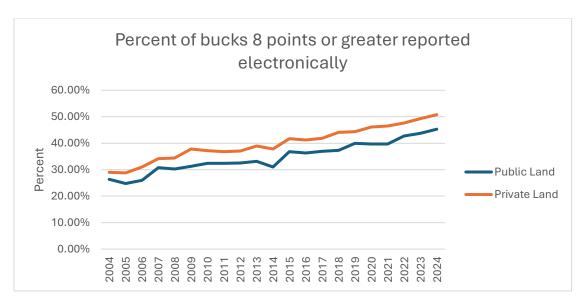


Figure 6. The percentage of bucks, reported electronically, having 8 points or more since 2004 on both public and private land. Electronic reporting became mandatory in 2021. 50% of the bucks reported on private land had 8 or more points.

Note in Figure 4 that lower doe harvest in the late 90s was due to conservative either-sex regulations at the time. In the early 2000s, either-sex regulations became more liberal to address overabundant deer populations, and hunters responded. However, antlerless harvest was still lagging in many area, so in 2008, the Earn-a-buck regulation was introduced. Also notice the big dip in 2014 for both buck and doe harvest—this was a big year for hemorrhagic disease (HD) across the state. Either-sex days were reduced in the areas that were hit the hardest by HD, and populations have rebounded and then some. Since then, buck harvest has remained above doe harvest despite liberal either-sex regulations throughout much of the state.

Figure 7 shows the current relative abundance map for deer on private lands. The Deer Population Index (DPI) Virginia uses is calculated as the number of antlered bucks taken per square mile of deer habitat in each county. A study conducted in collaboration with Virginia Tech in 2014 helped develop a scale of DPI values that correspond to various levels of relative abundance of deer (very low, low, moderate, moderate to high, high). Through a stakeholder-driven process in the last Deer Management Plan, each county was assigned an objective based on societal tolerance for deer (termed "cultural carrying capacity" or CCC). Figure 7 depicts the current status, objective, and management goal (decrease, increase, or stabilize) for each county. We are trying to decrease deer abundance in nearly half of the counties in the state. One assumption of the DPI is that hunters shoot the first buck they see, which clearly isn't the case nowadays—this means that our method of monitoring relative abundance is likely underestimating herds relative to CCC. We look to improve our methods of monitoring deer abundance through the next Deer Plan revision process. Regardless, the trend remains—deer herds are above objective on private lands throughout much of the state and probably in more areas than the index currently suggests.

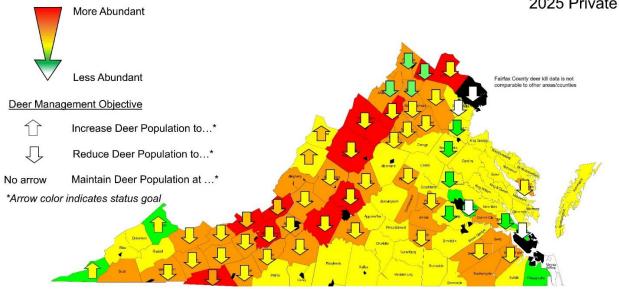


Figure 7. County deer relative abundance map showing current status, objective, and management approach for private lands as of the end of the 2024-2025 hunting season.

Meeting population objectives on private land is becoming increasingly difficult as Virginia continues to urbanize (Figure 8) and hunter numbers continue to decline (Figure 9).

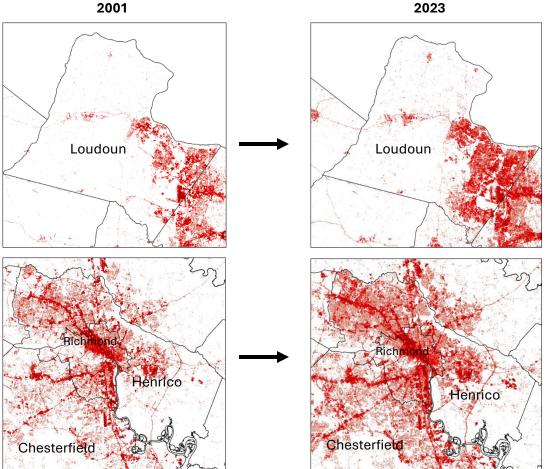


Figure 8. Development changes in Loudoun (top) and the Henrico, Chesterfield, and Richmond area (bottom) from 2001 to 2023. Red shading indicates land covered in development. Data acquired from the National Land Cover Database (NLCD).

