



2022 Virginia Private Lands Deer Population Management Objectives with Recommended Changes Related to Chronic Wasting Disease (CWD)

Summary: The Deer Plan allows for interim changes in objectives and/or strategies to address changing management needs of Virginia’s deer resource, provided the Stakeholder Advisory Committee (SAC) has an opportunity to review these plan changes. Recent expansions of CWD across Virginia necessitate changes in private land deer population objectives in 6 counties. Approved by the SAC, the updated deer population management objectives described below are considered effective with the posting of this second addendum to the Department’s 2015-2024 Deer Management Plan on the DWR website (see link below). The first addendum was posted in 2019 and included updates to objectives incorporating target levels for deer populations.

Background. Beginning in 2005, when CWD was first detected in Hampshire County, West Virginia, DWR began to focus CWD surveillance in adjacent counties within Virginia. This sampling effort resulted in detecting Virginia’s first case of CWD in 2009, in western Frederick County. Pursuant to this detection, a Containment Area (CA) was established in the western and northern portions of Frederick and Shenandoah counties, respectively. The first CWD detection in Shenandoah occurred in 2014. Due to continued geographic spread of the disease, the CA area was expanded in 2015 to include all of Clarke, Frederick, Shenandoah, and Warren counties. In 2018, DWR initiated a statewide CWD surveillance strategy to optimize sample effort by focusing on testing older male deer. The majority of samples collected via this strategy were submitted by cooperating taxidermists. Through this effort, CWD was confirmed in a deer from Culpeper County in fall 2018. In 2019, the term “Containment Area” was exchanged for the more accurate and descriptive term, “Disease Management Area.” Clarke, Frederick, Shenandoah, and Warren counties were re-designated Disease Management Area 1 (DMA1) and Culpeper, Madison, and Orange counties were designated DMA2. Further spread of the disease during 2019 and 2020 necessitated an expansion of DMA2 to also include Fauquier, Page, Loudoun, and Rappahannock counties. In fall 2020, CWD was detected in Montgomery County, and in fall 2021, CWD was detected in Floyd County. These detections resulted in the creation of DMA3, which now includes Carroll, Floyd, Montgomery, and Pulaski counties. To date, there have been 135 confirmed CWD detections in Virginia across 11 counties (Table 1, Figure 1, and Figure 2). In addition to the establishment of DMAs, DWR has also taken a number of management actions, some going back decades, which have had significant CWD management implications (Table 2).

Need. The Association of Fish and Wildlife Agencies (AFWA) technical report on the best management practices (BMPs) for surveillance, management, and control of CWD states that one of the best management practices for managing CWD prevalence in infected populations is reducing deer density in CWD positive areas with high density deer populations. Reducing deer density is designed to limit deer-to-deer interactions, reducing the potential spread of CWD

across the landscape. Applying the AFWA BMPs to help control the spread of CWD in Virginia, the Department's 2021-2025 CWD Management Plan (see link below) delineates two levels of management intensity for counties in Virginia based upon the extent and distribution of CWD within or near that county. Management Level I counties are generally defined as those counties with multiple CWD positive detections distributed broadly across the county and those counties which are adjacent to it. In Virginia, Management Level I counties include Clarke, Frederick, Shenandoah, and Warren, and the 2021-2025 CWD Management Plan calls for a "low" deer population management objective in areas. Management Level II counties are generally defined as those counties with relatively few CWD positive detections that are not widely distributed or where CWD has not been detected but the county is part of a CWD Disease Management Area. The 2021-2025 CWD Management Plan calls for a "moderate" deer population in all Management Level 2 counties. Besides Madison and Rappahannock, all other Management Level 2 counties already have a moderate deer population management objective. Western counties with large areas of national forests and Department-owned lands (including Frederick, Shenandoah, and Warren) have separate management objectives for these hunted public lands than for private lands (see pages 72-73 in the Deer Management Plan, link below).

New objective levels. Based upon the 2021-2025 CWD Management Plan and delineation of counties as a Management Level I or Management Level II county, the deer population objectives for private lands in six (6) counties within the current CWD Disease Management Areas should be reduced to help control the spread of CWD. These counties include Clarke, Frederick, Madison, Rappahannock, Shenandoah, and Warren (Table 3 and Figures 3, 4, and 5). *Public* land deer populations objectives for Frederick, Shenandoah, and Warren are not impacted by these changes. The tables and figures below portray the current deer population status, the current deer population management objectives, and the new deer population management objectives for private lands in each county. The six counties with revised deer population management objectives are indicated with a red asterisk (*) on Figures 3, 4, and 5.