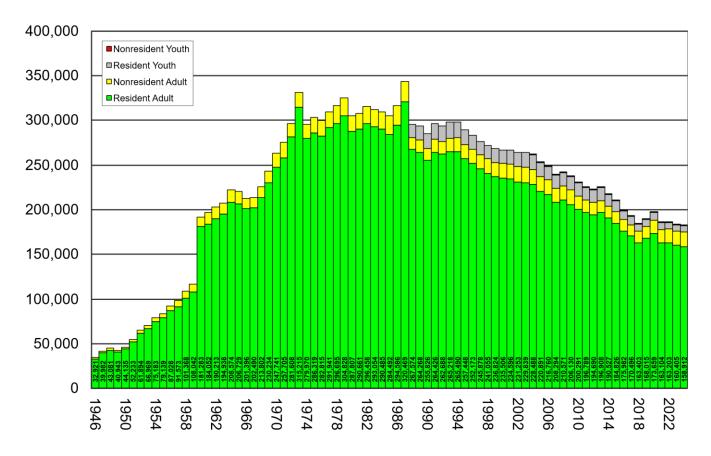


Figure 9. Virginia deer license sales from 1946 to present. Virginia saw a peak of over 340,000 deer licenses sold in 1987. There were 183,021 licensed deer hunters in the 2024-2025 season. The "COVID bump" in 2020 was short-lived.

# Deer Kill per square mile of deer habitat 2025

Figure 10 shows the total deer killed per square mile of deer habitat in each county. Bedford County leads the state at nearly 11 deer killed per square mile! Despite such heavy harvest, Bedford still has a tremendous number of deer, showing just how productive the county is and how prolific deer can be.

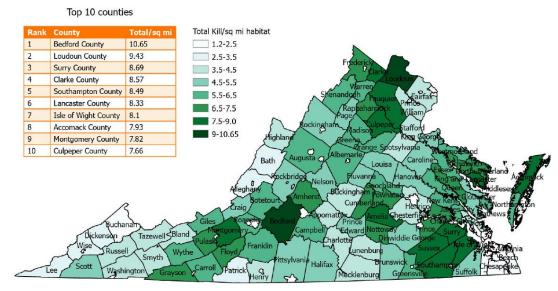


Figure 10. Map of deer harvest per square mile of habitat. Darker shades reflect higher "harvest intensity." The top 10 counties are also listed. Despite having the top two harvest intensities, Bedford and Loudoun are still well above objective.

# **Disease Updates**

## Hemorrhagic Disease

Hemorrhagic disease (HD) is a viral disease that's transmitted by biting midges (sometimes called "no-see-ums"). These midges prefer to breed in mud flats that are often created at the edge of ponds and streams as they dry up during a hot, dry period in late summer. When a deer becomes infected with the HD virus, it will often develop an incredibly high fever, causing it to seek water to cool itself. Not all deer will die from an infection, and some herds have developed varying levels of immunity to the disease. Those deer that do die often die within days of being infected. HD will often occur as a localized outbreak where many deer may be found dead in or around water in good body condition.

2024 was another active year for HD, especially west of the Blue Ridge (WBR). The Shenandoah Valley experienced another significant drought last summer, and we saw an increase in HD as a result. We confirmed HD outbreaks in Albemarle, Alleghany, Augusta, Botetourt, Frederick, Page, and Rockingham. Historically, HD occurs less frequently WBR due to cooler temperatures and typically more rainfall. Also, hard freezes kill midges so earlier frosts have usually put a damper on HD activity WBR. However, as our climate gets warmer and we experience more droughts, HD activity has been increasing recently WBR as well as in other northeastern states where HD has been less common or nonexistent. The good news is that even herds that have been hit hard by HD can rebound within a couple of years barring any HD activity in subsequent years. DWR tracks HD activity through citizen observations, reports from the Wildlife Conflict Helpline, and hoof data from DMAP cooperators (Figure 8).

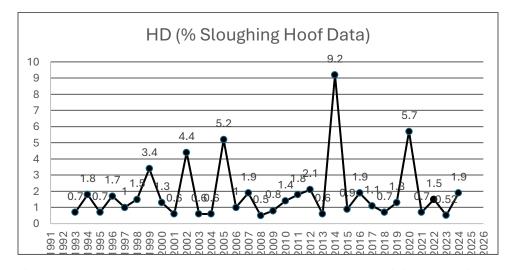


Figure 8. Percentage of deer harvested by DMAP cooperators that had splitting or sloughing hooves. The high fever caused by HD interrupts hoof growth, causing splitting or sloughing hooves. These observations help track HD activity across the state. Note the huge spike in 2014.

### Chronic Wasting Disease

Chronic Wasting Disease (CWD) is a disease like no other. CWD is not caused by any sort of a virus or bacteria, but a protein called a prion. There are normal prions in the body, but the CWD prion is misfolded and causes other prions to misfold. CWD belongs to a group of diseases known as Transmissible Spongiform Encephalopathies (TSEs), which literally translates to a disease that creates holes in brain tissue and can be passed from one individual to another. Other TSEs include Bovine Spongiform Encephalopathy (BSE, or "Mad Cow Disease"), Scrapie (occurs in sheep and goats), and Creutzfeldt-Jakob Disease (CJD, occurs in humans). CWD is known only to infect members of the deer family (cervids), including white-tailed deer, mule deer, elk, moose, and reindeer. The prions create holes in the brain and other tissues in the central nervous system that ultimately affect the animal's ability to function, causing it to starve or "waste away" (hence the name Wasting Disease). While the origin of CWD is unknown, it is possible that CWD either mutated from scrapie in sheep that shared pastures or captive facilities with mule deer along the front range of the Rocky Mountains or that it is a spontaneous TSE. CWD is the most significant wildlife disease of our time. It is always fatal to deer and there is no cure or vaccine.

It is believed that the main route of CWD transmission is through the ingestion of prions, although fawns can also get the disease *in utero* from the mother if she's infected during pregnancy. A deer infected with CWD will at some point begin shedding CWD prions in saliva, urine, and feces. It is unknown at what stage of infection that deer begin shedding the infectious prions, but the incubation period for CWD (the time it takes from the exposure to CWD prions to the onset of clinical disease) is quite long. In experimental settings, minimum incubation was about 15 months and average time from infection to death was about 23 months in mule deer. The maximum course of disease is unknown, but can exceed 25 months in experimentally infected deer. Prions have no genetic material, are highly resistant to heat and disinfectants, and remain infectious in the environment for prolonged periods.

Once an animal reaches the clinical stage of the disease and develops neurological symptoms, it may still take a while for the animal to die. It is in the very late stages of the disease when one may see the so-called "zombie deer," as the media tends to describe them—staggering, slobbering bags of bones that are unaware of their surroundings. Because of the long incubation period and the time it takes for deer to show visible symptoms, infected deer can shed prions and potentially spread the disease for over a year while appearing perfectly healthy.

In fact, when hunters receive a call from us notifying them their deer tested positive, they are usually surprised because their deer showed no signs of disease. Additionally, many of our positives come from bucks taken to a cooperating taxidermist, and these are typically big, handsome deer—not some "zombie." Many times, infected deer may die of other causes before they succumb to the disease itself, such as predation, pneumonia, or getting hit by a vehicle due to their neurological deficits.

In the 2024-2025 season, we surpassed 100 positive detections, the highest total of any year since the disease was first detected in Frederick County in 2009.



The Roanoke County positive before being dispatched. Photo by Mark Edwards.

# CWD sampling effort and positives for the 2024-2025 season.

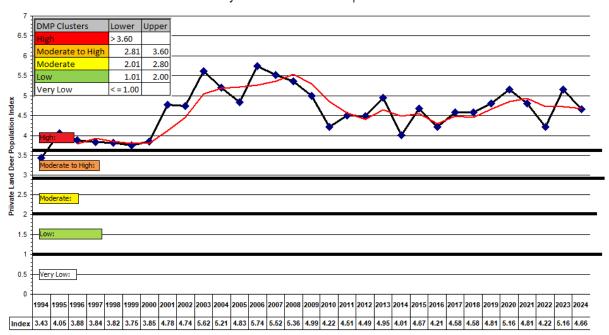
DMA	Counties in DMA	Total deer tested	CWD detections	Location of detections
1	Clarke, Frederick,	611	79	Clarke (9)
	Shenandoah, Warren			Frederick (53)
				Shenandoah (12)
				Warren (5)
2	Arlington, Culpeper,	2959	17	Culpeper (2)
	Fairfax, Fauquier,			Fauquier (3)
	Loudoun, Madison,			Loudoun (7)
	Orange, Page, Prince			Madison (3)
	William,			Prince William (1)*
	Rappahannock			Rappahannock (1)
3	Carrol, Floyd, Franklin,	2123	13	Floyd (5)
	Pulaski, Roanoke,			Montgomery (7)
	Wythe			Roanoke (1)*
4	Bland, Smyth,	146	0	
	Tazewell			
Non-DMA statewide		2262	0	

<sup>\*</sup> Denotes first positive detection in the county. The first positive detection in Prince William was found after a culling effort at Manassas Battlefield Park in winter 2025. The Roanoke County positive was a 6.5 year-old buck that was showing late-stage symptoms of CWD and was dispatched by a local Animal Control officer.

# **Management Spotlight: Bedford County**

In "Management Spotlight," I will plan to highlight a unique region or situation relative to deer management in Virginia that I feel is worth sharing. In this inaugural edition of the Deer Report, I've selected Bedford County.