Links to Literature Cited.

Gillin, C. M., and Mawdsley, J. R. (eds.). 2018. AFWA Technical Report on Best Management Practices for Surveillance, Management and Control of Chronic Wasting Disease. Association of Fish and Wildlife Agencies, Washington, D. C. 111 pp. See www.fishwildlife.org/application/files/9615/3729/1513/AFWA_Technical_Report_on_CWD_BMPs_FINAL.pdf

2021-2015 Chronic Wasting Disease Management Plan. Virginia Department of Wildlife Resources, Richmond, VA 23228. 24 pp. <https://dwr.virginia.gov/wildlife/diseases/cwd/cwd-surveillance-and-management-in-virginia/>

Virginia Deer Management Plan. 2015. Virginia Department of Game and Inland Fisheries. Richmond, VA 23228. 136 pp. See www.dwr.virginia.gov/wp-content/uploads/virginia-deer-management-plan.pdf and Addenda (2022 and 2019 Updated Deer Population Objectives) <https://dwr.virginia.gov/wildlife/deer/management-plan/addenda/>

Table 1. Summary of CWD detections in Virginia, 2009 – present.

County	Year First Identified	No Positive Deer
Clarke	2019	3
Culpeper	2018	2
Fauquier	2019	4
Floyd	2022	1
Frederick	2009	105
Loudoun	2020	2
Madison	2020	1
Montgomery	2020	2
Rappahannock	2020	1
Shenandoah	2014	13
Warren	2020	1
Total		135

Table 2. Timeline of deer regulations and policy changes pertinent to CWD management in Virginia.

Year	Description
1936	Hunting over bait prohibited.
1961	No new captive deer permits.
1994	Moratorium of fallow deer farming permits.
2001	Deer enclosures prohibited.
2002	Live deer importation into Virginia prohibited
	Statewide CWD surveillance project initiated (replicated in 2007 and 2011)
2005	First CWD risk assessment conducted by DWR staff.
	Partial deer carcass importation and movement restrictions adopted.
2006	Deer feeding prohibited statewide during deer season.
2008	Mandatory CWD testing initiated (first near WV, then in Containment Area, 2010)
2010	CWD Containment Area (CA) created in western Frederick and north western Shenandoah counties (west of 81 and north of Edinburg line).
	Fawn rehabilitation banned year round in CA.
	Carcass export restrictions adopted for CA.
	Deer feeding prohibited in Clarke, Frederick, Shenandoah, and Warren counties.
	1:1 Earn a Buck (EAB) established in Clarke, Frederick, Shenandoah, and Warren counties.
	Increase daily bag limit from 1 to 2 in Clarke, Frederick, Shenandoah, and Warren counties.
2013	Prohibition of whole deer carcasses from any enclosure in North America.
2015	Statewide ban on natural urine-based deer lures/scents.
	CA expanded to include all of Clarke, Frederick, Shenandoah, and Warren counties.
2019	DMA2 created to include Culpeper, Madison, and Orange counties
	Board adopts regulation to prohibit feeding and remove antler point restrictions in counties within 25 miles of a CWD positive animal
	1:1 EAB reinstated in Shenandoah County (private lands) and EAB changed from 1:1 to 2:1 in Clarke, Frederick, and Warren counties (private lands).
2020	DMA2 expanded to also include Fauquier, Loudoun, Page, and Rappahannock counties

2021	DMA3 created to include Floyd, Montgomery, and Pulaski counties.
	Firearms deer season on private lands in Montgomery and Pulaski counties extended from two to four weeks.
	Disease Focus Zone (DFZ) created in a designated area of Montgomery County with both early and late antlerless only deer seasons and a pilot either-sex CWD Disease Management Deer Tag Program initiated.
	Early and late antlerless only deer seasons initiated in DMA1 with uniform 1:1 EAB
	Early antlerless only deer season initiated in Culpeper, Fauquier, Madison, Orange, and Rappahannock counties in DMA2.
2022	DMA3 expanded to include Carroll County
	Firearms deer season on private lands in Carroll County extended from two to four weeks.
	All four counties in DMA3 will have a late January through March antlerless only deer season on private lands.
	All seven counties in DMA2 will have both an early September and a late January through March antlerless only deer season on private lands.
	The early and late muzzleloading deer seasons have been made full season either sex deer hunting on private lands in Page County.
2022	Proposed changes to deer management objectives for Clarke, Frederick, Madison, Rappahannock, Shenandoah, and Warren counties.

Table 3. Current and proposed changes to private land deer population management objectives.

County	Current Status¹	Current Objective¹	Current Management Approach¹	New Objective¹	New Management Approach¹
Clarke	Moderate to High	Moderate	Reduce	Low	Reduce ²
Frederick	Moderate to High	Moderate	Reduce	Low	Reduce ²
Madison	Moderate to High	Moderate to High	Stabilize	Moderate	Reduce ³
Rappahannock	Moderate to High	Moderate to High	Stabilize	Moderate	Reduce ³
Shenandoah	High	Moderate	Reduce	Low	Reduce ²
Warren	Moderate to High	Moderate	Reduce	Low	Reduce ²

¹ Deer population level descriptions (Moderate, Moderate to High, etc.) are subjective. The 2019 addendum on the website explains numerical ranges for these categories.

² Change in the private land deer population management objective does not result in a change in the management approach. The current management approach was, and stays, to reduce deer populations.

³ Change in the private land deer population management objective results in a change in the current management approach from stabilize to reduce deer populations.

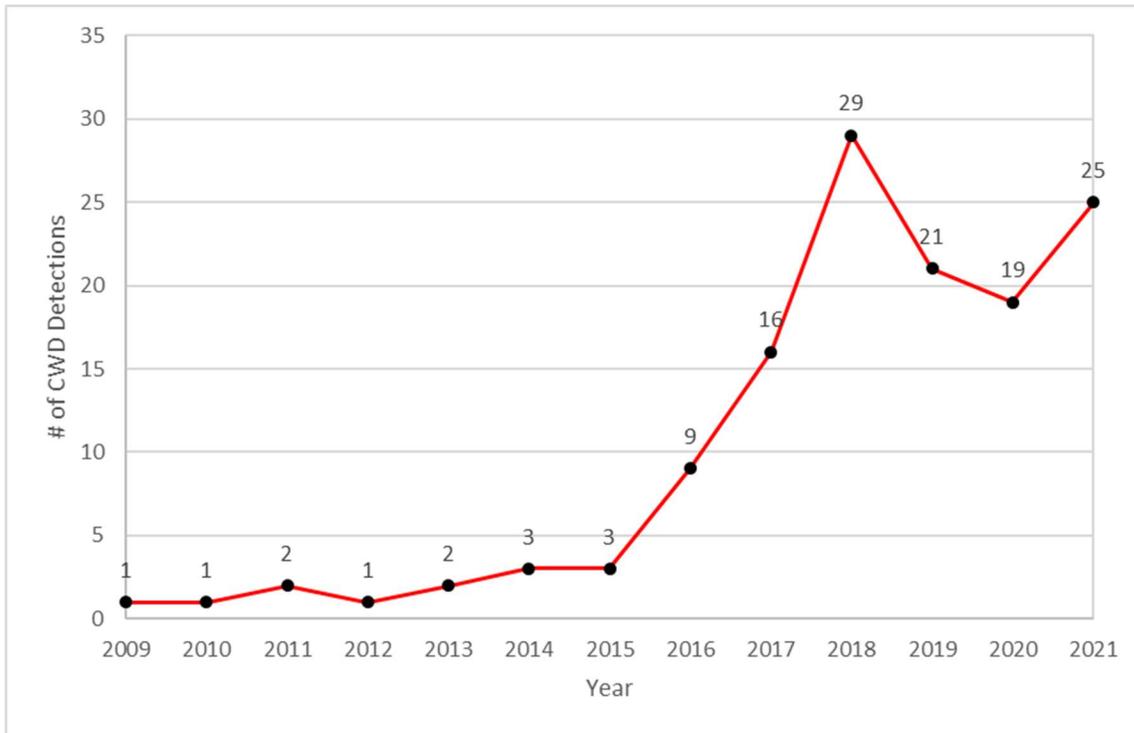


Figure 1. Virginia CWD cases by year.