It's difficult to pick one thing to focus on with Bedford, which is partly why I wanted to highlight it here; it has a lot of things going on. First and foremost, Bedford is what I call a "deer factory." At over 760 square miles in size and being 95% deer habitat, there's certainly plenty of space for deer to call home. On top of the amount of habitat, a lot of it is high quality, meaning does can pump out lots of fawns and bucks can produce impressive sets of antlers. Bedford consistently yields the highest total of deer killed per square mile of deer habitat in the state (as high as 11 deer killed per square mile!). While it may sound like a deer manager's paradise, these figures come with their share of baggage as well. Bedford consistently leads the state in the number of deer-vehicle collisions, its deer population has historically been well above objectives set forth in the state Deer Management Plan (see population index graph below), and agricultural producers deal with extensive crop damage each year.

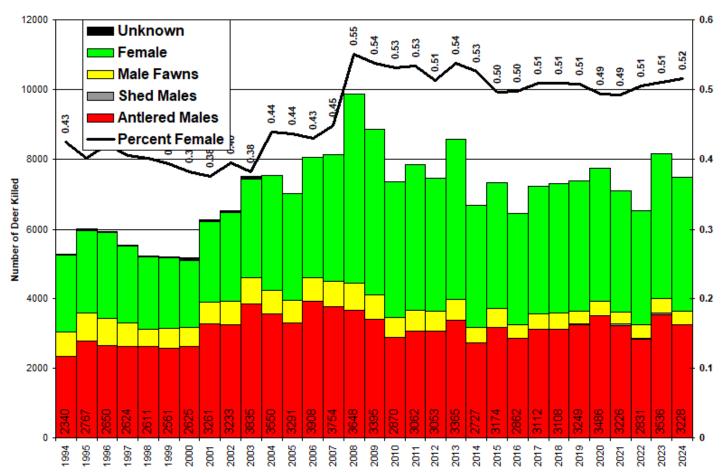


Bedford County Private Land Deer Population Index

The population index used by DWR to monitor population trends in each county is the 3-year average of the total number of antlered bucks killed per square mile of deer habitat (red line). A cultural carrying capacity (CCC) study completed by VA Tech in 2014 helped develop the upper and lower bounds of each population index category (very low, low, moderate, moderate to high, and high) for the 2015 Deer Management Plan. DWR's objective in Bedford has been to reduce herds since the Deer Plan was revised in 2006.

Bedford County first went full season either-sex in 1991—between 1987 and 1991, one could only take a doe with a firearm the last 6 days of the firearms season, and from 1980-1986, it was only the last 3 days. In 2008, DWR unveiled the earn-a-buck (EAB) regulation, under which a hunter is required to take at least 1 doe before taking their second buck, and at least 2 does prior to taking their 3<sup>rd</sup> buck. Bedford was one of the first 8 counties where DWR implemented EAB in an effort to try to increase antlerless (female) harvest to reduce deer populations. The goal was to increase the percentage of females in the harvest to 50% or more in order to drive the population trend downward. EAB yielded an immediate bump in percent females reported in the harvest, and the population index began to turn. Over time, the percentage of females in the harvest has dropped and the population index began to climb again. In 2023, DWR added the early (September) and late (January) antlerless only firearms seasons to try to right the ship. In 2025, the firearms season was extended from 4 to 7 weeks.

# Bedford County Private Land Deer Kill 1994 to Present



While DWR's deer management staff can try to influence the doe kill by increasing opportunity (season length) and implementing regulations aimed at requiring hunters to kill does (EAB), it's up to the hunters to pull the trigger. Nearly every state that manages white-tailed deer is currently facing the issue of hunters' reluctance to shoot does, and Virginia is certainly one of those states. To help influence doe harvest at the local level, a group of Bedford County landowners, farmers, and administrators partnered with Virginia Hunters for the Hungry and 3 local deer processors to initiate the "Bedford County Deer Management Project Raffle." Several donors and sponsors chipped in to provide 5 prizes for the drawing. To be eligible, a hunter had to donate a deer (taken in Bedford) to one of the 3 participating processors, and they received 1 raffle ticket for each deer that was donated. This effort yielded 1,107 deer being donated in 2024/2025 in Bedford County (an 80% increase from the previous year), and 30,537 pounds of venison (75% increase from previous year). Percent females in the harvest on private land went up one percentage point from the previous year over the same time period. Hunters donated approximately 14% of the total county harvest to Hunters for the Hungry! This program was a win for all involved—increased doe harvest was achieved, more venison was distributed to those in need, and 5 lucky hunters got some great prizes.