*In 2019 DWR ended mandatory CWD testing in Frederick County and decreased voluntary CWD testing to refrigerator drop offs and taxidermists only. Hence CWD detections dropped off due to reduced testing, not due to a reduction in prevalence.

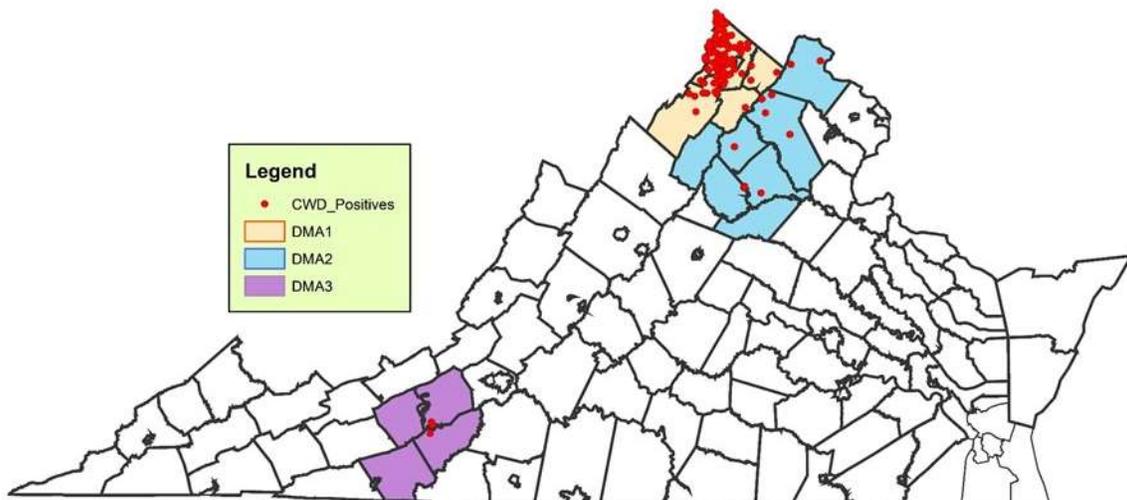


Figure 2. 2021 CWD Status in Virginia.

Current Private Land Deer Population Status: Relative Abundance

2021 Private land

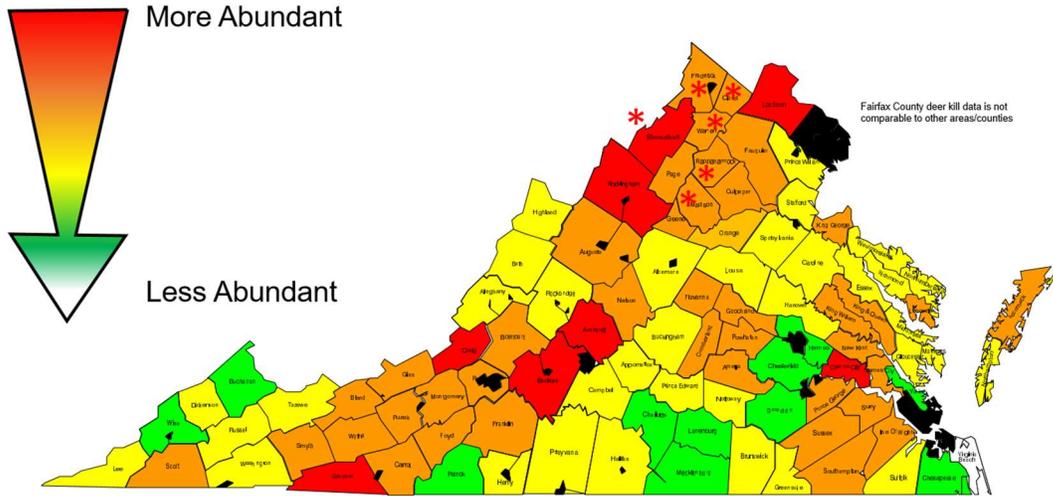


Figure 3. Current private land deer population status by management unit. Index is based on which category the 3-year average of antlered bucks killed per square mile of estimated private land deer habitat population index was in for two of the last three years. Counties recommended for change are designated with a red asterisk (*)

Current Private Land Deer Population Management Objective

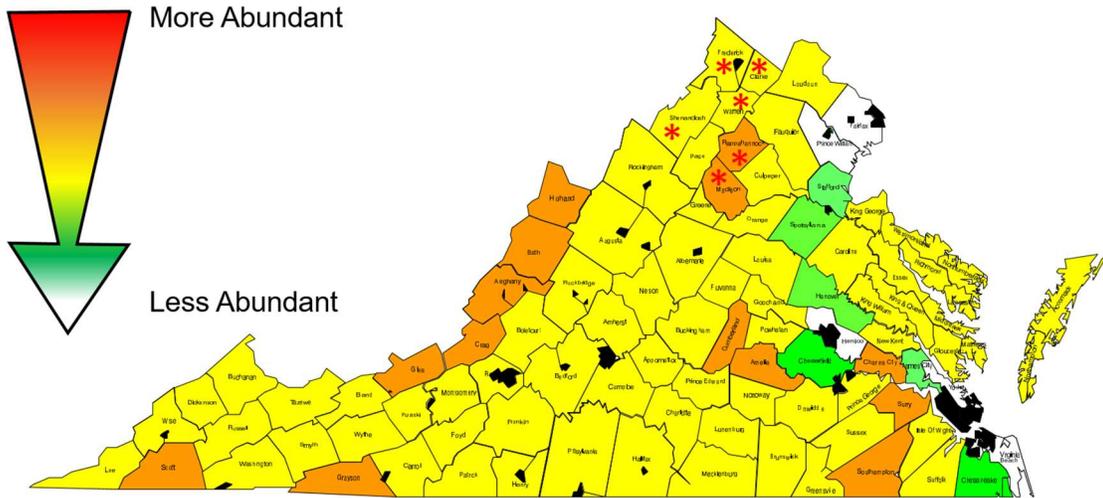


Figure 4. Current private land deer population objective by management unit. (<https://www.dgif.virginia.gov/wp-content/uploads/2019-Updated-Deer-Population-Objectives.pdf>) Counties recommended for change are designated with a red asterisk (*)

Proposed Private Land Deer Population Management Objective

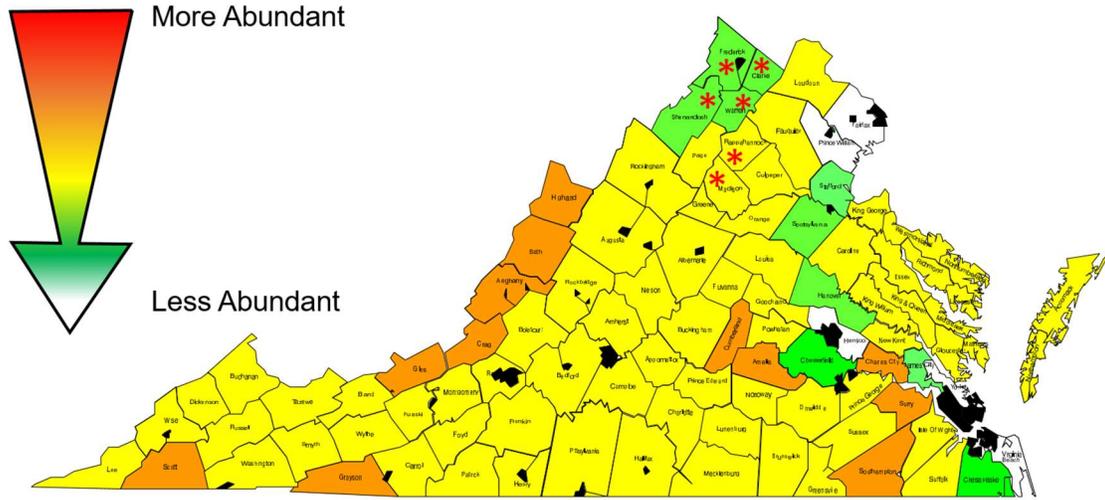


Figure 5. Proposed private land deer population objective by management unit.
(<https://www.dgif.virginia.gov/wp-content/uploads/2019-Updated-Deer-Population-Objectives.pdf>)
Counties recommended for change are designated with a red asterisk (*)